

Bahrain: Bahraini

REGISTRATION AREA

The Bahrain Cancer Registry (BCR) covers the Kingdom of Bahrain, an island country located off the southern shores of the Arabian Gulf, with a total area of 8269 km². In 2010, the total population was more than 1.2 million (569 000 Bahrainis and 666 000 non-Bahrainis). About 88.6% of residents live in urban areas.

CANCER CARE FACILITIES

High-quality comprehensive health care is provided to all residents. Primary health care is delivered by 27 well-equipped health centres throughout the country. Secondary care is provided at the main government hospital, Salmaiya Medical Complex (SMC), which has an oncology services centre equipped with the latest diagnostic and treatment technology. The Bahrain Defence Force Royal Medical Services hospital is another major general secondary hospital, serving primarily Bahrain Ministry of Defence employees and their families. King Hamad University Hospital is the third largest government hospital, with 373 beds. Secondary care is also provided by six private hospitals.

REGISTRY STRUCTURE AND METHODS

The BCR collects data on tumour type, anatomical site, and histology, and data on tumour stage, basis of diagnosis, and hospital of treatment and referral. The information is then added to the registry database and checked for duplication and consistency using CanReg4. Cancer notification became mandatory for all physicians in 1994. In 2010, an electronic notification form was made available to all health care facilities. BCR registrars also perform active data collection by visiting sources to abstract data. Residents diagnosed abroad are traced through the SMC's Oncology Outpatient Register, and data are subsequently extracted from their medical records.

INTERPRETING THE RESULTS

Some underreporting of cases treated in private hospitals or abroad is expected. However, Bahrain is

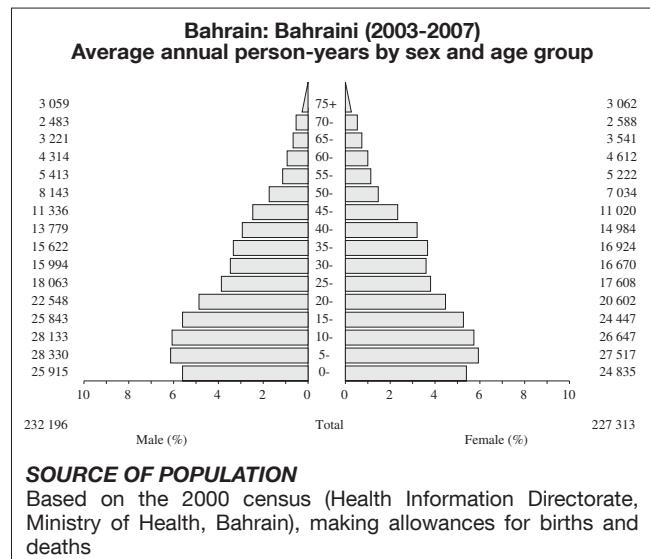
a small country, and its free cancer treatment facilities are located in a single public hospital, providing the opportunity to identify previously unreported cases. Cases are also identified through the national death register. Duplication and cases of unknown age are uncommon due to the unique identification number assigned to each resident.

USE OF THE DATA

The registry regularly publishes statistical reports on the distribution of various types of cancer by age, sex, and nationality. These reports are used by health planners and policy-makers to address cancer-related issues, allocate resources, and evaluate cancer prevention and control activities.

CONTRIBUTORS

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10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	24.8	Breast	56.0
Prostate	13.7	Trachea, bronchus and lung	9.0
Bladder	11.6	Colon	7.8
Colon	8.8	Thyroid	7.1
Non-Hodgkin lymphoma	6.7	Ovary	6.8
Rectum	5.7	Corpus uteri	6.4
Other and unspecified	5.5	Cervix uteri	5.7
Pancreas	5.1	Non-Hodgkin lymphoma	5.5
Liver	4.9	Other and unspecified	4.8
Stomach	4.9	Stomach	3.7
All sites	142.9	All sites	150.0

Bahrain: Bahraini (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	3	0.3	0.3	0.6	0.02	0.09	0	0.0	0.0	0.0	0.00	0.00	C00
Tongue	5	0.5	0.4	0.8	0.05	0.13	1	0.1	0.1	0.2	0.02	0.02	C01-02
Mouth	7	0.7	0.6	1.0	0.06	0.14	3	0.3	0.3	0.4	0.02	0.02	C03-06
Salivary glands	6	0.6	0.5	0.8	0.07	0.07	4	0.3	0.4	0.4	0.02	0.02	C07-08
Tonsil	4	0.4	0.3	0.5	0.06	0.06	0	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	10	1.0	0.9	1.3	0.09	0.17	6	0.5	0.5	0.8	0.04	0.15	C11
Hypopharynx	4	0.4	0.3	0.6	0.04	0.08	0	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	1	0.1	0.1	0.2	0.00	0.03	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	22	2.1	1.9	3.3	0.12	0.43	10	0.8	0.9	1.5	0.07	0.15	C15
Stomach	34	3.3	2.9	4.9	0.23	0.60	29	2.5	2.6	3.7	0.17	0.37	C16
Small intestine	4	0.4	0.3	0.6	0.02	0.06	2	0.2	0.2	0.3	0.03	0.03	C17
Colon	61	5.9	5.3	8.8	0.46	1.15	62	5.2	5.5	7.8	0.58	0.83	C18
Rectum	42	4.1	3.6	5.7	0.38	0.65	24	2.0	2.1	3.2	0.23	0.38	C19-20
Anus	6	0.6	0.5	0.8	0.05	0.08	2	0.2	0.2	0.3	0.00	0.03	C21
Liver	36	3.5	3.1	4.9	0.30	0.57	23	1.9	2.0	3.5	0.20	0.45	C22
Gallbladder etc.	6	0.6	0.5	0.8	0.06	0.09	7	0.6	0.6	0.9	0.08	0.08	C23-24
Pancreas	35	3.4	3.0	5.1	0.26	0.65	22	1.9	1.9	3.2	0.20	0.39	C25
Nose, sinuses etc.	4	0.4	0.3	0.4	0.03	0.03	1	0.1	0.1	0.1	0.01	0.01	C30-31
Larynx	23	2.2	2.0	3.5	0.23	0.45	2	0.2	0.2	0.2	0.01	0.03	C32
Trachea, bronchus and lung	161	15.7	13.9	24.8	0.97	3.12	61	5.2	5.4	9.0	0.44	1.13	C33-34
Other thoracic organs	8	0.8	0.7	0.9	0.04	0.08	2	0.2	0.2	0.3	0.03	0.03	C37-38
Bone	19	1.9	1.6	1.6	0.10	0.10	5	0.4	0.4	0.4	0.03	0.03	C40-41
Melanoma of skin	1	0.1	0.1	0.1	0.01	0.01	2	0.2	0.2	0.3	0.03	0.03	C43
Other skin	21		1.8	3.0	0.10	0.31	14		1.2	1.8	0.10	0.21	C44
Mesothelioma	12	1.2	1.0	1.9	0.04	0.35	2	0.2	0.2	0.2	0.01	0.01	C45
Kaposi sarcoma	2	0.2	0.2	0.3	0.01	0.04	1	0.1	0.1	0.1	0.01	0.01	C46
Connective and soft tissue	17	1.7	1.5	1.9	0.12	0.19	7	0.6	0.6	0.6	0.03	0.03	C47+C49
Breast	9	0.9	0.8	1.3	0.04	0.18	460	38.9	40.5	56.0	4.40	6.12	C50
Vulva							0	0.0	0.0	0.0	0.00	0.00	C51
Vagina							0	0.0	0.0	0.0	0.00	0.00	C52
Cervix uteri							44	3.7	3.9	5.7	0.40	0.61	C53
Corpus uteri							44	3.7	3.9	6.4	0.40	0.88	C54
Uterus unspecified							19	1.6	1.7	2.8	0.16	0.38	C55
Ovary							54	4.6	4.8	6.8	0.51	0.80	C56
Other female genital organs							1	0.1	0.1	0.1	0.00	0.00	C57
Placenta							5	0.4	0.4	0.5	0.04	0.04	C58
Penis	0	0.0	0.0	0.0	0.00	0.00							C60
Prostate	89	8.7	7.7	13.7	0.39	1.77							C61
Testis	17	1.7	1.5	1.8	0.14	0.17							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	32	3.1	2.8	4.3	0.27	0.54	24	2.0	2.1	2.9	0.14	0.30	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	77	7.5	6.6	11.6	0.49	1.36	19	1.6	1.7	2.5	0.10	0.14	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	3	0.3	0.3	0.4	0.04	0.04	1	0.1	0.1	0.1	0.00	0.00	C69
Brain, nervous system	37	3.6	3.2	4.2	0.33	0.43	19	1.6	1.7	2.2	0.14	0.27	C70-72
Thyroid	22	2.1	1.9	2.5	0.19	0.30	66	5.6	5.8	7.1	0.52	0.63	C73
Adrenal gland	5	0.5	0.4	0.4	0.02	0.02	2	0.2	0.2	0.2	0.01	0.01	C74
Other endocrine	1	0.1	0.1	0.1	0.01	0.01	1	0.1	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	25	2.4	2.2	2.2	0.12	0.19	16	1.4	1.4	1.6	0.12	0.15	C81
Non-Hodgkin lymphoma	60	5.8	5.2	6.7	0.33	0.65	46	3.9	4.0	5.5	0.30	0.70	C82-85,C96
Immunoproliferative diseases	1	0.1	0.1	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	9	0.9	0.8	1.2	0.06	0.06	10	0.8	0.9	1.5	0.16	0.16	C90
Lymphoid leukaemia	21	2.0	1.8	2.4	0.07	0.28	12	1.0	1.1	1.2	0.09	0.12	C91
Myeloid leukaemia	20	1.9	1.7	2.4	0.16	0.26	16	1.4	1.4	2.0	0.11	0.28	C92-94
Leukaemia unspecified	19	1.9	1.6	1.9	0.09	0.16	12	1.0	1.1	1.2	0.06	0.10	C95
Myeloproliferative disorders	2	0.2	0.2	0.3	0.01	0.05	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	6	0.6	0.5	0.8	0.05	0.05	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	39	3.8	3.4	5.5	0.30	0.65	33	2.8	2.9	4.8	0.20	0.61	O&U
All sites	1048		90.3	142.9	7.04	16.86	1196		105.2	150.0	10.18	16.75	C00-96
All sites except C44	1027	100.0	88.5	139.9	6.94	16.56	1182	100.0	104.0	148.3	10.08	16.55	C00-96 exc. C44

China, Beijing City

REGISTRATION AREA

Beijing is the capital of China, located in the north of the country. It has a typical temperate zone continental monsoon climate. The Beijing Cancer Registry covers eight urban districts of the city, with a combined area of 1368.3 km². In 2007, the covered population was about 7.4 million (95.7% Han Chinese).

CANCER CARE FACILITIES

About 96% of residents are covered by medical insurance. More than 140 hospitals (some of which have cancer departments), including two specialist cancer hospitals, report newly diagnosed cancer cases to the registry. There are 134 community health service centres conducting active patient follow-up.

REGISTRY STRUCTURE AND METHODS

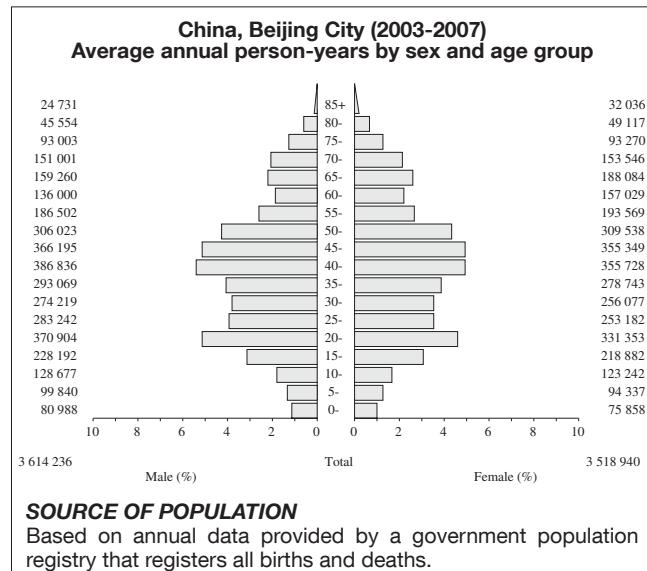
The registry was founded in 1977 and is now affiliated with the Peking University Cancer Hospital and the Beijing Institute for Cancer Research. Financial support comes mainly from the Beijing Municipal Health Bureau and China's National Central Cancer Registry. New cases are passively collected electronically from hospitals' health information systems and actively re-abstracted. Every hospital has one or two part-time registrars to help collect data. The registry database only includes information on permanent residents of Beijing. Suspected duplicate cases are examined by registry staff members. For incomplete cases, staff members visit the treating hospitals to re-abstract medical records to improve data quality. Death certificates are collected annually from the Vital Statistics Section of the Beijing Center for Disease Control and Prevention. If a death certificate shows an unregistered cancer case, the case is registered after trace-back. The vital status of registered patients is ascertained through both active and passive follow-up.

USE OF THE DATA

The registry submits an annual report of cancer incidence, mortality, survival, and time trends to various Beijing health administrative departments for the purpose of informing policies and decisions on cancer prevention and control. Registry data are also used in descriptive and analytical epidemiological studies.

CONTRIBUTORS

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10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	36.8	Breast	35.5
Liver	16.7	Trachea, bronchus and lung	21.3
Stomach	15.0	Colon	9.0
Colon	10.5	Ovary	7.1
Rectum	8.9	Stomach	6.8
Bladder	8.2	Corpus uteri	6.7
Oesophagus	8.0	Rectum	6.5
Prostate	7.0	Thyroid	5.3
Kidney	6.4	Liver	5.3
Pancreas	4.8	Cervix uteri	4.5
All sites	162.0	All sites	148.4

China, Beijing City (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	29	0.1	0.2	0.1	0.00	0.01	25	0.1	0.1	0.1	0.00	0.01	C00
Tongue	139	0.3	0.8	0.5	0.03	0.06	122	0.3	0.7	0.4	0.02	0.05	C01-02
Mouth	241	0.5	1.3	0.8	0.05	0.10	228	0.5	1.3	0.8	0.04	0.10	C03-06
Salivary glands	142	0.3	0.8	0.5	0.03	0.06	120	0.3	0.7	0.4	0.03	0.05	C07-08
Tonsil	16	0.0	0.1	0.1	0.00	0.01	13	0.0	0.1	0.0	0.00	0.00	C09
Other oropharynx	24	0.1	0.1	0.1	0.00	0.01	19	0.0	0.1	0.1	0.00	0.01	C10
Nasopharynx	322	0.7	1.8	1.2	0.08	0.13	114	0.3	0.6	0.4	0.03	0.05	C11
Hypopharynx	135	0.3	0.7	0.4	0.03	0.05	12	0.0	0.1	0.0	0.00	0.00	C12-13
Pharynx unspecified	32	0.1	0.2	0.1	0.00	0.01	11	0.0	0.1	0.0	0.00	0.00	C14
Oesophagus	2444	5.2	13.5	8.0	0.38	0.89	822	1.9	4.7	2.4	0.08	0.26	C15
Stomach	4619	9.8	25.6	15.0	0.66	1.82	2120	4.9	12.0	6.8	0.36	0.78	C16
Small intestine	250	0.5	1.4	0.8	0.05	0.11	202	0.5	1.1	0.7	0.04	0.09	C17
Colon	3265	7.0	18.1	10.5	0.45	1.25	2874	6.7	16.3	9.0	0.45	1.08	C18
Rectum	2672	5.7	14.8	8.9	0.45	1.09	2025	4.7	11.5	6.5	0.35	0.80	C19-20
Anus	35	0.1	0.2	0.1	0.01	0.01	25	0.1	0.1	0.1	0.00	0.01	C21
Liver	4716	10.0	26.1	16.7	1.11	1.95	1597	3.7	9.1	5.3	0.27	0.61	C22
Gallbladder etc.	1028	2.2	5.7	3.2	0.12	0.37	1001	2.3	5.7	3.0	0.12	0.34	C23-24
Pancreas	1426	3.0	7.9	4.8	0.23	0.57	1155	2.7	6.6	3.6	0.16	0.44	C25
Nose, sinuses etc.	102	0.2	0.6	0.4	0.02	0.04	65	0.2	0.4	0.3	0.02	0.03	C30-31
Larynx	577	1.2	3.2	2.0	0.12	0.25	87	0.2	0.5	0.3	0.01	0.04	C32
Trachea, bronchus and lung	11299	24.1	62.5	36.8	1.64	4.49	6963	16.1	39.6	21.3	0.94	2.63	C33-34
Other thoracic organs	214	0.5	1.2	0.9	0.06	0.09	134	0.3	0.8	0.6	0.03	0.05	C37-38
Bone	186	0.4	1.0	0.9	0.05	0.08	165	0.4	0.9	0.8	0.05	0.07	C40-41
Melanoma of skin	118	0.3	0.7	0.4	0.02	0.05	100	0.2	0.6	0.3	0.02	0.04	C43
Other skin	389	2.2	1.3	1.3	0.05	0.13	309		1.8	1.0	0.05	0.11	C44
Mesothelioma	95	0.2	0.5	0.3	0.01	0.04	74	0.2	0.4	0.2	0.02	0.03	C45
Kaposi sarcoma	2	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	312	0.7	1.7	1.2	0.08	0.12	256	0.6	1.5	1.0	0.06	0.10	C47+C49
Breast	76	0.2	0.4	0.2	0.01	0.03	10135	23.5	57.6	35.5	2.77	3.93	C50
Vulva							121	0.3	0.7	0.4	0.03	0.05	C51
Vagina							41	0.1	0.2	0.2	0.01	0.02	C52
Cervix uteri							1217	2.8	6.9	4.5	0.36	0.42	C53
Corpus uteri							1863	4.3	10.6	6.7	0.57	0.77	C54
Uterus unspecified							147	0.3	0.8	0.5	0.04	0.05	C55
Ovary							1963	4.5	11.2	7.1	0.53	0.79	C56
Other female genital organs							101	0.2	0.6	0.3	0.02	0.04	C57
Placenta							34	0.1	0.2	0.2	0.01	0.01	C58
Penis	95	0.2	0.5	0.3	0.01	0.03							C60
Prostate	2366	5.0	13.1	7.0	0.13	0.76							C61
Testis	99	0.2	0.5	0.4	0.03	0.04							C62
Other male genital organs	58	0.1	0.3	0.2	0.01	0.02							C63
Kidney	1785	3.8	9.9	6.4	0.43	0.75	825	1.9	4.7	2.9	0.19	0.34	C64
Renal pelvis	245	0.5	1.4	0.8	0.04	0.10	358	0.8	2.0	1.1	0.04	0.14	C65
Ureter	202	0.4	1.1	0.6	0.02	0.08	255	0.6	1.4	0.8	0.03	0.10	C66
Bladder	2508	5.3	13.9	8.2	0.37	0.95	912	2.1	5.2	2.8	0.13	0.33	C67
Other urinary organs	34	0.1	0.2	0.1	0.00	0.01	25	0.1	0.1	0.1	0.00	0.01	C68
Eye	28	0.1	0.2	0.3	0.02	0.02	21	0.0	0.1	0.4	0.02	0.02	C69
Brain, nervous system	766	1.6	4.2	3.4	0.23	0.32	612	1.4	3.5	2.6	0.16	0.25	C70-72
Thyroid	428	0.9	2.4	1.6	0.12	0.16	1326	3.1	7.5	5.3	0.41	0.51	C73
Adrenal gland	36	0.1	0.2	0.2	0.01	0.02	35	0.1	0.2	0.2	0.01	0.02	C74
Other endocrine	16	0.0	0.1	0.1	0.00	0.01	11	0.0	0.1	0.1	0.00	0.01	C75
Hodgkin lymphoma	92	0.2	0.5	0.4	0.02	0.03	85	0.2	0.5	0.4	0.02	0.03	C81
Non-Hodgkin lymphoma	1266	2.7	7.0	4.8	0.26	0.52	913	2.1	5.2	3.4	0.21	0.37	C82-85,C96
Immunoproliferative diseases	26	0.1	0.1	0.1	0.00	0.01	12	0.0	0.1	0.0	0.00	0.01	C88
Multiple myeloma	438	0.9	2.4	1.5	0.08	0.19	277	0.6	1.6	0.9	0.05	0.12	C90
Lymphoid leukaemia	352	0.7	1.9	2.6	0.13	0.17	220	0.5	1.3	1.5	0.08	0.11	C91
Myeloid leukaemia	724	1.5	4.0	3.1	0.19	0.29	580	1.3	3.3	2.5	0.16	0.23	C92-94
Leukaemia unspecified	199	0.4	1.1	0.9	0.05	0.08	140	0.3	0.8	0.5	0.03	0.05	C95
Myeloproliferative disorders	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	685	1.5	3.8	2.6	0.12	0.28	621	1.4	3.5	2.0	0.11	0.22	O&U
All sites	47354	262.0	162.0	8.06	18.64		43489		247.2	148.4	9.17	16.71	C00-96
All sites except C44	46965	100.0	259.9	160.7	8.01	18.51	43180	100.0	245.4	147.4	9.13	16.60	C00-96 exc. C44

China, Cixian County

REGISTRATION AREA

The Cixian Cancer Registry covers the county of Cixian at the southern tip of Hebei Province in China. Cixian contains 19 towns and villages, has a population of 620 000, and has an area of 1014 km², most of which is mountains, hills, and plains.

REGISTRY STRUCTURE AND METHODS

The registry, established in 1973, operates within a three-level (county, township, and village) cancer prevention network. All-cause disease mortality and cancer incidence data are coded according to ICD-10 and ICD-O-3, respectively. Due to the convenient transportation and easily accessible health services in Cixian, the rate of pathological diagnosis is relatively high. The registry became a member of IACR in 1996.

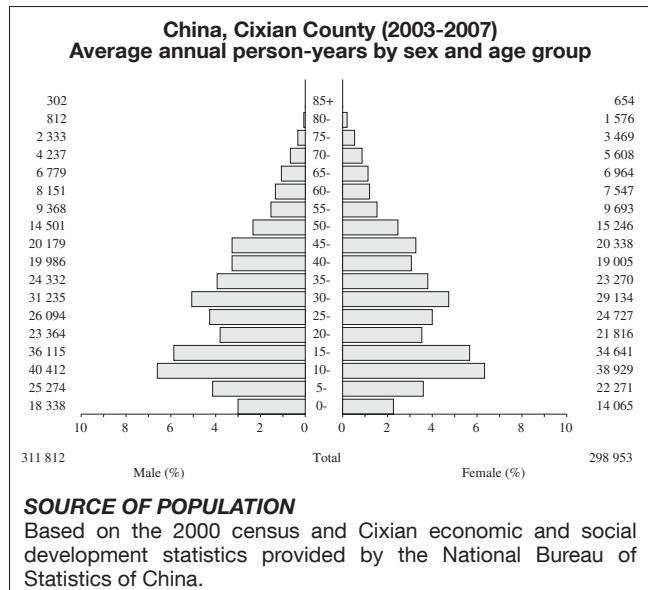
INTERPRETING THE RESULTS

Cixian has been selected as a national demonstration centre for both cancer registration and early detection and treatment of oesophageal cancer. An endoscopic screening programme was initiated in 2002 among residents aged 40–69 years, which improved the rate of early detection and treatment of gastrointestinal cancer in the county.

CONTRIBUTORS

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SOURCE OF POPULATION

Based on the 2000 census and Cixian economic and social development statistics provided by the National Bureau of Statistics of China.

NOTES ON THE DATA

*Overrepresentation of upper gastrointestinal sites.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Oesophagus	192.7	Oesophagus	108.5
Stomach	97.4	Stomach	45.4
Trachea, bronchus and lung	62.3	Trachea, bronchus and lung	30.5
Liver	38.4	Liver	18.0
Rectum	7.0	Breast	13.2
Colon	4.1	Cervix uteri	6.2
Brain, nervous system	4.1	Rectum	6.0
Larynx	4.0	Colon	4.7
Pancreas	3.0	Corpus uteri	2.8
Bladder	2.9	Brain, nervous system	2.6
All sites	444.9	All sites	265.0

*China, Cixian County (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	2	0.0	0.1	0.2	0.02	0.02	2	0.1	0.1	0.2	0.01	0.02	C00
Tongue	5	0.1	0.3	0.4	0.04	0.04	4	0.1	0.3	0.4	0.01	0.01	C01-02
Mouth	16	0.3	1.0	1.3	0.09	0.11	15	0.4	1.0	1.1	0.06	0.12	C03-06
Salivary glands	5	0.1	0.3	0.4	0.01	0.05	6	0.2	0.4	0.4	0.03	0.04	C07-08
Tonsil	5	0.1	0.3	0.6	0.03	0.05	0	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	4	0.1	0.3	0.3	0.04	0.04	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	14	0.3	0.9	1.0	0.10	0.11	7	0.2	0.5	0.5	0.04	0.06	C11
Hypopharynx	8	0.2	0.5	0.7	0.05	0.10	1	0.0	0.1	0.1	0.01	0.01	C12-13
Pharynx unspecified	3	0.1	0.2	0.3	0.01	0.04	1	0.0	0.1	0.1	0.01	0.01	C14
Oesophagus	2182	42.9	140.0	192.7	11.17	24.06	1387	40.5	92.8	108.5	6.41	13.43	C15
Stomach	1105	21.7	70.9	97.4	5.70	12.66	565	16.5	37.8	45.4	2.63	5.84	C16
Small intestine	6	0.1	0.4	0.5	0.04	0.08	7	0.2	0.5	0.7	0.04	0.07	C17
Colon	47	0.9	3.0	4.1	0.20	0.44	66	1.9	4.4	4.7	0.27	0.55	C18
Rectum	84	1.6	5.4	7.0	0.40	0.91	81	2.4	5.4	6.0	0.47	0.74	C19-20
Anus	4	0.1	0.3	0.3	0.01	0.04	2	0.1	0.1	0.2	0.01	0.02	C21
Liver	448	8.8	28.7	38.4	2.39	4.57	235	6.9	15.7	18.0	1.05	2.10	C22
Gallbladder etc.	12	0.2	0.8	1.3	0.05	0.12	13	0.4	0.9	1.0	0.09	0.12	C23-24
Pancreas	32	0.6	2.1	3.0	0.16	0.42	27	0.8	1.8	2.0	0.14	0.22	C25
Nose, sinuses etc.	13	0.3	0.8	1.1	0.06	0.15	6	0.2	0.4	0.5	0.03	0.08	C30-31
Larynx	45	0.9	2.9	4.0	0.27	0.53	10	0.3	0.7	0.9	0.06	0.11	C32
Trachea, bronchus and lung	715	14.0	45.9	62.3	3.39	8.00	388	11.3	26.0	30.5	1.57	3.18	C33-34
Other thoracic organs	9	0.2	0.6	0.6	0.05	0.07	4	0.1	0.3	0.2	0.01	0.01	C37-38
Bone	36	0.7	2.3	2.8	0.20	0.33	31	0.9	2.1	2.2	0.10	0.23	C40-41
Melanoma of skin	3	0.1	0.2	0.2	0.02	0.04	6	0.2	0.4	0.5	0.04	0.04	C43
Other skin	8	0.5	1.0	1.0	0.01	0.07	8		0.5	0.5	0.02	0.06	C44
Mesothelioma	2	0.0	0.1	0.2	0.00	0.04	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	2	0.0	0.1	0.2	0.02	0.02	7	0.2	0.5	0.6	0.02	0.05	C47+C49
Breast	0	0.0	0.0	0.0	0.00	0.00	186	5.4	12.4	13.2	1.11	1.41	C50
Vulva					5	0.1	0.3	0.4	0.03	0.06	C51		
Vagina					2	0.1	0.1	0.1	0.00	0.04	C52		
Cervix uteri					86	2.5	5.8	6.2	0.47	0.70	C53		
Corpus uteri					37	1.1	2.5	2.8	0.18	0.36	C54		
Uterus unspecified					20	0.6	1.3	1.4	0.08	0.23	C55		
Ovary					33	1.0	2.2	2.3	0.14	0.25	C56		
Other female genital organs					2	0.1	0.1	0.2	0.02	0.02	C57		
Placenta					5	0.1	0.3	0.3	0.02	0.02	C58		
Penis	10	0.2	0.6	0.8	0.03	0.13							C60
Prostate	17	0.3	1.1	2.1	0.01	0.10							C61
Testis	4	0.1	0.3	0.4	0.03	0.05							C62
Other male genital organs	1	0.0	0.1	0.1	0.01	0.01							C63
Kidney	16	0.3	1.0	1.3	0.04	0.23	10	0.3	0.7	1.0	0.03	0.07	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	3	0.1	0.2	0.2	0.03	0.03	C65
Ureter	2	0.0	0.1	0.2	0.02	0.02	1	0.0	0.1	0.1	0.00	0.00	C66
Bladder	32	0.6	2.1	2.9	0.17	0.28	7	0.2	0.5	0.5	0.04	0.07	C67
Other urinary organs	1	0.0	0.1	0.1	0.00	0.02	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	2	0.0	0.1	0.2	0.02	0.02	2	0.1	0.1	0.2	0.01	0.03	C69
Brain, nervous system	57	1.1	3.7	4.1	0.30	0.39	37	1.1	2.5	2.6	0.19	0.29	C70-72
Thyroid	9	0.2	0.6	0.7	0.06	0.08	18	0.5	1.2	1.2	0.10	0.12	C73
Adrenal gland	1	0.0	0.1	0.1	0.00	0.02	3	0.1	0.2	0.2	0.02	0.02	C74
Other endocrine	6	0.1	0.4	0.3	0.03	0.03	1	0.0	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	7	0.1	0.4	0.6	0.03	0.05	9	0.3	0.6	0.7	0.07	0.09	C81
Non-Hodgkin lymphoma	29	0.6	1.9	2.1	0.12	0.29	19	0.6	1.3	1.4	0.05	0.14	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	3	0.1	0.2	0.2	0.01	0.03	1	0.0	0.1	0.1	0.00	0.01	C90
Lymphoid leukaemia	18	0.4	1.2	1.3	0.08	0.09	10	0.3	0.7	0.6	0.05	0.05	C91
Myeloid leukaemia	28	0.5	1.8	1.9	0.13	0.14	23	0.7	1.5	1.4	0.08	0.11	C92-94
Leukaemia unspecified	25	0.5	1.6	1.8	0.11	0.21	24	0.7	1.6	1.8	0.12	0.19	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	17	0.3	1.1	1.4	0.06	0.19	13	0.4	0.9	1.0	0.05	0.08	O&U
All sites	5100		327.1	444.9	25.78	55.48	3436		229.9	265.0	16.05	31.52	C00-96
All sites except C44	5092	100.0	326.6	443.8	25.78	55.41	3428	100.0	229.3	264.5	16.02	31.46	C00-96 exc. C44

*See note following population pyramid

China, Haining County

REGISTRATION AREA

The Haining County Cancer Registry covers the county-level city of Haining in eastern China. The city's area is 693.5 km² and the population is about 640 000. The majority (99.6%) of residents are Han Chinese.

CANCER CARE FACILITIES

There are five major public hospitals, one cancer hospital, and 11 community hospitals. The cancer hospital provides radiotherapy services. All the hospitals report new cancer cases and benign tumours of the brain and central nervous system, as well as all causes of death. The population is covered by government health insurance.

REGISTRY STRUCTURE AND METHODS

Information on incident cancer cases is collected from clinicians and sent to public health physicians in the community hospitals, who then conduct follow-up and trace-back. The information is then reported to the registry, which is responsible for registration, coding, and entry of the data into the database. Investigations of registration quality are conducted twice per year. Since 2009, cancer cases have been reported through the online chronic diseases surveillance system of the Zhejiang Provincial Center for Disease Control and Prevention. The registry uses the IARC/IACR rules (2000) for multiple primary tumours.

INTERPRETING THE RESULTS

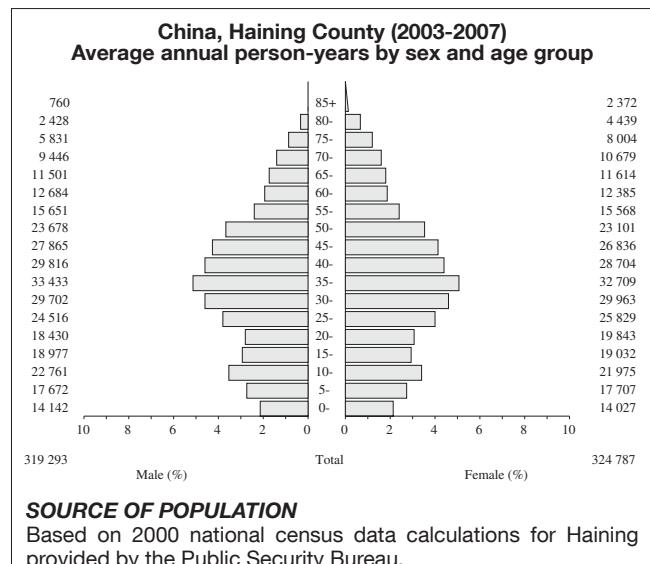
Factors that might affect incidence rates include improvements in the standard of medical care and diagnostic technologies, increases in insurance policy coverage, the ageing of the population, and changes in dietary habits.

USE OF THE DATA

Registry data are used mainly for surveillance and reporting of cancer incidence, analysis of survival rates, evaluation of treatment effects, and support for planning strategies for cancer prevention and control.

CONTRIBUTORS

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10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	52.4	Trachea, bronchus and lung	15.6
Liver	26.2	Breast	14.8
Stomach	21.4	Stomach	10.4
Oesophagus	13.3	Liver	9.6
Colon	8.5	Colon	7.2
Pancreas	7.7	Pancreas	5.5
Rectum	6.7	Cervix uteri	4.6
Bladder	4.3	Rectum	4.3
Nasopharynx	4.3	Oesophagus	3.8
Non-Hodgkin lymphoma	4.1	Brain, nervous system	3.7
All sites	179.6	All sites	112.0

China, Haining County (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	2	0.1	0.1	0.1	0.00	0.01	1	0.0	0.1	0.1	0.01	0.01	C00
Tongue	8	0.2	0.5	0.4	0.03	0.04	2	0.1	0.1	0.1	0.01	0.01	C01-02
Mouth	12	0.3	0.8	0.7	0.05	0.06	5	0.2	0.3	0.2	0.01	0.02	C03-06
Salivary glands	9	0.2	0.6	0.4	0.03	0.05	7	0.3	0.4	0.3	0.04	0.04	C07-08
Tonsil	0	0.0	0.0	0.0	0.00	0.00	5	0.2	0.3	0.2	0.01	0.01	C09
Other oropharynx	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	88	2.4	5.5	4.3	0.31	0.45	35	1.4	2.2	1.6	0.15	0.17	C11
Hypopharynx	13	0.4	0.8	0.7	0.07	0.09	3	0.1	0.2	0.1	0.00	0.01	C12-13
Pharynx unspecified	3	0.1	0.2	0.1	0.00	0.02	1	0.0	0.1	0.0	0.00	0.00	C14
Oesophagus	278	7.5	17.4	13.3	0.45	1.54	107	4.2	6.6	3.8	0.12	0.36	C15
Stomach	446	12.0	27.9	21.4	1.00	2.48	254	9.9	15.6	10.4	0.55	1.23	C16
Small intestine	10	0.3	0.6	0.4	0.02	0.06	12	0.5	0.7	0.5	0.03	0.06	C17
Colon	182	4.9	11.4	8.5	0.51	1.00	169	6.6	10.4	7.2	0.42	0.92	C18
Rectum	140	3.8	8.8	6.7	0.35	0.79	101	3.9	6.2	4.3	0.24	0.51	C19-20
Anus	6	0.2	0.4	0.3	0.01	0.06	2	0.1	0.1	0.1	0.00	0.01	C21
Liver	550	14.8	34.5	26.2	1.55	3.02	221	8.6	13.6	9.6	0.60	1.23	C22
Gallbladder etc.	46	1.2	2.9	2.1	0.09	0.26	92	3.6	5.7	3.6	0.19	0.42	C23-24
Pancreas	162	4.4	10.1	7.7	0.44	0.91	136	5.3	8.4	5.5	0.27	0.63	C25
Nose, sinuses etc.	3	0.1	0.2	0.1	0.00	0.02	2	0.1	0.1	0.1	0.00	0.00	C30-31
Larynx	17	0.5	1.1	0.9	0.07	0.11	2	0.1	0.1	0.1	0.00	0.01	C32
Trachea, bronchus and lung	1102	29.7	69.0	52.4	2.30	6.40	373	14.6	23.0	15.6	0.92	1.88	C33-34
Other thoracic organs	7	0.2	0.4	0.3	0.03	0.04	1	0.0	0.1	0.1	0.00	0.00	C37-38
Bone	25	0.7	1.6	1.3	0.07	0.12	20	0.8	1.2	0.9	0.07	0.10	C40-41
Melanoma of skin	4	0.1	0.3	0.2	0.02	0.02	5	0.2	0.3	0.2	0.01	0.03	C43
Other skin	32		2.0	1.6	0.04	0.16	23		1.4	0.8	0.04	0.09	C44
Mesothelioma	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.1	0.00	0.01	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	14	0.4	0.9	0.7	0.04	0.07	17	0.7	1.0	1.0	0.05	0.08	C47+C49
Breast	5	0.1	0.3	0.4	0.02	0.03	335	13.1	20.6	14.8	1.22	1.52	C50
Vulva							6	0.2	0.4	0.3	0.01	0.04	C51
Vagina							2	0.1	0.1	0.1	0.01	0.01	C52
Cervix uteri							104	4.1	6.4	4.6	0.38	0.44	C53
Corpus uteri							53	2.1	3.3	2.5	0.22	0.30	C54
Uterus unspecified							24	0.9	1.5	1.0	0.07	0.11	C55
Ovary							73	2.9	4.5	3.6	0.27	0.39	C56
Other female genital organs							3	0.1	0.2	0.1	0.02	0.02	C57
Placenta							1	0.0	0.1	0.1	0.01	0.01	C58
Penis	5	0.1	0.3	0.2	0.02	0.03							C60
Prostate	68	1.8	4.3	3.2	0.08	0.35							C61
Testis	4	0.1	0.3	0.3	0.01	0.01							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	22	0.6	1.4	1.0	0.07	0.11	11	0.4	0.7	0.5	0.03	0.06	C64
Renal pelvis	3	0.1	0.2	0.1	0.01	0.01	3	0.1	0.2	0.1	0.00	0.01	C65
Ureter	2	0.1	0.1	0.1	0.00	0.00	3	0.1	0.2	0.1	0.01	0.03	C66
Bladder	93	2.5	5.8	4.3	0.15	0.49	17	0.7	1.0	0.7	0.03	0.08	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	2	0.1	0.1	0.1	0.01	0.01	C68
Eye	1	0.0	0.1	0.2	0.01	0.01	1	0.0	0.1	0.0	0.00	0.00	C69
Brain, nervous system	79	2.1	4.9	3.9	0.23	0.40	76	3.0	4.7	3.7	0.25	0.40	C70-72
Thyroid	14	0.4	0.9	0.7	0.06	0.07	50	2.0	3.1	2.3	0.17	0.24	C73
Adrenal gland	3	0.1	0.2	0.1	0.00	0.02	3	0.1	0.2	0.3	0.01	0.02	C74
Other endocrine	3	0.1	0.2	0.2	0.01	0.01	4	0.2	0.2	0.2	0.02	0.02	C75
Hodgkin lymphoma	3	0.1	0.2	0.1	0.02	0.02	4	0.2	0.2	0.2	0.02	0.02	C81
Non-Hodgkin lymphoma	86	2.3	5.4	4.1	0.21	0.51	57	2.2	3.5	2.4	0.15	0.32	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	17	0.5	1.1	0.7	0.02	0.10	12	0.5	0.7	0.5	0.03	0.06	C90
Lymphoid leukaemia	20	0.5	1.3	1.5	0.08	0.11	6	0.2	0.4	0.6	0.03	0.03	C91
Myeloid leukaemia	18	0.5	1.1	1.2	0.07	0.09	14	0.5	0.9	0.7	0.05	0.08	C92-94
Leukaemia unspecified	70	1.9	4.4	3.6	0.25	0.39	66	2.6	4.1	3.4	0.20	0.28	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.0	0.00	0.01	MPD
Myelodysplastic syndromes	1	0.0	0.1	0.1	0.00	0.01	3	0.1	0.2	0.2	0.01	0.01	MDS
Other and unspecified	62	1.7	3.9	3.0	0.17	0.29	53	2.1	3.3	2.2	0.13	0.29	O&U
All sites	3738		234.1	179.6	8.94	20.83	2584		159.1	112.0	7.07	12.62	C00-96
All sites except C44	3706	100.0	232.1	178.0	8.89	20.67	2561	100.0	157.7	111.1	7.02	12.53	C00-96 exc. C44

China, Harbin City, Nangang District

REGISTRATION AREA

The Nangang District Cancer Registry covers the permanent residents of Nangang District in the centre of the city of Harbin in China. Nangang is the largest of the nine districts of Harbin, and is bordered by the districts of Daoli, Daowai, Xiangfang, and Pingfang. The district's area is 182.87 km² (including an urban area of 60 km²), which is one third of the total area of Harbin. The population is 1.3 million (90% Han Chinese). Due to the many colleges in Harbin City, there is a large temporary influx of students aged 20–24 years, who become short-term permanent residents.

REGISTRY STRUCTURE AND METHODS

The population-based registry began operation in 1997. It is located within the chronic disease division of the Nangang Center for Disease Control and Prevention (CDC), under the supervision of the Nangang Board of Health. The registry registers and reports all newly diagnosed malignant tumours and carcinoids of the central nervous system. A malignant tumour death reporting system and a general cause of death reporting system are also used as information sources. All health care professionals in Harbin are required to complete a notification card and submit it to the CDC whenever they diagnose a malignant tumour. They are also required to complete a death notification card in addition to each medical certificate of death. Follow-up is performed by family physicians at the community health service centre. Follow-up visits are currently limited to tumour death cases. The tumour notification cards are catalogued according to administrative area and disease type. After record linkage and duplicate elimination, cases are coded according to ICD-10. All registry tasks are now computerized.

USE OF THE DATA

Since its establishment in 1997, the registry has collected Nangang District malignant tumour incidence

and mortality data for the period of 1990–2009. Registry data have been used for epidemiological research, cancer trend predictions, and research on cancer control policies and countermeasures.

CONTRIBUTORS

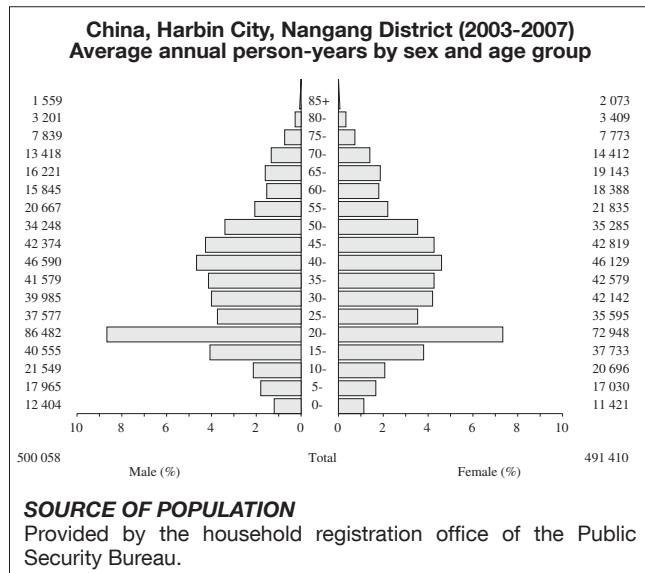
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NOTES ON THE DATA

*Low MV%.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male	Female		
Trachea, bronchus and lung	61.5	Trachea, bronchus and lung	32.9
Liver	29.9	Breast	31.5
Stomach	24.3	Stomach	11.0
Colon	12.5	Liver	10.7
Rectum	10.7	Colon	9.4
Pancreas	7.7	Cervix uteri	8.0
Oesophagus	7.7	Rectum	7.8
Bladder	6.7	Brain, nervous system	6.5
Brain, nervous system	6.3	Ovary	6.1
Kidney	6.1	Pancreas	5.3
All sites	207.5	All sites	164.4

*China, Harbin City, Nangang District (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	0	0.0	0.0	0.0	0.00	0.00	2	0.0	0.1	0.1	0.01	0.01	C00
Tongue	26	0.4	1.0	0.9	0.07	0.10	5	0.1	0.2	0.2	0.01	0.03	C01-02
Mouth	22	0.4	0.9	0.7	0.04	0.09	9	0.2	0.4	0.3	0.01	0.03	C03-06
Salivary glands	7	0.1	0.3	0.2	0.01	0.03	2	0.0	0.1	0.1	0.00	0.00	C07-08
Tonsil	11	0.2	0.4	0.3	0.02	0.03	3	0.1	0.1	0.1	0.00	0.01	C09
Other oropharynx	4	0.1	0.2	0.1	0.00	0.02	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	39	0.6	1.6	1.3	0.09	0.15	27	0.5	1.1	0.8	0.05	0.11	C11
Hypopharynx	8	0.1	0.3	0.3	0.02	0.03	1	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	1	0.0	0.0	0.1	0.01	0.01	3	0.1	0.1	0.1	0.00	0.02	C14
Oesophagus	224	3.7	9.0	7.7	0.48	0.88	43	0.8	1.8	1.3	0.05	0.20	C15
Stomach	728	12.0	29.1	24.3	1.22	2.95	346	6.6	14.1	11.0	0.65	1.31	C16
Small intestine	20	0.3	0.8	0.7	0.05	0.09	25	0.5	1.0	0.8	0.06	0.09	C17
Colon	367	6.0	14.7	12.5	0.62	1.56	297	5.7	12.1	9.4	0.48	1.17	C18
Rectum	323	5.3	12.9	10.7	0.54	1.30	248	4.7	10.1	7.8	0.46	0.95	C19-20
Anus	7	0.1	0.3	0.2	0.01	0.04	2	0.0	0.1	0.1	0.00	0.01	C21
Liver	894	14.7	35.8	29.9	1.93	3.35	336	6.4	13.7	10.7	0.59	1.33	C22
Gallbladder etc.	82	1.3	3.3	2.9	0.11	0.33	75	1.4	3.1	2.4	0.12	0.29	C23-24
Pancreas	219	3.6	8.8	7.7	0.43	0.92	165	3.2	6.7	5.3	0.29	0.66	C25
Nose, sinuses etc.	16	0.3	0.6	0.5	0.03	0.06	11	0.2	0.4	0.3	0.02	0.03	C30-31
Larynx	111	1.8	4.4	3.9	0.30	0.49	16	0.3	0.7	0.5	0.02	0.06	C32
Trachea, bronchus and lung	1800	29.6	72.0	61.5	3.18	7.42	1062	20.3	43.2	32.9	1.33	4.05	C33-34
Other thoracic organs	30	0.5	1.2	1.3	0.07	0.13	23	0.4	0.9	0.7	0.03	0.08	C37-38
Bone	61	1.0	2.4	2.2	0.13	0.21	60	1.1	2.4	2.1	0.13	0.26	C40-41
Melanoma of skin	3	0.0	0.1	0.1	0.01	0.01	4	0.1	0.2	0.1	0.01	0.02	C43
Other skin	17	0.7	0.5	0.02	0.07	19		0.8	0.7	0.04	0.06	0.06	C44
Mesothelioma	13	0.2	0.5	0.5	0.03	0.05	18	0.3	0.7	0.6	0.03	0.08	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	12	0.2	0.5	0.4	0.01	0.06	6	0.1	0.2	0.2	0.02	0.02	C47+C49
Breast	20	0.3	0.8	0.7	0.05	0.09	1034	19.8	42.1	31.5	2.50	3.48	C50
Vulva							10	0.2	0.4	0.3	0.01	0.04	C51
Vagina							10	0.2	0.4	0.3	0.02	0.03	C52
Cervix uteri							277	5.3	11.3	8.0	0.66	0.76	C53
Corpus uteri							90	1.7	3.7	2.9	0.24	0.37	C54
Uterus unspecified							46	0.9	1.9	1.4	0.10	0.14	C55
Ovary							188	3.6	7.7	6.1	0.48	0.70	C56
Other female genital organs							16	0.3	0.7	0.5	0.03	0.07	C57
Placenta							4	0.1	0.2	0.1	0.01	0.01	C58
Penis	17	0.3	0.7	0.6	0.03	0.06							C60
Prostate	103	1.7	4.1	3.5	0.05	0.34							C61
Testis	13	0.2	0.5	0.4	0.03	0.05							C62
Other male genital organs	3	0.0	0.1	0.1	0.01	0.01							C63
Kidney	174	2.9	7.0	6.1	0.38	0.69	77	1.5	3.1	2.4	0.14	0.30	C64
Renal pelvis	11	0.2	0.4	0.4	0.02	0.05	12	0.2	0.5	0.4	0.02	0.04	C65
Ureter	10	0.2	0.4	0.4	0.02	0.06	22	0.4	0.9	0.7	0.04	0.11	C66
Bladder	193	3.2	7.7	6.7	0.28	0.76	84	1.6	3.4	2.6	0.09	0.29	C67
Other urinary organs	1	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.01	0.01	C68
Eye	1	0.0	0.0	0.2	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C69
Brain, nervous system	191	3.1	7.6	6.3	0.39	0.74	196	3.8	8.0	6.5	0.38	0.71	C70-72
Thyroid	43	0.7	1.7	1.4	0.09	0.12	118	2.3	4.8	3.5	0.27	0.36	C73
Adrenal gland	5	0.1	0.2	0.2	0.01	0.01	5	0.1	0.2	0.2	0.01	0.02	C74
Other endocrine	32	0.5	1.3	1.1	0.09	0.12	45	0.9	1.8	1.4	0.12	0.14	C75
Hodgkin lymphoma	4	0.1	0.2	0.1	0.01	0.01	8	0.2	0.3	0.3	0.01	0.04	C81
Non-Hodgkin lymphoma	65	1.1	2.6	2.2	0.12	0.26	46	0.9	1.9	1.6	0.08	0.16	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	15	0.2	0.6	0.6	0.05	0.08	13	0.2	0.5	0.4	0.03	0.06	C90
Lymphoid leukaemia	28	0.5	1.1	1.0	0.07	0.08	21	0.4	0.9	0.6	0.05	0.07	C91
Myeloid leukaemia	5	0.1	0.2	0.1	0.01	0.01	4	0.1	0.2	0.1	0.01	0.01	C92-94
Leukaemia unspecified	73	1.2	2.9	2.3	0.12	0.25	57	1.1	2.3	2.3	0.17	0.20	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	52	0.9	2.1	1.8	0.08	0.19	52	1.0	2.1	1.8	0.10	0.18	O&U
All sites	6104		244.1	207.5	11.33	24.38	5244		213.4	164.4	9.99	19.19	C00-96
All sites except C44	6087	100.0	243.5	207.0	11.30	24.31	5225	100.0	212.7	163.8	9.96	19.13	C00-96 exc. C44

*See note following population pyramid

China, Hong Kong

REGISTRATION AREA

The Hong Kong Cancer Registry covers the Hong Kong Special Administrative Region of China. Hong Kong is one of the most densely populated places in the world, with an average density of 6540 residents/km². In 2011, the population was 7.1 million. About 92% of residents are Chinese, mostly descendants of people from Guangdong Province in southern China.

CANCER CARE FACILITIES

The Hospital Authority (HA) is a statutory body that manages all public hospitals and institutions in Hong Kong. There are six clinical oncology centres within the HA and a few private hospitals that provide clinical oncology services. At the end of 2011, Hong Kong had a total of 39 photon radiotherapy machines (in public and private hospitals). Most local patients are treated at public hospitals.

REGISTRY STRUCTURE AND METHODS

Cancer notification in Hong Kong is mandated by administrative order, without a specific law. The registry is staffed by seven employees, including statistical analysts and abstract clerks who carry out the registry's day-to-day activities. The director is a clinical oncologist, who provides regular input on the validity of the clinical data in addition to overseeing the registry's operation. The registry receives electronic data directly from all public hospitals, and has a good working relationship with most private cancer centres and pathology laboratories. Near-complete coverage has been achieved within the registration area. Death certificates are received from Hong Kong's Department of Health.

INTERPRETING THE RESULTS

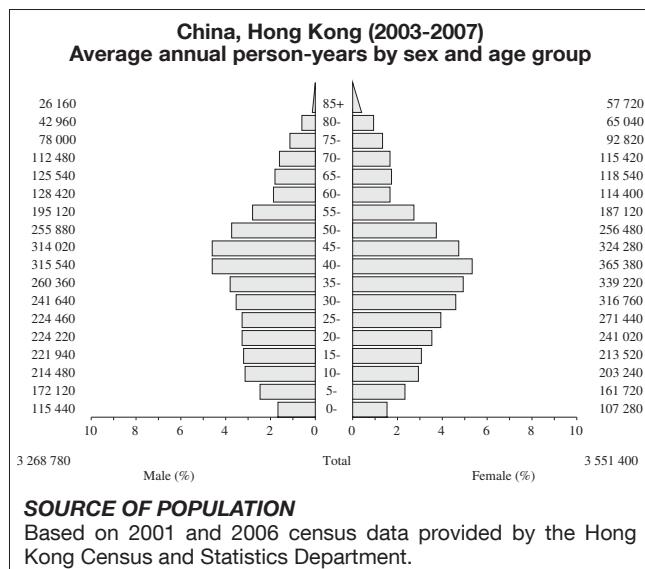
A government cervical screening programme was initiated in March 2004.

USE OF THE DATA

The registry publishes annual reports on cancer incidence and mortality on its website. Basic descriptive epidemiological analyses are also included, and survival data on some cancers have been provided in recent years. Registry data are routinely used by officials, health professionals, cancer control groups, and the public. The data are also extensively used by local researchers for various epidemiological studies.

CONTRIBUTORS

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10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	53.3	Breast	45.2
Liver	26.7	Trachea, bronchus and lung	21.9
Colon	23.0	Colon	16.8
Prostate	18.6	Corpus uteri	10.0
Rectum	17.0	Rectum	9.6
Nasopharynx	14.4	Cervix uteri	7.9
Stomach	12.1	Thyroid	7.8
Non-Hodgkin lymphoma	7.4	Liver	6.9
Bladder	7.3	Ovary	6.5
Oesophagus	7.1	Stomach	6.1
All sites	246.0	All sites	186.9

China, Hong Kong (2003-2007)

SITE	Male						Female						ICD-10
	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	21	0.0	0.1	0.1	0.00	0.01	16	0.0	0.1	0.1	0.00	0.01	C00
Tongue	474	0.8	2.9	2.0	0.13	0.23	304	0.6	1.7	1.1	0.07	0.13	C01-02
Mouth	379	0.6	2.3	1.5	0.08	0.17	221	0.4	1.2	0.7	0.03	0.08	C03-06
Salivary glands	177	0.3	1.1	0.8	0.05	0.08	148	0.3	0.8	0.6	0.05	0.06	C07-08
Tonsil	157	0.3	1.0	0.6	0.05	0.07	38	0.1	0.2	0.2	0.01	0.02	C09
Other oropharynx	66	0.1	0.4	0.3	0.02	0.03	12	0.0	0.1	0.0	0.00	0.00	C10
Nasopharynx	3425	5.7	21.0	14.4	1.16	1.51	1247	2.5	7.0	4.9	0.40	0.51	C11
Hypopharynx	318	0.5	1.9	1.3	0.08	0.16	24	0.0	0.1	0.1	0.00	0.01	C12-13
Pharynx unspecified	3	0.0	0.0	0.0	0.00	0.00	2	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	1780	2.9	10.9	7.1	0.40	0.87	493	1.0	2.8	1.6	0.07	0.18	C15
Stomach	3180	5.3	19.5	12.1	0.56	1.38	1923	3.8	10.8	6.1	0.30	0.63	C16
Small intestine	166	0.3	1.0	0.6	0.04	0.07	123	0.2	0.7	0.4	0.02	0.04	C17
Colon	6074	10.1	37.2	23.0	1.02	2.63	5107	10.1	28.8	16.8	0.80	1.94	C18
Rectum	4339	7.2	26.5	17.0	0.91	2.05	2822	5.6	15.9	9.6	0.51	1.12	C19-20
Anus	108	0.2	0.7	0.4	0.02	0.04	88	0.2	0.5	0.3	0.01	0.03	C21
Liver	6503	10.8	39.8	26.7	1.73	3.18	2001	4.0	11.3	6.9	0.33	0.84	C22
Gallbladder etc.	706	1.2	4.3	2.5	0.08	0.28	686	1.4	3.9	2.1	0.09	0.21	C23-24
Pancreas	1162	1.9	7.1	4.5	0.22	0.53	940	1.9	5.3	3.1	0.15	0.34	C25
Nose, sinuses etc.	180	0.3	1.1	0.8	0.05	0.08	107	0.2	0.6	0.4	0.02	0.04	C30-31
Larynx	920	1.5	5.6	3.6	0.19	0.46	53	0.1	0.3	0.2	0.01	0.03	C32
Trachea, bronchus and lung	14003	23.2	85.7	53.3	2.38	6.31	6817	13.5	38.4	21.9	1.00	2.47	C33-34
Other thoracic organs	177	0.3	1.1	0.9	0.06	0.08	117	0.2	0.7	0.5	0.04	0.05	C37-38
Bone	120	0.2	0.7	0.7	0.04	0.05	110	0.2	0.6	0.6	0.03	0.04	C40-41
Melanoma of skin	148	0.2	0.9	0.6	0.04	0.06	122	0.2	0.7	0.4	0.03	0.05	C43
Other skin	1600		9.8	6.2	0.33	0.62	1666		9.4	5.0	0.21	0.50	C44
Mesothelioma	62	0.1	0.4	0.2	0.01	0.03	18	0.0	0.1	0.1	0.00	0.01	C45
Kaposi sarcoma	13	0.0	0.1	0.1	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	327	0.5	2.0	1.5	0.09	0.14	273	0.5	1.5	1.2	0.08	0.11	C47+C49
Breast	73	0.1	0.4	0.3	0.01	0.04	11927	23.6	67.2	45.2	3.59	4.80	C50
Vulva							147	0.3	0.8	0.5	0.02	0.05	C51
Vagina							97	0.2	0.5	0.3	0.02	0.04	C52
Cervix uteri							2080	4.1	11.7	7.9	0.56	0.86	C53
Corpus uteri							2524	5.0	14.2	10.0	0.85	1.13	C54
Uterus unspecified							32	0.1	0.2	0.1	0.01	0.01	C55
Ovary							1642	3.2	9.2	6.5	0.50	0.66	C56
Other female genital organs							46	0.1	0.3	0.2	0.01	0.02	C57
Placenta							8	0.0	0.0	0.0	0.00	0.00	C58
Penis	72	0.1	0.4	0.3	0.01	0.03							C60
Prostate	5038	8.3	30.8	18.6	0.50	2.34							C61
Testis	256	0.4	1.6	1.5	0.10	0.11							C62
Other male genital organs	52	0.1	0.3	0.2	0.01	0.02							C63
Kidney	1101	1.8	6.7	4.5	0.29	0.53	550	1.1	3.1	2.1	0.12	0.22	C64
Renal pelvis	99	0.2	0.6	0.4	0.02	0.04	83	0.2	0.5	0.3	0.01	0.03	C65
Ureter	66	0.1	0.4	0.3	0.01	0.03	71	0.1	0.4	0.2	0.01	0.03	C66
Bladder	2014	3.3	12.3	7.3	0.25	0.79	626	1.2	3.5	1.8	0.06	0.18	C67
Other urinary organs	15	0.0	0.1	0.1	0.00	0.01	23	0.0	0.1	0.1	0.00	0.01	C68
Eye	38	0.1	0.2	0.4	0.02	0.02	20	0.0	0.1	0.2	0.01	0.01	C69
Brain, nervous system	533	0.9	3.3	2.9	0.18	0.25	392	0.8	2.2	2.0	0.12	0.18	C70-72
Thyroid	563	0.9	3.4	2.5	0.18	0.25	1926	3.8	10.8	7.8	0.62	0.76	C73
Adrenal gland	43	0.1	0.3	0.5	0.02	0.03	26	0.1	0.1	0.3	0.01	0.02	C74
Other endocrine	25	0.0	0.2	0.2	0.01	0.01	5	0.0	0.0	0.1	0.00	0.00	C75
Hodgkin lymphoma	117	0.2	0.7	0.6	0.04	0.05	105	0.2	0.6	0.5	0.03	0.04	C81
Non-Hodgkin lymphoma	1734	2.9	10.6	7.4	0.41	0.80	1453	2.9	8.2	5.4	0.33	0.59	C82-85,C96
Immunoproliferative diseases	21	0.0	0.1	0.1	0.00	0.01	8	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	536	0.9	3.3	2.1	0.10	0.23	390	0.8	2.2	1.3	0.06	0.15	C90
Lymphoid leukaemia	317	0.5	1.9	2.6	0.14	0.18	238	0.5	1.3	1.7	0.09	0.11	C91
Myeloid leukaemia	795	1.3	4.9	3.7	0.22	0.36	612	1.2	3.4	2.7	0.16	0.25	C92-94
Leukaemia unspecified	71	0.1	0.4	0.3	0.01	0.02	70	0.1	0.4	0.2	0.01	0.02	C95
Myeloproliferative disorders	7	0.0	0.0	0.0	0.00	0.00	12	0.0	0.1	0.0	0.00	0.01	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	1791	3.0	11.0	6.7	0.26	0.70	1600	3.2	9.0	4.7	0.19	0.45	O&U
All sites	61965		379.1	246.0	12.54	27.99	52192		293.9	186.9	11.68	20.10	C00-96
All sites except C44	60365	100.0	369.3	239.8	12.21	27.36	50526	100.0	284.5	181.9	11.47	19.60	C00-96 exc. C44

§Includes 17 cases of unknown age

§Includes 12 cases of unknown age

China, Jiashan County

REGISTRATION AREA

The Jiashan Cancer Registry covers Jiashan County, in the north of Zhejiang Province in China. The county has an area of about 506.6 km². In 2007, the population was 381 000 (nearly all Han Chinese). About 65% of residents live in rural areas. The population density is 752 residents/km². Agriculture is the major industry.

CANCER CARE FACILITIES

There are 19 medical establishments (hospitals and clinics), including three county-level hospitals that provide cancer surgery, chemotherapy, and integrated traditional and evidence-based medical services.

REGISTRY STRUCTURE AND METHODS

The registry was established in 1987 to determine and report cancer incidence and mortality, as well as all-cause mortality. It is affiliated with the Jiashan County Cancer Research Institute. Hospitals and clinics are required by Jiashan County Health Bureau regulations to report all newly diagnosed cancers, as well as benign tumours of the central nervous system. Cause of death must be reported for all deaths due to disease. At the end of 2007, the registry's missing report rate was 3.1%. The registry uses the IARC/IACR rules for multiple primary tumours.

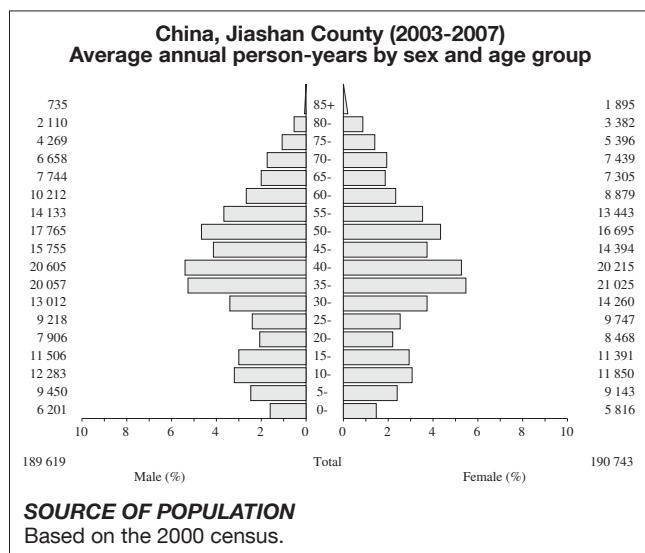
USE OF THE DATA

The registry publishes an annual report on cancer incidence and mortality. Data on cancer incidence, prevalence, and mortality by sex, age, and site are

also used in cancer prevention and treatment and for research on cancer etiology.

CONTRIBUTORS

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10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	55.7	Breast	22.4
Stomach	32.5	Trachea, bronchus and lung	16.3
Liver	29.5	Stomach	12.9
Oesophagus	17.0	Colon	11.2
Colon	12.9	Liver	10.9
Rectum	10.5	Rectum	8.8
Pancreas	9.3	Pancreas	6.5
Bladder	6.6	Brain, nervous system	6.3
Brain, nervous system	6.3	Gallbladder etc.	5.4
Non-Hodgkin lymphoma	4.8	Thyroid	4.3
All sites	219.4	All sites	140.1

China, Jiashan County (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	3	0.1	0.3	0.2	0.00	0.05	0	0.0	0.0	0.0	0.00	0.00	C00
Tongue	5	0.2	0.5	0.3	0.00	0.05	9	0.4	0.9	0.5	0.03	0.04	C01-02
Mouth	11	0.3	1.2	0.7	0.03	0.10	3	0.1	0.3	0.2	0.01	0.04	C03-06
Salivary glands	5	0.2	0.5	0.3	0.03	0.03	6	0.3	0.6	0.4	0.03	0.05	C07-08
Tonsil	3	0.1	0.3	0.2	0.01	0.04	0	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	2	0.1	0.2	0.1	0.02	0.02	1	0.0	0.1	0.1	0.01	0.01	C10
Nasopharynx	63	1.9	6.6	4.0	0.30	0.45	22	1.0	2.3	1.4	0.10	0.13	C11
Hypopharynx	6	0.2	0.6	0.4	0.01	0.05	0	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	261	7.9	27.5	17.0	0.86	2.23	57	2.6	6.0	3.2	0.11	0.40	C15
Stomach	497	15.0	52.4	32.5	1.76	4.17	221	10.2	23.2	12.9	0.61	1.57	C16
Small intestine	10	0.3	1.1	0.7	0.05	0.10	12	0.6	1.3	0.7	0.05	0.10	C17
Colon	195	5.9	20.6	12.9	0.62	1.69	175	8.0	18.3	11.2	0.68	1.35	C18
Rectum	165	5.0	17.4	10.5	0.65	1.23	137	6.3	14.4	8.8	0.58	1.13	C19-20
Anus	3	0.1	0.3	0.2	0.00	0.04	1	0.0	0.1	0.0	0.00	0.00	C21
Liver	467	14.1	49.3	29.5	1.43	3.62	202	9.3	21.2	10.9	0.44	1.32	C22
Gallbladder etc.	50	1.5	5.3	3.1	0.14	0.35	97	4.5	10.2	5.4	0.20	0.66	C23-24
Pancreas	147	4.4	15.5	9.3	0.45	1.15	111	5.1	11.6	6.5	0.38	0.80	C25
Nose, sinuses etc.	6	0.2	0.6	0.4	0.02	0.04	1	0.0	0.1	0.1	0.01	0.01	C30-31
Larynx	31	0.9	3.3	2.0	0.09	0.21	1	0.0	0.1	0.1	0.01	0.01	C32
Trachea, bronchus and lung	859	25.9	90.6	55.7	2.55	7.27	280	12.9	29.4	16.3	0.94	1.99	C33-34
Other thoracic organs	11	0.3	1.2	0.9	0.03	0.07	3	0.1	0.3	0.3	0.02	0.02	C37-38
Bone	26	0.8	2.7	1.8	0.08	0.23	24	1.1	2.5	1.9	0.11	0.20	C40-41
Melanoma of skin	5	0.2	0.5	0.3	0.04	0.04	7	0.3	0.7	0.5	0.03	0.05	C43
Other skin	29		3.1	2.0	0.05	0.22	38		4.0	2.2	0.08	0.27	C44
Mesothelioma	2	0.1	0.2	0.1	0.01	0.02	2	0.1	0.2	0.1	0.01	0.01	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	12	0.4	1.3	0.7	0.04	0.07	18	0.8	1.9	1.4	0.11	0.14	C47+C49
Breast	3	0.1	0.3	0.2	0.01	0.03	337	15.5	35.3	22.4	1.85	2.34	C50
Vulva							4	0.2	0.4	0.2	0.01	0.01	C51
Vagina							0	0.0	0.0	0.0	0.00	0.00	C52
Cervix uteri							40	1.8	4.2	2.6	0.21	0.27	C53
Corpus uteri							53	2.4	5.6	3.5	0.28	0.39	C54
Uterus unspecified							2	0.1	0.2	0.1	0.00	0.03	C55
Ovary							45	2.1	4.7	3.2	0.28	0.36	C56
Other female genital organs							2	0.1	0.2	0.1	0.01	0.02	C57
Placenta							4	0.2	0.4	0.4	0.03	0.03	C58
Penis	5	0.2	0.5	0.3	0.02	0.06							C60
Prostate	44	1.3	4.6	2.8	0.03	0.33							C61
Testis	8	0.2	0.8	0.6	0.05	0.06							C62
Other male genital organs	3	0.1	0.3	0.2	0.01	0.01							C63
Kidney	33	1.0	3.5	2.1	0.11	0.28	19	0.9	2.0	1.5	0.08	0.18	C64
Renal pelvis	5	0.2	0.5	0.3	0.03	0.04	1	0.0	0.1	0.1	0.01	0.01	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	2	0.1	0.2	0.1	0.01	0.01	C66
Bladder	95	2.9	10.0	6.6	0.31	0.67	23	1.1	2.4	1.3	0.05	0.12	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.1	0.00	0.01	C68
Eye	3	0.1	0.3	0.2	0.02	0.02	1	0.0	0.1	0.2	0.01	0.01	C69
Brain, nervous system	83	2.5	8.8	6.3	0.45	0.69	78	3.6	8.2	6.3	0.45	0.58	C70-72
Thyroid	11	0.3	1.2	0.9	0.06	0.09	64	2.9	6.7	4.3	0.34	0.45	C73
Adrenal gland	1	0.0	0.1	0.1	0.01	0.01	1	0.0	0.1	0.0	0.00	0.00	C74
Other endocrine	2	0.1	0.2	0.2	0.01	0.01	2	0.1	0.2	0.1	0.01	0.02	C75
Hodgkin lymphoma	0	0.0	0.0	0.0	0.00	0.00	2	0.1	0.2	0.2	0.02	0.02	C81
Non-Hodgkin lymphoma	68	2.1	7.2	4.8	0.36	0.50	33	1.5	3.5	2.4	0.15	0.26	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	16	0.5	1.7	1.0	0.03	0.14	13	0.6	1.4	0.9	0.07	0.15	C90
Lymphoid leukaemia	11	0.3	1.2	1.1	0.06	0.08	7	0.3	0.7	0.8	0.04	0.05	C91
Myeloid leukaemia	36	1.1	3.8	2.8	0.18	0.29	20	0.9	2.1	1.5	0.11	0.16	C92-94
Leukaemia unspecified	14	0.4	1.5	1.5	0.07	0.13	12	0.6	1.3	1.4	0.09	0.10	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	28	0.8	3.0	1.8	0.06	0.23	18	0.8	1.9	1.1	0.06	0.14	O&U
All sites	3343		352.6	219.4	11.11	27.17	2212		231.9	140.1	8.72	15.99	C00-96
All sites except C44	3314	100.0	349.5	217.5	11.05	26.95	2174	100.0	228.0	137.8	8.64	15.72	C00-96 exc. C44

China, Jiaxing City

REGISTRATION AREA

The Jiaxing Cancer Registry covers Nanhu District in the prefecture-level city of Jiaxing in eastern China. Nanhu is one of the city's two urban districts, and the majority (99.5%) of its population is Han Chinese.

CANCER CARE FACILITIES

There are eight large public hospitals (two with radiotherapy facilities) and 15 community hospitals, all of which report new cancer cases and benign tumours of the brain and central nervous system, as well as all causes of death. Some patients are covered by government health insurance.

REGISTRY STRUCTURE AND METHODS

The registry was established in 1992. Clinicians are responsible for reporting new cancer cases. Public health physicians then check these reports and send the notification cards to the registry. Three senior registry staff members categorize and code the cases, and then the community physicians double-check the information and conduct follow-up as required. The Jiaxing Center for Disease Control and Prevention's cause of death reporting system is used to check for missing incident cases. All patient-related information is confidential. The registry reviews its data quality twice per year, and a sample-based investigation of missing cases is conducted every 3 years. The registry database was computerized in 1996. The registry adopted ICD-9 and ICD-10 coding in 2001. Since 2009, all cases have been reported directly to the registry through an online system. The registry uses the IARC/IACR rules (2000) for multiple primary tumours.

INTERPRETING THE RESULTS

Factors that might affect incidence rates include the availability and quality of diagnosis and treatment services, the quality of the hospital reporting systems

(which have been greatly improved), the level of health awareness within the population (which has increased substantially since 1992), and the increasing coverage provided by national and local insurance policies.

USE OF THE DATA

Registry data are used mainly for surveillance and reporting of cancer incidence, analysis of survival rates, and planning and evaluation of health services.

CONTRIBUTORS

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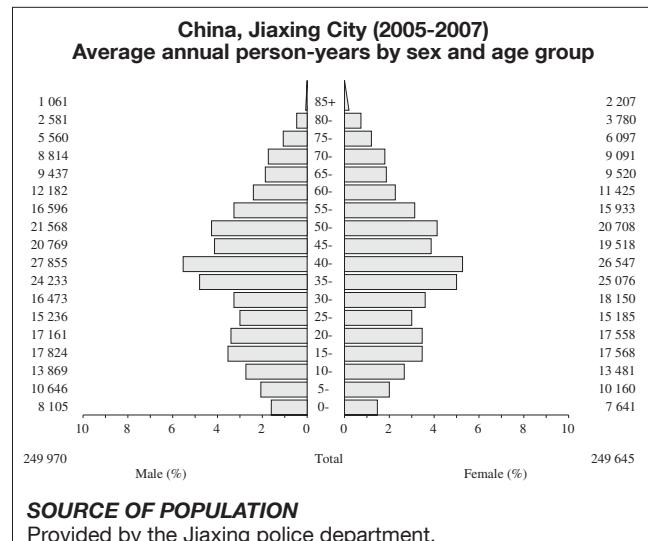
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SOURCE OF POPULATION

Provided by the Jiaxing police department.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male	Female		
Trachea, bronchus and lung	52.4	Breast	27.6
Liver	29.3	Trachea, bronchus and lung	19.4
Stomach	23.3	Colon	12.9
Colon	15.0	Stomach	10.3
Oesophagus	12.7	Liver	10.2
Rectum	9.8	Rectum	7.6
Brain, nervous system	8.5	Brain, nervous system	7.2
Pancreas	8.4	Pancreas	7.0
Prostate	6.0	Thyroid	5.7
Bladder	6.0	Ovary	5.5
All sites	219.4	All sites	160.3

China, Jiaxing City (2005-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	2	0.1	0.3	0.1	0.01	0.02	2	0.1	0.3	0.1	0.00	0.02	C00
Tongue	16	0.6	2.1	1.5	0.07	0.19	3	0.2	0.4	0.3	0.01	0.05	C01-02
Mouth	2	0.1	0.3	0.1	0.01	0.01	4	0.2	0.5	0.3	0.02	0.02	C03-06
Salivary glands	3	0.1	0.4	0.2	0.00	0.06	5	0.3	0.7	0.4	0.01	0.05	C07-08
Tonsil	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	2	0.1	0.3	0.1	0.00	0.00	1	0.1	0.1	0.1	0.00	0.02	C10
Nasopharynx	45	1.8	6.0	3.9	0.33	0.44	21	1.1	2.8	2.0	0.18	0.19	C11
Hypopharynx	2	0.1	0.3	0.2	0.01	0.03	0	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	1	0.1	0.1	0.1	0.01	0.01	C14
Oesophagus	149	6.0	19.9	12.7	0.61	1.56	38	2.1	5.1	2.8	0.07	0.32	C15
Stomach	272	11.0	36.3	23.3	1.27	2.70	122	6.6	16.3	10.3	0.54	1.13	C16
Small intestine	15	0.6	2.0	1.3	0.06	0.17	13	0.7	1.7	1.0	0.04	0.15	C17
Colon	170	6.9	22.7	15.0	0.76	1.74	151	8.2	20.2	12.9	0.70	1.60	C18
Rectum	115	4.7	15.3	9.8	0.52	1.24	94	5.1	12.6	7.6	0.41	0.89	C19-20
Anus	1	0.0	0.1	0.1	0.00	0.02	2	0.1	0.3	0.1	0.00	0.00	C21
Liver	353	14.3	47.1	29.3	1.60	3.37	126	6.8	16.8	10.2	0.48	1.27	C22
Gallbladder etc.	43	1.7	5.7	4.2	0.12	0.50	64	3.5	8.5	4.9	0.19	0.63	C23-24
Pancreas	100	4.1	13.3	8.4	0.39	1.26	89	4.8	11.9	7.0	0.34	0.83	C25
Nose, sinuses etc.	6	0.2	0.8	0.6	0.03	0.08	2	0.1	0.3	0.2	0.02	0.02	C30-31
Larynx	24	1.0	3.2	2.0	0.07	0.27	1	0.1	0.1	0.1	0.00	0.00	C32
Trachea, bronchus and lung	609	24.7	81.2	52.4	2.07	6.52	238	12.9	31.8	19.4	0.95	2.40	C33-34
Other thoracic organs	9	0.4	1.2	1.0	0.06	0.11	3	0.2	0.4	0.3	0.01	0.04	C37-38
Bone	15	0.6	2.0	1.7	0.09	0.11	14	0.8	1.9	1.5	0.10	0.13	C40-41
Melanoma of skin	7	0.3	0.9	0.5	0.04	0.08	5	0.3	0.7	0.4	0.04	0.05	C43
Other skin	24		3.2	2.1	0.08	0.21	18		2.4	1.3	0.05	0.12	C44
Mesothelioma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	18	0.7	2.4	1.4	0.09	0.17	13	0.7	1.7	1.3	0.08	0.14	C47+C49
Breast	6	0.2	0.8	0.4	0.02	0.03	311	16.9	41.5	27.6	2.25	3.00	C50
Vulva							6	0.3	0.8	0.5	0.05	0.05	C51
Vagina							1	0.1	0.1	0.1	0.01	0.01	C52
Cervix uteri							48	2.6	6.4	4.3	0.33	0.39	C53
Corpus uteri							44	2.4	5.9	4.0	0.38	0.40	C54
Uterus unspecified							6	0.3	0.8	0.5	0.05	0.07	C55
Ovary							63	3.4	8.4	5.5	0.44	0.60	C56
Other female genital organs							5	0.3	0.7	0.5	0.05	0.05	C57
Placenta							3	0.2	0.4	0.4	0.02	0.02	C58
Penis	5	0.2	0.7	0.4	0.03	0.03							C60
Prostate	70	2.8	9.3	6.0	0.09	0.59							C61
Testis	3	0.1	0.4	0.2	0.02	0.02							C62
Other male genital organs	4	0.2	0.5	0.4	0.02	0.02							C63
Kidney	46	1.9	6.1	4.0	0.25	0.46	16	0.9	2.1	1.3	0.07	0.14	C64
Renal pelvis	8	0.3	1.1	0.7	0.05	0.09	5	0.3	0.7	0.4	0.00	0.05	C65
Ureter	3	0.1	0.4	0.3	0.01	0.01	2	0.1	0.3	0.2	0.01	0.03	C66
Bladder	72	2.9	9.6	6.0	0.25	0.64	21	1.1	2.8	1.6	0.07	0.12	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C69
Brain, nervous system	69	2.8	9.2	8.5	0.47	0.69	78	4.2	10.4	7.2	0.44	0.80	C70-72
Thyroid	19	0.8	2.5	1.7	0.10	0.19	61	3.3	8.1	5.7	0.43	0.62	C73
Adrenal gland	3	0.1	0.4	0.6	0.03	0.05	3	0.2	0.4	0.2	0.03	0.03	C74
Other endocrine	24	1.0	3.2	2.6	0.15	0.29	21	1.1	2.8	2.1	0.14	0.18	C75
Hodgkin lymphoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C81
Non-Hodgkin lymphoma	52	2.1	6.9	4.5	0.23	0.45	38	2.1	5.1	3.3	0.18	0.44	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	11	0.4	1.5	0.9	0.05	0.09	14	0.8	1.9	1.1	0.05	0.16	C90
Lymphoid leukaemia	18	0.7	2.4	2.5	0.12	0.23	13	0.7	1.7	2.2	0.13	0.14	C91
Myeloid leukaemia	25	1.0	3.3	2.9	0.19	0.28	29	1.6	3.9	2.7	0.21	0.25	C92-94
Leukaemia unspecified	5	0.2	0.7	0.5	0.03	0.03	10	0.5	1.3	1.4	0.08	0.11	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	46	1.9	6.1	4.1	0.12	0.38	34	1.8	4.5	2.8	0.09	0.31	O&U
All sites	2491		332.2	219.4	10.51	25.41	1862		248.6	160.3	9.78	18.07	C00-96
All sites except C44	2467	100.0	329.0	217.3	10.43	25.21	1844	100.0	246.2	159.0	9.73	17.96	C00-96 exc. C44

China, Macao

REGISTRATION AREA

The Macao Cancer Registry covers the Macao Special Administrative Region of China, which has a total area of about 30 km² and consists of a peninsula and two islands that have been connected through land reclamation. Macao is bordered by the Pearl River Delta to the east, Guangdong Province to the north and west, and the South China Sea to the south. The population is about 500 000.

CANCER CARE FACILITIES

There is one major public hospital (Conde S. Januário Hospital) and two private hospitals (Kiang Wu Hospital and the Macau University of Science and Technology Hospital). All three are general hospitals. The public hospital provides free services for residents diagnosed with cancer. The government also subsidizes the Hospice and Palliative Care Centre of Kiang Wu Hospital, which began providing hospice care to patients with terminal illnesses in 2000. Macao has six health centres that provide free family medicine and community prevention services to residents.

REGISTRY STRUCTURE AND METHODS

The registry's primary source of information is reports submitted by physicians and pathologists (mainly those working at local hospitals that provide pathological diagnosis and cancer care) directly to the management unit of the registry within Macao's Health Bureau. For the purpose of annual analyses, information on cancer deaths is also registered from death certificates. The reports from various sources are collated and checked for duplicates. Case verification and data validation are performed to ensure data quality.

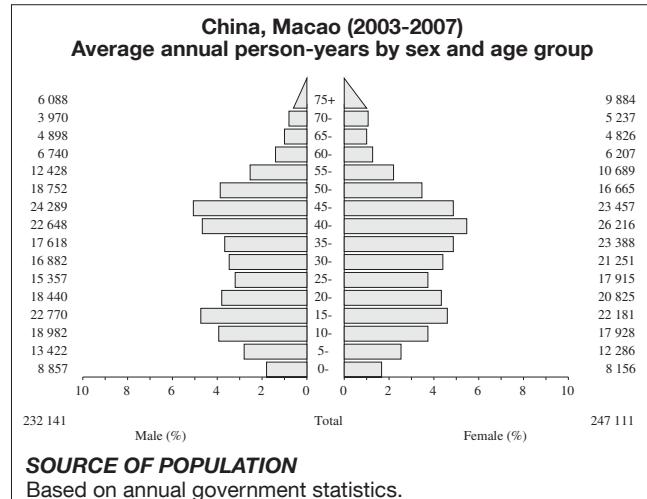
USE OF THE DATA

The registry provides information on the general cancer situation and trends in Macao. Registry data

are analysed to generate annual summary statistics (including incidence, mortality, and survival), which are provided to policy-makers, academics, and the general public. The registry publishes an annual report in print and online. The registry also provides additional anonymized data to researchers and policy-makers. A report on cancer survival was published in 2010.

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10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	39.8	Breast	38.9
Prostate	30.8	Trachea, bronchus and lung	17.1
Liver	20.2	Colon	16.5
Colon	18.6	Cervix uteri	8.9
Nasopharynx	15.7	Thyroid	8.5
Stomach	14.2	Rectum	8.0
Bladder	10.0	Nasopharynx	6.7
Rectum	9.2	Corpus uteri	5.7
Oesophagus	7.0	Stomach	5.6
Non-melanoma skin cancer	6.4	Liver	5.4
All sites	217.6	All sites	160.9

China, Macao (2003-2007)

SITE	Male						Female						ICD-10
	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	2	0.1	0.2	0.1	0.00	0.00	1	0.0	0.1	0.1	0.01	0.01	C00
Tongue	19	0.7	1.6	1.3	0.08	0.13	19	0.8	1.5	1.1	0.04	0.12	C01-02
Mouth	12	0.5	1.0	1.1	0.04	0.15	12	0.5	1.0	0.7	0.02	0.08	C03-06
Salivary glands	11	0.4	0.9	0.9	0.07	0.11	5	0.2	0.4	0.4	0.04	0.04	C07-08
Tonsil	3	0.1	0.3	0.2	0.02	0.02	2	0.1	0.2	0.2	0.01	0.03	C09
Other oropharynx	6	0.2	0.5	0.5	0.03	0.07	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	246	9.3	21.2	15.7	1.32	1.66	104	4.3	8.4	6.7	0.46	0.78	C11
Hypopharynx	11	0.4	0.9	1.0	0.06	0.13	0	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	2	0.1	0.2	0.1	0.01	0.01	2	0.1	0.2	0.1	0.00	0.00	C14
Oesophagus	93	3.5	8.0	7.0	0.42	0.83	15	0.6	1.2	0.9	0.05	0.11	C15
Stomach	180	6.8	15.5	14.2	0.59	1.58	85	3.5	6.9	5.6	0.30	0.64	C16
Small intestine	16	0.6	1.4	1.3	0.07	0.16	11	0.4	0.9	0.7	0.04	0.10	C17
Colon	228	8.6	19.6	18.6	0.85	2.20	255	10.4	20.6	16.5	0.73	1.90	C18
Rectum	125	4.7	10.8	9.2	0.55	1.05	126	5.1	10.2	8.0	0.43	0.88	C19-20
Anus	5	0.2	0.4	0.3	0.01	0.01	7	0.3	0.6	0.4	0.02	0.04	C21
Liver	252	9.5	21.7	20.2	1.14	2.47	84	3.4	6.8	5.4	0.24	0.58	C22
Gallbladder etc.	31	1.2	2.7	2.2	0.06	0.23	31	1.3	2.5	1.8	0.06	0.19	C23-24
Pancreas	43	1.6	3.7	3.5	0.12	0.47	24	1.0	1.9	1.5	0.06	0.14	C25
Nose, sinuses etc.	8	0.3	0.7	0.6	0.04	0.09	5	0.2	0.4	0.3	0.00	0.04	C30-31
Larynx	38	1.4	3.3	3.0	0.14	0.36	4	0.2	0.3	0.2	0.01	0.01	C32
Trachea, bronchus and lung	488	18.4	42.0	39.8	1.75	4.85	259	10.6	21.0	17.1	0.92	1.98	C33-34
Other thoracic organs	10	0.4	0.9	0.7	0.06	0.08	8	0.3	0.6	0.5	0.03	0.05	C37-38
Bone	10	0.4	0.9	0.8	0.04	0.09	11	0.4	0.9	1.1	0.07	0.11	C40-41
Melanoma of skin	2	0.1	0.2	0.1	0.01	0.01	6	0.2	0.5	0.4	0.01	0.05	C43
Other skin	81		7.0	6.4	0.36	0.66	62		5.0	3.9	0.20	0.38	C44
Mesothelioma	1	0.0	0.1	0.1	0.00	0.00	1	0.0	0.1	0.1	0.00	0.02	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	20	0.8	1.7	1.8	0.07	0.16	7	0.3	0.6	0.4	0.03	0.05	C47+C49
Breast	1	0.0	0.1	0.1	0.00	0.03	613	25.1	49.6	38.9	2.92	4.23	C50
Vulva							3	0.1	0.2	0.2	0.01	0.01	C51
Vagina							6	0.2	0.5	0.4	0.01	0.05	C52
Cervix uteri							148	6.0	12.0	8.9	0.76	0.95	C53
Corpus uteri							85	3.5	6.9	5.7	0.45	0.65	C54
Uterus unspecified							25	1.0	2.0	1.6	0.13	0.16	C55
Ovary							60	2.5	4.9	3.8	0.27	0.43	C56
Other female genital organs							14	0.6	1.1	0.9	0.06	0.12	C57
Placenta							0	0.0	0.0	0.0	0.00	0.00	C58
Penis	4	0.2	0.3	0.3	0.00	0.03							C60
Prostate	361	13.6	31.1	30.8	0.53	3.54							C61
Testis	16	0.6	1.4	1.4	0.06	0.11							C62
Other male genital organs	2	0.1	0.2	0.2	0.01	0.03							C63
Kidney	31	1.2	2.7	2.5	0.10	0.27	24	1.0	1.9	1.8	0.13	0.25	C64
Renal pelvis	1	0.0	0.1	0.0	0.00	0.00	1	0.0	0.1	0.1	0.00	0.02	C65
Ureter	2	0.1	0.2	0.2	0.00	0.05	5	0.2	0.4	0.3	0.02	0.04	C66
Bladder	119	4.5	10.3	10.0	0.42	1.28	41	1.7	3.3	2.3	0.04	0.22	C67
Other urinary organs	1	0.0	0.1	0.1	0.00	0.02	5	0.2	0.4	0.4	0.00	0.04	C68
Eye	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C69
Brain, nervous system	24	0.9	2.1	2.0	0.14	0.18	17	0.7	1.4	1.1	0.07	0.09	C70-72
Thyroid	31	1.2	2.7	2.4	0.16	0.25	138	5.6	11.2	8.5	0.62	0.85	C73
Adrenal gland	3	0.1	0.3	0.2	0.02	0.02	2	0.1	0.2	0.6	0.02	0.02	C74
Other endocrine	2	0.1	0.2	0.2	0.01	0.01	2	0.1	0.2	0.1	0.01	0.01	C75
Hodgkin lymphoma	7	0.3	0.6	0.6	0.03	0.05	3	0.1	0.2	0.3	0.02	0.04	C81
Non-Hodgkin lymphoma	66	2.5	5.7	5.3	0.29	0.57	69	2.8	5.6	4.4	0.27	0.42	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	17	0.6	1.5	1.4	0.08	0.22	10	0.4	0.8	0.6	0.01	0.06	C90
Lymphoid leukaemia	16	0.6	1.4	1.5	0.10	0.14	10	0.4	0.8	0.8	0.04	0.04	C91
Myeloid leukaemia	27	1.0	2.3	2.8	0.16	0.23	27	1.1	2.2	1.4	0.07	0.11	C92-94
Leukaemia unspecified	4	0.2	0.3	0.3	0.01	0.04	1	0.0	0.1	0.1	0.00	0.02	C95
Myeloproliferative disorders	3	0.1	0.3	0.2	0.01	0.03	4	0.2	0.3	0.4	0.01	0.03	MPD
Myelodysplastic syndromes	3	0.1	0.3	0.2	0.01	0.04	3	0.1	0.2	0.2	0.01	0.01	MDS
Other and unspecified	56	2.1	4.8	4.7	0.17	0.50	47	1.9	3.8	3.1	0.14	0.39	O&U
All sites	2740		236.1	217.6	10.22	25.21	2509		203.1	160.9	9.84	17.57	C00-96
All sites except C44	2659	100.0	229.1	211.2	9.86	24.55	2447	100.0	198.0	157.1	9.65	17.19	C00-96 exc. C44

§Includes 5 cases of unknown age

§Includes 3 cases of unknown age

China, Qidong County

REGISTRATION AREA

The Qidong Cancer Registry covers the county-level city of Qidong in Jiangsu Province in China. Qidong is located on the banks of the Yellow Sea at the mouth of the Yangtze River, to the north of Shanghai. It has six districts (Huilong, Qixi, Jianghai, Haidong, Wangbao, and Lusi) and a total area of 1208 km². In 2007, the population was 1.1 million.

REGISTRY STRUCTURE AND METHODS

The registry was established in 1972, and a vital statistics system for all deaths was established in 1974. Both initiatives are supervised by the Qidong Liver Cancer Institute (QDLCI). The registry uses active and passive data collection methods. All data received from smaller registries and hospitals are checked against cancer report lists and death-certificate-notified (DCN) cases to identify missing cases and prevent duplicate registration. New cancer cases in the catchment area are recorded, checked, and reported to the registry. If the registry receives a death notification before any other notifications of a new case, the patient's medical records are reviewed and a home visit may be carried out to obtain further information. As a result of this process, the proportion of death-certificate-only (DCO) cases is very low. The registry uses ICD-10 for coding the sites of malignant tumours, and ICD-O-3 for coding their histology. DEPedits software is used to prepare the data.

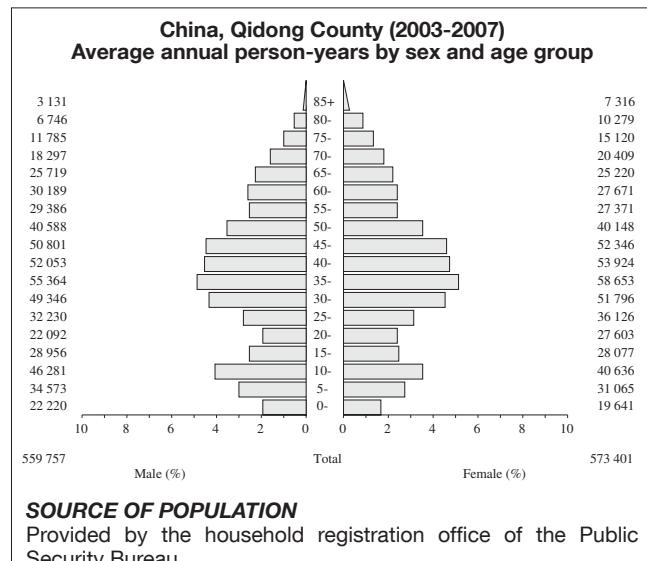
USE OF THE DATA

Registry data have been used mainly for epidemiological and etiological research investigating cancer of the liver (and other sites), other cancer research projects, monitoring of treatment outcomes, and government

and health department decision-making for disease control. The registry publishes an annual report on cancer incidence and mortality, and special studies (such as screening evaluations, survival analyses, and studies on chemoprevention of liver cancer) have been performed. Registry data have been published in Chinese and international peer-reviewed journals.

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by the household registration office of the Public Security Bureau.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Liver	77.5	Liver	26.1
Trachea, bronchus and lung	55.2	Trachea, bronchus and lung	19.6
Stomach	30.9	Stomach	15.8
Oesophagus	10.6	Breast	15.3
Rectum	8.3	Rectum	6.8
Pancreas	7.0	Cervix uteri	4.7
Colon	5.2	Brain, nervous system	4.7
Bladder	5.2	Pancreas	4.5
Brain, nervous system	4.9	Colon	4.3
Non-Hodgkin lymphoma	4.9	Oesophagus	3.9
All sites	234.5	All sites	130.4

China, Qidong County (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	2	0.0	0.1	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C00
Tongue	8	0.1	0.3	0.2	0.01	0.03	9	0.1	0.3	0.2	0.01	0.02	C01-02
Mouth	13	0.1	0.5	0.3	0.02	0.05	12	0.2	0.4	0.3	0.02	0.03	C03-06
Salivary glands	19	0.2	0.7	0.4	0.03	0.05	2	0.0	0.1	0.0	0.00	0.00	C07-08
Tonsil	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	4	0.0	0.1	0.1	0.01	0.01	1	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	76	0.8	2.7	1.9	0.14	0.19	38	0.6	1.3	0.8	0.06	0.09	C11
Hypopharynx	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	468	4.7	16.7	10.6	0.47	1.26	219	3.6	7.6	3.9	0.12	0.44	C15
Stomach	1360	13.6	48.6	30.9	1.61	3.73	804	13.3	28.0	15.8	0.79	1.76	C16
Small intestine	18	0.2	0.6	0.4	0.02	0.06	25	0.4	0.9	0.5	0.02	0.04	C17
Colon	230	2.3	8.2	5.2	0.26	0.61	216	3.6	7.5	4.3	0.23	0.50	C18
Rectum	369	3.7	13.2	8.3	0.39	0.99	348	5.8	12.1	6.8	0.37	0.73	C19-20
Anus	5	0.0	0.2	0.1	0.01	0.01	7	0.1	0.2	0.1	0.01	0.02	C21
Liver	3261	32.5	116.5	77.5	5.97	8.34	1192	19.8	41.6	26.1	1.78	2.95	C22
Gallbladder etc.	60	0.6	2.1	1.4	0.08	0.15	75	1.2	2.6	1.4	0.07	0.16	C23-24
Pancreas	313	3.1	11.2	7.0	0.29	0.84	229	3.8	8.0	4.5	0.21	0.59	C25
Nose, sinuses etc.	21	0.2	0.8	0.6	0.04	0.05	8	0.1	0.3	0.2	0.01	0.03	C30-31
Larynx	45	0.4	1.6	1.1	0.07	0.14	8	0.1	0.3	0.1	0.01	0.01	C32
Trachea, bronchus and lung	2457	24.5	87.8	55.2	2.53	6.94	959	15.9	33.4	19.6	1.05	2.34	C33-34
Other thoracic organs	26	0.3	0.9	0.7	0.04	0.07	19	0.3	0.7	0.4	0.03	0.06	C37-38
Bone	51	0.5	1.8	1.2	0.08	0.16	49	0.8	1.7	1.1	0.08	0.11	C40-41
Melanoma of skin	8	0.1	0.3	0.2	0.01	0.03	9	0.1	0.3	0.2	0.01	0.02	C43
Other skin	48		1.7	1.1	0.02	0.09	47		1.6	0.9	0.04	0.08	C44
Mesothelioma	3	0.0	0.1	0.1	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	11	0.1	0.4	0.3	0.03	0.03	6	0.1	0.2	0.1	0.01	0.01	C47+C49
Breast	11	0.1	0.4	0.3	0.02	0.03	646	10.7	22.5	15.3	1.29	1.65	C50
Vulva							3	0.0	0.1	0.0	0.00	0.00	C51
Vagina							2	0.0	0.1	0.1	0.01	0.01	C52
Cervix uteri							194	3.2	6.8	4.7	0.38	0.47	C53
Corpus uteri							77	1.3	2.7	1.9	0.17	0.23	C54
Uterus unspecified							39	0.6	1.4	0.9	0.07	0.08	C55
Ovary							112	1.9	3.9	2.8	0.22	0.30	C56
Other female genital organs							2	0.0	0.1	0.0	0.00	0.00	C57
Placenta							1	0.0	0.0	0.0	0.00	0.00	C58
Penis	11	0.1	0.4	0.3	0.02	0.02							C60
Prostate	159	1.6	5.7	3.3	0.03	0.34							C61
Testis	14	0.1	0.5	0.3	0.02	0.03							C62
Other male genital organs	2	0.0	0.1	0.0	0.00	0.01							C63
Kidney	49	0.5	1.8	1.1	0.08	0.12	26	0.4	0.9	0.6	0.04	0.07	C64
Renal pelvis	7	0.1	0.3	0.2	0.01	0.02	1	0.0	0.0	0.0	0.00	0.00	C65
Ureter	4	0.0	0.1	0.1	0.01	0.01	5	0.1	0.2	0.1	0.01	0.01	C66
Bladder	237	2.4	8.5	5.2	0.19	0.54	69	1.1	2.4	1.2	0.04	0.10	C67
Other urinary organs	1	0.0	0.0	0.0	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	5	0.0	0.2	0.1	0.01	0.01	4	0.1	0.1	0.1	0.00	0.01	C69
Brain, nervous system	191	1.9	6.8	4.9	0.29	0.57	187	3.1	6.5	4.7	0.32	0.50	C70-72
Thyroid	17	0.2	0.6	0.4	0.03	0.04	59	1.0	2.1	1.5	0.12	0.14	C73
Adrenal gland	4	0.0	0.1	0.2	0.01	0.02	5	0.1	0.2	0.1	0.01	0.01	C74
Other endocrine	2	0.0	0.1	0.0	0.00	0.00	4	0.1	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	6	0.1	0.2	0.1	0.00	0.01	6	0.1	0.2	0.1	0.01	0.02	C81
Non-Hodgkin lymphoma	188	1.9	6.7	4.9	0.32	0.53	109	1.8	3.8	2.4	0.15	0.32	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	78	0.8	2.8	1.8	0.10	0.23	55	0.9	1.9	1.4	0.11	0.19	C90
Lymphoid leukaemia	33	0.3	1.2	1.1	0.06	0.09	34	0.6	1.2	1.1	0.07	0.10	C91
Myeloid leukaemia	81	0.8	2.9	2.6	0.15	0.26	64	1.1	2.2	1.9	0.13	0.17	C92-94
Leukaemia unspecified	67	0.7	2.4	2.1	0.12	0.21	47	0.8	1.6	1.1	0.07	0.12	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	27	0.3	1.0	0.6	0.03	0.06	34	0.6	1.2	0.7	0.05	0.07	O&U
All sites	10071	359.8	234.5	13.63	26.99		6070		211.7	130.4	8.23	14.59	C00-96
All sites except C44	10023	100.0	233.5	13.61	26.90		6023	100.0	210.1	129.5	8.20	14.51	C00-96 exc. C44

China, Shanghai City

REGISTRATION AREA

The municipality of Shanghai is located on the east coast of China. It has a total area of 6340.5 km² and a population of about 13.5 million, and is divided into 16 districts and one county. During the 2003–2007 reporting period, the Shanghai Cancer Registry covered nine of Shanghai's urban districts, with a covered area of about 289.4 km² and a covered population of 6.2 million.

CANCER CARE FACILITIES

Shanghai has a three-level general health care network made up of more than 400 hospitals and community health service centres. The first-level facilities are the community health service centres, which provide predominantly primary health care. The second-level facilities are the district hospitals, most of which have an oncology department. The third-level facilities are the general and specialized hospitals. Most second- and third-level facilities are equipped to diagnose and treat cancer.

REGISTRY STRUCTURE AND METHODS

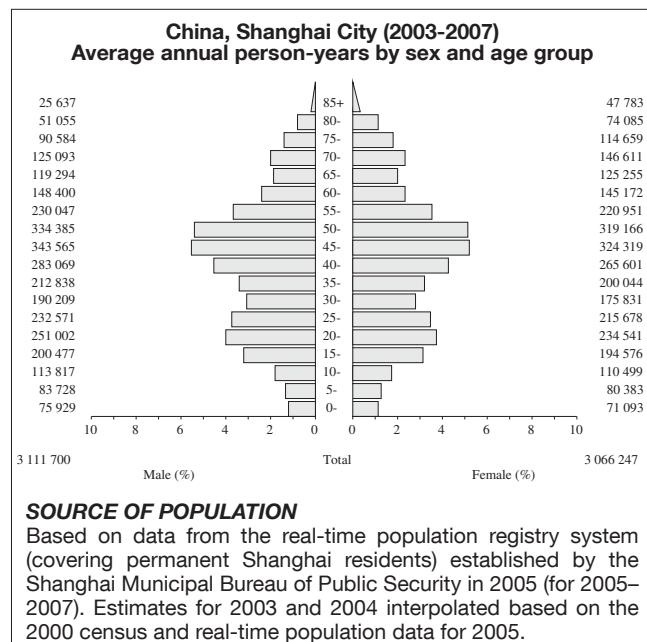
The registry is affiliated with the Shanghai Municipal Center for Disease Control and Prevention (CDC) and is staffed by two senior and three junior epidemiologists, two statisticians, and an assistant statistician. About 20 other epidemiologists and 20 assistants in local CDCs are also involved. All medical facilities that diagnose and treat cancer (about 180) are required to report all newly diagnosed cancers and benign tumours of the central nervous system, using a standardized notification card. Data linkage with the permanent resident registry is also used, together with home visits (when necessary), to determine whether a given patient is a permanent resident. The data on cancer notification cards are computerized using specially designed software that recognizes Chinese characters. Cancer patients' death certificates are obtained monthly from the Shanghai Vital Statistics database, and collated with the registry database.

USE OF THE DATA

The registry publishes the annual *Shanghai Cancer Report* and provides data for evaluating cancer control programmes.

CONTRIBUTORS

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NOTES ON THE DATA

*Low MV%.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	40.9	Breast	39.2
Stomach	26.6	Trachea, bronchus and lung	18.1
Liver	21.7	Colon	14.8
Colon	16.0	Stomach	14.1
Rectum	11.6	Thyroid	9.1
Prostate	10.5	Rectum	8.3
Bladder	8.0	Ovary	7.6
Pancreas	7.0	Liver	7.1
Oesophagus	6.6	Brain, nervous system	6.2
Kidney	6.3	Corpus uteri	5.8
All sites	204.8	All sites	179.1

*China, Shanghai City (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	21	0.0	0.1	0.1	0.00	0.01	23	0.0	0.2	0.1	0.01	0.01	C00
Tongue	180	0.3	1.2	0.7	0.04	0.08	159	0.3	1.0	0.5	0.03	0.06	C01-02
Mouth	225	0.4	1.4	0.8	0.04	0.09	164	0.3	1.1	0.5	0.02	0.06	C03-06
Salivary glands	144	0.2	0.9	0.5	0.03	0.06	129	0.2	0.8	0.5	0.03	0.05	C07-08
Tonsil	28	0.0	0.2	0.1	0.00	0.01	6	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	46	0.1	0.3	0.2	0.01	0.02	8	0.0	0.1	0.0	0.00	0.00	C10
Nasopharynx	953	1.6	6.1	3.7	0.28	0.40	363	0.7	2.4	1.4	0.10	0.15	C11
Hypopharynx	52	0.1	0.3	0.2	0.01	0.02	6	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	33	0.1	0.2	0.1	0.01	0.01	9	0.0	0.1	0.0	0.00	0.00	C14
Oesophagus	2017	3.4	13.0	6.6	0.28	0.71	791	1.5	5.2	1.9	0.04	0.21	C15
Stomach	7959	13.6	51.2	26.6	1.19	3.06	4728	8.9	30.8	14.1	0.70	1.56	C16
Small intestine	291	0.5	1.9	1.1	0.05	0.13	255	0.5	1.7	0.8	0.04	0.10	C17
Colon	4738	8.1	30.5	16.0	0.66	1.89	4952	9.3	32.3	14.8	0.67	1.79	C18
Rectum	3329	5.7	21.4	11.6	0.56	1.38	2697	5.1	17.6	8.3	0.43	0.99	C19-20
Anus	70	0.1	0.4	0.2	0.01	0.02	67	0.1	0.4	0.2	0.01	0.02	C21
Liver	6128	10.5	39.4	21.7	1.35	2.41	2419	4.5	15.8	7.1	0.32	0.80	C22
Gallbladder etc.	920	1.6	5.9	2.9	0.09	0.32	1599	3.0	10.4	4.2	0.13	0.44	C23-24
Pancreas	2100	3.6	13.5	7.0	0.29	0.78	1901	3.6	12.4	5.3	0.20	0.62	C25
Nose, sinuses etc.	137	0.2	0.9	0.6	0.04	0.06	69	0.1	0.5	0.2	0.01	0.02	C30-31
Larynx	686	1.2	4.4	2.4	0.12	0.28	71	0.1	0.5	0.2	0.01	0.02	C32
Trachea, bronchus and lung	12413	21.2	79.8	40.9	1.58	4.67	6238	11.7	40.7	18.1	0.79	2.12	C33-34
Other thoracic organs	269	0.5	1.7	1.1	0.07	0.11	194	0.4	1.3	0.8	0.05	0.08	C37-38
Bone	263	0.4	1.7	1.1	0.07	0.10	250	0.5	1.6	1.1	0.05	0.10	C40-41
Melanoma of skin	142	0.2	0.9	0.5	0.02	0.06	124	0.2	0.8	0.4	0.03	0.05	C43
Other skin	559		3.6	1.9	0.09	0.20	522		3.4	1.6	0.08	0.17	C44
Mesothelioma	39	0.1	0.3	0.1	0.01	0.01	30	0.1	0.2	0.1	0.01	0.01	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	369	0.6	2.4	1.6	0.09	0.15	331	0.6	2.2	1.4	0.08	0.13	C47+C49
Breast	90	0.2	0.6	0.3	0.02	0.04	10695	20.0	69.8	39.2	3.01	4.31	C50
Vulva							98	0.2	0.6	0.3	0.01	0.03	C51
Vagina							39	0.1	0.3	0.1	0.01	0.01	C52
Cervix uteri							1038	1.9	6.8	4.2	0.32	0.39	C53
Corpus uteri							1608	3.0	10.5	5.8	0.45	0.68	C54
Uterus unspecified							217	0.4	1.4	0.7	0.05	0.08	C55
Ovary							1974	3.7	12.9	7.6	0.56	0.80	C56
Other female genital organs							108	0.2	0.7	0.4	0.03	0.05	C57
Placenta							8	0.0	0.1	0.0	0.00	0.00	C58
Penis	107	0.2	0.7	0.3	0.02	0.04							C60
Prostate	3367	5.8	21.6	10.5	0.16	1.15							C61
Testis	122	0.2	0.8	0.7	0.05	0.05							C62
Other male genital organs	100	0.2	0.6	0.4	0.01	0.04							C63
Kidney	1736	3.0	11.2	6.3	0.41	0.71	956	1.8	6.2	3.3	0.20	0.37	C64
Renal pelvis	131	0.2	0.8	0.5	0.02	0.06	91	0.2	0.6	0.2	0.01	0.03	C65
Ureter	118	0.2	0.8	0.4	0.01	0.05	109	0.2	0.7	0.3	0.01	0.04	C66
Bladder	2435	4.2	15.7	8.0	0.27	0.86	810	1.5	5.3	2.3	0.08	0.26	C67
Other urinary organs	25	0.0	0.2	0.1	0.00	0.01	15	0.0	0.1	0.0	0.00	0.01	C68
Eye	36	0.1	0.2	0.2	0.01	0.02	44	0.1	0.3	0.2	0.01	0.02	C69
Brain, nervous system	1287	2.2	8.3	5.4	0.33	0.55	1690	3.2	11.0	6.2	0.38	0.67	C70-72
Thyroid	615	1.1	4.0	2.6	0.20	0.26	2100	3.9	13.7	9.1	0.73	0.87	C73
Adrenal gland	48	0.1	0.3	0.2	0.01	0.02	38	0.1	0.2	0.1	0.01	0.01	C74
Other endocrine	347	0.6	2.2	1.5	0.09	0.16	430	0.8	2.8	1.9	0.14	0.18	C75
Hodgkin lymphoma	49	0.1	0.3	0.2	0.02	0.02	31	0.1	0.2	0.2	0.01	0.01	C81
Non-Hodgkin lymphoma	1383	2.4	8.9	5.4	0.29	0.56	1091	2.0	7.1	3.9	0.21	0.42	C82-85,C96
Immunoproliferative diseases	10	0.0	0.1	0.0	0.00	0.00	3	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	356	0.6	2.3	1.3	0.06	0.16	309	0.6	2.0	1.0	0.05	0.12	C90
Lymphoid leukaemia	274	0.5	1.8	1.8	0.08	0.13	164	0.3	1.1	1.3	0.07	0.08	C91
Myeloid leukaemia	585	1.0	3.8	2.5	0.14	0.23	456	0.9	3.0	1.9	0.12	0.19	C92-94
Leukaemia unspecified	198	0.3	1.3	0.7	0.03	0.08	178	0.3	1.2	0.7	0.03	0.07	C95
Myeloproliferative disorders	3	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	1506	2.6	9.7	5.2	0.20	0.50	1510	2.8	9.8	4.3	0.18	0.43	O&U
All sites	59039		379.5	204.8	9.46	22.73	53916		351.7	179.1	10.51	19.72	C00-96
All sites except C44	58480	100.0	375.9	202.8	9.36	22.54	53394	100.0	348.3	177.5	10.43	19.56	C00-96 exc. C44

*See note following population pyramid

China, Wuhan City

REGISTRATION AREA

Wuhan is the largest city in central China, with a population of about 8 million (97% Han Chinese). It is an industrial and commercial city and the capital of Hubei Province. The Wuhan Cancer Registry covers 9 of the city's 13 districts. In 2005, the covered population was 4.7 million.

CANCER CARE FACILITIES

There are several types of hospitals in Wuhan. National, provincial, and municipal hospitals and most district hospitals provide radiotherapy, cancer surgery, and chemotherapy services. The Hubei Cancer Hospital specializes in cancer diagnosis and treatment.

REGISTRY STRUCTURE AND METHODS

The registry was established in 1980 by the Wuhan Center for Disease Prevention and Control (CDC) and is staffed by 19 full-time registrars and 20 part-time medical officers. Medical facilities are required by Wuhan Public Health Bureau regulations to report all newly diagnosed cancers, as well as benign tumours of the central nervous system. Physicians complete standardized notification cards, and each medical facility has a special department that collects the cards and submits them to the registry. Registry staff members check, code, and file the cards according to year, sex, permanent residence, and ICD code. They also determine whether each case has already been reported, to avoid duplication. Cancer patients' death certificates are collected from the Vital Statistics Section of the Wuhan CDC and compared against the registry database. If a deceased patient's case is already registered, his or her vital status is updated. If not, registry staff members interview relatives to obtain more complete information.

INTERPRETING THE RESULTS

Wuhan has a full range of diagnostic facilities, so it is unlikely that cases will be missed due to referral outside of the registration area.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

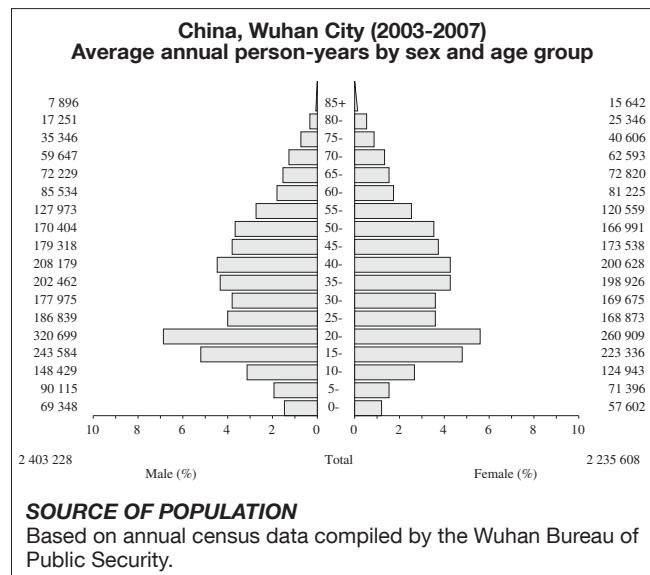
Male		Female	
Trachea, bronchus and lung	56.2	Breast	30.3
Liver	27.8	Trachea, bronchus and lung	19.6
Stomach	25.5	Stomach	12.2
Rectum	10.8	Colon	9.1
Oesophagus	10.7	Liver	8.5
Colon	9.8	Rectum	8.1
Bladder	8.0	Ovary	7.1
Brain, nervous system	5.7	Cervix uteri	6.5
Prostate	5.5	Brain, nervous system	6.4
Non-Hodgkin lymphoma	5.5	Thyroid	4.8
All sites	209.1	All sites	156.9

USE OF THE DATA

The registry produces an annual report on cancer incidence and mortality for the Wuhan Public Health Bureau. Registry data are also used in epidemiological studies.

CONTRIBUTORS

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NOTES ON THE DATA

*No DCO registrations. High MV%.

*China, Wuhan City (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	13	0.0	0.1	0.1	0.01	0.01	4	0.0	0.0	0.0	0.00	0.00	C00
Tongue	89	0.3	0.7	0.6	0.04	0.08	65	0.3	0.6	0.4	0.02	0.05	C01-02
Mouth	114	0.4	0.9	0.8	0.05	0.10	74	0.3	0.7	0.5	0.02	0.06	C03-06
Salivary glands	77	0.3	0.6	0.6	0.04	0.05	76	0.3	0.7	0.5	0.04	0.06	C07-08
Tonsil	12	0.0	0.1	0.1	0.01	0.01	9	0.0	0.1	0.1	0.00	0.01	C09
Other oropharynx	23	0.1	0.2	0.2	0.01	0.02	7	0.0	0.1	0.0	0.00	0.01	C10
Nasopharynx	538	1.8	4.5	3.6	0.29	0.41	207	0.9	1.9	1.4	0.10	0.15	C11
Hypopharynx	33	0.1	0.3	0.2	0.01	0.03	5	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	25	0.1	0.2	0.2	0.01	0.02	11	0.0	0.1	0.1	0.00	0.01	C14
Oesophagus	1528	5.2	12.7	10.7	0.54	1.30	536	2.4	4.8	3.6	0.15	0.45	C15
Stomach	3673	12.5	30.6	25.5	1.40	3.10	1837	8.1	16.4	12.2	0.71	1.44	C16
Small intestine	120	0.4	1.0	0.8	0.05	0.11	95	0.4	0.8	0.6	0.04	0.08	C17
Colon	1407	4.8	11.7	9.8	0.48	1.19	1334	5.9	11.9	9.1	0.49	1.17	C18
Rectum	1542	5.2	12.8	10.8	0.59	1.33	1209	5.3	10.8	8.1	0.46	1.02	C19-20
Anus	40	0.1	0.3	0.3	0.02	0.03	39	0.2	0.3	0.3	0.01	0.03	C21
Liver	4061	13.8	33.8	27.8	1.77	3.16	1271	5.6	11.4	8.5	0.42	1.03	C22
Gallbladder etc.	315	1.1	2.6	2.2	0.10	0.25	419	1.8	3.7	2.8	0.12	0.36	C23-24
Pancreas	662	2.2	5.5	4.6	0.23	0.59	550	2.4	4.9	3.6	0.16	0.45	C25
Nose, sinuses etc.	78	0.3	0.6	0.5	0.04	0.07	39	0.2	0.3	0.3	0.02	0.03	C30-31
Larynx	509	1.7	4.2	3.6	0.20	0.46	74	0.3	0.7	0.5	0.02	0.05	C32
Trachea, bronchus and lung	7963	27.0	66.3	56.2	2.56	7.19	2930	12.9	26.2	19.6	0.97	2.48	C33-34
Other thoracic organs	152	0.5	1.3	1.1	0.06	0.13	80	0.4	0.7	0.6	0.03	0.06	C37-38
Bone	273	0.9	2.3	2.0	0.10	0.23	164	0.7	1.5	1.4	0.08	0.14	C40-41
Melanoma of skin	74	0.3	0.6	0.5	0.03	0.06	49	0.2	0.4	0.3	0.02	0.04	C43
Other skin	132		1.1	0.9	0.05	0.10	96		0.9	0.6	0.04	0.07	C44
Mesothelioma	48	0.2	0.4	0.3	0.02	0.04	36	0.2	0.3	0.2	0.01	0.03	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	186	0.6	1.5	1.4	0.09	0.15	155	0.7	1.4	1.2	0.08	0.11	C47+C49
Breast	60	0.2	0.5	0.4	0.03	0.05	4497	19.8	40.2	30.3	2.44	3.27	C50
Vulva							27	0.1	0.2	0.2	0.01	0.02	C51
Vagina							29	0.1	0.3	0.2	0.01	0.02	C52
Cervix uteri							983	4.3	8.8	6.5	0.52	0.61	C53
Corpus uteri							599	2.6	5.4	4.1	0.34	0.48	C54
Uterus unspecified							110	0.5	1.0	0.7	0.04	0.08	C55
Ovary							1024	4.5	9.2	7.1	0.55	0.76	C56
Other female genital organs							37	0.2	0.3	0.3	0.02	0.03	C57
Placenta							20	0.1	0.2	0.1	0.01	0.01	C58
Penis	40	0.1	0.3	0.3	0.01	0.03							C60
Prostate	787	2.7	6.5	5.5	0.08	0.54							C61
Testis	62	0.2	0.5	0.6	0.03	0.04							C62
Other male genital organs	16	0.1	0.1	0.1	0.01	0.01							C63
Kidney	490	1.7	4.1	3.5	0.22	0.41	266	1.2	2.4	2.2	0.14	0.24	C64
Renal pelvis	46	0.2	0.4	0.3	0.02	0.03	36	0.2	0.3	0.2	0.01	0.03	C65
Ureter	26	0.1	0.2	0.2	0.01	0.03	35	0.2	0.3	0.2	0.01	0.03	C66
Bladder	1109	3.8	9.2	8.0	0.33	0.93	267	1.2	2.4	1.8	0.08	0.22	C67
Other urinary organs	12	0.0	0.1	0.1	0.01	0.01	4	0.0	0.0	0.0	0.00	0.00	C68
Eye	17	0.1	0.1	0.3	0.01	0.02	23	0.1	0.2	0.3	0.02	0.02	C69
Brain, nervous system	780	2.6	6.5	5.7	0.37	0.59	839	3.7	7.5	6.4	0.42	0.67	C70-72
Thyroid	191	0.6	1.6	1.3	0.08	0.13	680	3.0	6.1	4.8	0.37	0.45	C73
Adrenal gland	22	0.1	0.2	0.1	0.01	0.02	20	0.1	0.2	0.1	0.01	0.02	C74
Other endocrine	118	0.4	1.0	0.8	0.05	0.08	183	0.8	1.6	1.3	0.10	0.13	C75
Hodgkin lymphoma	39	0.1	0.3	0.3	0.01	0.02	32	0.1	0.3	0.2	0.01	0.02	C81
Non-Hodgkin lymphoma	752	2.5	6.3	5.5	0.31	0.63	513	2.3	4.6	3.7	0.21	0.43	C82-85,C96
Immunoproliferative diseases	1	0.0	0.0	0.0	0.00	0.00	2	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	145	0.5	1.2	1.0	0.05	0.14	112	0.5	1.0	0.8	0.05	0.11	C90
Lymphoid leukaemia	210	0.7	1.7	2.1	0.10	0.17	152	0.7	1.4	1.8	0.10	0.14	C91
Myeloid leukaemia	290	1.0	2.4	2.2	0.13	0.21	273	1.2	2.4	2.3	0.15	0.22	C92-94
Leukaemia unspecified	132	0.4	1.1	1.1	0.07	0.10	104	0.5	0.9	0.9	0.05	0.08	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	3	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	602	2.0	5.0	4.3	0.18	0.47	564	2.5	5.0	3.8	0.20	0.43	O&U
All sites	29634		246.6	209.1	10.89	24.86	22805		204.0	156.9	9.90	17.95	C00-96
All sites except C44	29502	100.0	245.5	208.2	10.84	24.75	22709	100.0	203.2	156.3	9.87	17.88	C00-96 exc. C44

*See note following population pyramid

China, Yangcheng County

REGISTRATION AREA

The Yangcheng Cancer Registry covers Yangcheng County in the south-eastern part of Shanxi Province. The county contains 17 townships and 468 administrative villages and has a total area of 1968 km². In 2003, the population was 390 000 (more than 95% Han Chinese). The population is slowly declining, with a decrease of about 4500 residents (1.2%) from 2003 to 2007. Occupations are diverse, but there is an emphasis on agriculture and manufacturing.

REGISTRY STRUCTURE AND METHODS

In 1974, the Yangcheng Cancer Hospital was enrolled in the national disease surveillance network by the Chinese Ministry of Health, leading to the establishment of the registry. Although cancer is not a reportable disease in China, the Shanxi Province Department of Health requires all medical institutions, township health centres, and village clinics in the province to regularly provide data about cancer incidence and mortality by submitting cancer notification cards and residents' death certificates to the registry. The registry uses ICD-10 and ICD-O-3 for coding and statistics, and has used CanReg4 software for data management since 1998. All new cases of malignant tumours and benign tumours of the central nervous system are registered. Reports of carcinoma in situ cases are also collected but are not included in the registry's cancer statistics report.

INTERPRETING THE RESULTS

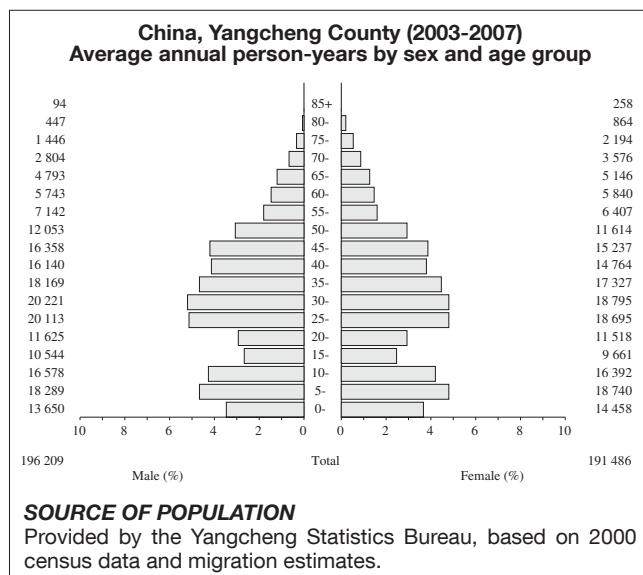
Yangcheng has one of the highest cancer incidence rates in China, with a particularly high incidence of digestive cancers.

USE OF THE DATA

The registry collaborates with the Chinese National Office for Cancer Prevention and Control and participates in many scientific research projects.

CONTRIBUTORS

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NOTES ON THE DATA

*No DCO registrations.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	168.9	Oesophagus	85.5
Oesophagus	149.5	Cervix uteri	71.8
Liver	41.8	Stomach	57.8
Trachea, bronchus and lung	20.5	Liver	15.3
Rectum	5.8	Breast	14.1
Colon	4.9	Trachea, bronchus and lung	9.5
Non-Hodgkin lymphoma	4.8	Rectum	5.1
Brain, nervous system	3.0	Colon	4.8
Bladder	3.0	Non-Hodgkin lymphoma	3.7
Bone	2.3	Ovary	3.5
All sites	425.0	All sites	291.4

*China, Yangcheng County (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	1	0.0	0.1	0.1	0.00	0.04	1	0.0	0.1	0.1	0.00	0.03	C00
Tongue	5	0.1	0.5	0.5	0.06	0.06	3	0.1	0.3	0.3	0.03	0.03	C01-02
Mouth	17	0.5	1.7	2.3	0.10	0.20	14	0.5	1.5	1.4	0.04	0.14	C03-06
Salivary glands	4	0.1	0.4	0.4	0.03	0.05	0	0.0	0.0	0.0	0.00	0.00	C07-08
Tonsil	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	1	0.0	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	5	0.1	0.5	0.4	0.02	0.05	2	0.1	0.2	0.2	0.02	0.02	C11
Hypopharynx	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.1	0.02	0.02	C12-13
Pharynx unspecified	5	0.1	0.5	0.7	0.03	0.07	2	0.1	0.2	0.2	0.01	0.03	C14
Oesophagus	1231	34.5	125.5	149.5	8.94	18.44	763	27.6	79.7	85.5	6.09	10.79	C15
Stomach	1416	39.7	144.3	168.9	10.97	22.12	507	18.4	53.0	57.8	3.77	7.56	C16
Small intestine	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.1	0.00	0.00	C17
Colon	46	1.3	4.7	4.9	0.38	0.60	45	1.6	4.7	4.8	0.39	0.57	C18
Rectum	56	1.6	5.7	5.8	0.42	0.66	48	1.7	5.0	5.1	0.32	0.62	C19-20
Anus	2	0.1	0.2	0.2	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C21
Liver	372	10.4	37.9	41.8	2.98	4.94	142	5.1	14.8	15.3	0.99	2.15	C22
Gallbladder etc.	5	0.1	0.5	0.6	0.04	0.09	14	0.5	1.5	1.4	0.12	0.15	C23-24
Pancreas	13	0.4	1.3	1.7	0.08	0.24	18	0.7	1.9	1.7	0.08	0.16	C25
Nose, sinuses etc.	5	0.1	0.5	0.6	0.07	0.07	5	0.2	0.5	0.5	0.04	0.06	C30-31
Larynx	14	0.4	1.4	1.6	0.11	0.27	4	0.1	0.4	0.4	0.04	0.04	C32
Trachea, bronchus and lung	170	4.8	17.3	20.5	1.35	2.99	89	3.2	9.3	9.5	0.71	1.10	C33-34
Other thoracic organs	8	0.2	0.8	0.9	0.06	0.11	3	0.1	0.3	0.3	0.01	0.04	C37-38
Bone	21	0.6	2.1	2.3	0.13	0.26	18	0.7	1.9	2.0	0.15	0.21	C40-41
Melanoma of skin	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C43
Other skin	6	0.6	0.9	0.01	0.12	6		0.6	0.6	0.07	0.07	0.07	C44
Mesothelioma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	1	0.0	0.1	0.1	0.00	0.02	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.1	0.01	0.01	C47+C49
Breast	2	0.1	0.2	0.2	0.01	0.01	153	5.5	16.0	14.1	1.22	1.48	C50
Vulva							1	0.0	0.1	0.1	0.02	0.02	C51
Vagina							3	0.1	0.3	0.3	0.03	0.03	C52
Cervix uteri							749	27.1	78.2	71.8	6.48	7.91	C53
Corpus uteri							9	0.3	0.9	0.8	0.07	0.09	C54
Uterus unspecified							1	0.0	0.1	0.1	0.02	0.02	C55
Ovary							35	1.3	3.7	3.5	0.32	0.32	C56
Other female genital organs							0	0.0	0.0	0.0	0.00	0.00	C57
Placenta							0	0.0	0.0	0.0	0.00	0.00	C58
Penis	8	0.2	0.8	1.0	0.05	0.14							C60
Prostate	6	0.2	0.6	0.8	0.00	0.11							C61
Testis	6	0.2	0.6	0.4	0.03	0.03							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	10	0.3	1.0	1.2	0.14	0.14	5	0.2	0.5	0.5	0.04	0.06	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.1	0.00	0.02	C66
Bladder	24	0.7	2.4	3.0	0.15	0.44	7	0.3	0.7	0.7	0.02	0.04	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	3	0.1	0.3	1.3	0.02	0.05	2	0.1	0.2	0.2	0.02	0.02	C69
Brain, nervous system	28	0.8	2.9	3.0	0.23	0.36	28	1.0	2.9	2.7	0.22	0.27	C70-72
Thyroid	3	0.1	0.3	0.3	0.02	0.06	9	0.3	0.9	0.9	0.07	0.10	C73
Adrenal gland	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C74
Other endocrine	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	10	0.3	1.0	1.1	0.07	0.16	11	0.4	1.1	1.2	0.06	0.14	C81
Non-Hodgkin lymphoma	36	1.0	3.7	4.8	0.30	0.45	34	1.2	3.6	3.7	0.33	0.41	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.2	0.01	0.01	C90
Lymphoid leukaemia	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C91
Myeloid leukaemia	17	0.5	1.7	1.6	0.12	0.12	15	0.5	1.6	1.4	0.11	0.14	C92-94
Leukaemia unspecified	4	0.1	0.4	0.5	0.04	0.04	0	0.0	0.0	0.0	0.00	0.00	C95
Myeloproliferative disorders	1	0.0	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	7	0.2	0.7	0.8	0.07	0.07	16	0.6	1.7	1.8	0.15	0.23	O&U
All sites	3569		363.8	425.0	27.07	53.65	2767		289.0	291.4	22.07	35.06	C00-96
All sites except C44	3563	100.0	363.2	424.1	27.06	53.53	2761	100.0	288.4	290.8	22.00	35.00	C00-96 exc. C44

*See note following population pyramid

China, Yanting County

REGISTRATION AREA

The Yanting Cancer Registry covers Yanting County in the north-east of Sichuan Province in China. The county has an area of 1647 km². In 2005, the population was 601 000, with about 89% of residents living in rural areas and the rest in towns.

CANCER CARE FACILITIES

General health care is provided predominantly by the county's health administrative department through county and district hospitals and a network of primary health centres. Patients diagnosed with or suspected to have cancer are typically referred by primary and secondary care facilities to the Yanting Cancer Hospital, which has radiotherapy, surgical oncology, and chemotherapy departments.

REGISTRY STRUCTURE AND METHODS

Population-based cancer registration was initiated in 1970. The registry is located within the department of epidemiology at the Yanting Cancer Institute and is funded by the institute and the Sichuan Yanting Health Bureau. The registry is staffed by five full-time registrars and 50 part-time interviewers. The registry uses active case finding. The death registration system (also part of the registry) is accurate and complete. A definite cause is registered for most deaths. Registry staff members periodically visit hospitals and other health services to review the files kept by the medical records and pathology departments and clinical laboratories, and to abstract data on cancer cases. Relevant information is also collected through annual home visits to residents outside the registration area.

INTERPRETING THE RESULTS

Cancer incidence rates, particularly those of oesophageal and gastric cancers, have been high for several decades. In 1971–1978, the West China Medical University launched an epidemiological

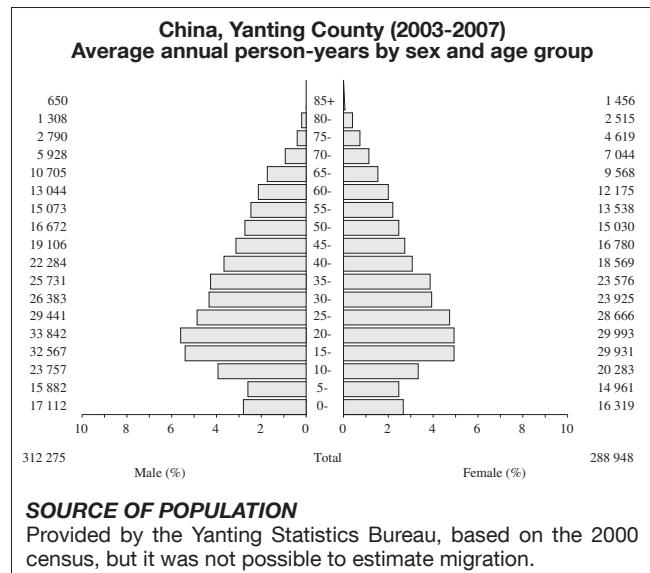
investigation of this phenomenon. However, no specific occupational exposures or other factors have yet been identified to explain the high rates.

USE OF THE DATA

Registry data have been used in 26 studies on the etiology and epidemiology of oesophageal and gastric cancers.

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by the Yanting Statistics Bureau, based on the 2000 census, but it was not possible to estimate migration.

NOTES ON THE DATA

*High MV%. Low DCO rate.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	138.4	Stomach	68.0
Oesophagus	100.6	Oesophagus	67.7
Liver	62.8	Liver	24.6
Trachea, bronchus and lung	48.3	Trachea, bronchus and lung	15.4
Rectum	9.5	Breast	9.7
Non-Hodgkin lymphoma	6.1	Cervix uteri	7.8
Leukaemia unspecified	5.3	Uterus unspecified	7.1
Brain, nervous system	4.9	Rectum	5.1
Bone	3.3	Leukaemia unspecified	3.8
Bladder	3.0	Ovary	2.6
All sites	401.1	All sites	229.5

*China, Yanting County (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C00
Tongue	4	0.1	0.3	0.2	0.03	0.03	2	0.1	0.1	0.1	0.01	0.02	C01-02
Mouth	45	0.7	2.9	2.7	0.16	0.35	23	0.6	1.6	1.4	0.09	0.21	C03-06
Salivary glands	0	0.0	0.0	0.0	0.00	0.00	12	0.3	0.8	0.7	0.03	0.14	C07-08
Tonsil	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	27	0.4	1.7	1.6	0.11	0.23	22	0.6	1.5	1.4	0.11	0.15	C11
Hypopharynx	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	1591	25.0	101.9	100.6	5.19	11.99	1146	29.6	79.3	67.7	3.80	8.35	C15
Stomach	2176	34.1	139.4	138.4	7.17	16.50	1173	30.3	81.2	68.0	3.49	8.12	C16
Small intestine	11	0.2	0.7	0.7	0.03	0.07	0	0.0	0.0	0.0	0.00	0.00	C17
Colon	29	0.5	1.9	1.7	0.09	0.24	22	0.6	1.5	1.2	0.06	0.12	C18
Rectum	158	2.5	10.1	9.5	0.57	1.12	90	2.3	6.2	5.1	0.28	0.61	C19-20
Anus	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C21
Liver	1039	16.3	66.5	62.8	4.31	6.40	417	10.8	28.9	24.6	1.55	2.85	C22
Gallbladder etc.	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C23-24
Pancreas	35	0.5	2.2	1.9	0.16	0.23	13	0.3	0.9	0.8	0.05	0.11	C25
Nose, sinuses etc.	8	0.1	0.5	0.4	0.02	0.05	3	0.1	0.2	0.2	0.01	0.03	C30-31
Larynx	20	0.3	1.3	1.2	0.08	0.12	1	0.0	0.1	0.1	0.01	0.01	C32
Trachea, bronchus and lung	771	12.1	49.4	48.3	2.41	6.11	264	6.8	18.3	15.4	0.85	1.83	C33-34
Other thoracic organs	7	0.1	0.4	0.4	0.03	0.06	0	0.0	0.0	0.0	0.00	0.00	C37-38
Bone	54	0.8	3.5	3.3	0.19	0.34	20	0.5	1.4	1.2	0.10	0.13	C40-41
Melanoma of skin	5	0.1	0.3	0.3	0.02	0.02	1	0.0	0.1	0.1	0.01	0.01	C43
Other skin	20		1.3	1.1	0.08	0.15	10		0.7	0.7	0.05	0.09	C44
Mesothelioma	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.1	0.01	0.01	C45
Kaposi sarcoma	4	0.1	0.3	0.2	0.00	0.04	4	0.1	0.3	0.3	0.01	0.03	C46
Connective and soft tissue	23	0.4	1.5	1.6	0.07	0.10	12	0.3	0.8	0.8	0.06	0.10	C47+C49
Breast	2	0.0	0.1	0.1	0.01	0.01	157	4.1	10.9	9.7	0.85	0.93	C50
Vulva					5	0.1	0.3	0.3	0.02	0.02	0.02	0.02	C51
Vagina					1	0.0	0.1	0.1	0.01	0.01	0.01	0.01	C52
Cervix uteri					128	3.3	8.9	7.8	0.57	0.99	0.99	0.99	C53
Corpus uteri					25	0.6	1.7	1.6	0.14	0.17	0.14	0.17	C54
Uterus unspecified					117	3.0	8.1	7.1	0.53	0.86	0.53	0.86	C55
Ovary					43	1.1	3.0	2.6	0.23	0.27	0.23	0.27	C56
Other female genital organs					3	0.1	0.2	0.2	0.01	0.01	0.01	0.01	C57
Placenta					3	0.1	0.2	0.1	0.01	0.01	0.01	0.01	C58
Penis	6	0.1	0.4	0.4	0.01	0.05							C60
Prostate	13	0.2	0.8	0.9	0.01	0.13							C61
Testis	3	0.0	0.2	0.2	0.01	0.01							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	3	0.0	0.2	0.2	0.01	0.02	5	0.1	0.3	0.4	0.02	0.02	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	2	0.0	0.1	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	41	0.6	2.6	3.0	0.08	0.34	13	0.3	0.9	0.8	0.06	0.07	C67
Other urinary organs	4	0.1	0.3	0.3	0.00	0.04	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	1	0.0	0.1	0.1	0.01	0.01	1	0.0	0.1	0.0	0.00	0.00	C69
Brain, nervous system	81	1.3	5.2	4.9	0.34	0.47	35	0.9	2.4	2.2	0.18	0.25	C70-72
Thyroid	2	0.0	0.1	0.1	0.01	0.01	2	0.1	0.1	0.1	0.01	0.01	C73
Adrenal gland	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.1	0.01	0.01	C74
Other endocrine	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	0	0.0	0.0	0.0	0.00	0.00	2	0.1	0.1	0.1	0.01	0.01	C81
Non-Hodgkin lymphoma	93	1.5	6.0	6.1	0.41	0.59	25	0.6	1.7	1.5	0.12	0.19	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	1	0.0	0.1	0.1	0.00	0.01	1	0.0	0.1	0.1	0.01	0.01	C90
Lymphoid leukaemia	15	0.2	1.0	0.9	0.06	0.12	5	0.1	0.3	0.3	0.02	0.02	C91
Myeloid leukaemia	3	0.0	0.2	0.3	0.02	0.02	2	0.1	0.1	0.1	0.01	0.01	C92-94
Leukaemia unspecified	82	1.3	5.3	5.3	0.34	0.43	65	1.7	4.5	3.8	0.22	0.45	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	14	0.2	0.9	1.0	0.04	0.09	7	0.2	0.5	0.4	0.01	0.03	O&U
All sites	6393		409.4	401.1	22.08	46.48	3883		268.8	229.5	13.64	27.27	C00-96
All sites except C44	6373	100.0	408.2	399.9	22.00	46.33	3873	100.0	268.1	228.8	13.59	27.18	C00-96 exc. C44

*See note following population pyramid

China, Zhongshan City

REGISTRATION AREA

The Zhongshan Cancer Registry covers the prefecture-level city of Zhongshan, which is located 86 km north of Guangzhou (the capital city of Guangdong Province) in China. Zhongshan has an area of 1800 km² and is divided into 24 districts and towns. In 2012, the population was 1.5 million, with 88% of residents living in urban areas.

CANCER CARE FACILITIES

Health care is provided by the Zhongshan Health Bureau through a network of hospitals, clinics, the Zhongshan Center for Disease Control and Prevention, and private practitioners. There are no private cancer centres or cancer hospitals, but each public general hospital has a cancer department that provides cancer surgery and chemotherapy, and two hospitals provide radiotherapy. Some cancer patients are diagnosed and/or treated in hospitals in nearby regions, such as Guangzhou.

REGISTRY STRUCTURE AND METHODS

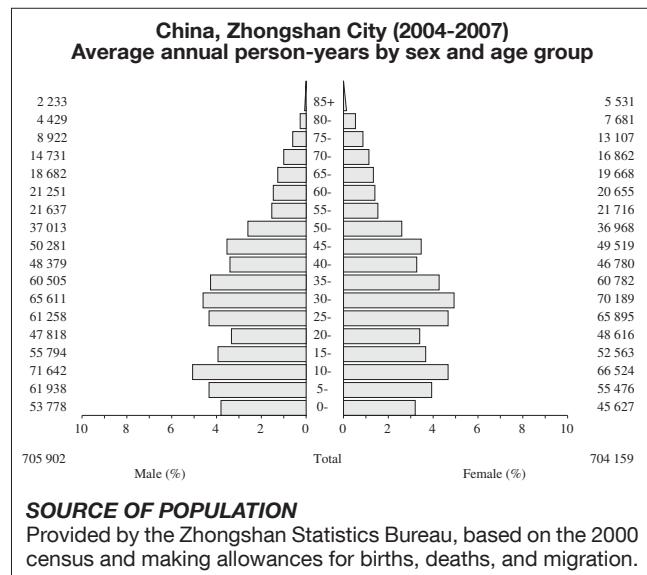
The registry is affiliated with the Zhongshan People's Hospital and is funded by the hospital and the health departments of Zhongshan and Guangzhou. The registry is staffed by a full-time medical officer and two full-time registrars. Each hospital in Zhongshan also has a part-time registrar who collects cancer data and performs follow-up. The hospital registrars conduct mainly active case finding, through computers connected to hospital workstations. The cancer data they collect are emailed to the registry, where the data are checked for consistency. Inconsistent data are sent back to the registrars for correction. The registry is currently developing automated cancer registration software. Additional registration data are collected through regular visits to hospitals in neighbouring regions.

USE OF THE DATA

The registry began publishing an annual cancer report in 2003. Registry data have been used in many scientific papers and one monograph. The registry also carries out its own research projects on topics such as oesophageal cancer control.

CONTRIBUTORS

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Kuang-Rong Wei
Zhi-Heng Liang



SOURCE OF POPULATION

Provided by the Zhongshan Statistics Bureau, based on the 2000 census and making allowances for births, deaths, and migration.

NOTES ON THE DATA

*No DCO registrations.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	54.1	Breast	22.9
Liver	39.6	Trachea, bronchus and lung	22.8
Nasopharynx	26.8	Corpus uteri	16.1
Oesophagus	21.5	Nasopharynx	10.7
Colon	13.5	Colon	9.2
Stomach	12.8	Cervix uteri	7.9
Rectum	10.4	Liver	7.8
Bladder	7.2	Rectum	6.8
Other and unspecified	6.1	Stomach	5.7
Prostate	5.8	Thyroid	5.1
All sites	253.6	All sites	154.9

*China, Zhongshan City (2004-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	3	0.0	0.1	0.1	0.01	0.02	1	0.0	0.0	0.0	0.00	0.01	C00
Tongue	63	0.9	2.2	2.2	0.19	0.23	26	0.6	0.9	0.9	0.07	0.10	C01-02
Mouth	66	1.0	2.3	2.5	0.23	0.26	18	0.4	0.6	0.5	0.02	0.07	C03-06
Salivary glands	26	0.4	0.9	0.9	0.06	0.10	11	0.2	0.4	0.4	0.02	0.05	C07-08
Tonsil	17	0.2	0.6	0.6	0.04	0.06	2	0.0	0.1	0.1	0.00	0.01	C09
Other oropharynx	9	0.1	0.3	0.3	0.02	0.04	2	0.0	0.1	0.1	0.00	0.01	C10
Nasopharynx	799	11.5	28.3	26.8	2.26	2.84	326	7.0	11.6	10.7	0.92	1.10	C11
Hypopharynx	53	0.8	1.9	2.0	0.19	0.21	1	0.0	0.0	0.0	0.00	0.01	C12-13
Pharynx unspecified	5	0.1	0.2	0.2	0.01	0.02	1	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	578	8.3	20.5	21.5	1.71	2.54	66	1.4	2.3	2.3	0.17	0.29	C15
Stomach	348	5.0	12.3	12.8	0.84	1.50	181	3.9	6.4	5.7	0.38	0.63	C16
Small intestine	34	0.5	1.2	1.2	0.08	0.15	26	0.6	0.9	0.8	0.05	0.10	C17
Colon	369	5.3	13.1	13.5	0.77	1.67	285	6.1	10.1	9.2	0.60	1.07	C18
Rectum	287	4.1	10.2	10.4	0.63	1.26	211	4.5	7.5	6.8	0.45	0.80	C19-20
Anus	4	0.1	0.1	0.2	0.02	0.02	4	0.1	0.1	0.1	0.01	0.01	C21
Liver	1111	16.0	39.3	39.6	3.01	4.49	242	5.2	8.6	7.8	0.49	0.94	C22
Gallbladder etc.	161	2.3	5.7	5.8	0.25	0.69	108	2.3	3.8	3.2	0.17	0.36	C23-24
Pancreas	106	1.5	3.8	4.0	0.24	0.46	84	1.8	3.0	2.7	0.13	0.36	C25
Nose, sinuses etc.	26	0.4	0.9	1.0	0.07	0.10	15	0.3	0.5	0.5	0.02	0.06	C30-31
Larynx	147	2.1	5.2	5.5	0.41	0.69	5	0.1	0.2	0.1	0.01	0.01	C32
Trachea, bronchus and lung	1479	21.3	52.4	54.1	3.02	6.63	715	15.3	25.4	22.8	1.37	2.74	C33-34
Other thoracic organs	31	0.4	1.1	1.2	0.09	0.14	7	0.2	0.2	0.2	0.02	0.02	C37-38
Bone	23	0.3	0.8	0.8	0.05	0.07	15	0.3	0.5	0.6	0.05	0.05	C40-41
Melanoma of skin	7	0.1	0.2	0.2	0.02	0.02	12	0.3	0.4	0.3	0.02	0.03	C43
Other skin	91		3.2	3.3	0.14	0.35	87		3.1	2.5	0.13	0.26	C44
Mesothelioma	7	0.1	0.2	0.2	0.00	0.03	5	0.1	0.2	0.2	0.02	0.02	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	32	0.5	1.1	1.2	0.07	0.10	26	0.6	0.9	0.8	0.06	0.07	C47+C49
Breast	5	0.1	0.2	0.1	0.00	0.00	699	15.0	24.8	22.9	1.99	2.37	C50
Vulva							13	0.3	0.5	0.4	0.02	0.04	C51
Vagina							9	0.2	0.3	0.3	0.03	0.03	C52
Cervix uteri							245	5.3	8.7	7.9	0.71	0.78	C53
Corpus uteri							447	9.6	15.9	16.1	1.60	1.73	C54
Uterus unspecified							11	0.2	0.4	0.4	0.03	0.04	C55
Ovary							141	3.0	5.0	4.7	0.35	0.47	C56
Other female genital organs							7	0.2	0.2	0.3	0.03	0.03	C57
Placenta							2	0.0	0.1	0.1	0.00	0.00	C58
Penis	27	0.4	1.0	1.0	0.07	0.11							C60
Prostate	164	2.4	5.8	5.8	0.08	0.63							C61
Testis	24	0.3	0.8	0.8	0.05	0.06							C62
Other male genital organs	5	0.1	0.2	0.2	0.02	0.02							C63
Kidney	64	0.9	2.3	2.4	0.17	0.26	38	0.8	1.3	1.4	0.10	0.12	C64
Renal pelvis	10	0.1	0.4	0.4	0.03	0.05	5	0.1	0.2	0.1	0.01	0.01	C65
Ureter	5	0.1	0.2	0.2	0.01	0.02	8	0.2	0.3	0.2	0.01	0.03	C66
Bladder	200	2.9	7.1	7.2	0.40	0.82	53	1.1	1.9	1.5	0.05	0.18	C67
Other urinary organs	1	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.01	0.01	C68
Eye	3	0.0	0.1	0.2	0.01	0.01	4	0.1	0.1	0.2	0.01	0.01	C69
Brain, nervous system	70	1.0	2.5	2.5	0.18	0.23	53	1.1	1.9	1.7	0.11	0.14	C70-72
Thyroid	42	0.6	1.5	1.4	0.10	0.13	156	3.3	5.5	5.1	0.38	0.49	C73
Adrenal gland	4	0.1	0.1	0.2	0.01	0.01	7	0.2	0.2	0.3	0.02	0.02	C74
Other endocrine	2	0.0	0.1	0.1	0.00	0.01	2	0.0	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	11	0.2	0.4	0.4	0.03	0.04	10	0.2	0.4	0.4	0.03	0.03	C81
Non-Hodgkin lymphoma	122	1.8	4.3	4.3	0.31	0.48	90	1.9	3.2	3.0	0.19	0.30	C82-85,C96
Immunoproliferative diseases	1	0.0	0.0	0.1	0.00	0.00	1	0.0	0.0	0.0	0.00	0.01	C88
Multiple myeloma	26	0.4	0.9	0.9	0.04	0.10	28	0.6	1.0	1.0	0.06	0.11	C90
Lymphoid leukaemia	49	0.7	1.7	1.8	0.10	0.15	36	0.8	1.3	1.4	0.09	0.11	C91
Myeloid leukaemia	105	1.5	3.7	3.8	0.23	0.35	76	1.6	2.7	2.5	0.17	0.25	C92-94
Leukaemia unspecified	16	0.2	0.6	0.6	0.02	0.06	11	0.2	0.4	0.4	0.02	0.02	C95
Myeloproliferative disorders	22	0.3	0.8	0.7	0.05	0.08	5	0.1	0.2	0.2	0.01	0.03	MPD
Myelodysplastic syndromes	11	0.2	0.4	0.4	0.02	0.05	9	0.2	0.3	0.2	0.01	0.02	MDS
Other and unspecified	166	2.4	5.9	6.1	0.39	0.71	100	2.1	3.6	3.0	0.18	0.31	O&U
All sites	7037		249.2	253.6	16.71	29.07	4749		168.6	154.9	11.37	16.88	C00-96
All sites except C44	6946	100.0	246.0	250.3	16.56	28.72	4662	100.0	165.5	152.4	11.24	16.62	C00-96 exc. C44

*See note following population pyramid

India, Bangalore

REGISTRATION AREA

The Cancer Registry of Bangalore covers the Bangalore Urban Agglomeration, which has an area of 741 km² and is the capital of the Indian state of Karnataka.

CANCER CARE FACILITIES

The Kidwai Memorial Institute of Oncology in Bangalore is a regional cancer centre with state-of-the-art facilities for cancer diagnosis, treatment, education, and research. It offers specialized courses in oncology and related subjects and serves patients from Karnataka and neighbouring states.

REGISTRY STRUCTURE AND METHODS

The registry was established in 1981 as part of the National Cancer Registry Programme (NCRP) of the Indian Council of Medical Research (ICMR) and is funded partly by the ICMR. The registry is staffed by a principal investigator, a co-principal investigator, two biostatisticians, a field supervisor, and six assistant social scientists. Case finding is active. The registry has 475 data sources, including cancer hospitals, general hospitals, pathology laboratories, and municipal death registration offices. Registry staff members visit the sources to review medical records, pathology registers, and reports, and to abstract information on resident cases. Quality checks, checks for duplicates, and other analyses are performed using software developed by the NCRP.

INTERPRETING THE RESULTS

Since 2002, the area covered has increased from 366 km² to 741 km². The Kidwai Memorial Institute of Oncology facilitates opportunistic screening. Cancer detection initiatives are conducted within and around Karnataka.

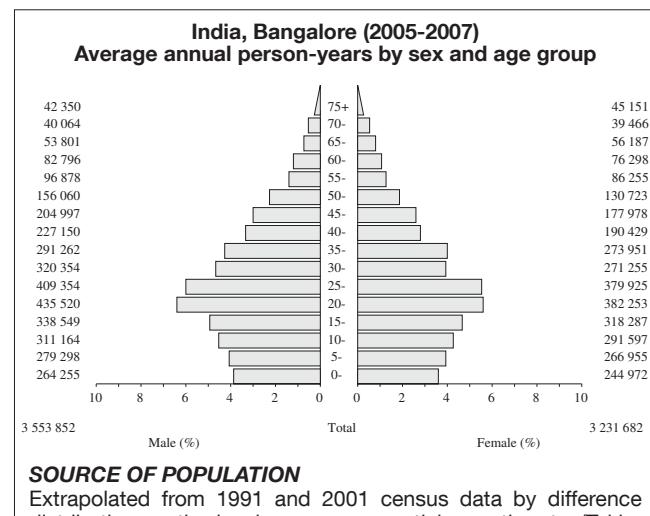
USE OF THE DATA

The registry publishes an annual incidence report highlighting trends and changes. The report is presented at the NCRP's Annual Review Meeting, during which registries from throughout India present

their data and recommendations are made. The registry has also undertaken several epidemiological studies for specific cancers.

CONTRIBUTORS

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SOURCE OF POPULATION

Extrapolated from 1991 and 2001 census data by difference distribution method using an exponential growth rate (Takiar and Shobana, 2009). Population estimates by 5-year age groups for 1991 and 2001 and all-ages totals for 2011 were used when available.

NOTES ON THE DATA

*No official mortality data. High MV%. Fluctuation in rates from year to year.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	10.3	Breast	36.6
Stomach	9.6	Cervix uteri	20.6
Prostate	9.0	Ovary	7.6
Other and unspecified	8.5	Oesophagus	6.6
Oesophagus	7.9	Other and unspecified	6.5
Non-Hodgkin lymphoma	5.1	Mouth	6.3
Hypopharynx	4.8	Corpus uteri	5.4
Liver	4.4	Stomach	5.1
Colon	4.1	Thyroid	3.8
Brain, nervous system	4.1	Trachea, bronchus and lung	3.5
All sites	113.5	All sites	137.7

*India, Bangalore (2005-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 0-74	(%)	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 0-74	(%)	
Lip	5	0.1	0.0	0.1	0.00	0.01	11	0.1	0.1	0.1	0.01	0.02	C00
Tongue	311	3.8	2.9	4.0	0.30	0.48	91	0.9	0.9	1.3	0.09	0.16	C01-02
Mouth	259	3.1	2.4	3.3	0.23	0.42	442	4.4	4.6	6.3	0.41	0.75	C03-06
Salivary glands	36	0.4	0.3	0.5	0.03	0.06	36	0.4	0.4	0.4	0.03	0.04	C07-08
Tonsil	77	0.9	0.7	1.0	0.06	0.13	17	0.2	0.2	0.2	0.02	0.03	C09
Other oropharynx	92	1.1	0.9	1.3	0.07	0.16	7	0.1	0.1	0.1	0.01	0.02	C10
Nasopharynx	26	0.3	0.2	0.3	0.02	0.03	15	0.1	0.2	0.2	0.02	0.02	C11
Hypopharynx	335	4.1	3.1	4.8	0.29	0.61	87	0.9	0.9	1.2	0.09	0.13	C12-13
Pharynx unspecified	73	0.9	0.7	1.0	0.06	0.12	29	0.3	0.3	0.4	0.03	0.05	C14
Oesophagus	541	6.5	5.1	7.9	0.42	1.03	446	4.4	4.6	6.6	0.42	0.81	C15
Stomach	685	8.3	6.4	9.6	0.53	1.21	374	3.7	3.9	5.1	0.32	0.62	C16
Small intestine	32	0.4	0.3	0.4	0.03	0.06	20	0.2	0.2	0.3	0.02	0.03	C17
Colon	302	3.7	2.8	4.1	0.25	0.46	244	2.4	2.5	3.4	0.23	0.40	C18
Rectum	308	3.7	2.9	4.1	0.24	0.49	235	2.3	2.4	3.1	0.19	0.36	C19-20
Anus	33	0.4	0.3	0.5	0.03	0.06	23	0.2	0.2	0.3	0.02	0.03	C21
Liver	296	3.6	2.8	4.4	0.19	0.54	110	1.1	1.1	1.6	0.08	0.19	C22
Gallbladder etc.	92	1.1	0.9	1.2	0.10	0.14	109	1.1	1.1	1.6	0.10	0.18	C23-24
Pancreas	126	1.5	1.2	1.8	0.12	0.22	87	0.9	0.9	1.3	0.08	0.14	C25
Nose, sinuses etc.	48	0.6	0.5	0.6	0.04	0.07	32	0.3	0.3	0.4	0.04	0.04	C30-31
Larynx	257	3.1	2.4	3.7	0.22	0.49	33	0.3	0.3	0.5	0.04	0.06	C32
Trachea, bronchus and lung	708	8.6	6.6	10.3	0.56	1.34	246	2.4	2.5	3.5	0.26	0.45	C33-34
Other thoracic organs	36	0.4	0.3	0.5	0.02	0.06	34	0.3	0.4	0.5	0.03	0.06	C37-38
Bone	96	1.2	0.9	1.0	0.05	0.09	45	0.4	0.5	0.5	0.03	0.05	C40-41
Melanoma of skin	33	0.4	0.3	0.4	0.02	0.05	26	0.3	0.3	0.4	0.03	0.04	C43
Other skin	92	0.9	0.7	1.2	0.07	0.13	68		0.7	1.0	0.06	0.11	C44
Mesothelioma	8	0.1	0.1	0.1	0.00	0.02	4	0.0	0.0	0.0	0.00	0.01	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	87	1.1	0.8	1.1	0.06	0.11	61	0.6	0.6	0.8	0.05	0.08	C47+C49
Breast	77	0.9	0.7	1.0	0.07	0.11	2798	27.6	28.9	36.6	2.90	4.20	C50
Vulva							43	0.4	0.4	0.7	0.03	0.09	C51
Vagina							54	0.5	0.6	0.8	0.05	0.09	C52
Cervix uteri							1541	15.2	15.9	20.6	1.57	2.40	C53
Corpus uteri							367	3.6	3.8	5.4	0.41	0.69	C54
Uterus unspecified							67	0.7	0.7	0.9	0.06	0.08	C55
Ovary							571	5.6	5.9	7.6	0.57	0.88	C56
Other female genital organs							3	0.0	0.0	0.0	0.00	0.01	C57
Placenta							2	0.0	0.0	0.0	0.00	0.00	C58
Penis	101	1.2	0.9	1.3	0.07	0.16							C60
Prostate	556	6.7	5.2	9.0	0.20	1.03							C61
Testis	68	0.8	0.6	0.6	0.04	0.05							C62
Other male genital organs	6	0.1	0.1	0.1	0.00	0.02							C63
Kidney	121	1.5	1.1	1.7	0.10	0.21	71	0.7	0.7	1.1	0.06	0.13	C64
Renal pelvis	4	0.0	0.0	0.1	0.00	0.01	1	0.0	0.0	0.0	0.00	0.00	C65
Ureter	1	0.0	0.0	0.0	0.00	0.00	2	0.0	0.0	0.0	0.00	0.00	C66
Bladder	230	2.8	2.2	3.4	0.14	0.41	60	0.6	0.6	0.9	0.05	0.09	C67
Other urinary organs	1	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C68
Eye	18	0.2	0.2	0.2	0.01	0.01	10	0.1	0.1	0.1	0.01	0.02	C69
Brain, nervous system	367	4.4	3.4	4.1	0.28	0.42	216	2.1	2.2	2.6	0.17	0.26	C70-72
Thyroid	111	1.3	1.0	1.3	0.09	0.14	330	3.3	3.4	3.8	0.29	0.40	C73
Adrenal gland	6	0.1	0.1	0.1	0.00	0.00	5	0.0	0.1	0.1	0.00	0.00	C74
Other endocrine	5	0.1	0.0	0.0	0.00	0.00	2	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	132	1.6	1.2	1.2	0.09	0.10	45	0.4	0.5	0.5	0.03	0.04	C81
Non-Hodgkin lymphoma	402	4.9	3.8	5.1	0.32	0.59	235	2.3	2.4	3.2	0.23	0.37	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	126	1.5	1.2	1.8	0.09	0.23	96	0.9	1.0	1.4	0.11	0.17	C90
Lymphoid leukaemia	146	1.8	1.4	1.7	0.08	0.16	67	0.7	0.7	0.9	0.05	0.06	C91
Myeloid leukaemia	201	2.4	1.9	2.1	0.15	0.20	177	1.7	1.8	2.2	0.15	0.24	C92-94
Leukaemia unspecified	55	0.7	0.5	0.7	0.03	0.06	40	0.4	0.4	0.5	0.02	0.04	C95
Myeloproliferative disorders	1	0.0	0.0	0.0	0.00	0.00	3	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	14	0.2	0.1	0.2	0.01	0.02	10	0.1	0.1	0.1	0.01	0.02	MDS
Other and unspecified	613	7.4	5.7	8.5	0.44	1.05	458	4.5	4.7	6.5	0.38	0.74	O&U
All sites	8356		78.4	113.5	6.23	13.56	10208		105.3	137.7	9.86	15.96	C00-96
All sites except C44	8264	100.0	77.5	112.3	6.16	13.43	10140	100.0	104.6	136.8	9.80	15.85	C00-96 exc. C44

*See note following population pyramid

India; Barshi, Paranda, and Bhum

REGISTRATION AREA

The Rural Cancer Registry, Barshi covers the rural area of three municipalities in the state of Maharashtra in western India: Barshi in the Solapur district and Paranda and Bhum in the Osmanabad district.

CANCER CARE FACILITIES

Villagers seek medical advice and treatment from many major and minor hospitals, some as far away as 400 km. However, more than 60% of cancer patients are treated at the Nargis Dutt Memorial Cancer Hospital.

REGISTRY STRUCTURE AND METHODS

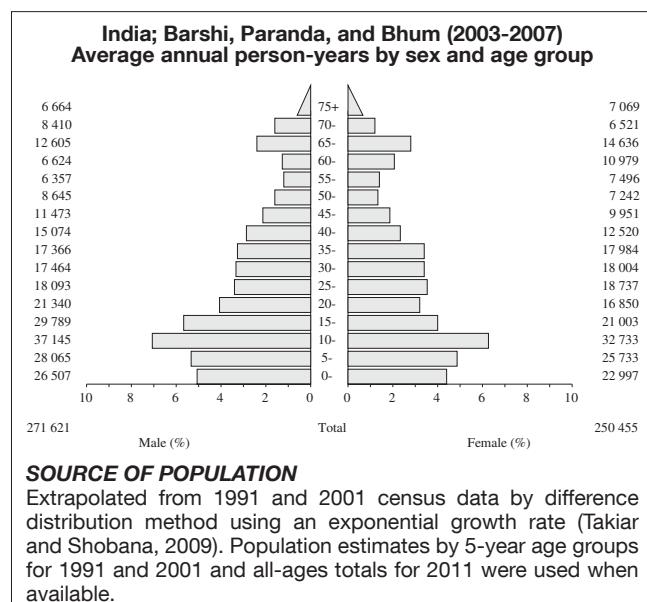
The registry has adopted a special methodology suitable for local conditions. In addition to collecting data, the registry also promotes cancer awareness and early detection initiatives. Trained social investigators regularly visit the villages to collect incidence and mortality data directly from community and primary health centres, government health workers, and private physicians, and to request that suspected cancer cases be referred to diagnostic centres. Cancer detection clinics are periodically organized in the area's primary health centres to screen for symptomatic cases. Additional data on registered cases are collected from 75 hospitals, various pathology laboratories, and all diagnostic centres. Residential status and vital status are confirmed by visiting patients' villages. Information on deaths is collected from village death records, from all major hospitals, and directly from the local community. Because deaths are generally not medically certified and cause of death information is often inaccurate, registry staff members make home visits to patients' relatives to ascertain cause of death and perform trace-back to the associated medical records from the treating hospital or physician.

INTERPRETING THE RESULTS

Because of the registry's special methodology, it is unlikely that diagnosed cases will be missed, and this has been confirmed by annual sample surveys. Within the registration area, almost every death is registered with a cause of death recorded. The proportion of death-certificate-only (DCO) cases registered is extremely low, meaning that nearly all cancer cases are already registered before the patients' deaths.

CONTRIBUTORS

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NOTES ON THE DATA

*No official mortality data. No DCO registrations.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Other and unspecified	4.8	Cervix uteri	18.7
Oesophagus	3.4	Breast	8.3
Mouth	3.1	Other and unspecified	2.8
Liver	2.9	Oesophagus	2.8
Hypopharynx	2.5	Ovary	2.7
Stomach	2.3	Trachea, bronchus and lung	2.3
Larynx	2.2	Stomach	1.7
Penis	2.2	Myeloid leukaemia	1.2
Myeloid leukaemia	1.8	Corpus uteri	1.1
Non-Hodgkin lymphoma	1.7	Mouth	1.0
All sites	48.1	All sites	54.6

***India; Barshi, Paranda, and Bhum (2003-2007)**

S I T E	Male						Female						
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	ICD-10
Lip	2	0.3	0.1	0.2	0.02	0.02	0	0.0	0.0	0.0	0.00	0.00	C00
Tongue	19	3.2	1.4	1.7	0.15	0.19	3	0.5	0.2	0.2	0.02	0.02	C01-02
Mouth	36	6.1	2.7	3.1	0.25	0.32	17	2.7	1.4	1.0	0.06	0.14	C03-06
Salivary glands	3	0.5	0.2	0.2	0.02	0.02	0	0.0	0.0	0.0	0.00	0.00	C07-08
Tonsil	2	0.3	0.1	0.2	0.02	0.03	1	0.2	0.1	0.1	0.00	0.02	C09
Other oropharynx	2	0.3	0.1	0.2	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	2	0.3	0.1	0.1	0.00	0.02	2	0.3	0.2	0.2	0.01	0.01	C11
Hypopharynx	36	6.1	2.7	2.5	0.15	0.33	7	1.1	0.6	0.6	0.05	0.09	C12-13
Pharynx unspecified	1	0.2	0.1	0.0	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	49	8.3	3.6	3.4	0.18	0.43	34	5.4	2.7	2.8	0.23	0.34	C15
Stomach	25	4.3	1.8	2.3	0.21	0.27	21	3.4	1.7	1.7	0.14	0.20	C16
Small intestine	2	0.3	0.1	0.2	0.03	0.03	2	0.3	0.2	0.2	0.01	0.03	C17
Colon	12	2.0	0.9	1.1	0.08	0.10	3	0.5	0.2	0.3	0.03	0.04	C18
Rectum	17	2.9	1.3	1.6	0.14	0.16	9	1.4	0.7	0.6	0.03	0.08	C19-20
Anus	3	0.5	0.2	0.2	0.00	0.02	3	0.5	0.2	0.3	0.02	0.04	C21
Liver	31	5.3	2.3	2.9	0.28	0.35	10	1.6	0.8	0.9	0.09	0.10	C22
Gallbladder etc.	7	1.2	0.5	0.7	0.07	0.07	5	0.8	0.4	0.5	0.05	0.05	C23-24
Pancreas	9	1.5	0.7	1.0	0.10	0.10	6	1.0	0.5	0.6	0.05	0.07	C25
Nose, sinuses etc.	3	0.5	0.2	0.2	0.01	0.04	3	0.5	0.2	0.3	0.02	0.02	C30-31
Larynx	32	5.4	2.4	2.2	0.11	0.25	3	0.5	0.2	0.2	0.02	0.03	C32
Trachea, bronchus and lung	19	3.2	1.4	1.6	0.14	0.21	25	4.0	2.0	2.3	0.22	0.25	C33-34
Other thoracic organs	3	0.5	0.2	0.2	0.02	0.03	5	0.8	0.4	0.5	0.05	0.06	C37-38
Bone	13	2.2	1.0	1.0	0.07	0.08	4	0.6	0.3	0.3	0.02	0.02	C40-41
Melanoma of skin	1	0.2	0.1	0.0	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C43
Other skin	14	1.0	0.9	0.9	0.03	0.08	12	1.0	0.9	0.05	0.10	0.10	C44
Mesothelioma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	7	1.2	0.5	0.6	0.06	0.06	5	0.8	0.4	0.4	0.03	0.03	C47+C49
Breast	1	0.2	0.1	0.0	0.00	0.01	94	15.0	7.5	8.3	0.70	0.91	C50
Vulva							2	0.3	0.2	0.1	0.01	0.01	C51
Vagina							6	1.0	0.5	0.5	0.04	0.06	C52
Cervix uteri							214	34.2	17.1	18.7	1.64	2.11	C53
Corpus uteri							12	1.9	1.0	1.1	0.09	0.14	C54
Uterus unspecified							3	0.5	0.2	0.3	0.03	0.03	C55
Ovary							29	4.6	2.3	2.7	0.24	0.27	C56
Other female genital organs							0	0.0	0.0	0.0	0.00	0.00	C57
Placenta							0	0.0	0.0	0.0	0.00	0.00	C58
Penis	25	4.3	1.8	2.2	0.18	0.26							C60
Prostate	26	4.4	1.9	1.6	0.05	0.18							C61
Testis	7	1.2	0.5	0.6	0.06	0.06							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	11	1.9	0.8	0.8	0.04	0.05	3	0.5	0.2	0.3	0.02	0.02	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	15	2.6	1.1	1.3	0.11	0.15	2	0.3	0.2	0.1	0.01	0.02	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	7	1.2	0.5	0.6	0.03	0.03	3	0.5	0.2	0.3	0.01	0.01	C69
Brain, nervous system	18	3.1	1.3	1.4	0.10	0.14	10	1.6	0.8	0.9	0.08	0.08	C70-72
Thyroid	5	0.9	0.4	0.4	0.04	0.04	7	1.1	0.6	0.6	0.04	0.06	C73
Adrenal gland	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C74
Other endocrine	1	0.2	0.1	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	10	1.7	0.7	0.7	0.05	0.05	5	0.8	0.4	0.4	0.02	0.02	C81
Non-Hodgkin lymphoma	22	3.7	1.6	1.7	0.13	0.19	11	1.8	0.9	0.8	0.04	0.06	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	4	0.7	0.3	0.3	0.01	0.04	2	0.3	0.2	0.2	0.02	0.02	C90
Lymphoid leukaemia	17	2.9	1.3	1.2	0.06	0.06	4	0.6	0.3	0.4	0.03	0.03	C91
Myeloid leukaemia	21	3.6	1.5	1.8	0.17	0.17	13	2.1	1.0	1.2	0.10	0.12	C92-94
Leukaemia unspecified	4	0.7	0.3	0.3	0.02	0.02	2	0.3	0.2	0.1	0.01	0.01	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	1	0.2	0.1	0.1	0.01	0.01	MDS
Other and unspecified	58	9.9	4.3	4.8	0.39	0.62	35	5.6	2.8	2.8	0.23	0.32	O&U
All sites	602		44.3	48.1	3.58	5.31	638		50.9	54.6	4.56	6.02	C00-96
All sites except C44	588	100.0	43.3	47.2	3.55	5.23	626	100.0	50.0	53.7	4.50	5.93	C00-96 exc. C44

*See note following population pyramid

India, Bhopal

REGISTRATION AREA

The Bhopal Population-based Cancer Registry covers the city of Bhopal, which is the capital of the Indian state of Madhya Pradesh.

CANCER CARE FACILITIES

There are five cancer treatment centres that provide comprehensive cancer care to patients in Bhopal.

REGISTRY STRUCTURE AND METHODS

In 1984, a chemical disaster caused by a toxic gas leak at a Union Carbide pesticide factory in Bhopal resulted in massive mortality and morbidity in the city. The main component of the toxic gas cloud was methyl isocyanate (MIC). After the disaster, the Indian Council of Medical Research initiated many studies to evaluate the resulting health effects, and a population-based cancer registry was established in Bhopal, as part of India's National Cancer Registry Programme (NCRP), to determine the burden of cancer in central India and to evaluate the carcinogenic effects of MIC, if any, on the gas-exposed population. The registry has 77 data sources, including tertiary health care centres, imaging and pathology diagnostic centres, and five cancer treatment centres. The registry's social investigators actively collect data by visiting the information sources and interviewing patients. Additional information is collected from medical records. NCRP and IARC checks are used to ensure data quality.

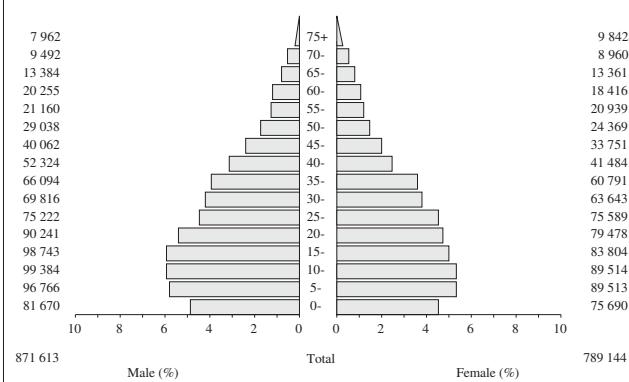
USE OF THE DATA

Registry data are used to help formulate the policies of the National Cancer Control Programme.

CONTRIBUTORS

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India, Bhopal (2004-2007)
Average annual person-years by sex and age group



SOURCE OF POPULATION

Extrapolated from 1991 and 2001 census data by difference distribution method using an exponential growth rate (Takiar and Shobana, 2009). Population estimates by 5-year age groups for 1991 and 2001 and all-ages totals for 2011 were used when available.

NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	11.9	Breast	26.4
Other and unspecified	11.7	Cervix uteri	19.5
Tongue	10.3	Ovary	8.0
Mouth	9.6	Other and unspecified	5.8
Oesophagus	6.0	Oesophagus	5.6
Prostate	5.8	Mouth	5.2
Hypopharynx	5.6	Gallbladder etc.	4.5
Larynx	5.3	Corpus uteri	2.7
Non-Hodgkin lymphoma	4.7	Non-Hodgkin lymphoma	2.6
Stomach	2.8	Trachea, bronchus and lung	2.5
All sites	110.2	All sites	109.2

*India, Bhopal (2004-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	11	0.4	0.3	0.5	0.03	0.06	9	0.4	0.3	0.4	0.03	0.04	C00
Tongue	244	9.9	7.0	10.3	0.71	1.27	49	2.0	1.6	2.2	0.19	0.24	C01-02
Mouth	237	9.6	6.8	9.6	0.68	1.09	111	4.6	3.5	5.2	0.43	0.62	C03-06
Salivary glands	11	0.4	0.3	0.5	0.03	0.06	6	0.3	0.2	0.2	0.02	0.02	C07-08
Tonsil	42	1.7	1.2	1.9	0.14	0.25	4	0.2	0.1	0.2	0.00	0.01	C09
Other oropharynx	20	0.8	0.6	1.0	0.05	0.14	2	0.1	0.1	0.1	0.01	0.02	C10
Nasopharynx	11	0.4	0.3	0.4	0.04	0.06	2	0.1	0.1	0.1	0.01	0.01	C11
Hypopharynx	113	4.6	3.2	5.6	0.28	0.71	17	0.7	0.5	0.9	0.06	0.10	C12-13
Pharynx unspecified	6	0.2	0.2	0.3	0.01	0.03	1	0.0	0.0	0.1	0.00	0.01	C14
Oesophagus	126	5.1	3.6	6.0	0.36	0.69	113	4.7	3.6	5.6	0.37	0.69	C15
Stomach	60	2.4	1.7	2.8	0.17	0.35	24	1.0	0.8	1.2	0.08	0.17	C16
Small intestine	6	0.2	0.2	0.3	0.02	0.04	5	0.2	0.2	0.3	0.03	0.03	C17
Colon	54	2.2	1.5	2.3	0.13	0.31	32	1.3	1.0	1.6	0.11	0.20	C18
Rectum	42	1.7	1.2	1.9	0.12	0.21	36	1.5	1.1	1.6	0.11	0.17	C19-20
Anus	10	0.4	0.3	0.4	0.03	0.05	11	0.5	0.3	0.5	0.03	0.06	C21
Liver	44	1.8	1.3	2.0	0.11	0.26	23	1.0	0.7	1.0	0.06	0.13	C22
Gallbladder etc.	55	2.2	1.6	2.4	0.16	0.30	93	3.9	2.9	4.5	0.29	0.57	C23-24
Pancreas	28	1.1	0.8	1.2	0.09	0.12	18	0.8	0.6	0.9	0.05	0.11	C25
Nose, sinuses etc.	14	0.6	0.4	0.6	0.03	0.06	8	0.3	0.3	0.4	0.03	0.04	C30-31
Larynx	113	4.6	3.2	5.3	0.33	0.65	15	0.6	0.5	0.7	0.05	0.08	C32
Trachea, bronchus and lung	253	10.2	7.3	11.9	0.79	1.54	51	2.1	1.6	2.5	0.16	0.30	C33-34
Other thoracic organs	5	0.2	0.1	0.2	0.01	0.01	2	0.1	0.1	0.1	0.01	0.01	C37-38
Bone	40	1.6	1.1	1.3	0.09	0.11	19	0.8	0.6	0.6	0.04	0.04	C40-41
Melanoma of skin	10	0.4	0.3	0.4	0.03	0.05	3	0.1	0.1	0.1	0.01	0.01	C43
Other skin	41	1.2	1.2	2.0	0.11	0.23	33		1.0	1.6	0.10	0.15	C44
Mesothelioma	2	0.1	0.1	0.1	0.01	0.01	1	0.0	0.0	0.1	0.01	0.01	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.1	0.01	0.01	C46
Connective and soft tissue	32	1.3	0.9	1.3	0.07	0.16	28	1.2	0.9	1.0	0.06	0.10	C47+C49
Breast	18	0.7	0.5	0.7	0.04	0.10	598	25.0	18.9	26.4	2.15	2.94	C50
Vulva							5	0.2	0.2	0.3	0.01	0.04	C51
Vagina							7	0.3	0.2	0.4	0.02	0.05	C52
Cervix uteri							426	17.8	13.5	19.5	1.50	2.22	C53
Corpus uteri							57	2.4	1.8	2.7	0.26	0.32	C54
Uterus unspecified							7	0.3	0.2	0.3	0.03	0.04	C55
Ovary							184	7.7	5.8	8.0	0.62	0.89	C56
Other female genital organs							0	0.0	0.0	0.0	0.00	0.00	C57
Placenta							7	0.3	0.2	0.2	0.01	0.01	C58
Penis	12	0.5	0.3	0.6	0.03	0.05							C60
Prostate	109	4.4	3.1	5.8	0.19	0.75							C61
Testis	29	1.2	0.8	0.8	0.06	0.07							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	33	1.3	0.9	1.4	0.09	0.15	14	0.6	0.4	0.6	0.04	0.06	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	42	1.7	1.2	2.2	0.06	0.28	10	0.4	0.3	0.5	0.03	0.06	C67
Other urinary organs	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	5	0.2	0.1	0.2	0.01	0.02	5	0.2	0.2	0.2	0.01	0.01	C69
Brain, nervous system	59	2.4	1.7	2.2	0.15	0.28	55	2.3	1.7	2.0	0.15	0.17	C70-72
Thyroid	20	0.8	0.6	0.8	0.06	0.10	42	1.8	1.3	1.8	0.13	0.19	C73
Adrenal gland	1	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C74
Other endocrine	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	26	1.1	0.7	0.9	0.05	0.08	20	0.8	0.6	0.7	0.05	0.06	C81
Non-Hodgkin lymphoma	123	5.0	3.5	4.7	0.24	0.52	59	2.5	1.9	2.6	0.17	0.26	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	32	1.3	0.9	1.5	0.08	0.19	19	0.8	0.6	0.9	0.05	0.10	C90
Lymphoid leukaemia	53	2.1	1.5	1.9	0.10	0.19	27	1.1	0.9	0.9	0.05	0.07	C91
Myeloid leukaemia	65	2.6	1.9	2.3	0.15	0.21	42	1.8	1.3	1.7	0.11	0.21	C92-94
Leukaemia unspecified	1	0.0	0.0	0.0	0.01	0.01	3	0.1	0.1	0.1	0.00	0.00	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	252	10.2	7.2	11.7	0.69	1.36	121	5.1	3.8	5.8	0.35	0.70	O&U
All sites	2511		72.0	110.2	6.65	13.19	2426		76.9	109.2	8.09	12.35	C00-96
All sites except C44	2470	100.0	70.8	108.3	6.54	12.96	2393	100.0	75.8	107.6	7.99	12.20	C00-96 exc. C44

*See note following population pyramid

India, Chennai

REGISTRATION AREA

The Madras Metropolitan Tumour Registry (MMTR) covers an entirely urban area of 170 km² within the metropolitan limits of Chennai, which is the capital of the Indian state of Tamil Nadu. In 2005, the covered population was 4.5 million, accounting for 0.4% and 6.5% of the total populations of the country and the state, respectively.

CANCER CARE FACILITIES

Cancer diagnosis and treatment are provided primarily by government health services, including the Cancer Institute (WIA) Chennai, which is one of the Indian Ministry of Health and Family Welfare's regional cancer centres. Some care is also provided by private practitioners and hospitals. Radiotherapy is available at four government hospitals and eight private hospitals. Surgery and chemotherapy are provided by all major hospitals.

REGISTRY STRUCTURE AND METHODS

The MMTR was established at the Cancer Institute (WIA) Chennai in 1981 as part of India's National Cancer Registry Programme (NCRP). Data collection is active. The registry receives good cooperation from all health care facilities in and around Chennai, and has more than 230 information sources (government and private hospitals, nursing homes, consultants, pathology laboratories, imaging centres, and hospices). MMTR registrars visit these sources regularly and collect data by interviewing patients (when possible) and from medical records. Mortality data are collected from the Vital Statistics Division of the Corporation of Chennai. Data reliability and quality are continually monitored, with an emphasis on case finding. Validity checks are done using IARC, NCRP, and registry-developed software.

USE OF THE DATA

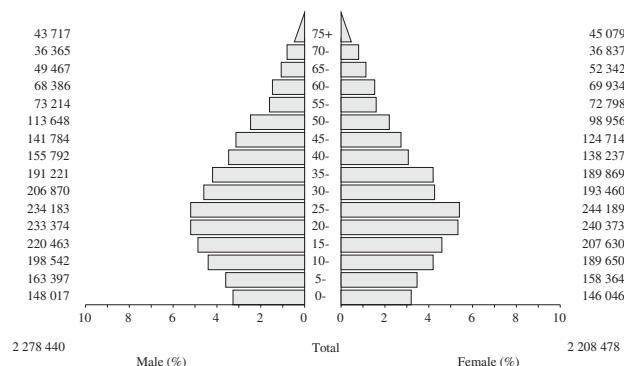
The registry periodically publishes reports and descriptive epidemiological studies on cancer

incidence patterns and trends. The MMTR also provides expertise to the Dindigul Ambilikai Cancer Registry in Tamil Nadu.

CONTRIBUTORS

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India, Chennai (2003-2007)
Average annual person-years by sex and age group



SOURCE OF POPULATION

Extrapolated from 1991 and 2001 census data by difference distribution method using an exponential growth rate (Takiar and Shobana, 2009). Population estimates by 5-year age groups for 1991 and 2001 and all-ages totals for 2011 were used when available.

NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	12.5	Breast	32.8
Stomach	11.9	Cervix uteri	21.4
Oesophagus	7.9	Ovary	6.5
Other and unspecified	6.6	Stomach	5.9
Mouth	6.2	Mouth	5.0
Tongue	5.9	Oesophagus	4.7
Prostate	5.1	Other and unspecified	4.4
Larynx	4.7	Trachea, bronchus and lung	3.5
Non-Hodgkin lymphoma	4.6	Thyroid	2.8
Hypopharynx	4.4	Corpus uteri	2.7
All sites	114.9	All sites	122.8

*India, Chennai (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	26	0.2	0.2	0.3	0.02	0.03	19	0.2	0.2	0.2	0.01	0.02	C00
Tongue	614	5.4	5.4	5.9	0.43	0.70	211	1.7	1.9	2.1	0.16	0.27	C01-02
Mouth	636	5.6	5.6	6.2	0.47	0.74	481	3.9	4.4	5.0	0.34	0.64	C03-06
Salivary glands	60	0.5	0.5	0.5	0.04	0.06	45	0.4	0.4	0.4	0.03	0.04	C07-08
Tonsil	170	1.5	1.5	1.7	0.13	0.20	18	0.1	0.2	0.2	0.01	0.02	C09
Other oropharynx	164	1.4	1.4	1.7	0.13	0.21	19	0.2	0.2	0.2	0.01	0.02	C10
Nasopharynx	76	0.7	0.7	0.7	0.05	0.08	41	0.3	0.4	0.4	0.03	0.04	C11
Hypopharynx	434	3.8	3.8	4.4	0.32	0.54	194	1.6	1.8	1.9	0.14	0.22	C12-13
Pharynx unspecified	59	0.5	0.5	0.6	0.05	0.07	27	0.2	0.2	0.3	0.02	0.03	C14
Oesophagus	782	6.8	6.9	7.9	0.52	1.01	462	3.7	4.2	4.7	0.30	0.61	C15
Stomach	1187	10.4	10.4	11.9	0.80	1.48	595	4.8	5.4	5.9	0.43	0.70	C16
Small intestine	27	0.2	0.2	0.3	0.02	0.03	20	0.2	0.2	0.2	0.02	0.02	C17
Colon	277	2.4	2.4	2.7	0.18	0.32	228	1.8	2.1	2.2	0.16	0.26	C18
Rectum	393	3.4	3.4	3.8	0.23	0.45	237	1.9	2.1	2.3	0.16	0.27	C19-20
Anus	69	0.6	0.6	0.7	0.06	0.08	49	0.4	0.4	0.5	0.04	0.07	C21
Liver	301	2.6	2.6	3.0	0.19	0.38	105	0.8	1.0	1.1	0.07	0.12	C22
Gallbladder etc.	145	1.3	1.3	1.5	0.10	0.19	120	1.0	1.1	1.2	0.09	0.14	C23-24
Pancreas	167	1.5	1.5	1.6	0.12	0.19	103	0.8	0.9	1.0	0.06	0.12	C25
Nose, sinuses etc.	78	0.7	0.7	0.8	0.06	0.08	47	0.4	0.4	0.5	0.03	0.05	C30-31
Larynx	454	4.0	4.0	4.7	0.29	0.62	72	0.6	0.7	0.7	0.05	0.09	C32
Trachea, bronchus and lung	1218	10.7	10.7	12.5	0.84	1.61	347	2.8	3.1	3.5	0.24	0.42	C33-34
Other thoracic organs	30	0.3	0.3	0.3	0.02	0.03	20	0.2	0.2	0.2	0.02	0.02	C37-38
Bone	125	1.1	1.1	1.1	0.07	0.10	94	0.8	0.9	0.9	0.06	0.07	C40-41
Melanoma of skin	34	0.3	0.3	0.3	0.02	0.04	38	0.3	0.3	0.4	0.03	0.04	C43
Other skin	145	1.3	1.3	1.4	0.09	0.17	88		0.8	0.9	0.06	0.11	C44
Mesothelioma	12	0.1	0.1	0.1	0.01	0.02	2	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	2	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	132	1.2	1.2	1.3	0.07	0.13	115	0.9	1.0	1.1	0.08	0.11	C47+C49
Breast	50	0.4	0.4	0.5	0.04	0.06	3405	27.5	30.8	32.8	2.62	3.62	C50
Vulva							51	0.4	0.5	0.5	0.03	0.07	C51
Vagina							79	0.6	0.7	0.8	0.06	0.10	C52
Cervix uteri							2145	17.3	19.4	21.4	1.74	2.51	C53
Corpus uteri							266	2.1	2.4	2.7	0.20	0.34	C54
Uterus unspecified							55	0.4	0.5	0.6	0.04	0.07	C55
Ovary							659	5.3	6.0	6.5	0.50	0.75	C56
Other female genital organs							5	0.0	0.0	0.0	0.00	0.00	C57
Placenta							10	0.1	0.1	0.1	0.01	0.01	C58
Penis	179	1.6	1.6	1.8	0.13	0.23							C60
Prostate	489	4.3	4.3	5.1	0.15	0.63							C61
Testis	96	0.8	0.8	0.8	0.05	0.06							C62
Other male genital organs	5	0.0	0.0	0.0	0.00	0.00							C63
Kidney	145	1.3	1.3	1.5	0.09	0.18	68	0.5	0.6	0.7	0.05	0.08	C64
Renal pelvis	5	0.0	0.0	0.1	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	5	0.0	0.0	0.1	0.00	0.01	3	0.0	0.0	0.0	0.00	0.00	C66
Bladder	301	2.6	2.6	3.1	0.14	0.40	76	0.6	0.7	0.8	0.04	0.10	C67
Other urinary organs	4	0.0	0.0	0.0	0.00	0.00	3	0.0	0.0	0.0	0.00	0.00	C68
Eye	48	0.4	0.4	0.6	0.03	0.04	28	0.2	0.3	0.4	0.02	0.03	C69
Brain, nervous system	344	3.0	3.0	3.2	0.23	0.31	239	1.9	2.2	2.3	0.16	0.21	C70-72
Thyroid	146	1.3	1.3	1.3	0.10	0.15	323	2.6	2.9	2.8	0.22	0.28	C73
Adrenal gland	22	0.2	0.2	0.3	0.02	0.02	11	0.1	0.1	0.1	0.01	0.01	C74
Other endocrine	11	0.1	0.1	0.1	0.00	0.01	2	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	145	1.3	1.3	1.3	0.09	0.10	100	0.8	0.9	0.9	0.06	0.08	C81
Non-Hodgkin lymphoma	481	4.2	4.2	4.6	0.32	0.50	254	2.0	2.3	2.4	0.18	0.26	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	2	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	149	1.3	1.3	1.6	0.10	0.20	91	0.7	0.8	0.9	0.06	0.10	C90
Lymphoid leukaemia	208	1.8	1.8	2.3	0.12	0.15	146	1.2	1.3	1.7	0.09	0.11	C91
Myeloid leukaemia	225	2.0	2.0	2.0	0.14	0.19	196	1.6	1.8	1.8	0.13	0.17	C92-94
Leukaemia unspecified	36	0.3	0.3	0.3	0.02	0.02	26	0.2	0.2	0.3	0.01	0.02	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	668	5.8	5.9	6.6	0.44	0.79	440	3.6	4.0	4.4	0.29	0.49	O&U
All sites	11580	101.6	114.9		7.53	13.64	12481	113.0	122.8		9.16	13.97	C00-96
All sites except C44	11435	100.0	100.4	113.5	7.44	13.47	12393	100.0	112.2	121.9	9.09	13.87	C00-96 exc. C44

*See note following population pyramid

India, Dindigul, Ambilikkai

REGISTRATION AREA

The Dindigul Ambilikkai Cancer Registry (DACR) covers the Dindigul district in the Indian state of Tamil Nadu. The district has an area of 6267 km² and in 2005 had a population (predominantly rural) of 2 million.

CANCER CARE FACILITIES

Cancer diagnosis and treatment are provided by government health services and supplemented by private practitioners and hospitals. Radiotherapy is available at the Christian Fellowship Community Health Centre (CFCHC) in Dindigul district, and in 10 other hospitals in neighbouring districts. Surgery and chemotherapy are provided by all major hospitals, and pathology and imaging services are widely available in neighbouring districts.

REGISTRY STRUCTURE AND METHODS

The DACR was established in 2004, with special emphasis on the evaluation of a field intervention trial on cervical cancer that was under way in the region. The registry includes data on incident cancers diagnosed since 2003. The DACR is based at the Cancer Institute (WIA) Chennai and has a field office at the CFCHC in the village of Ambilikkai. The registry is funded by IARC. Information is actively collected from 103 data sources: 33 in the Dindigul district, 22 in five adjoining districts, and 48 in five distant districts (including Chennai). The sources are government and private hospitals, nursing homes, consultants, pathology laboratories, imaging centres, and hospices. DACR registrars visit the sources regularly to collect data from medical records. Home visits for each registered case are conducted annually to improve data completeness. Mortality data are collected from the vital statistics division of the directorate of public health and from subdistrict offices. Validity checks are done using IARC and registry-developed software.

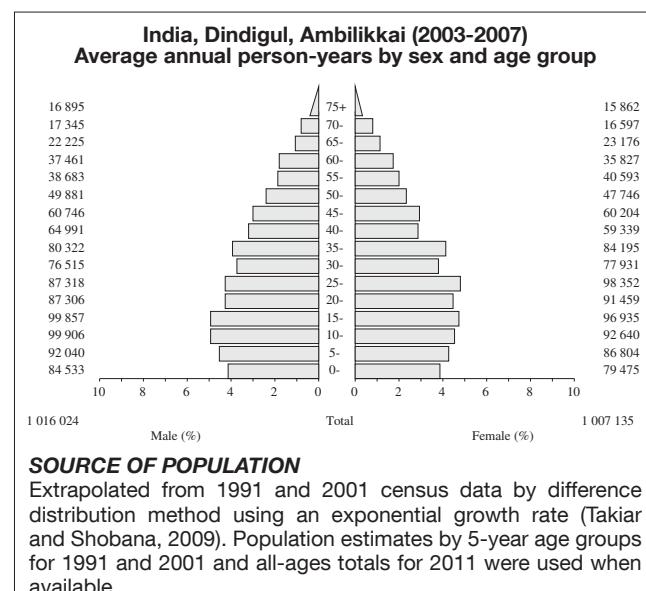
USE OF THE DATA

The DACR has published several descriptive epidemiological studies on cancer incidence patterns.

It was also instrumental in evaluating the population-based cervical cancer intervention trial in Dindigul district, which paved the way for the state government to establish cancer screening programmes in other districts. In the future, the DACR will monitor participants in the human papillomavirus vaccine trial in Ambilikkai for cervical neoplasia and will support the evaluation of breast cancer early detection initiatives in Dindigul district.

CONTRIBUTORS

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NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	6.1	Cervix uteri	24.5
Other and unspecified	5.4	Breast	12.0
Oesophagus	4.0	Other and unspecified	3.7
Mouth	4.0	Ovary	3.2
Trachea, bronchus and lung	3.7	Mouth	3.0
Tongue	2.7	Stomach	2.8
Hypopharynx	2.3	Oesophagus	1.9
Larynx	2.2	Thyroid	1.4
Liver	2.0	Corpus uteri	1.0
Non-melanoma skin cancer	1.5	Trachea, bronchus and lung	1.0
All sites	54.6	All sites	68.6

*India, Dindigul, Ambilikkai (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	11	0.4	0.2	0.2	0.01	0.02	11	0.3	0.2	0.2	0.02	0.03	C00
Tongue	127	5.1	2.5	2.7	0.18	0.32	32	1.0	0.6	0.7	0.06	0.07	C01-02
Mouth	185	7.4	3.6	4.0	0.26	0.52	140	4.2	2.8	3.0	0.21	0.37	C03-06
Salivary glands	11	0.4	0.2	0.2	0.02	0.03	14	0.4	0.3	0.3	0.03	0.03	C07-08
Tonsil	42	1.7	0.8	0.9	0.07	0.11	10	0.3	0.2	0.2	0.01	0.02	C09
Other oropharynx	51	2.0	1.0	1.1	0.07	0.14	4	0.1	0.1	0.1	0.01	0.01	C10
Nasopharynx	20	0.8	0.4	0.4	0.03	0.05	5	0.1	0.1	0.1	0.01	0.01	C11
Hypopharynx	103	4.1	2.0	2.3	0.14	0.28	36	1.1	0.7	0.7	0.06	0.07	C12-13
Pharynx unspecified	40	1.6	0.8	0.9	0.05	0.11	19	0.6	0.4	0.4	0.03	0.04	C14
Oesophagus	181	7.2	3.6	4.0	0.24	0.52	88	2.6	1.7	1.9	0.14	0.21	C15
Stomach	293	11.7	5.8	6.1	0.48	0.74	135	4.0	2.7	2.8	0.19	0.35	C16
Small intestine	5	0.2	0.1	0.1	0.01	0.01	3	0.1	0.1	0.1	0.00	0.00	C17
Colon	28	1.1	0.6	0.6	0.05	0.06	23	0.7	0.5	0.5	0.04	0.05	C18
Rectum	68	2.7	1.3	1.4	0.09	0.16	42	1.3	0.8	0.8	0.07	0.08	C19-20
Anus	14	0.6	0.3	0.3	0.03	0.03	9	0.3	0.2	0.2	0.02	0.02	C21
Liver	90	3.6	1.8	2.0	0.11	0.26	19	0.6	0.4	0.4	0.03	0.03	C22
Gallbladder etc.	19	0.8	0.4	0.4	0.03	0.05	21	0.6	0.4	0.4	0.03	0.04	C23-24
Pancreas	35	1.4	0.7	0.7	0.05	0.09	20	0.6	0.4	0.4	0.04	0.05	C25
Nose, sinuses etc.	35	1.4	0.7	0.8	0.04	0.09	16	0.5	0.3	0.3	0.02	0.03	C30-31
Larynx	103	4.1	2.0	2.2	0.16	0.27	12	0.4	0.2	0.2	0.02	0.03	C32
Trachea, bronchus and lung	173	6.9	3.4	3.7	0.27	0.47	50	1.5	1.0	1.0	0.08	0.13	C33-34
Other thoracic organs	3	0.1	0.1	0.1	0.01	0.01	2	0.1	0.0	0.0	0.00	0.01	C37-38
Bone	37	1.5	0.7	0.7	0.05	0.06	30	0.9	0.6	0.6	0.04	0.05	C40-41
Melanoma of skin	6	0.2	0.1	0.1	0.01	0.02	4	0.1	0.1	0.1	0.01	0.01	C43
Other skin	75	2.8	1.5	1.5	0.13	0.16	42	0.8	0.8	0.9	0.07	0.09	C44
Mesothelioma	2	0.1	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	37	1.5	0.7	0.7	0.05	0.08	30	0.9	0.6	0.6	0.05	0.06	C47+C49
Breast	14	0.6	0.3	0.3	0.02	0.04	607	18.2	12.1	12.0	0.97	1.24	C50
Vulva							20	0.6	0.4	0.5	0.02	0.07	C51
Vagina							39	1.2	0.8	0.8	0.06	0.10	C52
Cervix uteri							1215	36.4	24.1	24.5	2.11	2.65	C53
Corpus uteri							49	1.5	1.0	1.0	0.08	0.12	C54
Uterus unspecified							6	0.2	0.1	0.1	0.01	0.01	C55
Ovary							161	4.8	3.2	3.2	0.27	0.33	C56
Other female genital organs							1	0.0	0.0	0.0	0.00	0.00	C57
Placenta							4	0.1	0.1	0.1	0.00	0.00	C58
Penis	72	2.9	1.4	1.5	0.10	0.17							C60
Prostate	32	1.3	0.6	0.7	0.03	0.12							C61
Testis	20	0.8	0.4	0.4	0.03	0.03							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	30	1.2	0.6	0.7	0.04	0.07	18	0.5	0.4	0.4	0.03	0.04	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	51	2.0	1.0	1.1	0.07	0.15	15	0.4	0.3	0.3	0.02	0.03	C67
Other urinary organs	2	0.1	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	3	0.1	0.1	0.1	0.00	0.00	4	0.1	0.1	0.1	0.01	0.01	C69
Brain, nervous system	77	3.1	1.5	1.5	0.12	0.13	47	1.4	0.9	1.0	0.07	0.08	C70-72
Thyroid	25	1.0	0.5	0.5	0.04	0.06	71	2.1	1.4	1.4	0.11	0.14	C73
Adrenal gland	1	0.0	0.0	0.0	0.00	0.00	3	0.1	0.1	0.1	0.00	0.00	C74
Other endocrine	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	27	1.1	0.5	0.5	0.03	0.03	16	0.5	0.3	0.3	0.02	0.03	C81
Non-Hodgkin lymphoma	72	2.9	1.4	1.5	0.11	0.15	28	0.8	0.6	0.6	0.04	0.06	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	14	0.6	0.3	0.3	0.02	0.04	10	0.3	0.2	0.2	0.02	0.02	C90
Lymphoid leukaemia	35	1.4	0.7	0.8	0.04	0.05	12	0.4	0.2	0.3	0.02	0.02	C91
Myeloid leukaemia	41	1.6	0.8	0.8	0.06	0.07	42	1.3	0.8	0.8	0.07	0.07	C92-94
Leukaemia unspecified	18	0.7	0.4	0.3	0.03	0.03	11	0.3	0.2	0.2	0.02	0.02	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	252	10.1	5.0	5.4	0.36	0.60	180	5.4	3.6	3.7	0.28	0.39	O&U
All sites	2580	50.8	54.6	3.74	6.39		3378	67.1	68.6	5.52	7.33	C00-96	
All sites except C44	2505	100.0	49.3	53.1	3.61	6.23	3336	100.0	66.2	67.8	5.45	7.23	C00-96 exc. C44

*See note following population pyramid

India, Karunagappally

REGISTRATION AREA

The Karunagappally Rural Cancer Registry covers the *taluk* (subdistrict) of Karunagappally (an area of 192 km²) in the Kollam district of the Indian state of Kerala. The area is rural, with lowlands, backwaters, and coastlines. The coastal belt of Karunagappally is internationally known for its rich deposits of naturally occurring radioactive mineral sands. The population is stable, with 2000 residents/km². Most residents are agricultural labourers, fishermen, or coconut fibre labourers. The major religions are Hinduism, Christianity, and Islam. The literacy rate is more than 85%.

CANCER CARE FACILITIES

There are no dedicated cancer treatment centres in the area, but the Regional Cancer Centre in Thiruvananthapuram is located about 100 km away.

REGISTRY STRUCTURE AND METHODS

The registry (Kerala's first population-based cancer registry) was established in 1990 by the Regional Cancer Centre in Thiruvananthapuram, with government funding from the Indian Department of Atomic Energy, as a special-purpose registry to study cancer and the natural radiation present along the coast of Karunagappally. Since 1999, the registry has received funding from the Japanese Health Research Foundation and the government of Kerala's Local Administration Department. In January 2006, the registry was extended to cover the entire Kollam district, with funding from the Indian Council of Medical Research. The registry has 15 staff members and uses active case finding. Registry investigators visit and abstract data from pathology laboratories, medical colleges with oncology units, private and government hospitals, and the vital statistics divisions of the district and nearby towns. The collected data are then processed and registered.

INTERPRETING THE RESULTS

Although there are no cancer treatment facilities in the registration area, the area's high literacy rates, good

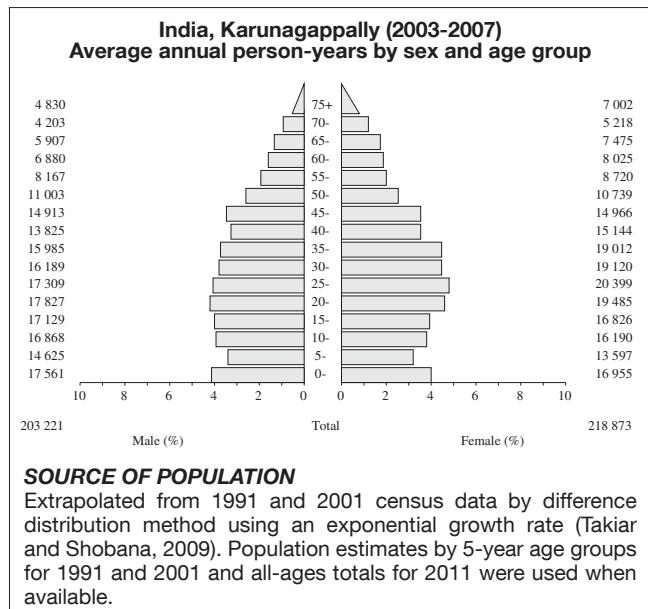
communications infrastructure, and high levels of health awareness, as well as the dedicated services established for cancer care by the Regional Cancer Centre, enhance the quality of registry activities.

USE OF THE DATA

Registry data are used for organizing cancer control and epidemiological studies, which investigate mainly the effects of chronic exposure to the natural radiation in the area.

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NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	18.8	Breast	16.6
Other and unspecified	12.7	Cervix uteri	8.9
Mouth	7.3	Other and unspecified	6.1
Stomach	6.9	Thyroid	6.0
Oesophagus	6.7	Ovary	3.7
Tongue	5.7	Mouth	3.1
Larynx	5.3	Oesophagus	3.0
Liver	4.6	Rectum	2.8
Prostate	4.2	Tongue	2.7
Brain, nervous system	4.1	Stomach	2.5
All sites	116.6	All sites	80.4

*India, Karunagappally (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	1	0.1	0.1	0.1	0.01	0.01	4	0.4	0.4	0.3	0.02	0.04	C00
Tongue	62	5.2	6.1	5.7	0.43	0.61	33	3.4	3.0	2.7	0.21	0.35	C01-02
Mouth	76	6.3	7.5	7.3	0.58	0.85	39	4.0	3.6	3.1	0.19	0.41	C03-06
Salivary glands	4	0.3	0.4	0.4	0.01	0.04	3	0.3	0.3	0.3	0.03	0.03	C07-08
Tonsil	7	0.6	0.7	0.7	0.03	0.12	2	0.2	0.2	0.2	0.00	0.02	C09
Other oropharynx	19	1.6	1.9	1.9	0.13	0.20	1	0.1	0.1	0.1	0.00	0.00	C10
Nasopharynx	4	0.3	0.4	0.4	0.02	0.05	1	0.1	0.1	0.1	0.01	0.01	C11
Hypopharynx	29	2.4	2.9	2.7	0.09	0.39	1	0.1	0.1	0.1	0.00	0.01	C12-13
Pharynx unspecified	7	0.6	0.7	0.7	0.02	0.06	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	69	5.8	6.8	6.7	0.48	0.79	39	4.0	3.6	3.0	0.11	0.43	C15
Stomach	73	6.1	7.2	6.9	0.34	0.87	34	3.5	3.1	2.5	0.11	0.27	C16
Small intestine	2	0.2	0.2	0.2	0.02	0.02	1	0.1	0.1	0.1	0.00	0.01	C17
Colon	26	2.2	2.6	2.4	0.16	0.28	28	2.8	2.6	2.2	0.13	0.30	C18
Rectum	34	2.8	3.3	3.3	0.25	0.38	33	3.4	3.0	2.8	0.21	0.37	C19-20
Anus	3	0.3	0.3	0.3	0.01	0.06	4	0.4	0.4	0.3	0.01	0.03	C21
Liver	49	4.1	4.8	4.6	0.32	0.53	12	1.2	1.1	0.9	0.05	0.09	C22
Gallbladder etc.	11	0.9	1.1	1.0	0.05	0.14	8	0.8	0.7	0.6	0.05	0.08	C23-24
Pancreas	24	2.0	2.4	2.3	0.16	0.33	16	1.6	1.5	1.3	0.08	0.14	C25
Nose, sinuses etc.	5	0.4	0.5	0.5	0.02	0.04	3	0.3	0.3	0.2	0.01	0.04	C30-31
Larynx	54	4.5	5.3	5.3	0.35	0.70	5	0.5	0.5	0.4	0.04	0.06	C32
Trachea, bronchus and lung	195	16.3	19.2	18.8	1.15	2.43	28	2.8	2.6	2.3	0.16	0.29	C33-34
Other thoracic organs	4	0.3	0.4	0.4	0.05	0.05	0	0.0	0.0	0.0	0.00	0.00	C37-38
Bone	11	0.9	1.1	1.1	0.08	0.11	12	1.2	1.1	1.1	0.07	0.07	C40-41
Melanoma of skin	0	0.0	0.0	0.0	0.00	0.00	6	0.6	0.5	0.4	0.02	0.04	C43
Other skin	21		2.1	2.0	0.14	0.25	13		1.2	1.0	0.05	0.11	C44
Mesothelioma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	12	1.0	1.2	1.1	0.06	0.10	12	1.2	1.1	0.9	0.04	0.09	C47+C49
Breast	2	0.2	0.2	0.2	0.02	0.02	211	21.5	19.3	16.6	1.29	1.73	C50
Vulva							3	0.3	0.3	0.2	0.01	0.02	C51
Vagina							2	0.2	0.2	0.2	0.01	0.01	C52
Cervix uteri							108	11.0	9.9	8.9	0.69	1.04	C53
Corpus uteri							16	1.6	1.5	1.3	0.09	0.16	C54
Uterus unspecified							4	0.4	0.4	0.3	0.03	0.03	C55
Ovary							44	4.5	4.0	3.7	0.29	0.43	C56
Other female genital organs							1	0.1	0.1	0.1	0.00	0.02	C57
Placenta							0	0.0	0.0	0.0	0.00	0.00	C58
Penis	13	1.1	1.3	1.2	0.08	0.14							C60
Prostate	44	3.7	4.3	4.2	0.11	0.56							C61
Testis	6	0.5	0.6	0.5	0.04	0.04							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	16	1.3	1.6	1.6	0.13	0.18	2	0.2	0.2	0.2	0.01	0.02	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	32	2.7	3.1	3.0	0.09	0.41	3	0.3	0.3	0.2	0.01	0.01	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	1	0.1	0.1	0.1	0.01	0.01	1	0.1	0.1	0.1	0.01	0.01	C69
Brain, nervous system	44	3.7	4.3	4.1	0.25	0.46	25	2.5	2.3	2.2	0.17	0.21	C70-72
Thyroid	20	1.7	2.0	1.7	0.14	0.15	77	7.8	7.0	6.0	0.45	0.50	C73
Adrenal gland	1	0.1	0.1	0.1	0.01	0.01	2	0.2	0.2	0.2	0.01	0.01	C74
Other endocrine	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	8	0.7	0.8	0.8	0.05	0.07	2	0.2	0.2	0.1	0.00	0.00	C81
Non-Hodgkin lymphoma	30	2.5	3.0	2.8	0.19	0.33	22	2.2	2.0	1.9	0.11	0.24	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	19	1.6	1.9	1.8	0.09	0.22	19	1.9	1.7	1.5	0.06	0.20	C90
Lymphoid leukaemia	14	1.2	1.4	1.7	0.09	0.09	13	1.3	1.2	1.4	0.07	0.09	C91
Myeloid leukaemia	27	2.3	2.7	2.5	0.18	0.24	17	1.7	1.6	1.5	0.12	0.13	C92-94
Leukaemia unspecified	6	0.5	0.6	0.6	0.04	0.06	6	0.6	0.5	0.5	0.04	0.04	C95
Myeloproliferative disorders	1	0.1	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	134	11.2	13.2	12.7	0.72	1.53	80	8.1	7.3	6.1	0.31	0.72	O&U
All sites	1220		120.1	116.6	7.22	13.90	996		91.0	80.4	5.39	8.93	C00-96
All sites except C44	1199	100.0	118.0	114.6	7.08	13.65	983	100.0	89.8	79.4	5.34	8.82	C00-96 exc. C44

*See note following population pyramid

India, Mizoram

REGISTRATION AREA

The Mizoram Population-based Cancer Registry covers the state of Mizoram in north-eastern India between Myanmar and Bangladesh. The residents are ethnically different than elsewhere in India; they are of Mongoloid origin, and most are Christian. The population is a mix of urban and rural.

CANCER CARE FACILITIES

The main referral hospital is the Aizawl Civil Hospital, which is also a regional cancer centre. It provides radiotherapy, pathology, computed tomography, and cancer surgery. Histopathology, computed tomography, magnetic resonance imaging, and endoscopy are available in some private hospitals and diagnostic centres.

REGISTRY STRUCTURE AND METHODS

The registry was established at the Aizawl Civil Hospital in 2003 as part of the National Cancer Registry Programme (NCRP) of the Indian Council of Medical Research, which funds the project. The registry is staffed by part-time pathologists and oncologists and seven full-time employees: a principal investigator/director (a pathologist) and six co-investigators. Data collection is active, with staff members regularly visiting the sources (hospitals, laboratories, and diagnostic centres). Mortality data are collected from about 700 birth and death registers throughout the state. Checks for duplicates and consistency are carried out first at the registry and again at the NCRP headquarters in Bangalore.

INTERPRETING THE RESULTS

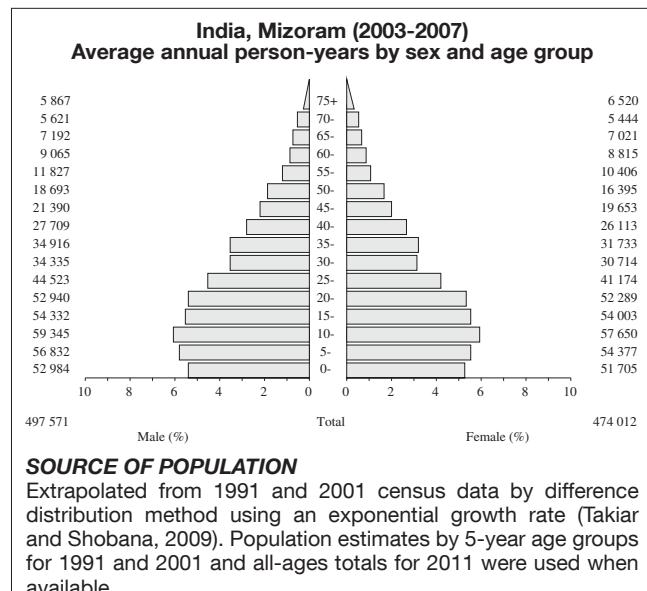
There have been no changes in the area or population covered. There are no organized screening programmes in the state. National and international tobacco use surveys have consistently shown very high rates of tobacco smoking and smokeless tobacco use among both men and women in Mizoram.

USE OF THE DATA

Registry data are published by the NCRP (along with other data) annually or biennially. Several research projects, some of which have already been published, have been initiated to investigate Mizoram's consistently high incidence rates of certain cancers (such as gastric, lung, and oesophageal cancers) and overall compared with other registration areas in India. Tobacco control programmes have been initiated.

CONTRIBUTORS

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SOURCE OF POPULATION

Extrapolated from 1991 and 2001 census data by difference distribution method using an exponential growth rate (Takiar and Shobana, 2009). Population estimates by 5-year age groups for 1991 and 2001 and all-ages totals for 2011 were used when available.

NOTES ON THE DATA

*No official mortality data. Fluctuation in rates from year to year.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	50.6	Trachea, bronchus and lung	27.4
Trachea, bronchus and lung	27.5	Stomach	24.9
Other and unspecified	25.1	Cervix uteri	19.7
Oesophagus	20.9	Other and unspecified	18.0
Hypopharynx	10.1	Breast	16.3
Liver	6.7	Liver	4.8
Nasopharynx	5.0	Rectum	3.9
Rectum	4.5	Oesophagus	3.7
Non-Hodgkin lymphoma	3.5	Ovary	3.2
Mouth	3.3	Nasopharynx	2.9
All sites	197.1	All sites	159.1

*India, Mizoram (2003-2007)

S I T E	Male						Female						ICD-10
	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	2	0.1	0.1	0.1	0.01	0.01	4	0.2	0.2	0.2	0.02	0.02	C00
Tongue	54	1.8	2.2	3.0	0.28	0.31	7	0.3	0.3	0.5	0.03	0.08	C01-02
Mouth	55	1.8	2.2	3.3	0.24	0.36	32	1.3	1.4	2.1	0.15	0.28	C03-06
Salivary glands	7	0.2	0.3	0.5	0.03	0.04	10	0.4	0.4	0.6	0.02	0.09	C07-08
Tonsil	36	1.2	1.4	2.0	0.20	0.21	6	0.2	0.3	0.4	0.04	0.04	C09
Other oropharynx	23	0.7	0.9	1.4	0.11	0.18	7	0.3	0.3	0.6	0.05	0.08	C10
Nasopharynx	82	2.7	3.3	5.0	0.36	0.57	43	1.8	1.8	2.9	0.24	0.34	C11
Hypopharynx	168	5.5	6.8	10.1	0.82	1.07	14	0.6	0.6	0.9	0.07	0.10	C12-13
Pharynx unspecified	39	1.3	1.6	2.3	0.16	0.28	14	0.6	0.6	0.9	0.06	0.11	C14
Oesophagus	347	11.3	13.9	20.9	1.75	2.33	58	2.4	2.4	3.7	0.21	0.41	C15
Stomach	752	24.5	30.2	50.6	3.07	6.24	347	14.2	14.6	24.9	1.53	3.19	C16
Small intestine	4	0.1	0.2	0.3	0.01	0.04	2	0.1	0.1	0.1	0.00	0.02	C17
Colon	45	1.5	1.8	2.8	0.12	0.29	40	1.6	1.7	2.5	0.20	0.21	C18
Rectum	67	2.2	2.7	4.5	0.25	0.48	56	2.3	2.4	3.9	0.22	0.53	C19-20
Anus	1	0.0	0.0	0.1	0.00	0.02	3	0.1	0.1	0.2	0.01	0.03	C21
Liver	111	3.6	4.5	6.7	0.36	0.80	69	2.8	2.9	4.8	0.35	0.54	C22
Gallbladder etc.	17	0.6	0.7	1.2	0.10	0.16	38	1.6	1.6	2.8	0.17	0.35	C23-24
Pancreas	32	1.0	1.3	2.2	0.12	0.29	33	1.3	1.4	2.2	0.16	0.22	C25
Nose, sinuses etc.	12	0.4	0.5	0.8	0.05	0.06	11	0.4	0.5	0.6	0.02	0.07	C30-31
Larynx	50	1.6	2.0	2.9	0.23	0.31	16	0.7	0.7	1.0	0.07	0.10	C32
Trachea, bronchus and lung	390	12.7	15.7	27.5	1.56	3.41	369	15.1	15.6	27.4	1.67	3.69	C33-34
Other thoracic organs	3	0.1	0.1	0.2	0.02	0.02	1	0.0	0.0	0.1	0.01	0.01	C37-38
Bone	20	0.7	0.8	1.0	0.07	0.07	13	0.5	0.5	0.6	0.03	0.04	C40-41
Melanoma of skin	5	0.2	0.2	0.4	0.01	0.06	4	0.2	0.2	0.2	0.02	0.02	C43
Other skin	27		1.1	1.7	0.09	0.22	18		0.8	1.3	0.07	0.17	C44
Mesothelioma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	31	1.0	1.2	1.7	0.11	0.18	21	0.9	0.9	1.1	0.07	0.10	C47+C49
Breast	4	0.1	0.2	0.3	0.01	0.06	274	11.2	11.6	16.3	1.32	1.78	C50
Vulva							13	0.5	0.5	0.8	0.07	0.08	C51
Vagina							4	0.2	0.2	0.3	0.01	0.02	C52
Cervix uteri							364	14.9	15.4	19.7	1.61	2.01	C53
Corpus uteri							24	1.0	1.0	1.8	0.18	0.21	C54
Uterus unspecified							9	0.4	0.4	0.5	0.03	0.06	C55
Ovary							57	2.3	2.4	3.2	0.22	0.30	C56
Other female genital organs							2	0.1	0.1	0.1	0.01	0.01	C57
Placenta							17	0.7	0.7	0.7	0.05	0.05	C58
Penis	26	0.8	1.0	1.7	0.10	0.23							C60
Prostate	40	1.3	1.6	2.8	0.02	0.29							C61
Testis	7	0.2	0.3	0.3	0.02	0.02							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	11	0.4	0.4	0.6	0.03	0.05	11	0.4	0.5	0.6	0.05	0.05	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	2	0.1	0.1	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	24	0.8	1.0	1.5	0.04	0.16	15	0.6	0.6	1.0	0.05	0.13	C67
Other urinary organs	1	0.0	0.0	0.1	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	9	0.3	0.4	0.5	0.02	0.04	6	0.2	0.3	0.3	0.01	0.01	C69
Brain, nervous system	25	0.8	1.0	1.3	0.06	0.18	13	0.5	0.5	0.7	0.04	0.10	C70-72
Thyroid	22	0.7	0.9	1.4	0.07	0.17	47	1.9	2.0	2.8	0.19	0.29	C73
Adrenal gland	1	0.0	0.0	0.0	0.00	0.00	2	0.1	0.1	0.1	0.00	0.00	C74
Other endocrine	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	4	0.1	0.2	0.2	0.01	0.01	1	0.0	0.0	0.0	0.00	0.00	C81
Non-Hodgkin lymphoma	58	1.9	2.3	3.5	0.22	0.40	34	1.4	1.4	2.1	0.13	0.28	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	2	0.1	0.1	0.1	0.01	0.01	5	0.2	0.2	0.3	0.03	0.03	C90
Lymphoid leukaemia	21	0.7	0.8	1.0	0.07	0.08	12	0.5	0.5	0.5	0.03	0.03	C91
Myeloid leukaemia	52	1.7	2.1	2.4	0.16	0.24	33	1.3	1.4	1.6	0.10	0.14	C92-94
Leukaemia unspecified	17	0.6	0.7	0.9	0.06	0.08	22	0.9	0.9	1.1	0.09	0.11	C95
Myeloproliferative disorders	2	0.1	0.1	0.2	0.00	0.03	1	0.0	0.0	0.1	0.01	0.01	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	393	12.8	15.8	25.1	1.51	2.68	264	10.8	11.1	18.0	1.13	2.06	O&U
All sites	3101		124.6	197.1	12.52	22.70	2466		104.0	159.1	10.84	18.63	C00-96
All sites except C44	3074	100.0	123.6	195.4	12.43	22.49	2448	100.0	103.3	157.7	10.77	18.46	C00-96 exc. C44

*Includes 16 cases of unknown age

\$Includes 9 cases of unknown age

*See note following population pyramid

India, Mumbai

REGISTRATION AREA

The Mumbai Cancer Registry covers the metropolis of Greater Mumbai, which is an island on the west coast of India joined to the mainland by bridges. It has an area of 437.7 km² and a warm, humid climate. In 2001, the population was 11.9 million, with a sex ratio of 811 females per 1000 males. Greater Mumbai is the most densely populated district in India, with 2220 residents/km².

CANCER CARE FACILITIES

The Municipal Corporation of Greater Mumbai and the state government run most hospitals in Mumbai, including the Tata Memorial Centre, which specializes in cancer. Cancer diagnosis and treatment are centralized to certain hospitals. There have been substantial improvements in diagnostic facilities, and histopathology and imaging facilities are now available within the registration area. The number of hospital radiotherapy departments in the area has increased from two to nine.

REGISTRY STRUCTURE AND METHODS

The registry was established in 1963 as a unit of the Indian Cancer Society, for the purpose of obtaining reliable cancer incidence and mortality data from a precisely defined urban population. Data compilation began in 1964. The registry was established in collaboration with the Biometric Research Branch of the United States National Cancer Institute and received funding from the branch until 1975. Since 1981, the registry has been funded partly by the Indian Council of Medical Research. Registry staff members visit the wards of all participating hospitals at least weekly to personally interview each patient diagnosed with or suspected to have cancer. All files maintained by the various departments of these hospitals are individually cross-checked. Care is taken to prevent duplicate registrations.

INTERPRETING THE RESULTS

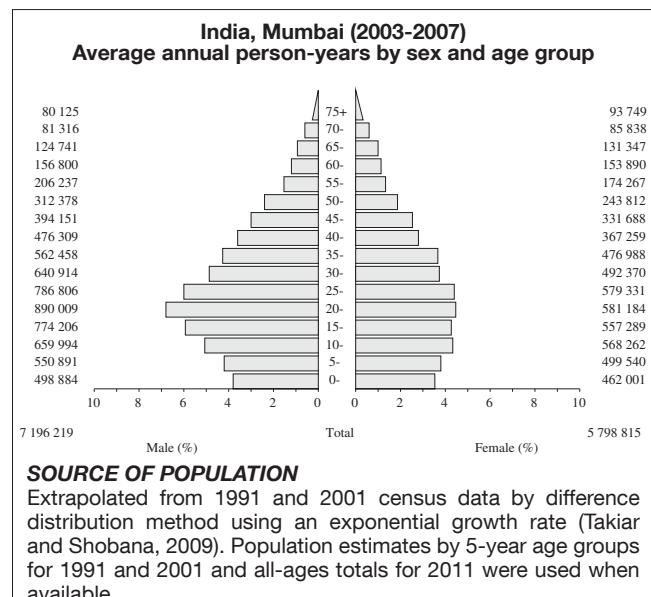
Tobacco chewing is very prevalent in both sexes. Smoking (particularly bidi smoking) is prevalent among men but less common among women.

USE OF THE DATA

The registry publishes annual reports and has published numerous journal articles and monographs. Registry data are also used by public health workers for etiological and cancer control studies. The registry is a rich source of data for studying time trends in cancer incidence and mortality.

CONTRIBUTORS

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NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	9.3	Breast	30.4
Prostate	7.1	Cervix uteri	13.5
Mouth	6.9	Ovary	7.0
Larynx	5.4	Trachea, bronchus and lung	3.5
Oesophagus	5.2	Oesophagus	3.5
Liver	5.2	Mouth	3.5
Tongue	4.8	Corpus uteri	3.2
Non-Hodgkin lymphoma	4.6	Non-Hodgkin lymphoma	2.8
Stomach	4.5	Gallbladder etc.	2.7
Bladder	3.8	Other and unspecified	2.6
All sites	97.9	All sites	105.5

*India, Mumbai (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	99	0.4	0.3	0.3	0.03	0.04	67	0.3	0.2	0.3	0.02	0.04	C00
Tongue	1304	5.4	3.6	4.8	0.34	0.54	472	1.8	1.6	1.9	0.13	0.23	C01-02
Mouth	1910	7.9	5.3	6.9	0.50	0.79	832	3.2	2.9	3.5	0.23	0.39	C03-06
Salivary glands	148	0.6	0.4	0.5	0.03	0.06	105	0.4	0.4	0.4	0.03	0.04	C07-08
Tonsil	244	1.0	0.7	1.0	0.07	0.12	52	0.2	0.2	0.2	0.02	0.02	C09
Other oropharynx	140	0.6	0.4	0.6	0.04	0.06	28	0.1	0.1	0.1	0.01	0.01	C10
Nasopharynx	120	0.5	0.3	0.4	0.02	0.05	53	0.2	0.2	0.2	0.01	0.02	C11
Hypopharynx	770	3.2	2.1	3.3	0.18	0.40	231	0.9	0.8	1.0	0.06	0.11	C12-13
Pharynx unspecified	146	0.6	0.4	0.6	0.03	0.07	62	0.2	0.2	0.3	0.01	0.03	C14
Oesophagus	1217	5.0	3.4	5.2	0.29	0.64	810	3.1	2.8	3.5	0.20	0.40	C15
Stomach	1088	4.5	3.0	4.5	0.25	0.55	590	2.3	2.0	2.5	0.14	0.29	C16
Small intestine	94	0.4	0.3	0.4	0.03	0.04	46	0.2	0.2	0.2	0.01	0.02	C17
Colon	859	3.5	2.4	3.4	0.18	0.38	550	2.1	1.9	2.3	0.13	0.26	C18
Rectum	731	3.0	2.0	2.9	0.17	0.33	503	1.9	1.7	2.0	0.12	0.23	C19-20
Anus	102	0.4	0.3	0.4	0.02	0.05	70	0.3	0.2	0.3	0.02	0.03	C21
Liver	1195	4.9	3.3	5.2	0.27	0.62	567	2.2	2.0	2.4	0.13	0.27	C22
Gallbladder etc.	420	1.7	1.2	1.7	0.10	0.20	645	2.5	2.2	2.7	0.18	0.30	C23-24
Pancreas	566	2.3	1.6	2.4	0.13	0.29	326	1.3	1.1	1.4	0.07	0.17	C25
Nose, sinuses etc.	137	0.6	0.4	0.5	0.03	0.06	82	0.3	0.3	0.3	0.02	0.04	C30-31
Larynx	1278	5.3	3.6	5.4	0.29	0.67	183	0.7	0.6	0.8	0.05	0.09	C32
Trachea, bronchus and lung	2134	8.8	5.9	9.3	0.47	1.14	824	3.2	2.8	3.5	0.20	0.41	C33-34
Other thoracic organs	71	0.3	0.2	0.3	0.01	0.03	47	0.2	0.2	0.2	0.01	0.02	C37-38
Bone	372	1.5	1.0	1.2	0.07	0.11	253	1.0	0.9	0.9	0.06	0.09	C40-41
Melanoma of skin	77	0.3	0.2	0.3	0.02	0.04	67	0.3	0.2	0.3	0.02	0.03	C43
Other skin	330	0.9	0.6	1.3	0.08	0.13	224		0.8	0.9	0.05	0.10	C44
Mesothelioma	15	0.1	0.0	0.1	0.00	0.01	8	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	3	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	316	1.3	0.9	1.1	0.06	0.11	252	1.0	0.9	0.9	0.07	0.09	C47+C49
Breast	147	0.6	0.4	0.6	0.04	0.07	7677	29.7	26.5	30.4	2.26	3.33	C50
Vulva							65	0.3	0.2	0.3	0.02	0.03	C51
Vagina							160	0.6	0.6	0.7	0.04	0.07	C52
Cervix uteri							3388	13.1	11.7	13.5	1.03	1.52	C53
Corpus uteri							737	2.8	2.5	3.2	0.24	0.40	C54
Uterus unspecified							192	0.7	0.7	0.8	0.04	0.09	C55
Ovary							1742	6.7	6.0	7.0	0.51	0.76	C56
Other female genital organs							10	0.0	0.0	0.0	0.00	0.01	C57
Placenta							11	0.0	0.0	0.0	0.00	0.00	C58
Penis	239	1.0	0.7	0.9	0.06	0.10							C60
Prostate	1480	6.1	4.1	7.1	0.17	0.73							C61
Testis	257	1.1	0.7	0.7	0.05	0.05							C62
Other male genital organs	15	0.1	0.0	0.1	0.00	0.01							C63
Kidney	520	2.1	1.4	2.1	0.13	0.25	250	1.0	0.9	1.0	0.06	0.11	C64
Renal pelvis	1	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C65
Ureter	12	0.0	0.0	0.1	0.00	0.01	6	0.0	0.0	0.0	0.00	0.00	C66
Bladder	883	3.6	2.5	3.8	0.18	0.42	246	1.0	0.8	1.1	0.05	0.12	C67
Other urinary organs	2	0.0	0.0	0.0	0.00	0.00	5	0.0	0.0	0.0	0.00	0.00	C68
Eye	32	0.1	0.1	0.1	0.01	0.01	16	0.1	0.1	0.1	0.00	0.01	C69
Brain, nervous system	1004	4.1	2.8	3.3	0.22	0.35	605	2.3	2.1	2.3	0.15	0.22	C70-72
Thyroid	214	0.9	0.6	0.7	0.05	0.07	466	1.8	1.6	1.6	0.12	0.17	C73
Adrenal gland	31	0.1	0.1	0.1	0.01	0.01	16	0.1	0.1	0.1	0.01	0.01	C74
Other endocrine	17	0.1	0.0	0.1	0.00	0.00	22	0.1	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	300	1.2	0.8	1.0	0.06	0.09	144	0.6	0.5	0.5	0.04	0.05	C81
Non-Hodgkin lymphoma	1225	5.0	3.4	4.6	0.26	0.49	690	2.7	2.4	2.8	0.17	0.31	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	372	1.5	1.0	1.5	0.08	0.18	242	0.9	0.8	1.1	0.07	0.12	C90
Lymphoid leukaemia	454	1.9	1.3	1.6	0.08	0.12	272	1.1	0.9	1.1	0.06	0.08	C91
Myeloid leukaemia	597	2.5	1.7	1.9	0.11	0.19	422	1.6	1.5	1.6	0.10	0.15	C92-94
Leukaemia unspecified	196	0.8	0.5	0.7	0.03	0.06	148	0.6	0.5	0.6	0.03	0.05	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	777	3.2	2.2	3.1	0.18	0.36	632	2.4	2.2	2.6	0.16	0.29	O&U
All sites	24661	68.5	97.9	5.43	11.10		26116	90.1	105.5	7.16	11.64	C00-96	
All sites except C44	24331	100.0	67.6	96.6	5.35	10.97	25892	100.0	89.3	104.6	7.11	11.53	C00-96 exc. C44

*See note following population pyramid

India, New Delhi

REGISTRATION AREA

The Delhi Cancer Registry covers an urban area of 890 km² in Delhi, the capital territory of India. For census purposes, urban Delhi was divided into three statutory towns (the Municipal Corporation of Delhi, the New Delhi Municipal Council, and the Delhi Cantonment) and 29 census towns. In 2001, the population of urban Delhi was 12.8 million. The sex ratio in Delhi is 822 females per 1000 males, and the population density is 9294 residents/km².

REGISTRY STRUCTURE AND METHODS

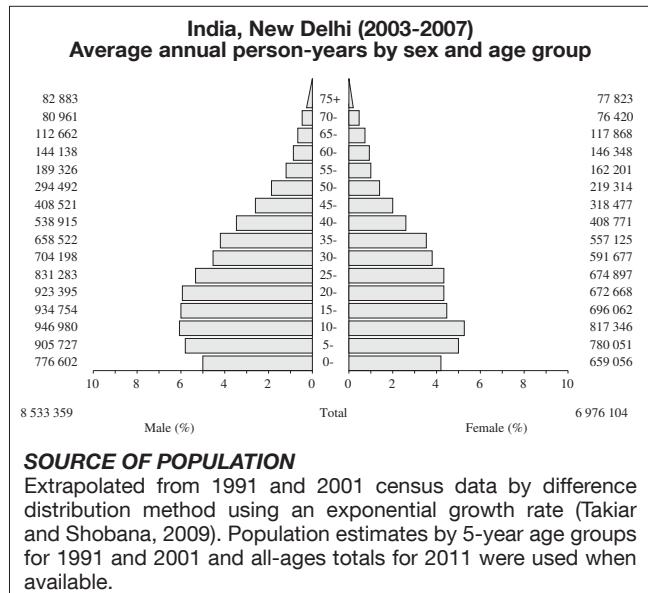
The registry is based at the Dr. B.R. Ambedkar Institute Rotary Cancer Hospital of the All India Institute of Medical Sciences in New Delhi. It collects cancer morbidity and mortality data from 165 major government hospitals, centres, and institutions; more than 250 private hospitals and nursing homes; and municipal vital statistics departments. The registry is staffed by two scientists (a statistician and a medical officer), nine medical social workers (MSWs), a data entry operator, and a lower-division clerk. The MSWs visit participating hospitals and nursing homes and collect data from the relevant departments. Smaller nursing homes and clinics are contacted by mail, and data are collected on a notification form. Hospitals outside the registration area notify the registry of resident cases that they diagnose or treat. The death registration system in the area is inadequate and incomplete, and cause of death is often recorded simply as cardiorespiratory arrest. All hospital death records are checked against morbidity records, and cases with no matching morbidity records are registered as death-certificate-only (DCO) cases. Registry data are coded using ICD-O-3 and ICD-10. Consistency and validity checks are carried out to detect coding or keying errors.

USE OF THE DATA

The registry publishes annual and biennial reports on cancer incidence and mortality, highlighting trends and changes.

CONTRIBUTORS

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NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	13.7	Breast	31.6
Prostate	10.1	Cervix uteri	17.7
Larynx	8.0	Ovary	8.5
Tongue	7.4	Gallbladder etc.	8.0
Other and unspecified	6.8	Corpus uteri	4.5
Bladder	6.5	Other and unspecified	4.2
Non-Hodgkin lymphoma	5.6	Trachea, bronchus and lung	3.6
Mouth	5.3	Non-Hodgkin lymphoma	3.0
Oesophagus	4.9	Oesophagus	2.9
Gallbladder etc.	4.0	Thyroid	2.5
All sites	119.7	All sites	118.4

*India, New Delhi (2003-2007)

SITE	Male						Female						
	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	ICD-10
Lip	130	0.4	0.3	0.5	0.03	0.06	38	0.1	0.1	0.2	0.01	0.02	C00
Tongue	1914	6.2	4.5	7.4	0.56	0.90	471	1.6	1.4	2.1	0.16	0.25	C01-02
Mouth	1446	4.7	3.4	5.3	0.40	0.64	412	1.4	1.2	1.9	0.13	0.23	C03-06
Salivary glands	231	0.8	0.5	0.8	0.06	0.10	138	0.5	0.4	0.5	0.04	0.05	C07-08
Tonsil	503	1.6	1.2	2.0	0.15	0.25	94	0.3	0.3	0.4	0.03	0.05	C09
Other oropharynx	286	0.9	0.7	1.2	0.09	0.15	50	0.2	0.1	0.2	0.02	0.03	C10
Nasopharynx	170	0.6	0.4	0.5	0.04	0.06	76	0.3	0.2	0.3	0.02	0.03	C11
Hypopharynx	574	1.9	1.3	2.5	0.16	0.33	100	0.3	0.3	0.4	0.03	0.05	C12-13
Pharynx unspecified	100	0.3	0.2	0.4	0.03	0.05	22	0.1	0.1	0.1	0.01	0.01	C14
Oesophagus	1175	3.8	2.8	4.9	0.34	0.60	650	2.3	1.9	2.9	0.20	0.35	C15
Stomach	813	2.6	1.9	3.2	0.21	0.41	355	1.2	1.0	1.5	0.12	0.17	C16
Small intestine	60	0.2	0.1	0.2	0.02	0.03	35	0.1	0.1	0.1	0.01	0.02	C17
Colon	710	2.3	1.7	2.7	0.17	0.33	448	1.6	1.3	1.9	0.14	0.23	C18
Rectum	574	1.9	1.3	2.2	0.13	0.24	358	1.2	1.0	1.4	0.11	0.16	C19-20
Anus	170	0.6	0.4	0.7	0.05	0.08	87	0.3	0.2	0.4	0.02	0.04	C21
Liver	647	2.1	1.5	2.6	0.18	0.32	340	1.2	1.0	1.5	0.10	0.17	C22
Gallbladder etc.	977	3.2	2.3	4.0	0.26	0.46	1852	6.5	5.3	8.0	0.61	0.95	C23-24
Pancreas	461	1.5	1.1	1.9	0.12	0.24	255	0.9	0.7	1.1	0.08	0.15	C25
Nose, sinuses etc.	72	0.2	0.2	0.3	0.02	0.03	54	0.2	0.2	0.2	0.02	0.03	C30-31
Larynx	1910	6.2	4.5	8.0	0.55	1.02	243	0.8	0.7	1.1	0.08	0.13	C32
Trachea, bronchus and lung	3162	10.3	7.4	13.7	0.91	1.74	793	2.8	2.3	3.6	0.24	0.44	C33-34
Other thoracic organs	91	0.3	0.2	0.4	0.02	0.04	66	0.2	0.2	0.3	0.02	0.03	C37-38
Bone	747	2.4	1.8	2.0	0.14	0.20	369	1.3	1.1	1.2	0.08	0.11	C40-41
Melanoma of skin	66	0.2	0.2	0.2	0.01	0.03	49	0.2	0.1	0.2	0.02	0.02	C43
Other skin	346	0.8	0.8	1.3	0.08	0.15	237		0.7	1.0	0.06	0.12	C44
Mesothelioma	2	0.0	0.0	0.0	0.00	0.00	7	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	1	0.0	0.0	0.0	0.00	0.00	2	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	499	1.6	1.2	1.5	0.11	0.16	348	1.2	1.0	1.2	0.09	0.12	C47+C49
Breast	316	1.0	0.7	1.3	0.08	0.15	7727	27.0	22.2	31.6	2.53	3.57	C50
Vulva							104	0.4	0.3	0.5	0.03	0.06	C51
Vagina							97	0.3	0.3	0.4	0.03	0.05	C52
Cervix uteri							4280	14.9	12.3	17.7	1.46	2.03	C53
Corpus uteri							974	3.4	2.8	4.5	0.35	0.57	C54
Uterus unspecified							137	0.5	0.4	0.6	0.05	0.06	C55
Ovary							2122	7.4	6.1	8.5	0.67	0.95	C56
Other female genital organs							13	0.0	0.0	0.1	0.00	0.01	C57
Placenta							24	0.1	0.1	0.1	0.00	0.01	C58
Penis	246	0.8	0.6	0.9	0.06	0.10							C60
Prostate	2068	6.7	4.8	10.1	0.31	1.21							C61
Testis	234	0.8	0.5	0.6	0.04	0.05							C62
Other male genital organs	17	0.1	0.0	0.1	0.01	0.01							C63
Kidney	640	2.1	1.5	2.6	0.17	0.31	278	1.0	0.8	1.1	0.07	0.12	C64
Renal pelvis	11	0.0	0.0	0.0	0.00	0.01	7	0.0	0.0	0.0	0.00	0.00	C65
Ureter	5	0.0	0.0	0.0	0.00	0.00	6	0.0	0.0	0.0	0.00	0.00	C66
Bladder	1488	4.8	3.5	6.5	0.35	0.81	338	1.2	1.0	1.5	0.10	0.18	C67
Other urinary organs	20	0.1	0.0	0.1	0.00	0.02	8	0.0	0.0	0.0	0.00	0.01	C68
Eye	113	0.4	0.3	0.3	0.02	0.02	54	0.2	0.2	0.2	0.01	0.01	C69
Brain, nervous system	1266	4.1	3.0	3.8	0.27	0.38	691	2.4	2.0	2.4	0.18	0.24	C70-72
Thyroid	328	1.1	0.8	1.1	0.07	0.12	734	2.6	2.1	2.5	0.18	0.26	C73
Adrenal gland	48	0.2	0.1	0.1	0.01	0.01	44	0.2	0.1	0.1	0.01	0.01	C74
Other endocrine	9	0.0	0.0	0.0	0.00	0.00	11	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	617	2.0	1.4	1.6	0.11	0.14	218	0.8	0.6	0.7	0.05	0.06	C81
Non-Hodgkin lymphoma	1609	5.2	3.8	5.6	0.35	0.62	746	2.6	2.1	3.0	0.20	0.36	C82-85,C96
Immunoproliferative diseases	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	448	1.5	1.0	2.0	0.12	0.25	253	0.9	0.7	1.2	0.08	0.14	C90
Lymphoid leukaemia	778	2.5	1.8	2.3	0.12	0.20	331	1.2	0.9	1.1	0.06	0.09	C91
Myeloid leukaemia	910	3.0	2.1	2.6	0.17	0.26	582	2.0	1.7	2.0	0.15	0.20	C92-94
Leukaemia unspecified	271	0.9	0.6	0.7	0.05	0.07	149	0.5	0.4	0.5	0.03	0.05	C95
Myeloproliferative disorders	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	1755	5.7	4.1	6.8	0.46	0.83	1018	3.6	2.9	4.2	0.30	0.49	O&U
All sites	31038	72.7	119.7	7.61	14.16		28895	82.8	118.4	9.01	13.50	C00-96	
All sites except C44	30692	100.0	71.9	118.4	7.53	14.01	28658	100.0	82.2	117.4	8.95	13.38	C00-96 exc. C44

*Includes 245 cases of unknown age

\$Includes 226 cases of unknown age

*See note following population pyramid

India, Poona

REGISTRATION AREA

The Poona Cancer Registry (a satellite of the Mumbai Cancer Registry) covers the urban agglomeration of Poona (also called Pune) within the district of Poona in the Indian state of Maharashtra. The agglomeration has an area of 344.18 km². In 2001, the population was 3.6 million, with a density of 10 330 residents/km²; 79.7% were Hindu, 8.9% Muslim, 2.6% Christian, 5.8% Neo-Buddhist, and 2.2% Jain. The lowest average temperature is 9 °C in January, and the highest average temperature is 40 °C in May. The climate is dry, with an average annual rainfall of about 900 mm.

CANCER CARE FACILITIES

Patients from Poona often seek cancer treatment at the Tata Memorial Centre in Mumbai, which specializes in cancer. There are also 35 hospitals in Poona that provide cancer diagnosis and treatment services. There are two radiotherapy centres in the city of Poona, and chemotherapy is available in nine hospitals.

REGISTRY STRUCTURE AND METHODS

The registry was established in 1972 by the BJ Medical College and the Sasoon Hospital in Poona. The registry has three social investigators (who conduct active case finding) and a supervisor (who performs administration and ensures data completeness). Editing, coding, and analysis are carried out by the Mumbai Cancer Registry. Information is collected on all cancer patients who visit hospitals in Poona and on Poona residents who receive treatment at the Tata Memorial Centre and other leading hospitals in Mumbai. The registry collects data from 16 major hospitals in Poona and six major hospitals in Mumbai. General medical practitioners are not contacted individually. Death records maintained by the Pune Municipal Corporation are used to check for missed cases. Registry data are checked for duplication using software such as PBCRDM and Excel.

INTERPRETING THE RESULTS

There are no screening programmes in the registration area. Tobacco chewing is very prevalent in both sexes.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Mouth	7.3	Breast	23.7
Prostate	6.9	Cervix uteri	13.4
Trachea, bronchus and lung	6.2	Ovary	5.7
Oesophagus	5.2	Mouth	4.3
Larynx	4.6	Oesophagus	3.9
Liver	4.5	Trachea, bronchus and lung	3.5
Stomach	4.2	Other and unspecified	2.7
Brain, nervous system	3.6	Brain, nervous system	2.5
Other and unspecified	3.6	Corpus uteri	2.4
Bladder	3.5	Colon	2.2
All sites	83.3	All sites	89.9

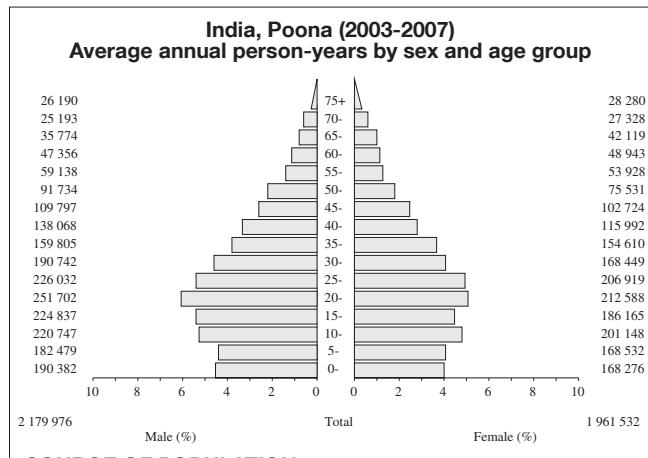
Smoking (particularly bidi smoking) is prevalent among men but uncommon among women.

USE OF THE DATA

The registry publishes a report every 5 years. The state government uses registry data for district cancer control programmes, and the data are also used by public health workers for etiological and cancer control studies.

CONTRIBUTORS

Arun Kurkure
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SOURCE OF POPULATION

Extrapolated from 1991 and 2001 census data by difference distribution method using an exponential growth rate (Takiar and Shobana, 2009). Population estimates by 5-year age groups for 1991 and 2001 and all-ages totals for 2011 were used when available.

NOTES ON THE DATA

*No official mortality data. Fluctuation in rates from year to year.

*India, Poona (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	33	0.5	0.3	0.5	0.03	0.07	19	0.3	0.2	0.3	0.02	0.04	C00
Tongue	241	3.9	2.2	3.0	0.22	0.34	129	1.9	1.3	1.7	0.13	0.20	C01-02
Mouth	565	9.2	5.2	7.3	0.53	0.89	312	4.6	3.2	4.3	0.31	0.49	C03-06
Salivary glands	41	0.7	0.4	0.5	0.03	0.06	22	0.3	0.2	0.3	0.02	0.03	C07-08
Tonsil	34	0.6	0.3	0.4	0.03	0.06	5	0.1	0.1	0.1	0.00	0.00	C09
Other oropharynx	24	0.4	0.2	0.3	0.02	0.03	6	0.1	0.1	0.1	0.01	0.01	C10
Nasopharynx	33	0.5	0.3	0.4	0.03	0.03	14	0.2	0.1	0.2	0.01	0.02	C11
Hypopharynx	130	2.1	1.2	1.9	0.10	0.22	47	0.7	0.5	0.6	0.04	0.07	C12-13
Pharynx unspecified	24	0.4	0.2	0.3	0.01	0.03	15	0.2	0.2	0.2	0.01	0.02	C14
Oesophagus	367	6.0	3.4	5.2	0.24	0.60	285	4.2	2.9	3.9	0.19	0.45	C15
Stomach	294	4.8	2.7	4.2	0.22	0.48	129	1.9	1.3	1.8	0.09	0.20	C16
Small intestine	10	0.2	0.1	0.1	0.01	0.01	13	0.2	0.1	0.2	0.01	0.01	C17
Colon	223	3.6	2.0	3.1	0.16	0.36	165	2.4	1.7	2.2	0.13	0.23	C18
Rectum	203	3.3	1.9	2.7	0.13	0.34	146	2.1	1.5	1.9	0.11	0.25	C19-20
Anus	31	0.5	0.3	0.4	0.03	0.05	27	0.4	0.3	0.4	0.02	0.05	C21
Liver	306	5.0	2.8	4.5	0.21	0.52	127	1.9	1.3	1.7	0.09	0.16	C22
Gallbladder etc.	79	1.3	0.7	1.1	0.06	0.15	78	1.1	0.8	1.1	0.07	0.11	C23-24
Pancreas	139	2.3	1.3	1.9	0.12	0.21	92	1.3	0.9	1.2	0.06	0.15	C25
Nose, sinuses etc.	61	1.0	0.6	0.7	0.05	0.08	38	0.6	0.4	0.5	0.03	0.06	C30-31
Larynx	322	5.2	3.0	4.6	0.26	0.54	60	0.9	0.6	0.8	0.04	0.09	C32
Trachea, bronchus and lung	439	7.1	4.0	6.2	0.31	0.74	260	3.8	2.7	3.5	0.21	0.40	C33-34
Other thoracic organs	19	0.3	0.2	0.3	0.02	0.03	18	0.3	0.2	0.2	0.01	0.03	C37-38
Bone	88	1.4	0.8	0.9	0.05	0.08	74	1.1	0.8	0.8	0.05	0.07	C40-41
Melanoma of skin	18	0.3	0.2	0.2	0.01	0.02	17	0.2	0.2	0.2	0.01	0.02	C43
Other skin	66	1.1	0.6	0.9	0.05	0.09	65	1.0	0.7	0.9	0.05	0.09	C44
Mesothelioma	5	0.1	0.0	0.1	0.00	0.01	1	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	100	1.6	0.9	1.1	0.06	0.12	84	1.2	0.9	1.0	0.07	0.10	C47+C49
Breast	50	0.8	0.5	0.7	0.04	0.07	1846	27.0	18.8	23.7	1.72	2.60	C50
Vulva							25	0.4	0.3	0.3	0.02	0.04	C51
Vagina							44	0.6	0.4	0.6	0.04	0.07	C52
Cervix uteri							1035	15.1	10.6	13.4	1.03	1.50	C53
Corpus uteri							173	2.5	1.8	2.4	0.15	0.29	C54
Uterus unspecified							31	0.5	0.3	0.4	0.02	0.06	C55
Ovary							442	6.5	4.5	5.7	0.41	0.64	C56
Other female genital organs							3	0.0	0.0	0.0	0.00	0.00	C57
Placenta							2	0.0	0.0	0.0	0.00	0.00	C58
Penis	71	1.2	0.7	1.0	0.05	0.12							C60
Prostate	446	7.2	4.1	6.9	0.15	0.71							C61
Testis	55	0.9	0.5	0.5	0.03	0.04							C62
Other male genital organs	1	0.0	0.0	0.0	0.00	0.00							C63
Kidney	133	2.2	1.2	1.8	0.10	0.20	62	0.9	0.6	0.8	0.05	0.09	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C65
Ureter	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	237	3.9	2.2	3.5	0.14	0.43	50	0.7	0.5	0.7	0.03	0.07	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	6	0.1	0.1	0.1	0.00	0.00	10	0.1	0.1	0.1	0.01	0.01	C69
Brain, nervous system	328	5.3	3.0	3.6	0.24	0.34	213	3.1	2.2	2.5	0.17	0.25	C70-72
Thyroid	44	0.7	0.4	0.5	0.03	0.06	101	1.5	1.0	1.2	0.08	0.15	C73
Adrenal gland	2	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C74
Other endocrine	5	0.1	0.0	0.1	0.00	0.01	9	0.1	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	67	1.1	0.6	0.8	0.04	0.09	43	0.6	0.4	0.5	0.04	0.05	C81
Non-Hodgkin lymphoma	267	4.3	2.4	3.5	0.18	0.40	153	2.2	1.6	1.9	0.11	0.22	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	82	1.3	0.8	1.1	0.07	0.13	45	0.7	0.5	0.6	0.05	0.08	C90
Lymphoid leukaemia	109	1.8	1.0	1.2	0.06	0.08	47	0.7	0.5	0.5	0.02	0.04	C91
Myeloid leukaemia	114	1.9	1.0	1.3	0.08	0.13	96	1.4	1.0	1.1	0.07	0.11	C92-94
Leukaemia unspecified	44	0.7	0.4	0.5	0.03	0.06	31	0.5	0.3	0.4	0.03	0.03	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	261	4.2	2.4	3.6	0.18	0.42	202	2.9	2.1	2.7	0.16	0.28	O&U
All sites	6218		57.0	83.3	4.44	9.46	6914		70.5	89.9	5.96	9.93	C00-96
All sites except C44	6152	100.0	56.4	82.4	4.39	9.37	6849	100.0	69.8	89.0	5.91	9.84	C00-96 exc. C44

*See note following population pyramid

India, Sikkim State

REGISTRATION AREA

The Sikkim Population-based Cancer Registry covers the Indian state of Sikkim. In 2001, the population was 540 000.

CANCER CARE FACILITIES

Sikkim does not have a dedicated cancer treatment centre. Most patients diagnosed with cancer are referred for treatment in Kolkata, New Delhi, or Mumbai.

REGISTRY STRUCTURE AND METHODS

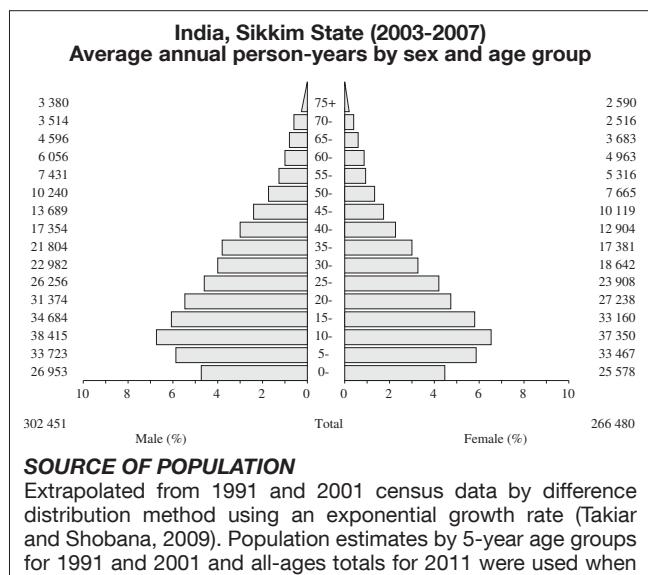
The registry was established in 2003 as part of the National Cancer Registry Programme (NCRP) of the Indian Council of Medical Research. It is located in the Sir Thutob Namgyal Memorial (STNM) Hospital in Gangtok. The registry is staffed by a principal investigator, a research officer, a programmer, a statistician, a data entry operator, and two social investigators. Data collection is active, and cases are classified as either resident or non-resident. Data analysis is conducted using NCRP software. Consistency checks are done at the registry office in Gangtok and by the NCRP in Bangalore. Deaths that occur in hospitals or primary health centres are certified by the medical officer in charge, and death certificates are sent to the Office of the Registrar General in Gangtok on a monthly basis. Deaths that occur at home are certified by the local *panchayat* (council) or *anganwadi* (basic health centre) or by a community social worker. The registry's social investigators visit all sources that maintain mortality records. When cancer is listed as the cause of death but no other information can be found, cases are categorized as death-certification-only (DCO) cases. Every year, mortality data are matched with the corresponding incidence data from the current and previous years and the records are updated.

USE OF THE DATA

The registry periodically publishes reports and descriptive epidemiological studies.

CONTRIBUTORS

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NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	15.3	Other and unspecified	10.2
Other and unspecified	10.8	Cervix uteri	10.2
Oesophagus	9.9	Breast	9.6
Liver	8.3	Oesophagus	9.5
Trachea, bronchus and lung	7.7	Stomach	8.1
Larynx	6.0	Trachea, bronchus and lung	7.9
Nasopharynx	3.6	Liver	6.1
Hypopharynx	3.4	Gallbladder etc.	5.3
Mouth	2.8	Larynx	4.0
Tongue	2.2	Ovary	3.9
All sites	96.7	All sites	108.3

*India, Sikkim State (2003-2007)

SITE	Male						Female						
	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	ICD-10
Lip	4	0.4	0.3	0.5	0.01	0.06	1	0.1	0.1	0.2	0.02	0.02	C00
Tongue	20	2.2	1.3	2.2	0.11	0.34	12	1.5	0.9	1.7	0.14	0.23	C01-02
Mouth	28	3.1	1.9	2.8	0.21	0.35	13	1.6	1.0	1.7	0.12	0.21	C03-06
Salivary glands	4	0.4	0.3	0.3	0.02	0.02	8	1.0	0.6	0.8	0.07	0.07	C07-08
Tonsil	9	1.0	0.6	1.0	0.05	0.15	10	1.2	0.8	1.5	0.14	0.21	C09
Other oropharynx	1	0.1	0.1	0.1	0.00	0.02	1	0.1	0.1	0.2	0.00	0.00	C10
Nasopharynx	39	4.4	2.6	3.6	0.28	0.42	21	2.6	1.6	2.1	0.13	0.18	C11
Hypopharynx	30	3.4	2.0	3.4	0.15	0.45	8	1.0	0.6	1.2	0.09	0.15	C12-13
Pharynx unspecified	9	1.0	0.6	1.0	0.08	0.13	3	0.4	0.2	0.5	0.04	0.08	C14
Oesophagus	88	9.9	5.8	9.9	0.54	1.25	66	8.1	5.0	9.5	0.54	1.29	C15
Stomach	136	15.2	9.0	15.3	0.87	1.94	58	7.1	4.4	8.1	0.44	0.90	C16
Small intestine	2	0.2	0.1	0.2	0.02	0.02	0	0.0	0.0	0.0	0.00	0.00	C17
Colon	11	1.2	0.7	1.1	0.06	0.11	11	1.3	0.8	1.5	0.11	0.20	C18
Rectum	20	2.2	1.3	2.1	0.15	0.24	5	0.6	0.4	0.6	0.05	0.08	C19-20
Anus	3	0.3	0.2	0.4	0.03	0.03	3	0.4	0.2	0.4	0.03	0.07	C21
Liver	77	8.6	5.1	8.3	0.40	1.09	45	5.5	3.4	6.1	0.43	0.75	C22
Gallbladder etc.	14	1.6	0.9	1.4	0.05	0.15	38	4.6	2.9	5.3	0.38	0.65	C23-24
Pancreas	13	1.5	0.9	1.4	0.08	0.14	5	0.6	0.4	0.6	0.05	0.05	C25
Nose, sinuses etc.	4	0.4	0.3	0.4	0.03	0.03	6	0.7	0.5	0.9	0.04	0.04	C30-31
Larynx	52	5.8	3.4	6.0	0.34	0.69	27	3.3	2.0	4.0	0.21	0.59	C32
Trachea, bronchus and lung	67	7.5	4.4	7.7	0.29	1.00	55	6.7	4.1	7.9	0.32	1.04	C33-34
Other thoracic organs	2	0.2	0.1	0.2	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C37-38
Bone	16	1.8	1.1	1.2	0.07	0.10	9	1.1	0.7	1.0	0.04	0.13	C40-41
Melanoma of skin	9	1.0	0.6	1.1	0.03	0.12	4	0.5	0.3	0.6	0.02	0.11	C43
Other skin	17		1.1	1.7	0.06	0.23	19		1.4	2.5	0.11	0.15	C44
Mesothelioma	1	0.1	0.1	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	8	0.9	0.5	0.5	0.03	0.05	5	0.6	0.4	0.6	0.05	0.05	C47+C49
Breast	3	0.3	0.2	0.3	0.03	0.03	81	9.9	6.1	9.6	0.79	0.98	C50
Vulva							2	0.2	0.2	0.3	0.02	0.02	C51
Vagina							4	0.5	0.3	0.6	0.02	0.10	C52
Cervix uteri							87	10.6	6.5	10.2	0.82	1.13	C53
Corpus uteri							14	1.7	1.1	1.8	0.15	0.21	C54
Uterus unspecified							5	0.6	0.4	0.7	0.06	0.09	C55
Ovary							34	4.2	2.6	3.9	0.30	0.33	C56
Other female genital organs							0	0.0	0.0	0.0	0.00	0.00	C57
Placenta							1	0.1	0.1	0.1	0.01	0.01	C58
Penis	10	1.1	0.7	1.0	0.08	0.13							C60
Prostate	11	1.2	0.7	1.3	0.04	0.22							C61
Testis	4	0.4	0.3	0.2	0.02	0.02							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	7	0.8	0.5	0.7	0.04	0.04	2	0.2	0.2	0.2	0.03	0.03	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	1	0.1	0.1	0.2	0.00	0.04	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	15	1.7	1.0	1.6	0.07	0.15	10	1.2	0.8	1.2	0.10	0.14	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	1	0.1	0.1	0.2	0.02	0.02	C68
Eye	1	0.1	0.1	0.1	0.00	0.00	2	0.2	0.2	0.2	0.02	0.02	C69
Brain, nervous system	26	2.9	1.7	2.1	0.18	0.22	21	2.6	1.6	2.7	0.16	0.42	C70-72
Thyroid	15	1.7	1.0	1.6	0.09	0.16	16	2.0	1.2	2.0	0.10	0.29	C73
Adrenal gland	0	0.0	0.0	0.0	0.00	0.00	3	0.4	0.2	0.3	0.01	0.03	C74
Other endocrine	1	0.1	0.1	0.1	0.01	0.01	1	0.1	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	2	0.2	0.1	0.2	0.02	0.04	5	0.6	0.4	0.4	0.03	0.03	C81
Non-Hodgkin lymphoma	5	0.6	0.3	0.5	0.03	0.03	9	1.1	0.7	1.1	0.06	0.16	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	4	0.4	0.3	0.5	0.00	0.07	6	0.7	0.5	0.8	0.03	0.06	C90
Lymphoid leukaemia	6	0.7	0.4	0.3	0.02	0.02	4	0.5	0.3	0.4	0.01	0.01	C91
Myeloid leukaemia	17	1.9	1.1	1.2	0.10	0.10	18	2.2	1.4	1.6	0.12	0.16	C92-94
Leukaemia unspecified	1	0.1	0.1	0.1	0.01	0.01	3	0.4	0.2	0.2	0.01	0.01	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	98	11.0	6.5	10.8	0.64	1.38	74	9.0	5.6	10.2	0.56	1.41	O&U
All sites	910		60.2	96.7	5.38	11.80	837		62.8	108.3	7.00	12.92	C00-96
All sites except C44	893	100.0	59.1	95.0	5.32	11.57	818	100.0	61.4	105.8	6.89	12.78	C00-96 exc. C44

*Includes 13 cases of unknown age

\$Includes 12 cases of unknown age

*See note following population pyramid

India, Trivandrum

REGISTRATION AREA

The Thiruvananthapuram Cancer Registry covers the city of Trivandrum (also called Thiruvananthapuram) and three adjoining rural community development blocks within the *taluk* (subdistrict) of Thiruvananthapuram in the Indian state of Kerala. The *taluk* has an area of 300 km² and in 2001 had a population of 1.1 million (67% urban and 33% rural).

CANCER CARE FACILITIES

There are 37 government hospitals, 28 private hospitals, and seven pathology laboratories in Thiruvananthapuram.

REGISTRY STRUCTURE AND METHODS

A cancer registry was first established in the area in 1994, with retrospective data collection since 1991. The current registry was established in 2006 as part of the National Cancer Registry Programme (NCRP) of the Indian Council of Medical Research. Retrospective data collection goes back to 1 January 2005. A reliable data collection procedure was established by the original registry, and the same methodology has been adopted by the Thiruvananthapuram Cancer Registry. Registry staff members routinely visit government and private hospitals and pathology laboratories. The main sources of incidence data are the Regional Cancer Centre and the Medical College Hospital in Thiruvananthapuram. Registry staff members abstract incidence and mortality data on all malignant tumours using a standard format, a procedure manual, and a user guide provided by the NCRP. In situ lesions and neoplasms of uncertain behaviour are also recorded but are not included in incidence figures. Because cause of death information is generally not accurate, information on all deaths except those due to accidents or natural disasters is collected from the vital statistics offices and compared against the current and original registry databases. About 90% of cases in the current registry are also covered by the original registry. Any cancer death with no corresponding record in the

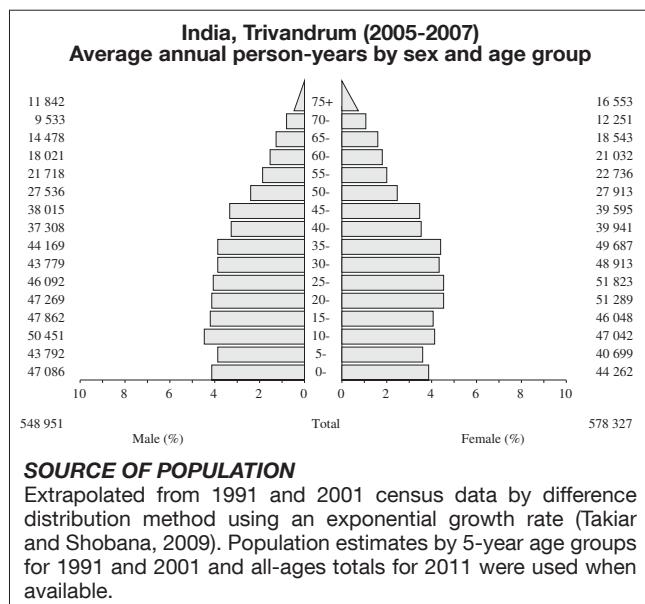
databases is registered as a death-certificate-only (DCO) case. Follow-up information and survival data are collected by telephone and through the mail.

USE OF THE DATA

The data have been used extensively for the planning and evaluation of cancer control programmes throughout Kerala.

CONTRIBUTORS

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SOURCE OF POPULATION

Extrapolated from 1991 and 2001 census data by difference distribution method using an exponential growth rate (Takiar and Shobana, 2009). Population estimates by 5-year age groups for 1991 and 2001 and all-ages totals for 2011 were used when available.

NOTES ON THE DATA

*No official mortality data. High "other and unspecified" registrations.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male	Female		
Trachea, bronchus and lung	17.1	Breast	35.4
Other and unspecified	16.4	Other and unspecified	10.2
Prostate	8.2	Cervix uteri	10.0
Mouth	7.6	Thyroid	7.3
Larynx	6.9	Ovary	6.8
Tongue	6.8	Corpus uteri	4.9
Stomach	6.2	Tongue	3.5
Liver	5.4	Trachea, bronchus and lung	3.3
Non-Hodgkin lymphoma	5.2	Mouth	3.1
Oesophagus	4.8	Rectum	3.0
All sites	132.3	All sites	114.9

*India, Trivandrum (2005-2007)

SITE	Male						Female						
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 0-74	(%)	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 0-74	(%)	ICD-10
Lip	4	0.2	0.2	0.2	0.02	0.02	3	0.1	0.2	0.1	0.00	0.02	C00
Tongue	110	5.3	6.7	6.8	0.54	0.80	64	3.0	3.7	3.5	0.24	0.45	C01-02
Mouth	122	5.9	7.4	7.6	0.50	0.92	61	2.9	3.5	3.1	0.14	0.34	C03-06
Salivary glands	14	0.7	0.9	0.8	0.03	0.09	7	0.3	0.4	0.4	0.03	0.04	C07-08
Tonsil	16	0.8	1.0	1.0	0.07	0.11	4	0.2	0.2	0.2	0.02	0.02	C09
Other oropharynx	41	2.0	2.5	2.7	0.21	0.33	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	13	0.6	0.8	0.8	0.05	0.08	1	0.0	0.1	0.0	0.00	0.00	C11
Hypopharynx	45	2.2	2.7	2.9	0.19	0.40	8	0.4	0.5	0.4	0.02	0.04	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.0	0.00	0.00	C14
Oesophagus	76	3.7	4.6	4.8	0.36	0.60	22	1.0	1.3	1.2	0.06	0.14	C15
Stomach	99	4.8	6.0	6.2	0.42	0.78	26	1.2	1.5	1.3	0.09	0.13	C16
Small intestine	2	0.1	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C17
Colon	62	3.0	3.8	3.8	0.24	0.45	39	1.8	2.2	2.1	0.14	0.25	C18
Rectum	65	3.1	3.9	4.1	0.23	0.52	55	2.6	3.2	3.0	0.21	0.34	C19-20
Anus	2	0.1	0.1	0.1	0.02	0.02	6	0.3	0.3	0.3	0.01	0.06	C21
Liver	84	4.0	5.1	5.4	0.31	0.69	16	0.8	0.9	0.9	0.06	0.13	C22
Gallbladder etc.	15	0.7	0.9	1.0	0.06	0.14	14	0.7	0.8	0.7	0.05	0.07	C23-24
Pancreas	43	2.1	2.6	2.7	0.19	0.29	30	1.4	1.7	1.6	0.12	0.19	C25
Nose, sinuses etc.	11	0.5	0.7	0.7	0.04	0.08	9	0.4	0.5	0.4	0.03	0.04	C30-31
Larynx	107	5.1	6.5	6.9	0.47	0.88	5	0.2	0.3	0.3	0.03	0.03	C32
Trachea, bronchus and lung	268	12.9	16.3	17.1	1.13	2.20	60	2.8	3.5	3.3	0.22	0.40	C33-34
Other thoracic organs	4	0.2	0.2	0.2	0.01	0.01	2	0.1	0.1	0.1	0.02	0.02	C37-38
Bone	15	0.7	0.9	0.9	0.04	0.06	10	0.5	0.6	0.6	0.03	0.06	C40-41
Melanoma of skin	5	0.2	0.3	0.3	0.02	0.04	9	0.4	0.5	0.4	0.02	0.04	C43
Other skin	27		1.6	1.8	0.11	0.22	20		1.2	1.1	0.07	0.12	C44
Mesothelioma	1	0.0	0.1	0.1	0.01	0.01	2	0.1	0.1	0.1	0.01	0.01	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	19	0.9	1.2	1.1	0.08	0.12	22	1.0	1.3	1.1	0.10	0.12	C47+C49
Breast	8	0.4	0.5	0.5	0.05	0.05	663	31.1	38.2	35.4	2.96	3.90	C50
Vulva							4	0.2	0.2	0.2	0.02	0.02	C51
Vagina							8	0.4	0.5	0.4	0.02	0.06	C52
Cervix uteri							188	8.8	10.8	10.0	0.72	1.16	C53
Corpus uteri							89	4.2	5.1	4.9	0.38	0.65	C54
Uterus unspecified							9	0.4	0.5	0.5	0.05	0.05	C55
Ovary							127	6.0	7.3	6.8	0.55	0.73	C56
Other female genital organs							0	0.0	0.0	0.0	0.00	0.00	C57
Placenta							1	0.0	0.1	0.1	0.00	0.00	C58
Penis	12	0.6	0.7	0.7	0.06	0.07							C60
Prostate	129	6.2	7.8	8.2	0.25	0.94							C61
Testis	15	0.7	0.9	0.8	0.06	0.06							C62
Other male genital organs	2	0.1	0.1	0.1	0.00	0.01							C63
Kidney	31	1.5	1.9	2.0	0.13	0.22	8	0.4	0.5	0.4	0.02	0.04	C64
Renal pelvis	1	0.0	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	1	0.0	0.1	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	63	3.0	3.8	4.0	0.21	0.45	13	0.6	0.7	0.7	0.05	0.07	C67
Other urinary organs	1	0.0	0.1	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	2	0.1	0.1	0.2	0.01	0.01	1	0.0	0.1	0.1	0.00	0.00	C69
Brain, nervous system	54	2.6	3.3	3.3	0.26	0.34	38	1.8	2.2	2.1	0.16	0.18	C70-72
Thyroid	35	1.7	2.1	2.0	0.15	0.17	144	6.8	8.3	7.3	0.57	0.63	C73
Adrenal gland	2	0.1	0.1	0.1	0.00	0.02	0	0.0	0.0	0.0	0.00	0.00	C74
Other endocrine	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	16	0.8	1.0	1.0	0.07	0.07	17	0.8	1.0	1.0	0.07	0.07	C81
Non-Hodgkin lymphoma	84	4.0	5.1	5.2	0.38	0.62	52	2.4	3.0	2.7	0.16	0.34	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	33	1.6	2.0	2.1	0.15	0.29	36	1.7	2.1	2.0	0.14	0.30	C90
Lymphoid leukaemia	31	1.5	1.9	2.2	0.09	0.16	16	0.8	0.9	1.1	0.06	0.08	C91
Myeloid leukaemia	46	2.2	2.8	2.6	0.19	0.26	44	2.1	2.5	2.3	0.15	0.26	C92-94
Leukaemia unspecified	7	0.3	0.4	0.5	0.02	0.06	4	0.2	0.2	0.3	0.02	0.02	C95
Myeloproliferative disorders	2	0.1	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	1	0.0	0.1	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	262	12.6	15.9	16.4	0.82	2.04	193	9.1	11.1	10.2	0.63	1.28	O&U
All sites	2108		128.0	132.3	8.26	15.74	2151		124.0	114.9	8.43	12.92	C00-96
All sites except C44	2081	100.0	126.4	130.5	8.14	15.52	2131	100.0	122.8	113.8	8.36	12.80	C00-96 exc. C44

*See note following population pyramid

Islamic Republic of Iran, Golestan Province

REGISTRATION AREA

The Golestan Population-based Cancer Registry (GPCR) covers Golestan Province in the north-eastern Islamic Republic of Iran. The province's land area is 20 438 km² (about 1.3% of the country's total land area). About half of the province's residents live in urban areas.

CANCER CARE FACILITIES

Golestan has 20 hospitals. Almost all cancer diagnostic and therapeutic services, including open and laparoscopic surgeries, radiotherapy, chemotherapy, computed tomography, magnetic resonance imaging, upper endoscopy, colonoscopy, sonography, mammography, and pathological examination, are available throughout the province. The provincial health network also includes 120 health care centres that provide various public health services for residents, including cancer prevention programmes.

REGISTRY STRUCTURE AND METHODS

The GPCR was established by the Golestan Research Center of Gastroenterology and Hepatology, Golestan University of Medical Sciences (GOUMS) under the supervision of the Digestive Disease Research Center, Tehran University of Medical Sciences. The registry collects information from 68 public and private sources within the province, including hospitals, pathology laboratories, imaging centres, and specialists. It also obtains information from medical centres and regional registries in neighbouring provinces (particularly Razavi Khorasan, Mazandaran, and Tehran), to minimize the loss of data on resident cases diagnosed outside of Golestan. Data are collected both actively and passively, by well-trained staff members who regularly visit all sources. The GPCR also regularly receives information on cancer-related deaths from the death registry within the health department of GOUMS, and matches these data against the registry database to identify previously unreported cases, which are defined as death-certificate-only (DCO) cases. Procedures are in place to ensure the confidentiality, quality, and optimal use of data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

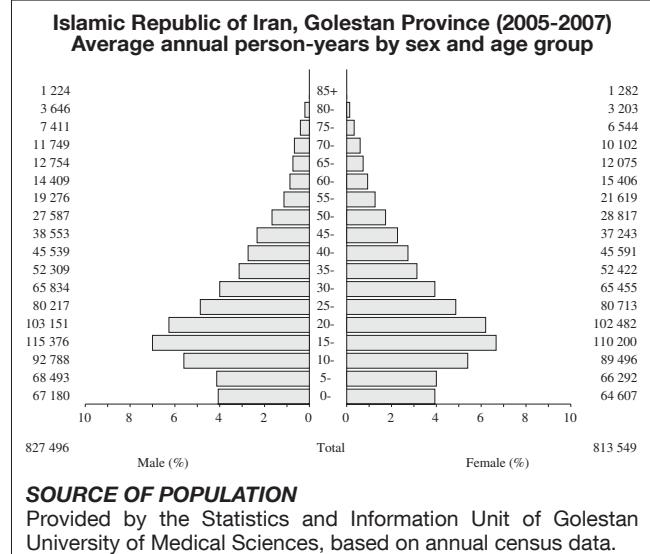
Male		Female	
Stomach	30.4	Breast	28.0
Oesophagus	23.2	Oesophagus	18.8
Trachea, bronchus and lung	17.5	Stomach	12.6
Non-melanoma skin cancer	11.0	Colon	7.7
Prostate	10.6	Non-melanoma skin cancer	7.7
Colon	9.9	Ovary	6.1
Bladder	8.5	Trachea, bronchus and lung	5.6
Brain, nervous system	7.8	Cervix uteri	5.4
Non-Hodgkin lymphoma	7.2	Brain, nervous system	5.3
Lymphoid leukaemia	5.2	Non-Hodgkin lymphoma	3.3
All sites	176.3	All sites	142.0

USE OF THE DATA

The GPCR publishes an annual report on cancer incidence and mortality. Registry data have also been used in several cross-sectional, case-control, and survival studies.

CONTRIBUTORS

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NOTES ON THE DATA

*Low MV%. Low M:I ratios.

*Islamic Republic of Iran, Golestan Province (2005-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	3	0.1	0.1	0.1	0.01	0.01	5	0.2	0.2	0.2	0.02	0.02	C00
Tongue	10	0.4	0.4	0.6	0.04	0.07	4	0.2	0.2	0.2	0.01	0.01	C01-02
Mouth	11	0.4	0.4	0.6	0.04	0.06	11	0.5	0.5	0.7	0.03	0.10	C03-06
Salivary glands	6	0.2	0.2	0.4	0.03	0.04	3	0.1	0.1	0.2	0.01	0.02	C07-08
Tonsil	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.1	0.01	0.01	C09
Other oropharynx	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	11	0.4	0.4	0.7	0.04	0.08	11	0.5	0.5	0.4	0.03	0.03	C11
Hypopharynx	5	0.2	0.2	0.3	0.02	0.04	3	0.1	0.1	0.1	0.01	0.02	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.1	0.00	0.00	C14
Oesophagus	370	13.3	14.9	23.2	1.08	2.88	285	11.9	11.7	18.8	0.99	2.37	C15
Stomach	476	17.1	19.2	30.4	1.51	3.48	199	8.3	8.2	12.6	0.63	1.47	C16
Small intestine	25	0.9	1.0	1.4	0.08	0.17	16	0.7	0.7	0.9	0.03	0.11	C17
Colon	163	5.8	6.6	9.9	0.62	1.13	128	5.3	5.2	7.7	0.51	0.94	C18
Rectum	55	2.0	2.2	3.1	0.19	0.34	41	1.7	1.7	2.3	0.18	0.22	C19-20
Anus	10	0.4	0.4	0.6	0.05	0.07	5	0.2	0.2	0.4	0.00	0.06	C21
Liver	60	2.1	2.4	3.6	0.23	0.40	36	1.5	1.5	2.0	0.11	0.23	C22
Gallbladder etc.	17	0.6	0.7	1.2	0.06	0.11	24	1.0	1.0	1.6	0.07	0.18	C23-24
Pancreas	48	1.7	1.9	2.8	0.12	0.34	17	0.7	0.7	1.0	0.07	0.14	C25
Nose, sinuses etc.	1	0.0	0.0	0.0	0.00	0.00	3	0.1	0.1	0.2	0.01	0.01	C30-31
Larynx	64	2.3	2.6	4.1	0.26	0.54	22	0.9	0.9	1.4	0.11	0.18	C32
Trachea, bronchus and lung	278	10.0	11.2	17.5	1.07	2.13	93	3.9	3.8	5.6	0.35	0.68	C33-34
Other thoracic organs	7	0.3	0.3	0.3	0.01	0.03	4	0.2	0.2	0.2	0.01	0.01	C37-38
Bone	31	1.1	1.2	1.3	0.07	0.15	33	1.4	1.4	1.5	0.14	0.14	C40-41
Melanoma of skin	14	0.5	0.6	0.9	0.07	0.10	12	0.5	0.5	0.7	0.04	0.04	C43
Other skin	176	7.1	7.1	11.0	0.60	1.23	124		5.1	7.7	0.41	0.83	C44
Mesothelioma	1	0.0	0.0	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	10	0.4	0.4	0.7	0.06	0.09	1	0.0	0.0	0.1	0.01	0.01	C46
Connective and soft tissue	39	1.4	1.6	2.1	0.15	0.20	44	1.8	1.8	2.1	0.17	0.20	C47+C49
Breast	3	0.1	0.1	0.1	0.00	0.01	558	23.3	22.9	28.0	2.27	2.88	C50
Vulva							1	0.0	0.0	0.1	0.01	0.01	C51
Vagina							3	0.1	0.1	0.2	0.01	0.04	C52
Cervix uteri							91	3.8	3.7	5.4	0.44	0.62	C53
Corpus uteri							28	1.2	1.1	1.7	0.11	0.21	C54
Uterus unspecified							17	0.7	0.7	0.9	0.05	0.09	C55
Ovary							118	4.9	4.8	6.1	0.52	0.68	C56
Other female genital organs							1	0.0	0.0	0.1	0.01	0.01	C57
Placenta							5	0.2	0.2	0.2	0.01	0.01	C58
Penis	0	0.0	0.0	0.0	0.00	0.00							C60
Prostate	172	6.2	6.9	10.6	0.27	1.20							C61
Testis	53	1.9	2.1	2.3	0.18	0.22							C62
Other male genital organs	1	0.0	0.0	0.0	0.00	0.00							C63
Kidney	34	1.2	1.4	2.1	0.14	0.26	20	0.8	0.8	1.2	0.10	0.13	C64
Renal pelvis	1	0.0	0.0	0.1	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	133	4.8	5.4	8.5	0.40	0.93	48	2.0	2.0	2.8	0.15	0.31	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	6	0.2	0.2	0.4	0.02	0.05	3	0.1	0.1	0.2	0.01	0.01	C69
Brain, nervous system	153	5.5	6.2	7.8	0.57	0.89	101	4.2	4.1	5.3	0.39	0.57	C70-72
Thyroid	22	0.8	0.9	1.2	0.09	0.12	64	2.7	2.6	3.0	0.25	0.29	C73
Adrenal gland	3	0.1	0.1	0.1	0.01	0.01	2	0.1	0.1	0.1	0.01	0.01	C74
Other endocrine	10	0.4	0.4	0.5	0.05	0.06	5	0.2	0.2	0.3	0.02	0.04	C75
Hodgkin lymphoma	47	1.7	1.9	1.8	0.13	0.15	29	1.2	1.2	1.1	0.09	0.09	C81
Non-Hodgkin lymphoma	134	4.8	5.4	7.2	0.46	0.81	65	2.7	2.7	3.3	0.27	0.33	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	38	1.4	1.5	2.4	0.15	0.31	34	1.4	1.4	2.2	0.11	0.30	C90
Lymphoid leukaemia	103	3.7	4.1	5.2	0.31	0.47	47	2.0	1.9	2.4	0.14	0.25	C91
Myeloid leukaemia	45	1.6	1.8	2.3	0.17	0.24	50	2.1	2.0	2.8	0.17	0.30	C92-94
Leukaemia unspecified	62	2.2	2.5	3.3	0.17	0.34	50	2.1	2.0	2.5	0.15	0.26	C95
Myeloproliferative disorders	3	0.1	0.1	0.2	0.00	0.03	4	0.2	0.2	0.3	0.01	0.01	MPD
Myelodysplastic syndromes	1	0.0	0.0	0.1	0.00	0.01	4	0.2	0.2	0.2	0.02	0.02	MDS
Other and unspecified	52	1.9	2.1	3.3	0.18	0.43	48	2.0	2.0	2.7	0.19	0.33	O&U
All sites	2967		119.5	176.3	9.70	20.24	2522		103.3	142.0	9.42	15.82	C00-96
All sites except C44	2791	100.0	112.4	165.3	9.10	19.02	2398	100.0	98.3	134.3	9.01	14.99	C00-96 exc. C44

*See note following population pyramid

Israel

REGISTRATION AREA

The Israel National Cancer Registry (INCR) covers all of Israel. In 2009, the population was estimated to be 7.5 million (76% Jewish, 20% Arab, and 4% of other ethnicities).

CANCER CARE FACILITIES

Since 1995, all Israeli citizens have been entitled to a defined set of health care and preventive services, including services for the prevention, diagnosis, and treatment of cancer. Cancer care is provided in acute care hospitals, outpatient oncology and haematology centres, and physicians' offices. Most pathology laboratories are based in hospitals.

REGISTRY STRUCTURE AND METHODS

The INCR was first established in 1960, and cancer reporting has been mandatory for hospitals, pathology and cytology laboratories, and other health care providers since 1982. The registry records all incident cases of malignant neoplasms (excluding basal and squamous cell skin cancers), carcinoma in situ and high-grade intraepithelial neoplasia, and benign neoplasms of the brain and central nervous system. The INCR's information sources include pathology reports, hospital discharge summaries, death certificates from local health authorities, periodic reports from oncology programmes, and cause of death information from the Israel Central Bureau of Statistics. Demographic data are obtained from the Israel National Population Register and include name, dates of birth and death, sex, vital status, ethnicity, and address. For each case, trained registrars use the available documents to establish site and morphology according to ICD-O-3 coding and record grade, size, treatment provided, and stage according to the *SEER Summary Staging Manual*. Due to the wide range of data sources and the varying reporting frequencies, the registry generally requires about 2 years to ensure the complete ascertainment of cases diagnosed during a given year.

INTERPRETING THE RESULTS

The completeness of the INCR's data is estimated at 95–96% for solid tumours and 85% for haematopoietic tumours. Quality control activities are carried out by the Israel Center for Disease Control.

USE OF THE DATA

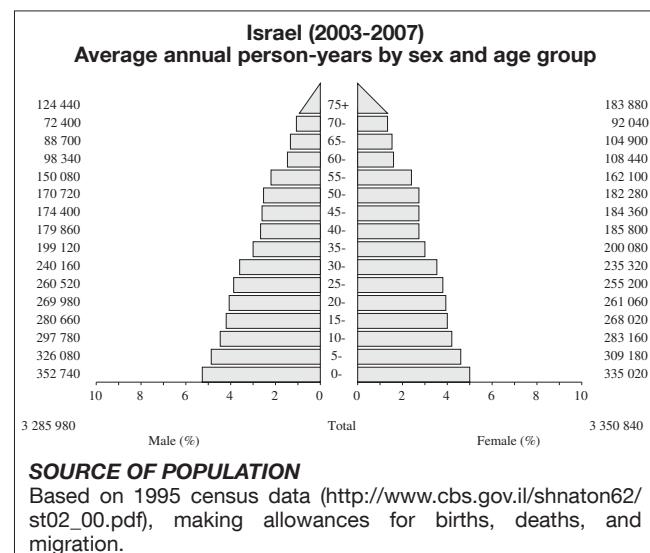
INCR data are used by government ministries, researchers, and the public for a range of purposes, including tracking cancer incidence and survival, making health policy and payment decisions, evaluating the effectiveness of screening and treatment programmes, and carrying out public education and research.

CONTRIBUTORS

Barbara G. Silverman

Lital Keinan-Boker

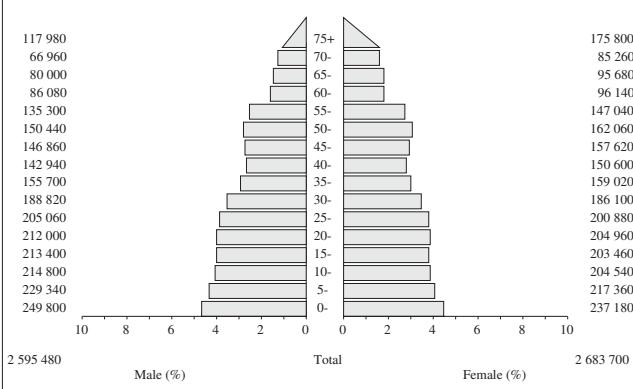
Irena Liphshiz



10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Prostate	65.0	Breast	85.7
Trachea, bronchus and lung	31.4	Colon	22.4
Colon	28.2	Corpus uteri	14.2
Bladder	25.4	Non-Hodgkin lymphoma	14.0
Non-Hodgkin lymphoma	17.5	Thyroid	14.0
Rectum	13.1	Trachea, bronchus and lung	12.8
Melanoma of skin	12.2	Melanoma of skin	9.9
Kidney	11.5	Rectum	9.1
Stomach	10.1	Ovary	8.4
Pancreas	8.4	Other and unspecified	7.6
All sites	301.9	All sites	263.5

Israel: Jews (2003-2007)
Average annual person-years by sex and age group

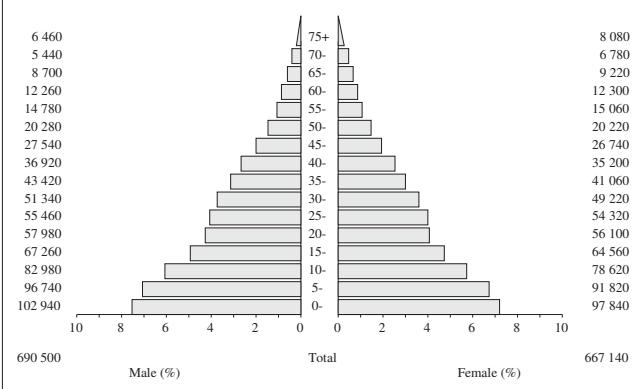


ISRAEL: JEWS
10 MAJOR CANCERS, ASR (WORLD) PER 100 000

	Male	Female	
Prostate	68.3	Breast	89.4
Trachea, bronchus and lung	29.8	Colon	22.9
Colon	29.2	Thyroid	14.7
Bladder	25.5	Corpus uteri	14.4
Non-Hodgkin lymphoma	17.9	Non-Hodgkin lymphoma	14.4
Melanoma of skin	13.7	Trachea, bronchus and lung	13.4
Rectum	13.3	Melanoma of skin	11.2
Kidney	12.3	Rectum	9.2
Stomach	10.0	Ovary	8.8
Pancreas	8.6	Other and unspecified	7.7
All sites	308.5	All sites	273.1

NOTES ON THE DATA: *No official mortality data.

Israel: Non-Jews (2003-2007)
Average annual person-years by sex and age group



ISRAEL: NON-JEWS
10 MAJOR CANCERS, ASR (WORLD) PER 100 000

	Male	Female	
Trachea, bronchus and lung	46.8	Breast	56.1
Prostate	34.1	Colon	16.5
Bladder	24.3	Corpus uteri	12.2
Colon	17.1	Non-Hodgkin lymphoma	11.3
Non-Hodgkin lymphoma	14.1	Thyroid	9.3
Rectum	10.9	Other and unspecified	7.2
Stomach	9.9	Rectum	7.1
Other and unspecified	9.9	Trachea, bronchus and lung	7.0
Larynx	6.4	Stomach	6.0
Brain, nervous system	6.1	Ovary	4.9
All sites	245.1	All sites	183.9

NOTES ON THE DATA: *No official mortality data.

Israel (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	92	0.2	0.6	0.5	0.03	0.05	32	0.1	0.2	0.1	0.01	0.01	C00
Tongue	171	0.3	1.0	0.9	0.05	0.10	150	0.3	0.9	0.6	0.04	0.07	C01-02
Mouth	163	0.3	1.0	0.9	0.05	0.10	171	0.3	1.0	0.7	0.03	0.07	C03-06
Salivary glands	187	0.3	1.1	0.9	0.05	0.10	147	0.3	0.9	0.7	0.05	0.07	C07-08
Tonsil	41	0.1	0.2	0.2	0.02	0.03	17	0.0	0.1	0.1	0.01	0.01	C09
Other oropharynx	14	0.0	0.1	0.1	0.01	0.01	3	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	165	0.3	1.0	1.0	0.07	0.10	61	0.1	0.4	0.3	0.02	0.03	C11
Hypopharynx	26	0.0	0.2	0.1	0.01	0.02	11	0.0	0.1	0.1	0.01	0.01	C12-13
Pharynx unspecified	10	0.0	0.1	0.0	0.00	0.00	7	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	357	0.6	2.2	1.8	0.08	0.20	243	0.4	1.5	0.9	0.04	0.08	C15
Stomach	2015	3.5	12.3	10.1	0.44	1.13	1373	2.4	8.2	5.5	0.27	0.60	C16
Small intestine	196	0.3	1.2	1.0	0.05	0.12	166	0.3	1.0	0.7	0.04	0.08	C17
Colon	5724	10.1	34.8	28.2	1.07	3.25	5652	10.0	33.7	22.4	1.02	2.57	C18
Rectum	2458	4.3	15.0	13.1	0.66	1.60	2078	3.7	12.4	9.1	0.50	1.08	C19-20
Anus	57	0.1	0.3	0.3	0.02	0.03	101	0.2	0.6	0.4	0.02	0.05	C21
Liver	629	1.1	3.8	3.2	0.17	0.35	376	0.7	2.2	1.4	0.06	0.15	C22
Gallbladder etc.	335	0.6	2.0	1.8	0.08	0.22	398	0.7	2.4	1.5	0.06	0.18	C23-24
Pancreas	1658	2.9	10.1	8.4	0.38	0.97	1635	2.9	9.8	6.2	0.26	0.67	C25
Nose, sinuses etc.	76	0.1	0.5	0.4	0.02	0.04	55	0.1	0.3	0.2	0.01	0.02	C30-31
Larynx	778	1.4	4.7	4.3	0.28	0.52	127	0.2	0.8	0.6	0.05	0.07	C32
Trachea, bronchus and lung	5880	10.4	35.8	31.4	1.54	3.95	3018	5.3	18.0	12.8	0.68	1.52	C33-34
Other thoracic organs	107	0.2	0.7	0.6	0.04	0.06	71	0.1	0.4	0.4	0.02	0.03	C37-38
Bone	223	0.4	1.4	1.3	0.08	0.12	178	0.3	1.1	1.0	0.07	0.08	C40-41
Melanoma of skin	2216	3.9	13.5	12.2	0.76	1.38	2028	3.6	12.1	9.9	0.68	1.07	C43
Other skin	503		3.1	2.7	0.16	0.29	408		2.4	1.8	0.11	0.17	C44
Mesothelioma	158	0.3	1.0	0.8	0.04	0.11	53	0.1	0.3	0.2	0.01	0.03	C45
Kaposi sarcoma	483	0.9	2.9	2.5	0.11	0.31	197	0.3	1.2	0.7	0.02	0.07	C46
Connective and soft tissue	554	1.0	3.4	3.1	0.19	0.32	410	0.7	2.4	2.1	0.14	0.20	C47+C49
Breast	238	0.4	1.4	1.2	0.06	0.14	16931	29.9	101.1	85.7	6.19	9.92	C50
Vulva							229	0.4	1.4	0.9	0.04	0.09	C51
Vagina							71	0.1	0.4	0.3	0.02	0.03	C52
Cervix uteri							918	1.6	5.5	5.0	0.39	0.51	C53
Corpus uteri							2954	5.2	17.6	14.2	0.97	1.78	C54
Uterus unspecified							81	0.1	0.5	0.3	0.02	0.03	C55
Ovary							1745	3.1	10.4	8.4	0.56	0.98	C56
Other female genital organs							102	0.2	0.6	0.5	0.04	0.06	C57
Placenta							5	0.0	0.0	0.0	0.00	0.00	C58
Penis	17	0.0	0.1	0.1	0.01	0.01							C60
Prostate	12304	21.7	74.9	65.0	2.58	8.68							C61
Testis	694	1.2	4.2	4.1	0.31	0.32							C62
Other male genital organs	31	0.1	0.2	0.2	0.01	0.02							C63
Kidney	2071	3.6	12.6	11.5	0.68	1.41	1233	2.2	7.4	5.6	0.32	0.66	C64
Renal pelvis	176	0.3	1.1	0.9	0.05	0.11	84	0.1	0.5	0.3	0.01	0.04	C65
Ureter	88	0.2	0.5	0.4	0.02	0.05	40	0.1	0.2	0.1	0.01	0.02	C66
Bladder	5033	8.9	30.6	25.4	1.06	3.01	1167	2.1	7.0	4.6	0.21	0.53	C67
Other urinary organs	55	0.1	0.3	0.3	0.01	0.03	20	0.0	0.1	0.1	0.00	0.01	C68
Eye	91	0.2	0.6	0.5	0.03	0.05	74	0.1	0.4	0.4	0.02	0.03	C69
Brain, nervous system	1144	2.0	7.0	6.6	0.42	0.68	932	1.6	5.6	4.8	0.29	0.48	C70-72
Thyroid	779	1.4	4.7	4.6	0.35	0.51	2521	4.5	15.0	14.0	1.12	1.43	C73
Adrenal gland	77	0.1	0.5	0.5	0.02	0.03	61	0.1	0.4	0.4	0.02	0.03	C74
Other endocrine	22	0.0	0.1	0.1	0.01	0.01	15	0.0	0.1	0.1	0.00	0.01	C75
Hodgkin lymphoma	599	1.1	3.6	3.6	0.25	0.30	577	1.0	3.4	3.3	0.22	0.25	C81
Non-Hodgkin lymphoma	3198	5.6	19.5	17.5	1.04	1.93	3058	5.4	18.3	14.0	0.84	1.57	C82-85,C96
Immunoproliferative diseases	21	0.0	0.1	0.1	0.01	0.01	12	0.0	0.1	0.0	0.00	0.00	C88
Multiple myeloma	901	1.6	5.5	4.8	0.23	0.57	720	1.3	4.3	3.0	0.15	0.34	C90
Lymphoid leukaemia	1181	2.1	7.2	6.2	0.29	0.60	787	1.4	4.7	3.4	0.15	0.31	C91
Myeloid leukaemia	723	1.3	4.4	4.0	0.21	0.42	683	1.2	4.1	3.1	0.17	0.31	C92-94
Leukaemia unspecified	129	0.2	0.8	0.7	0.03	0.06	121	0.2	0.7	0.5	0.02	0.04	C95
Myeloproliferative disorders	320	0.6	1.9	1.7	0.07	0.19	273	0.5	1.6	1.1	0.06	0.11	MPD
Myelodysplastic syndromes	419	0.7	2.6	1.9	0.05	0.17	349	0.6	2.1	1.2	0.03	0.11	MDS
Other and unspecified	1682	3.0	10.2	8.3	0.34	0.87	2010	3.6	12.0	7.6	0.32	0.77	O&U
All sites	57269		348.6	301.9	14.59	35.67	56939		339.8	263.5	16.42	29.47	C00-96
All sites except C44	56766	100.0	345.5	299.2	14.43	35.38	56531	100.0	337.4	261.8	16.31	29.30	C00-96 exc. C44

*Israel: Jews (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	82	0.2	0.6	0.5	0.03	0.05	29	0.1	0.2	0.1	0.01	0.01	C00
Tongue	154	0.3	1.2	0.9	0.06	0.10	143	0.3	1.1	0.7	0.04	0.08	C01-02
Mouth	155	0.3	1.2	0.9	0.05	0.10	160	0.3	1.2	0.7	0.03	0.07	C03-06
Salivary glands	173	0.3	1.3	1.0	0.05	0.10	140	0.3	1.0	0.8	0.05	0.08	C07-08
Tonsil	39	0.1	0.3	0.2	0.02	0.03	17	0.0	0.1	0.1	0.01	0.01	C09
Other oropharynx	11	0.0	0.1	0.1	0.00	0.01	2	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	139	0.3	1.1	1.0	0.07	0.11	53	0.1	0.4	0.3	0.02	0.03	C11
Hypopharynx	23	0.0	0.2	0.1	0.00	0.02	11	0.0	0.1	0.1	0.01	0.01	C12-13
Pharynx unspecified	8	0.0	0.1	0.0	0.00	0.01	6	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	334	0.6	2.6	1.8	0.08	0.21	229	0.4	1.7	0.9	0.03	0.08	C15
Stomach	1838	3.5	14.2	10.0	0.43	1.14	1253	2.4	9.3	5.4	0.27	0.59	C16
Small intestine	178	0.3	1.4	1.0	0.05	0.12	155	0.3	1.2	0.7	0.04	0.09	C17
Colon	5435	10.4	41.9	29.2	1.11	3.37	5341	10.1	39.8	22.9	1.04	2.63	C18
Rectum	2267	4.3	17.5	13.3	0.67	1.64	1939	3.7	14.5	9.2	0.51	1.10	C19-20
Anus	56	0.1	0.4	0.3	0.02	0.04	99	0.2	0.7	0.5	0.03	0.06	C21
Liver	559	1.1	4.3	3.1	0.16	0.34	341	0.6	2.5	1.4	0.06	0.15	C22
Gallbladder etc.	299	0.6	2.3	1.7	0.08	0.22	355	0.7	2.6	1.4	0.05	0.17	C23-24
Pancreas	1563	3.0	12.0	8.6	0.39	1.00	1564	3.0	11.7	6.4	0.28	0.70	C25
Nose, sinuses etc.	68	0.1	0.5	0.4	0.02	0.05	54	0.1	0.4	0.3	0.01	0.03	C30-31
Larynx	666	1.3	5.1	4.1	0.26	0.49	117	0.2	0.9	0.6	0.05	0.07	C32
Trachea, bronchus and lung	5114	9.8	39.4	29.8	1.44	3.74	2887	5.5	21.5	13.4	0.73	1.60	C33-34
Other thoracic organs	92	0.2	0.7	0.6	0.04	0.06	57	0.1	0.4	0.3	0.02	0.03	C37-38
Bone	185	0.4	1.4	1.3	0.08	0.12	151	0.3	1.1	1.0	0.07	0.09	C40-41
Melanoma of skin	2188	4.2	16.9	13.7	0.87	1.55	1994	3.8	14.9	11.2	0.77	1.19	C43
Other skin	468		3.6	2.8	0.17	0.31	386		2.9	1.9	0.11	0.18	C44
Mesothelioma	145	0.3	1.1	0.9	0.04	0.11	47	0.1	0.4	0.2	0.01	0.03	C45
Kaposi sarcoma	467	0.9	3.6	2.6	0.12	0.33	186	0.4	1.4	0.7	0.02	0.07	C46
Connective and soft tissue	499	1.0	3.8	3.2	0.20	0.33	381	0.7	2.8	2.2	0.15	0.21	C47+C49
Breast	217	0.4	1.7	1.3	0.06	0.14	15750	29.9	117.4	89.4	6.47	10.33	C50
Vulva							213	0.4	1.6	0.9	0.04	0.09	C51
Vagina							70	0.1	0.5	0.3	0.02	0.03	C52
Cervix uteri							863	1.6	6.4	5.5	0.43	0.55	C53
Corpus uteri							2727	5.2	20.3	14.4	0.97	1.80	C54
Uterus unspecified							75	0.1	0.6	0.3	0.02	0.03	C55
Ovary							1646	3.1	12.3	8.8	0.59	1.03	C56
Other female genital organs							98	0.2	0.7	0.5	0.04	0.06	C57
Placenta							4	0.0	0.0	0.0	0.00	0.00	C58
Penis	14	0.0	0.1	0.1	0.01	0.01							C60
Prostate	11779	22.5	90.8	68.3	2.80	9.15							C61
Testis	631	1.2	4.9	4.7	0.35	0.36							C62
Other male genital organs	28	0.1	0.2	0.2	0.01	0.02							C63
Kidney	1966	3.8	15.1	12.3	0.72	1.50	1163	2.2	8.7	5.9	0.34	0.69	C64
Renal pelvis	165	0.3	1.3	1.0	0.05	0.12	83	0.2	0.6	0.4	0.01	0.05	C65
Ureter	82	0.2	0.6	0.4	0.02	0.05	38	0.1	0.3	0.1	0.01	0.02	C66
Bladder	4629	8.8	35.7	25.5	1.08	3.02	1118	2.1	8.3	4.8	0.22	0.55	C67
Other urinary organs	47	0.1	0.4	0.2	0.01	0.03	20	0.0	0.1	0.1	0.00	0.01	C68
Eye	86	0.2	0.7	0.6	0.03	0.06	70	0.1	0.5	0.4	0.02	0.04	C69
Brain, nervous system	992	1.9	7.6	6.7	0.42	0.68	836	1.6	6.2	5.0	0.30	0.49	C70-72
Thyroid	697	1.3	5.4	4.8	0.36	0.52	2268	4.3	16.9	14.7	1.17	1.50	C73
Adrenal gland	58	0.1	0.4	0.5	0.02	0.03	50	0.1	0.4	0.4	0.02	0.03	C74
Other endocrine	20	0.0	0.2	0.1	0.01	0.01	13	0.0	0.1	0.1	0.00	0.01	C75
Hodgkin lymphoma	487	0.9	3.8	3.6	0.25	0.31	481	0.9	3.6	3.4	0.23	0.26	C81
Non-Hodgkin lymphoma	2887	5.5	22.2	17.9	1.07	1.98	2809	5.3	20.9	14.4	0.86	1.61	C82-85,C96
Immunoproliferative diseases	19	0.0	0.1	0.1	0.01	0.01	12	0.0	0.1	0.0	0.00	0.00	C88
Multiple myeloma	821	1.6	6.3	4.7	0.23	0.57	664	1.3	4.9	3.0	0.15	0.35	C90
Lymphoid leukaemia	1059	2.0	8.2	6.3	0.30	0.61	707	1.3	5.3	3.4	0.15	0.32	C91
Myeloid leukaemia	608	1.2	4.7	3.8	0.20	0.40	607	1.2	4.5	3.0	0.17	0.31	C92-94
Leukaemia unspecified	99	0.2	0.8	0.6	0.03	0.05	100	0.2	0.7	0.4	0.02	0.04	C95
Myeloproliferative disorders	290	0.6	2.2	1.6	0.07	0.18	252	0.5	1.9	1.1	0.06	0.11	MPD
Myelodysplastic syndromes	401	0.8	3.1	1.9	0.05	0.18	332	0.6	2.5	1.2	0.03	0.11	MDS
Other and unspecified	1514	2.9	11.7	8.1	0.34	0.84	1868	3.5	13.9	7.7	0.33	0.77	O&U
All sites	52801		406.9	308.5	15.02	36.48	53034		395.2	273.1	17.13	30.56	C00-96
All sites except C44	52333	100.0	403.3	305.7	14.85	36.18	52648	100.0	392.4	271.2	17.01	30.37	C00-96 exc. C44

*See note following population pyramid

*Israel: Non-Jews (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	10	0.2	0.3	0.6	0.02	0.08	3	0.1	0.1	0.1	0.01	0.01	C00
Tongue	17	0.4	0.5	1.0	0.05	0.17	7	0.2	0.2	0.4	0.02	0.04	C01-02
Mouth	8	0.2	0.2	0.4	0.02	0.06	11	0.3	0.3	0.5	0.04	0.07	C03-06
Salivary glands	14	0.3	0.4	0.7	0.04	0.08	7	0.2	0.2	0.4	0.03	0.03	C07-08
Tonsil	2	0.0	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	3	0.1	0.1	0.2	0.02	0.02	1	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	26	0.6	0.8	1.0	0.07	0.07	8	0.2	0.2	0.4	0.02	0.05	C11
Hypopharynx	3	0.1	0.1	0.2	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	2	0.0	0.1	0.1	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	23	0.5	0.7	1.3	0.06	0.15	14	0.4	0.4	0.6	0.04	0.05	C15
Stomach	177	4.0	5.1	9.9	0.51	1.01	120	3.1	3.6	6.0	0.30	0.67	C16
Small intestine	18	0.4	0.5	1.0	0.06	0.15	11	0.3	0.3	0.5	0.02	0.05	C17
Colon	289	6.5	8.4	17.1	0.81	2.14	311	8.0	9.3	16.5	0.86	1.89	C18
Rectum	191	4.3	5.5	10.9	0.60	1.22	139	3.6	4.2	7.1	0.42	0.81	C19-20
Anus	1	0.0	0.0	0.0	0.00	0.00	2	0.1	0.1	0.1	0.00	0.00	C21
Liver	70	1.6	2.0	4.1	0.26	0.45	35	0.9	1.0	1.8	0.07	0.16	C22
Gallbladder etc.	36	0.8	1.0	2.1	0.11	0.23	43	1.1	1.3	2.3	0.12	0.22	C23-24
Pancreas	95	2.1	2.8	5.6	0.29	0.68	71	1.8	2.1	3.8	0.16	0.37	C25
Nose, sinuses etc.	8	0.2	0.2	0.3	0.02	0.02	1	0.0	0.0	0.0	0.00	0.00	C30-31
Larynx	112	2.5	3.2	6.4	0.42	0.80	10	0.3	0.3	0.6	0.02	0.09	C32
Trachea, bronchus and lung	766	17.3	22.2	46.8	2.22	5.94	131	3.4	3.9	7.0	0.33	0.80	C33-34
Other thoracic organs	15	0.3	0.4	0.6	0.05	0.05	14	0.4	0.4	0.6	0.03	0.04	C37-38
Bone	38	0.9	1.1	1.1	0.08	0.09	27	0.7	0.8	0.9	0.06	0.08	C40-41
Melanoma of skin	28	0.6	0.8	1.5	0.07	0.13	34	0.9	1.0	1.5	0.08	0.15	C43
Other skin	35	1.0	1.0	1.8	0.10	0.17	22		0.7	1.0	0.05	0.11	C44
Mesothelioma	13	0.3	0.4	0.7	0.02	0.09	6	0.2	0.2	0.3	0.01	0.02	C45
Kaposi sarcoma	16	0.4	0.5	0.9	0.04	0.06	11	0.3	0.3	0.6	0.02	0.08	C46
Connective and soft tissue	55	1.2	1.6	2.3	0.13	0.23	29	0.7	0.9	1.0	0.07	0.09	C47+C49
Breast	21	0.5	0.6	1.1	0.06	0.11	1181	30.4	35.4	56.1	4.21	6.48	C50
Vulva							16	0.4	0.5	0.8	0.06	0.11	C51
Vagina							1	0.0	0.0	0.0	0.00	0.00	C52
Cervix uteri							55	1.4	1.6	2.5	0.20	0.27	C53
Corpus uteri							227	5.8	6.8	12.2	0.92	1.53	C54
Uterus unspecified							6	0.2	0.2	0.3	0.03	0.05	C55
Ovary							99	2.5	3.0	4.9	0.33	0.57	C56
Other female genital organs							4	0.1	0.1	0.2	0.01	0.01	C57
Placenta							1	0.0	0.0	0.0	0.00	0.00	C58
Penis	3	0.1	0.1	0.2	0.00	0.02							C60
Prostate	525	11.8	15.2	34.1	0.89	4.34							C61
Testis	63	1.4	1.8	1.8	0.14	0.14							C62
Other male genital organs	3	0.1	0.1	0.2	0.01	0.03							C63
Kidney	105	2.4	3.0	5.5	0.39	0.62	70	1.8	2.1	3.2	0.19	0.37	C64
Renal pelvis	11	0.2	0.3	0.7	0.02	0.07	1	0.0	0.0	0.0	0.00	0.00	C65
Ureter	6	0.1	0.2	0.4	0.03	0.06	2	0.1	0.1	0.1	0.01	0.02	C66
Bladder	404	9.1	11.7	24.3	0.95	2.93	49	1.3	1.5	2.7	0.11	0.30	C67
Other urinary organs	8	0.2	0.2	0.4	0.02	0.02	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	5	0.1	0.1	0.2	0.01	0.01	4	0.1	0.1	0.1	0.01	0.01	C69
Brain, nervous system	152	3.4	4.4	6.1	0.44	0.66	96	2.5	2.9	3.6	0.23	0.36	C70-72
Thyroid	82	1.8	2.4	3.6	0.24	0.43	253	6.5	7.6	9.3	0.76	0.88	C73
Adrenal gland	19	0.4	0.6	0.5	0.02	0.02	11	0.3	0.3	0.3	0.01	0.01	C74
Other endocrine	2	0.0	0.1	0.1	0.01	0.01	2	0.1	0.1	0.1	0.00	0.00	C75
Hodgkin lymphoma	112	2.5	3.2	3.7	0.25	0.30	96	2.5	2.9	3.1	0.19	0.25	C81
Non-Hodgkin lymphoma	311	7.0	9.0	14.1	0.83	1.49	249	6.4	7.5	11.3	0.67	1.21	C82-85,C96
Immunoproliferative diseases	2	0.0	0.1	0.1	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	80	1.8	2.3	4.8	0.23	0.64	56	1.4	1.7	3.1	0.16	0.30	C90
Lymphoid leukaemia	122	2.8	3.5	5.3	0.28	0.54	80	2.1	2.4	3.0	0.14	0.23	C91
Myeloid leukaemia	115	2.6	3.3	5.3	0.31	0.60	76	2.0	2.3	3.2	0.18	0.35	C92-94
Leukaemia unspecified	30	0.7	0.9	1.3	0.05	0.11	21	0.5	0.6	0.8	0.03	0.06	C95
Myeloproliferative disorders	30	0.7	0.9	1.7	0.08	0.21	21	0.5	0.6	0.8	0.04	0.08	MPD
Myelodysplastic syndromes	18	0.4	0.5	1.0	0.01	0.12	17	0.4	0.5	0.9	0.03	0.12	MDS
Other and unspecified	168	3.8	4.9	9.9	0.37	1.12	142	3.7	4.3	7.2	0.26	0.78	O&U
All sites	4468	129.4	245.1	11.75	28.69		3905	117.1	183.9	11.56	20.25	C00-96	
All sites except C44	4433	100.0	243.3	11.65	28.53		3883	100.0	116.4	182.9	11.50	20.14	C00-96 exc. C44

*See note following population pyramid

Japan, Aichi Prefecture

REGISTRATION AREA

The Aichi Cancer Registry (ACR) covers Aichi Prefecture, which is located in central Japan and flanked to the south by the Pacific Ocean. It has an area of 5146 km² and a population of 7.3 million. About 2% of the economically active population is engaged in primary industry, 42.8% in secondary industry, and 53.5% in tertiary industry. Buddhism is the dominant religion.

CANCER CARE FACILITIES

Diagnostic and treatment services for cancer are available and accessible throughout Aichi Prefecture. The prefecture is divided into 11 health care districts, and each district has at least one designated cancer care hospital; 15 designated cancer care hospitals have been certified by the Japanese Ministry of Health, Labour, and Welfare, and six hospitals have been certified by the Department of Health and Public Welfare, Aichi Prefecture (DHPW). These certified hospitals cover approximately 67% of cancer patients in the area.

REGISTRY STRUCTURE AND METHODS

The ACR is staffed by physicians/epidemiologists (1.5 full-time equivalents) and five registrars. It is operated by the DHPW and located within the Aichi Cancer Center Research Institute, which provides the registry with technical support. Notification is passive; all medical institutions in the area have been asked to report incident cases. Registered cases are annually matched against the area's death certificates. Non-matched cases are followed up to identify previously unreported cases, which are registered as death-certificate-only (DCO) cases.

INTERPRETING THE RESULTS

The ACR's data quality remains modest, due mainly to the registry's dependence on voluntary reporting, with no legal requirements. Over the past 20 years, the registry has set up a model area with good-quality registry data. The area is in the central part of the prefecture and has a population of 1.4 million. The

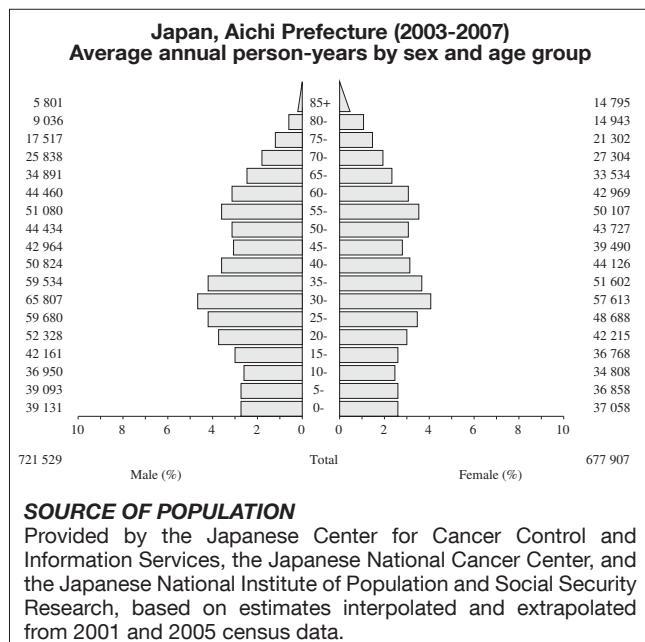
local governments support gastric, colon, breast, lung, and cervical cancer screening. Prostate-specific antigen (PSA) testing is commonly available, but it is not defined as an official tool for prostate cancer screening.

USE OF THE DATA

The ACR provides descriptive data on cancer incidence, and registry data have been used in a variety of epidemiological investigations, including cohort studies, case-control studies, and evaluations of screening programmes. The data have also been used for planning and evaluating cancer control and for estimating cancer incidence in Japan.

CONTRIBUTORS

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Keitaro Matsuo	Sachiko Hiraiwa
Hideo Tanaka	Hiroshi Yoshida
Kazuo Tajima	



10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	50.2	Breast	43.4
Trachea, bronchus and lung	39.5	Stomach	19.0
Prostate	34.8	Colon	16.4
Colon	22.3	Trachea, bronchus and lung	13.4
Liver	19.1	Rectum	7.5
Rectum	15.6	Ovary	7.3
Bladder	11.1	Liver	7.1
Pancreas	9.1	Cervix uteri	7.0
Oesophagus	7.7	Corpus uteri	6.8
Non-Hodgkin lymphoma	7.6	Thyroid	5.7
All sites	268.7	All sites	175.8

Japan, Aichi Prefecture (2003-2007)

S I T E	Male						Female						ICD-10	
	§No. cases	Freq. (%)	Crude rate world (per 100,000)	Cum. rates		§No. cases	Freq. (%)	Crude rate world (per 100,000)	Cum. rates		(%)	(%)		
				0-64	0-74				0-64	0-74				
Lip	6	0.0	0.2	0.1	0.00	0.01	7	0.1	0.2	0.1	0.00	0.01	C00	
Tongue	87	0.5	2.4	1.5	0.11	0.18	73	0.7	2.2	1.2	0.07	0.13	C01-02	
Mouth	58	0.4	1.6	1.0	0.06	0.12	51	0.5	1.5	0.6	0.02	0.06	C03-06	
Salivary glands	28	0.2	0.8	0.5	0.04	0.05	20	0.2	0.6	0.4	0.03	0.03	C07-08	
Tonsil	6	0.0	0.2	0.1	0.00	0.02	3	0.0	0.1	0.1	0.00	0.01	C09	
Other oropharynx	51	0.3	1.4	0.9	0.05	0.11	16	0.1	0.5	0.3	0.03	0.04	C10	
Nasopharynx	34	0.2	0.9	0.7	0.05	0.08	7	0.1	0.2	0.2	0.01	0.02	C11	
Hypopharynx	67	0.4	1.9	1.1	0.06	0.14	3	0.0	0.1	0.0	0.00	0.00	C12-13	
Pharynx unspecified	9	0.1	0.2	0.1	0.00	0.01	4	0.0	0.1	0.1	0.00	0.00	C14	
Oesophagus	473	2.9	13.1	7.7	0.41	0.96	55	0.5	1.6	0.7	0.03	0.07	C15	
Stomach	3079	18.9	85.3	50.2	2.49	6.09	1369	12.7	40.4	19.0	0.97	2.08	C16	
Small intestine	47	0.3	1.3	0.8	0.04	0.09	32	0.3	0.9	0.5	0.03	0.05	C17	
Colon	1398	8.6	38.8	22.3	0.92	2.65	1154	10.7	34.0	16.4	0.88	1.91	C18	
Rectum	928	5.7	25.7	15.6	0.89	1.98	499	4.6	14.7	7.5	0.45	0.87	C19-20	
Anus	18	0.1	0.5	0.3	0.02	0.04	13	0.1	0.4	0.2	0.01	0.02	C21	
Liver	1181	7.2	32.7	19.1	0.93	2.50	550	5.1	16.2	7.1	0.25	0.93	C22	
Gallbladder etc.	363	2.2	10.1	5.5	0.18	0.56	361	3.3	10.7	4.0	0.10	0.39	C23-24	
Pancreas	566	3.5	15.7	9.1	0.42	1.11	424	3.9	12.5	5.4	0.23	0.60	C25	
Nose, sinuses etc.	43	0.3	1.2	0.7	0.04	0.10	16	0.1	0.5	0.2	0.01	0.02	C30-31	
Larynx	159	1.0	4.4	2.5	0.13	0.32	5	0.0	0.1	0.1	0.00	0.01	C32	
Trachea, bronchus and lung	2539	15.6	70.4	39.5	1.55	4.54	967	8.9	28.5	13.4	0.70	1.53	C33-34	
Other thoracic organs	46	0.3	1.3	0.9	0.05	0.10	28	0.3	0.8	0.6	0.04	0.05	C37-38	
Bone	27	0.2	0.7	0.7	0.04	0.05	26	0.2	0.8	0.6	0.04	0.04	C40-41	
Melanoma of skin	29	0.2	0.8	0.5	0.03	0.06	28	0.3	0.8	0.4	0.03	0.04	C43	
Other skin	167		4.6	2.7	0.12	0.23	169		5.0	1.9	0.06	0.16	C44	
Mesothelioma	21	0.1	0.6	0.3	0.02	0.03	7	0.1	0.2	0.1	0.01	0.01	C45	
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46	
Connective and soft tissue	62	0.4	1.7	1.3	0.07	0.12	41	0.4	1.2	1.0	0.06	0.09	C47+C49	
Breast	21	0.1	0.6	0.4	0.03	0.05	2195	20.3	64.8	43.4	3.42	4.74	C50	
Vulva							18	0.2	0.5	0.2	0.01	0.02	C51	
Vagina							15	0.1	0.4	0.3	0.02	0.03	C52	
Cervix uteri							346	3.2	10.2	7.0	0.55	0.71	C53	
Corpus uteri							356	3.3	10.5	6.8	0.56	0.78	C54	
Uterus unspecified							40	0.4	1.2	0.5	0.02	0.04	C55	
Ovary							370	3.4	10.9	7.3	0.57	0.74	C56	
Other female genital organs							2	0.0	0.1	0.0	0.00	0.00	C57	
Placenta							3	0.0	0.1	0.1	0.01	0.01	C58	
Penis	8	0.0	0.2	0.1	0.00	0.01							C60	
Prostate	2267	13.9	62.8	34.8	1.07	4.53							C61	
Testis	77	0.5	2.1	1.8	0.13	0.14							C62	
Other male genital organs	7	0.0	0.2	0.1	0.00	0.01							C63	
Kidney	335	2.1	9.3	5.8	0.35	0.70	112	1.0	3.3	1.8	0.12	0.22	C64	
Renal pelvis	57	0.3	1.6	1.0	0.05	0.13	22	0.2	0.6	0.3	0.01	0.03	C65	
Ureter	45	0.3	1.2	0.7	0.03	0.10	19	0.2	0.6	0.2	0.00	0.02	C66	
Bladder	705	4.3	19.5	11.1	0.48	1.24	191	1.8	5.6	2.6	0.12	0.29	C67	
Other urinary organs	15	0.1	0.4	0.2	0.02	0.03	5	0.0	0.1	0.1	0.00	0.01	C68	
Eye	13	0.1	0.4	0.4	0.02	0.03	8	0.1	0.2	0.2	0.01	0.01	C69	
Brain, nervous system	142	0.9	3.9	3.0	0.19	0.29	113	1.0	3.3	2.4	0.15	0.20	C70-72	
Thyroid	89	0.5	2.5	1.8	0.13	0.18	279	2.6	8.2	5.7	0.39	0.62	C73	
Adrenal gland	10	0.1	0.3	0.5	0.02	0.02	2	0.0	0.1	0.0	0.00	0.01	C74	
Other endocrine	11	0.1	0.3	0.3	0.01	0.02	3	0.0	0.1	0.1	0.00	0.01	C75	
Hodgkin lymphoma	25	0.2	0.7	0.5	0.03	0.04	17	0.2	0.5	0.4	0.03	0.03	C81	
Non-Hodgkin lymphoma	445	2.7	12.3	7.6	0.40	0.81	326	3.0	9.6	5.1	0.30	0.53	C82-85,C96	
Immunoproliferative diseases	6	0.0	0.2	0.1	0.00	0.01	3	0.0	0.1	0.0	0.00	0.00	C88	
Multiple myeloma	113	0.7	3.1	1.7	0.07	0.16	108	1.0	3.2	1.5	0.07	0.17	C90	
Lymphoid leukaemia	97	0.6	2.7	2.5	0.14	0.20	64	0.6	1.9	1.6	0.11	0.12	C91	
Myeloid leukaemia	163	1.0	4.5	3.0	0.16	0.29	113	1.0	3.3	2.2	0.13	0.19	C92-94	
Leukaemia unspecified	10	0.1	0.3	0.1	0.00	0.01	8	0.1	0.2	0.1	0.01	0.01	C95	
Myeloproliferative disorders	6	0.0	0.2	0.1	0.00	0.01	10	0.1	0.3	0.3	0.02	0.02	MPD	
Myelodysplastic syndromes	131	0.8	3.6	2.0	0.06	0.18	92	0.9	2.7	1.0	0.02	0.07	MDS	
Other and unspecified	182	1.1	5.0	2.9	0.10	0.27	206	1.9	6.1	2.4	0.09	0.24	O&U	
All sites	16472		456.6	268.7	12.24	31.71	10974		323.8	175.8	10.80	19.06	C00-96	
All sites except C44	16305	100.0	452.0	266.0	12.12	31.48	10805	100.0	318.8	173.9	10.74	18.91	C00-96 exc. C44	

\$Includes 3 cases of unknown age

\$Includes 1 case of unknown age

Japan, Fukui Prefecture

REGISTRATION AREA

The Fukui Cancer Registry covers Fukui Prefecture in central Japan. The prefecture has a population of about 820 000 and an area of 4189 km².

CANCER CARE FACILITIES

The six main district hospitals provide radiotherapy, cancer surgery, and chemotherapy services. Patients suspected to have cancer are generally referred by primary and secondary care facilities to one of these hospitals.

REGISTRY STRUCTURE AND METHODS

In 1984, the Fukui Prefectural Government (FPG) established a system of voluntary cancer registration to obtain information about the nature and extent of the cancer burden in the prefecture and to assist in planning cancer control programmes. The Fukui Medical Association (FMA) is responsible for data collection. The registry is located within the FPG and is staffed by a part-time registrar and a full-time health worker. Each month, the central registry receives cancer reports from the FMA, as well as death certificates. The information is checked for consistency, coded, and computerized. Questionnaires are sent to physicians who have signed death certificates that cannot be matched with previous registrations. The data obtained with these questionnaires are also checked and computerized. All original copies of cancer reports and death certificates mentioning cancer are stored. Living cases are filed by the patient's date of birth, and deceased cases are grouped by the patient's year of death and filed by date of birth.

INTERPRETING THE RESULTS

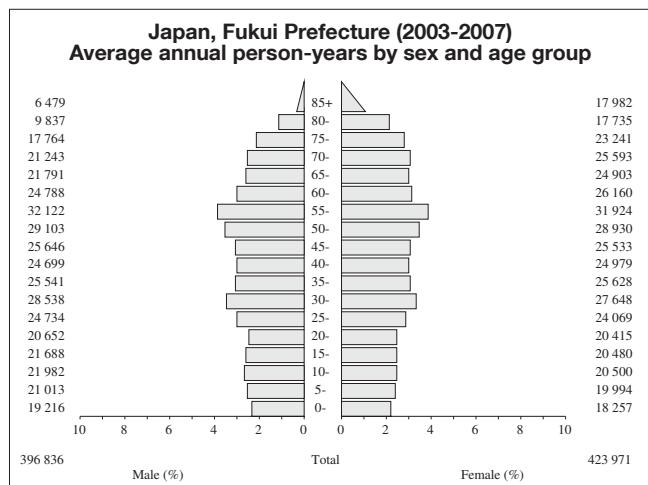
There are organized screening programmes for gastric, colorectal, breast, lung, and cervical cancers. Prostate-specific antigen (PSA) testing is not defined as an official tool for prostate cancer screening.

USE OF THE DATA

Registry data are used for geographical analysis within the prefecture and for comparison of cancer morbidity in other parts of Japan. The registry publishes an annual report on cancer incidence, highlighting trends and changes. Special studies of survival among patients with gastric, colorectal, and cervical cancers have also been carried out using registry data. Policy-makers also use the data to evaluate screening programmes for gastric and colorectal cancers.

CONTRIBUTORS

Manabu Fujita
Masakazu Hattori



SOURCE OF POPULATION

Provided by the Japanese Center for Cancer Control and Information Services, the Japanese National Cancer Center, and the Japanese National Institute of Population and Social Security Research, based on estimates interpolated and extrapolated from 2001 and 2005 census data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	62.6	Breast	44.2
Trachea, bronchus and lung	40.7	Stomach	25.8
Prostate	27.7	Colon	17.1
Colon	24.8	Trachea, bronchus and lung	13.0
Liver	19.7	Thyroid	11.2
Rectum	15.8	Liver	8.6
Bladder	12.2	Cervix uteri	8.0
Pancreas	10.6	Rectum	7.7
Non-Hodgkin lymphoma	9.4	Ovary	6.7
Oesophagus	8.1	Pancreas	6.4
All sites	286.2	All sites	190.3

Japan, Fukui Prefecture (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	2	0.0	0.1	0.1	0.00	0.01	6	0.1	0.3	0.0	0.00	0.00	C00
Tongue	42	0.3	2.1	1.1	0.08	0.12	22	0.2	1.0	0.5	0.03	0.05	C01-02
Mouth	43	0.3	2.2	1.0	0.05	0.11	29	0.3	1.4	0.4	0.01	0.05	C03-06
Salivary glands	16	0.1	0.8	0.5	0.04	0.05	11	0.1	0.5	0.3	0.02	0.03	C07-08
Tonsil	8	0.1	0.4	0.2	0.01	0.02	4	0.0	0.2	0.1	0.01	0.01	C09
Other oropharynx	20	0.2	1.0	0.5	0.04	0.06	4	0.0	0.2	0.1	0.01	0.01	C10
Nasopharynx	13	0.1	0.7	0.5	0.04	0.05	3	0.0	0.1	0.1	0.01	0.01	C11
Hypopharynx	29	0.2	1.5	0.7	0.04	0.10	6	0.1	0.3	0.1	0.01	0.02	C12-13
Pharynx unspecified	10	0.1	0.5	0.2	0.01	0.02	2	0.0	0.1	0.0	0.00	0.00	C14
Oesophagus	347	2.6	17.5	8.1	0.48	0.98	86	0.9	4.1	1.5	0.08	0.18	C15
Stomach	2828	21.3	142.5	62.6	3.38	7.53	1547	16.1	73.0	25.8	1.41	2.93	C16
Small intestine	54	0.4	2.7	1.2	0.08	0.13	36	0.4	1.7	0.7	0.05	0.08	C17
Colon	1169	8.8	58.9	24.8	1.17	3.00	1053	11.0	49.7	17.1	0.92	2.00	C18
Rectum	688	5.2	34.7	15.8	0.89	1.90	421	4.4	19.9	7.7	0.45	0.91	C19-20
Anus	12	0.1	0.6	0.2	0.01	0.03	12	0.1	0.6	0.2	0.02	0.02	C21
Liver	912	6.9	46.0	19.7	0.95	2.55	592	6.2	27.9	8.6	0.32	1.09	C22
Gallbladder etc.	431	3.2	21.7	7.8	0.23	0.76	456	4.8	21.5	5.0	0.17	0.47	C23-24
Pancreas	514	3.9	25.9	10.6	0.49	1.24	476	5.0	22.5	6.4	0.28	0.74	C25
Nose, sinuses etc.	29	0.2	1.5	0.8	0.06	0.09	14	0.1	0.7	0.4	0.02	0.03	C30-31
Larynx	113	0.9	5.7	2.5	0.15	0.32	7	0.1	0.3	0.1	0.00	0.01	C32
Trachea, bronchus and lung	2191	16.5	110.4	40.7	1.52	4.56	847	8.8	40.0	13.0	0.66	1.52	C33-34
Other thoracic organs	27	0.2	1.4	0.8	0.06	0.08	11	0.1	0.5	0.2	0.01	0.01	C37-38
Bone	18	0.1	0.9	0.5	0.04	0.05	29	0.3	1.4	0.7	0.04	0.06	C40-41
Melanoma of skin	21	0.2	1.1	0.5	0.03	0.07	17	0.2	0.8	0.3	0.02	0.03	C43
Other skin	140		7.1	2.7	0.08	0.29	101		4.8	1.4	0.06	0.15	C44
Mesothelioma	18	0.1	0.9	0.4	0.03	0.03	7	0.1	0.3	0.1	0.00	0.00	C45
Kaposi sarcoma	1	0.0	0.1	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	21	0.2	1.1	0.4	0.03	0.05	17	0.2	0.8	0.4	0.03	0.03	C47+C49
Breast	17	0.1	0.9	0.4	0.02	0.04	1531	16.0	72.2	44.2	3.57	4.67	C50
Vulva							22	0.2	1.0	0.4	0.02	0.03	C51
Vagina							8	0.1	0.4	0.2	0.02	0.03	C52
Cervix uteri							264	2.8	12.5	8.0	0.63	0.79	C53
Corpus uteri							211	2.2	10.0	5.5	0.49	0.64	C54
Uterus unspecified							29	0.3	1.4	0.4	0.02	0.03	C55
Ovary							245	2.6	11.6	6.7	0.53	0.69	C56
Other female genital organs							12	0.1	0.6	0.3	0.03	0.04	C57
Placenta							1	0.0	0.0	0.1	0.00	0.00	C58
Penis	9	0.1	0.5	0.2	0.01	0.02							C60
Prostate	1494	11.2	75.3	27.7	0.89	3.46							C61
Testis	44	0.3	2.2	2.2	0.17	0.17							C62
Other male genital organs	5	0.0	0.3	0.1	0.00	0.02							C63
Kidney	276	2.1	13.9	6.9	0.45	0.80	128	1.3	6.0	2.7	0.19	0.30	C64
Renal pelvis	48	0.4	2.4	1.0	0.05	0.10	29	0.3	1.4	0.4	0.01	0.04	C65
Ureter	46	0.3	2.3	0.8	0.02	0.09	43	0.4	2.0	0.5	0.01	0.05	C66
Bladder	625	4.7	31.5	12.2	0.50	1.32	171	1.8	8.1	2.3	0.09	0.29	C67
Other urinary organs	35	0.3	1.8	0.7	0.02	0.09	10	0.1	0.5	0.1	0.00	0.02	C68
Eye	3	0.0	0.2	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C69
Brain, nervous system	97	0.7	4.9	3.4	0.20	0.26	93	1.0	4.4	2.4	0.14	0.20	C70-72
Thyroid	120	0.9	6.0	3.8	0.29	0.42	373	3.9	17.6	11.2	0.89	1.20	C73
Adrenal gland	10	0.1	0.5	0.4	0.03	0.03	9	0.1	0.4	0.6	0.03	0.03	C74
Other endocrine	3	0.0	0.2	0.1	0.00	0.00	6	0.1	0.3	0.1	0.01	0.02	C75
Hodgkin lymphoma	19	0.1	1.0	0.8	0.05	0.07	15	0.2	0.7	0.6	0.04	0.04	C81
Non-Hodgkin lymphoma	393	3.0	19.8	9.4	0.53	0.96	289	3.0	13.6	5.4	0.33	0.59	C82-85,C96
Immunoproliferative diseases	1	0.0	0.1	0.0	0.00	0.00	2	0.0	0.1	0.0	0.00	0.01	C88
Multiple myeloma	96	0.7	4.8	1.8	0.07	0.22	97	1.0	4.6	1.3	0.05	0.17	C90
Lymphoid leukaemia	36	0.3	1.8	1.5	0.08	0.12	30	0.3	1.4	1.0	0.07	0.09	C91
Myeloid leukaemia	116	0.9	5.8	3.3	0.18	0.30	83	0.9	3.9	2.0	0.13	0.19	C92-94
Leukaemia unspecified	6	0.0	0.3	0.1	0.00	0.01	7	0.1	0.3	0.1	0.01	0.01	C95
Myeloproliferative disorders	10	0.1	0.5	0.3	0.02	0.03	9	0.1	0.4	0.2	0.01	0.02	MPD
Myelodysplastic syndromes	112	0.8	5.6	2.2	0.08	0.25	64	0.7	3.0	1.0	0.05	0.10	MDS
Other and unspecified	87	0.7	4.4	1.8	0.09	0.20	96	1.0	4.5	1.3	0.07	0.14	O&U
All sites	13425		676.6	286.2	13.76	33.19	9693		457.3	190.3	12.09	20.87	C00-96
All sites except C44	13285	100.0	669.5	283.5	13.68	32.90	9592	100.0	452.5	188.9	12.03	20.72	C00-96 exc. C44

Japan, Hiroshima

REGISTRATION AREA

The Hiroshima Prefecture Cancer Registry (HPCR) covers the city of Hiroshima, the largest city in the Chugoku region of Japan. The city was rebuilt after its destruction by the atomic bombing in 1945. In 2005, 16.6% of residents were aged 65 years or more, compared with 14.2% in 2000. The town of Yuki (with a population of 7796 and an area of 162.9 km²) was merged with Hiroshima in 2005.

CANCER CARE FACILITIES

In 2005, there were 1501 hospital beds and 273 physicians per 100 000 residents. In 2006, the Japanese Ministry of Health, Labour, and Welfare designated four hospitals as cancer care hospitals, and these provide advanced cancer treatment, palliative care, patient information services, and professional training programmes.

REGISTRY STRUCTURE AND METHODS

The Hiroshima City Medical Association's Tumor Statistics Registry was established in 1957 and was renamed the Hiroshima Cancer Registry under the auspices of the municipal government in 2005. Data are collected mostly by the abstraction of medical records from major hospitals. The Hiroshima Prefecture Tissue Registry was started by the Hiroshima Prefectural Medical Association in 1973. Pathologists submit pathology records and provide sample slides of surgically removed tumours. The HPCR was started by the prefectural government in 2002 and collects data through voluntary notification from all hospitals and clinics. Death certificates are also collected, and trace-back surveys were initiated in 2005 (to request cancer diagnosis information for cases notified by death certificate only). Data from all three registries are summarized in the HPCR database. All registration activities have been supported by the Radiation Effects Research Foundation and its predecessor, the Atomic Bomb Casualty Commission.

INTERPRETING THE RESULTS

Data abstraction from major hospitals, the collection of pathology records, and the collection of data from

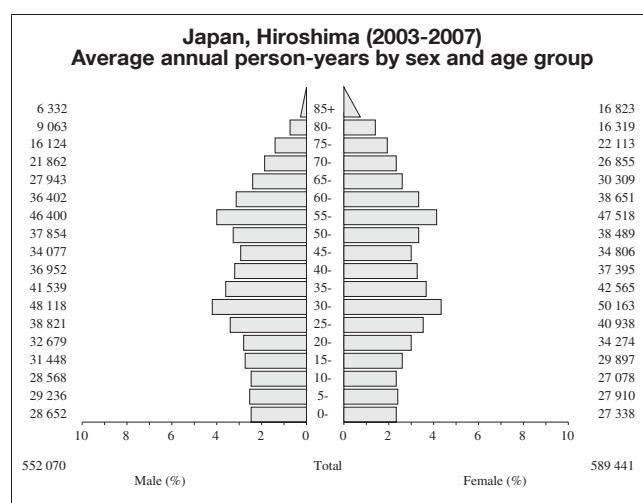
hospital-based cancer registries in the cancer care hospitals guarantee a high quality of registration. Many atomic bomb survivors still live in Hiroshima, and the effects of atomic bomb radiation on cancer incidence persist.

USE OF THE DATA

Registry data are used for evaluating cancer incidence rates and cancer control programmes in the community. The registry also provides cancer incidence data for studies on the effects of radiation in atomic bomb survivors.

CONTRIBUTORS

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SOURCE OF POPULATION

Based on interpolations from 2000 and 2005 census data for Hiroshima before it was merged with the town of Yuki in 2005, and on extrapolations from 2000 and 2005 census data for Hiroshima and Yuki.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	72.5	Breast	58.1
Trachea, bronchus and lung	48.6	Stomach	26.2
Prostate	47.0	Colon	24.1
Colon	36.8	Trachea, bronchus and lung	20.1
Liver	34.5	Thyroid	16.8
Rectum	24.4	Liver	12.0
Bladder	21.0	Rectum	10.9
Oesophagus	14.2	Corpus uteri	10.5
Non-Hodgkin lymphoma	11.7	Cervix uteri	10.2
Pancreas	9.5	Non-Hodgkin lymphoma	9.0
All sites	392.4	All sites	252.7

Japan, Hiroshima (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	§ No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	2	0.0	0.1	0.0	0.00	0.00	3	0.0	0.1	0.0	0.00	0.01	C00
Tongue	119	0.6	4.3	2.4	0.14	0.27	74	0.5	2.5	1.4	0.08	0.14	C01-02
Mouth	94	0.5	3.4	1.8	0.11	0.22	56	0.4	1.9	0.7	0.03	0.07	C03-06
Salivary glands	33	0.2	1.2	0.8	0.05	0.09	24	0.2	0.8	0.5	0.03	0.05	C07-08
Tonsil	28	0.1	1.0	0.5	0.04	0.06	5	0.0	0.2	0.1	0.00	0.01	C09
Other oropharynx	46	0.2	1.7	0.9	0.07	0.13	9	0.1	0.3	0.2	0.01	0.02	C10
Nasopharynx	21	0.1	0.8	0.4	0.03	0.05	6	0.0	0.2	0.2	0.01	0.01	C11
Hypopharynx	117	0.6	4.2	2.3	0.14	0.31	7	0.0	0.2	0.1	0.01	0.02	C12-13
Pharynx unspecified	12	0.1	0.4	0.2	0.01	0.03	2	0.0	0.1	0.0	0.00	0.00	C14
Oesophagus	752	3.6	27.2	14.2	0.81	1.82	164	1.1	5.6	2.3	0.10	0.28	C15
Stomach	3885	18.8	140.7	72.5	3.57	8.71	1804	12.3	61.2	26.2	1.41	2.94	C16
Small intestine	72	0.3	2.6	1.3	0.07	0.16	49	0.3	1.7	0.8	0.04	0.09	C17
Colon	1963	9.5	71.1	36.8	1.77	4.50	1676	11.4	56.9	24.1	1.22	2.81	C18
Rectum	1230	6.0	44.6	24.4	1.49	2.96	687	4.7	23.3	10.9	0.65	1.32	C19-20
Anus	15	0.1	0.5	0.3	0.02	0.03	21	0.1	0.7	0.3	0.02	0.02	C21
Liver	1842	8.9	66.7	34.5	1.65	4.37	919	6.3	31.2	12.0	0.36	1.57	C22
Gallbladder etc.	385	1.9	13.9	6.6	0.22	0.67	413	2.8	14.0	4.6	0.13	0.46	C23-24
Pancreas	531	2.6	19.2	9.5	0.46	1.07	513	3.5	17.4	6.7	0.26	0.81	C25
Nose, sinuses etc.	35	0.2	1.3	0.7	0.05	0.09	23	0.2	0.8	0.3	0.02	0.03	C30-31
Larynx	214	1.0	7.8	4.0	0.20	0.52	26	0.2	0.9	0.4	0.02	0.05	C32
Trachea, bronchus and lung	2739	13.3	99.2	48.6	1.95	5.64	1373	9.3	46.6	20.1	1.06	2.48	C33-34
Other thoracic organs	39	0.2	1.4	0.9	0.06	0.11	15	0.1	0.5	0.3	0.02	0.03	C37-38
Bone	20	0.1	0.7	0.6	0.04	0.06	17	0.1	0.6	0.6	0.04	0.04	C40-41
Melanoma of skin	23	0.1	0.8	0.5	0.03	0.05	20	0.1	0.7	0.4	0.03	0.05	C43
Other skin	349		12.6	6.1	0.24	0.66	275		9.3	3.4	0.13	0.35	C44
Mesothelioma	57	0.3	2.1	1.0	0.06	0.12	13	0.1	0.4	0.2	0.01	0.01	C45
Kaposi sarcoma	2	0.0	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	78	0.4	2.8	1.7	0.10	0.16	38	0.3	1.3	0.8	0.06	0.08	C47+C49
Breast	16	0.1	0.6	0.3	0.01	0.03	2789	19.0	94.6	58.1	4.49	6.30	C50
Vulva							26	0.2	0.9	0.3	0.01	0.04	C51
Vagina							11	0.1	0.4	0.2	0.01	0.02	C52
Cervix uteri							440	3.0	14.9	10.2	0.81	0.97	C53
Corpus uteri							498	3.4	16.9	10.5	0.87	1.17	C54
Uterus unspecified							41	0.3	1.4	0.4	0.01	0.03	C55
Ovary							395	2.7	13.4	8.8	0.71	0.90	C56
Other female genital organs							13	0.1	0.4	0.2	0.02	0.02	C57
Placenta							1	0.0	0.0	0.0	0.00	0.00	C58
Penis	21	0.1	0.8	0.3	0.01	0.03							C60
Prostate	2769	13.4	100.3	47.0	1.18	6.02							C61
Testis	70	0.3	2.5	2.2	0.18	0.18							C62
Other male genital organs	23	0.1	0.8	0.4	0.01	0.05							C63
Kidney	406	2.0	14.7	8.4	0.53	0.99	186	1.3	6.3	3.2	0.18	0.38	C64
Renal pelvis	91	0.4	3.3	1.7	0.07	0.25	42	0.3	1.4	0.5	0.01	0.06	C65
Ureter	65	0.3	2.4	1.1	0.03	0.13	24	0.2	0.8	0.3	0.01	0.04	C66
Bladder	1191	5.8	43.1	21.0	0.82	2.42	316	2.1	10.7	4.0	0.15	0.46	C67
Other urinary organs	28	0.1	1.0	0.5	0.02	0.05	17	0.1	0.6	0.2	0.00	0.02	C68
Eye	8	0.0	0.3	0.3	0.02	0.02	1	0.0	0.0	0.0	0.00	0.00	C69
Brain, nervous system	122	0.6	4.4	3.5	0.23	0.31	92	0.6	3.1	2.5	0.16	0.21	C70-72
Thyroid	215	1.0	7.8	4.9	0.37	0.55	785	5.3	26.6	16.8	1.31	1.82	C73
Adrenal gland	5	0.0	0.2	0.2	0.01	0.02	5	0.0	0.2	0.3	0.01	0.01	C74
Other endocrine	10	0.0	0.4	0.4	0.03	0.03	7	0.0	0.2	0.1	0.01	0.02	C75
Hodgkin lymphoma	31	0.2	1.1	1.0	0.05	0.07	27	0.2	0.9	0.6	0.04	0.06	C81
Non-Hodgkin lymphoma	568	2.7	20.6	11.7	0.66	1.25	509	3.5	17.3	9.0	0.59	0.96	C82-85,C96
Immunoproliferative diseases	8	0.0	0.3	0.1	0.01	0.01	2	0.0	0.1	0.0	0.00	0.00	C88
Multiple myeloma	106	0.5	3.8	1.8	0.06	0.20	86	0.6	2.9	1.1	0.05	0.13	C90
Lymphoid leukaemia	49	0.2	1.8	1.8	0.11	0.13	48	0.3	1.6	1.6	0.08	0.12	C91
Myeloid leukaemia	202	1.0	7.3	4.5	0.25	0.46	121	0.8	4.1	2.1	0.11	0.23	C92-94
Leukaemia unspecified	13	0.1	0.5	0.3	0.02	0.03	16	0.1	0.5	0.4	0.02	0.03	C95
Myeloproliferative disorders	25	0.1	0.9	0.5	0.02	0.04	18	0.1	0.6	0.3	0.01	0.02	MPD
Myelodysplastic syndromes	107	0.5	3.9	1.7	0.04	0.15	73	0.5	2.5	1.0	0.05	0.08	MDS
Other and unspecified	152	0.7	5.5	2.7	0.09	0.30	152	1.0	5.2	1.9	0.08	0.18	O&U
All sites	21004		760.9	392.4	18.18	46.59	14973		508.0	252.7	15.60	28.03	C00-96
All sites except C44	20655	100.0	748.3	386.3	17.94	45.93	14698	100.0	498.7	249.3	15.47	27.69	C00-96 exc. C44

\$Includes 1 case of unknown age

Japan, Miyagi Prefecture

REGISTRATION AREA

The Miyagi Prefectural Cancer Registry covers Miyagi Prefecture, which is located in northern Japan and flanked to the east by the Pacific Ocean. In 2005, the population was 2.4 million and about 69% of employed residents worked in sales and service, 23% in manufacturing and construction, and 5% in agriculture.

CANCER CARE FACILITIES

The prefecture has seven designated cancer care hospitals certified by the Japanese Ministry of Health, Labour, and Welfare; five of these are located in the prefectural capital of Sendai and the surrounding area. Outside of the Sendai area, the prefecture is divided into six health care districts, and several core general hospitals in each district also provide cancer diagnostic and treatment services.

REGISTRY STRUCTURE AND METHODS

The registry began operations in 1959 and has been based in the Miyagi Cancer Society since 1976. The prefectural government provides grants for cancer registration and the Miyagi Cancer Society also supports the registry financially. The registry is staffed by a part-time physician and three full-time registrars. All registry work is the responsibility of the Registry Committee, which is made up of representatives of the Miyagi Medical Association, the designated cancer care hospitals, the prefectural government, and the Miyagi Cancer Society. Reporting is voluntary, and registry staff members also collect data actively, visiting 10–20 hospitals annually to abstract data.

INTERPRETING THE RESULTS

Screening programmes for gastric, colorectal, lung, breast, and cervical cancers are provided by municipalities and in workplaces. The 2007 Comprehensive Survey of Living Conditions found that participation rates in these screening programmes were approximately 30–40%, which was relatively

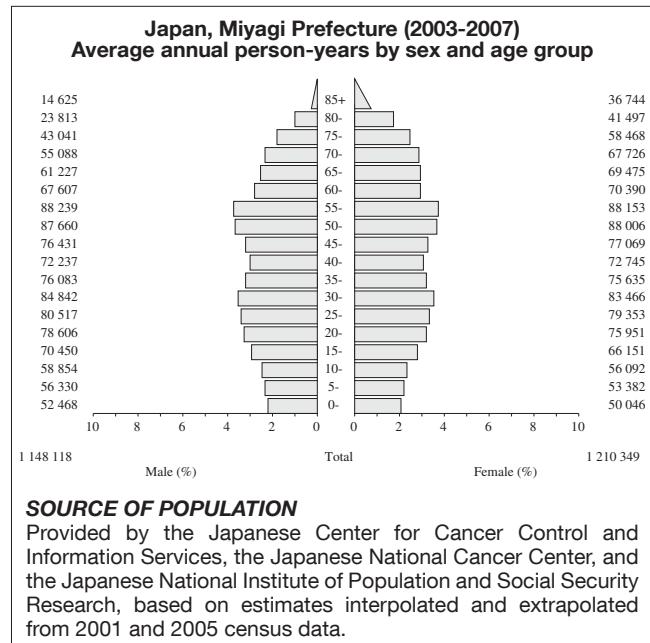
high compared with rates in other prefectures. During 2000–2006 most municipalities initiated prostate cancer screening programmes using prostate-specific antigen (PSA) testing.

USE OF THE DATA

The registry provides descriptive data on the incidence of cancer, the extent of disease, and survival rates, and registry data have also been used in a variety of epidemiological research projects, including follow-ups of large-scale cohort studies and evaluations of screening programmes.

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by the Japanese Center for Cancer Control and Information Services, the Japanese National Cancer Center, and the Japanese National Institute of Population and Social Security Research, based on estimates interpolated and extrapolated from 2001 and 2005 census data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	66.7	Breast	54.0
Prostate	44.1	Colon	24.0
Trachea, bronchus and lung	41.9	Stomach	22.8
Colon	37.9	Trachea, bronchus and lung	13.5
Rectum	24.1	Rectum	11.3
Liver	15.9	Thyroid	10.7
Oesophagus	15.0	Ovary	7.8
Bladder	12.0	Cervix uteri	6.9
Pancreas	10.5	Corpus uteri	6.8
Non-Hodgkin lymphoma	7.7	Pancreas	6.2
All sites	334.5	All sites	210.2

Japan, Miyagi Prefecture (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	9	0.0	0.2	0.1	0.01	0.01	1	0.0	0.0	0.0	0.00	0.00	C00
Tongue	168	0.4	2.9	1.6	0.11	0.18	98	0.4	1.6	0.8	0.05	0.09	C01-02
Mouth	146	0.4	2.5	1.3	0.07	0.16	70	0.3	1.2	0.4	0.02	0.04	C03-06
Salivary glands	68	0.2	1.2	0.7	0.04	0.07	43	0.2	0.7	0.4	0.02	0.04	C07-08
Tonsil	25	0.1	0.4	0.3	0.02	0.03	1	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	128	0.3	2.2	1.2	0.08	0.16	13	0.0	0.2	0.1	0.01	0.01	C10
Nasopharynx	39	0.1	0.7	0.4	0.03	0.04	12	0.0	0.2	0.1	0.01	0.01	C11
Hypopharynx	184	0.5	3.2	1.6	0.09	0.22	22	0.1	0.4	0.2	0.01	0.02	C12-13
Pharynx unspecified	17	0.0	0.3	0.1	0.01	0.02	4	0.0	0.1	0.0	0.00	0.00	C14
Oesophagus	1829	4.5	31.9	15.0	0.76	1.99	351	1.3	5.8	2.3	0.14	0.26	C15
Stomach	8151	20.1	142.0	66.7	3.19	8.32	3607	13.4	59.6	22.8	1.20	2.56	C16
Small intestine	94	0.2	1.6	0.8	0.05	0.09	54	0.2	0.9	0.4	0.03	0.05	C17
Colon	4633	11.4	80.7	37.9	1.80	4.73	3800	14.1	62.8	24.0	1.24	2.78	C18
Rectum	2752	6.8	47.9	24.1	1.44	2.98	1565	5.8	25.9	11.3	0.69	1.32	C19-20
Anus	39	0.1	0.7	0.3	0.02	0.04	38	0.1	0.6	0.2	0.01	0.03	C21
Liver	1900	4.7	33.1	15.9	0.83	2.00	991	3.7	16.4	5.4	0.17	0.68	C22
Gallbladder etc.	1047	2.6	18.2	7.4	0.24	0.79	1014	3.8	16.8	4.9	0.16	0.51	C23-24
Pancreas	1326	3.3	23.1	10.5	0.48	1.23	1164	4.3	19.2	6.2	0.26	0.67	C25
Nose, sinuses etc.	95	0.2	1.7	0.9	0.06	0.11	52	0.2	0.9	0.5	0.02	0.05	C30-31
Larynx	377	0.9	6.6	3.2	0.19	0.40	25	0.1	0.4	0.2	0.01	0.02	C32
Trachea, bronchus and lung	5622	13.9	97.9	41.9	1.60	4.86	2196	8.1	36.3	13.5	0.65	1.61	C33-34
Other thoracic organs	62	0.2	1.1	0.8	0.04	0.08	33	0.1	0.5	0.4	0.02	0.04	C37-38
Bone	34	0.1	0.6	0.5	0.02	0.03	28	0.1	0.5	0.3	0.02	0.03	C40-41
Melanoma of skin	63	0.2	1.1	0.6	0.03	0.06	72	0.3	1.2	0.5	0.03	0.05	C43
Other skin	466	8.1	3.5	1.3	0.13	0.34	467		7.7	2.4	0.10	0.24	C44
Mesothelioma	69	0.2	1.2	0.6	0.04	0.07	19	0.1	0.3	0.1	0.01	0.02	C45
Kaposi sarcoma	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	110	0.3	1.9	1.2	0.07	0.13	79	0.3	1.3	0.8	0.05	0.08	C47+C49
Breast	26	0.1	0.5	0.2	0.01	0.02	5210	19.3	86.1	54.0	4.39	5.76	C50
Vulva							41	0.2	0.7	0.2	0.01	0.02	C51
Vagina							23	0.1	0.4	0.1	0.01	0.01	C52
Cervix uteri							603	2.2	10.0	6.9	0.55	0.65	C53
Corpus uteri							711	2.6	11.7	6.8	0.54	0.78	C54
Uterus unspecified							68	0.3	1.1	0.5	0.03	0.05	C55
Ovary							778	2.9	12.9	7.8	0.62	0.81	C56
Other female genital organs							18	0.1	0.3	0.2	0.02	0.02	C57
Placenta							5	0.0	0.1	0.1	0.01	0.01	C58
Penis	31	0.1	0.5	0.2	0.01	0.02							C60
Prostate	5969	14.7	104.0	44.1	1.28	5.90							C61
Testis	135	0.3	2.4	2.2	0.17	0.17							C62
Other male genital organs	20	0.0	0.3	0.2	0.01	0.02							C63
Kidney	779	1.9	13.6	7.5	0.49	0.89	376	1.4	6.2	2.9	0.18	0.35	C64
Renal pelvis	128	0.3	2.2	1.0	0.05	0.11	73	0.3	1.2	0.5	0.02	0.06	C65
Ureter	116	0.3	2.0	0.9	0.04	0.11	86	0.3	1.4	0.4	0.01	0.06	C66
Bladder	1524	3.8	26.5	12.0	0.54	1.34	484	1.8	8.0	2.9	0.14	0.32	C67
Other urinary organs	11	0.0	0.2	0.1	0.00	0.01	9	0.0	0.1	0.0	0.00	0.00	C68
Eye	10	0.0	0.2	0.1	0.01	0.01	9	0.0	0.1	0.2	0.01	0.01	C69
Brain, nervous system	190	0.5	3.3	2.8	0.17	0.24	130	0.5	2.1	1.6	0.11	0.15	C70-72
Thyroid	231	0.6	4.0	2.4	0.16	0.27	962	3.6	15.9	10.7	0.87	1.11	C73
Adrenal gland	14	0.0	0.2	0.3	0.02	0.02	11	0.0	0.2	0.1	0.01	0.01	C74
Other endocrine	7	0.0	0.1	0.2	0.01	0.01	6	0.0	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	37	0.1	0.6	0.4	0.02	0.04	31	0.1	0.5	0.5	0.03	0.04	C81
Non-Hodgkin lymphoma	853	2.1	14.9	7.7	0.43	0.83	791	2.9	13.1	6.0	0.37	0.69	C82-85,C96
Immunoproliferative diseases	13	0.0	0.2	0.1	0.00	0.01	5	0.0	0.1	0.0	0.00	0.00	C88
Multiple myeloma	229	0.6	4.0	1.8	0.07	0.23	228	0.8	3.8	1.3	0.05	0.15	C90
Lymphoid leukaemia	140	0.3	2.4	2.0	0.11	0.17	133	0.5	2.2	2.2	0.12	0.16	C91
Myeloid leukaemia	363	0.9	6.3	3.7	0.21	0.39	230	0.9	3.8	2.3	0.14	0.22	C92-94
Leukaemia unspecified	25	0.1	0.4	0.2	0.01	0.02	23	0.1	0.4	0.2	0.01	0.01	C95
Myeloproliferative disorders	27	0.1	0.5	0.3	0.01	0.02	20	0.1	0.3	0.2	0.01	0.02	MPD
Myelodysplastic syndromes	226	0.6	3.9	1.5	0.03	0.15	137	0.5	2.3	0.7	0.02	0.05	MDS
Other and unspecified	469	1.2	8.2	3.6	0.14	0.35	457	1.7	7.6	2.6	0.11	0.24	O&U
All sites	41027		714.7	334.5	15.46	40.48	27477		454.0	210.2	13.33	22.97	C00-96
All sites except C44	40561	100.0	706.6	331.0	15.33	40.13	27010	100.0	446.3	207.8	13.24	22.73	C00-96 exc. C44

Japan, Nagasaki Prefecture

REGISTRATION AREA

The Nagasaki Prefectural Cancer Registry covers Nagasaki Prefecture, on the western tip of the Japanese archipelago. A third of the prefecture's population lives in the city of Nagasaki on the island of Kyushu, where shipbuilding is one of the primary industries. The prefecture also has 55 smaller inhabited islands, whose residents account for 9% of the total prefectural population. More than 60% of the prefecture's residents work in the service and retail/restaurant industries, and 12% work in manufacturing (including shipbuilding).

CANCER CARE FACILITIES

There are six cancer care hospitals with radiotherapy facilities designated by the Japanese government and six other hospitals (two of which have radiotherapy facilities) that treat more than 100 cancer cases annually. These hospitals are concentrated in the cities of Nagasaki and Sasebo, and 70% of cancer patients in the prefecture are treated in these cities.

REGISTRY STRUCTURE AND METHODS

The central registry office is located in the Radiation Effects Research Foundation's Department of Epidemiology and is staffed by a physician and nine full-time staff members, who are prefectural government employees. Incidence data are collected mainly by abstraction from medical records and pathology reports. Data on cancer cases detected in screening programmes are also obtained. The registry also collects all death certificates within the prefecture, to update the vital status of the registered cases.

INTERPRETING THE RESULTS

Hepatitis C virus and human T-cell lymphotropic virus type 1 (HTLV-1) infections are endemic in Nagasaki Prefecture, and these affect the incidence of hepatocellular carcinoma and adult T-cell leukaemia, respectively. The incidence of prostate cancer has been increasing due to increased opportunistic prostate-specific antigen (PSA) testing since 2003. Many atomic bomb survivors still live in Nagasaki,

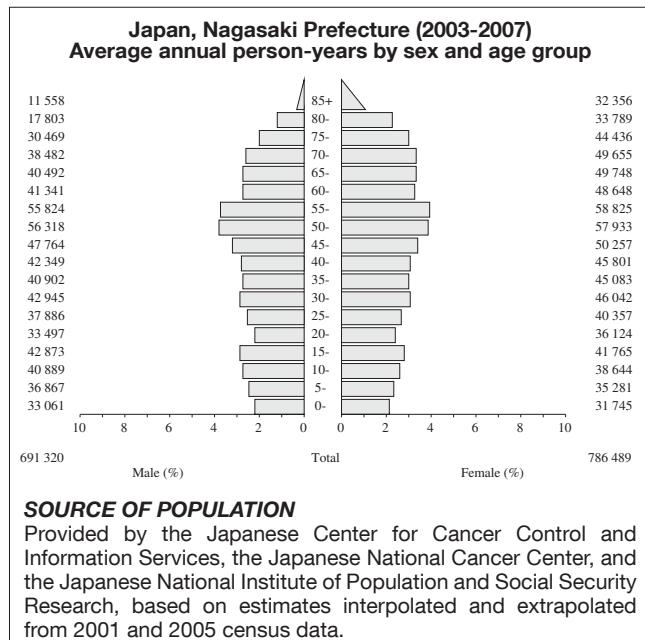
and the effects of atomic bomb radiation on cancer incidence persist.

USE OF THE DATA

The registry publishes annual reports on cancer incidence, mortality, and survival in Nagasaki Prefecture and participates in a project to estimate nationwide cancer incidence in Japan. Registry data are used for research into the association between radiation exposure and cancer incidence, and are also used by the government to design medical projects and cancer screening assessments.

CONTRIBUTORS

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10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	55.2	Breast	48.5
Trachea, bronchus and lung	46.1	Stomach	21.3
Prostate	40.4	Colon	19.7
Colon	29.8	Trachea, bronchus and lung	15.5
Liver	24.4	Cervix uteri	10.0
Rectum	20.4	Rectum	9.7
Bladder	13.6	Thyroid	9.4
Oesophagus	10.6	Corpus uteri	8.4
Pancreas	9.4	Ovary	7.8
Non-Hodgkin lymphoma	8.3	Liver	7.5
All sites	325.9	All sites	209.8

Japan, Nagasaki Prefecture (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	7	0.0	0.2	0.1	0.00	0.01	3	0.0	0.1	0.0	0.00	0.00	C00
Tongue	176	0.7	5.1	2.6	0.17	0.31	99	0.5	2.5	1.1	0.07	0.12	C01-02
Mouth	154	0.6	4.5	2.0	0.10	0.23	111	0.6	2.8	1.0	0.05	0.11	C03-06
Salivary glands	57	0.2	1.6	0.9	0.06	0.11	28	0.1	0.7	0.3	0.02	0.03	C07-08
Tonsil	23	0.1	0.7	0.3	0.02	0.05	6	0.0	0.2	0.1	0.01	0.01	C09
Other oropharynx	75	0.3	2.2	1.0	0.07	0.13	11	0.1	0.3	0.2	0.01	0.02	C10
Nasopharynx	32	0.1	0.9	0.5	0.05	0.06	13	0.1	0.3	0.1	0.01	0.02	C11
Hypopharynx	169	0.6	4.9	2.2	0.12	0.27	10	0.1	0.3	0.1	0.01	0.01	C12-13
Pharynx unspecified	13	0.0	0.4	0.2	0.01	0.02	1	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	803	3.0	23.2	10.6	0.67	1.32	137	0.7	3.5	1.3	0.08	0.16	C15
Stomach	4624	17.2	133.8	55.2	2.73	6.57	2412	12.5	61.3	21.3	1.14	2.42	C16
Small intestine	84	0.3	2.4	1.0	0.06	0.11	75	0.4	1.9	0.6	0.03	0.08	C17
Colon	2523	9.4	73.0	29.8	1.38	3.65	2367	12.2	60.2	19.7	1.01	2.22	C18
Rectum	1554	5.8	45.0	20.4	1.24	2.51	1009	5.2	25.7	9.7	0.58	1.14	C19-20
Anus	18	0.1	0.5	0.2	0.01	0.02	23	0.1	0.6	0.2	0.01	0.02	C21
Liver	1976	7.4	57.2	24.4	1.24	3.10	998	5.2	25.4	7.5	0.29	0.94	C22
Gallbladder etc.	599	2.2	17.3	6.3	0.24	0.67	800	4.1	20.3	4.9	0.16	0.48	C23-24
Pancreas	811	3.0	23.5	9.4	0.44	1.11	761	3.9	19.4	5.6	0.26	0.63	C25
Nose, sinuses etc.	63	0.2	1.8	0.9	0.06	0.11	36	0.2	0.9	0.4	0.02	0.04	C30-31
Larynx	266	1.0	7.7	3.3	0.16	0.41	18	0.1	0.5	0.2	0.01	0.02	C32
Trachea, bronchus and lung	4321	16.1	125.0	46.1	1.82	5.12	1958	10.1	49.8	15.5	0.72	1.82	C33-34
Other thoracic organs	50	0.2	1.4	0.9	0.07	0.09	30	0.2	0.8	0.4	0.02	0.04	C37-38
Bone	28	0.1	0.8	0.6	0.04	0.05	28	0.1	0.7	0.5	0.03	0.05	C40-41
Melanoma of skin	37	0.1	1.1	0.6	0.03	0.07	78	0.4	2.0	1.2	0.08	0.10	C43
Other skin	615		17.8	6.8	0.25	0.71	743		18.9	5.1	0.21	0.50	C44
Mesothelioma	107	0.4	3.1	1.4	0.08	0.16	30	0.2	0.8	0.3	0.01	0.04	C45
Kaposi sarcoma	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	66	0.2	1.9	1.0	0.05	0.10	66	0.3	1.7	0.8	0.05	0.08	C47+C49
Breast	27	0.1	0.8	0.3	0.01	0.04	3209	16.6	81.6	48.5	3.91	5.22	C50
Vulva							46	0.2	1.2	0.3	0.01	0.03	C51
Vagina							12	0.1	0.3	0.1	0.00	0.01	C52
Cervix uteri							590	3.0	15.0	10.0	0.79	0.96	C53
Corpus uteri							561	2.9	14.3	8.4	0.72	0.92	C54
Uterus unspecified							47	0.2	1.2	0.4	0.03	0.04	C55
Ovary							554	2.9	14.1	7.8	0.59	0.80	C56
Other female genital organs							22	0.1	0.6	0.3	0.02	0.03	C57
Placenta							2	0.0	0.1	0.1	0.00	0.00	C58
Penis	28	0.1	0.8	0.4	0.02	0.04							C60
Prostate	3916	14.6	113.3	40.4	1.15	5.14							C61
Testis	66	0.2	1.9	2.1	0.15	0.16							C62
Other male genital organs	27	0.1	0.8	0.3	0.01	0.03							C63
Kidney	441	1.6	12.8	6.2	0.40	0.71	199	1.0	5.1	2.2	0.15	0.24	C64
Renal pelvis	119	0.4	3.4	1.4	0.07	0.17	68	0.4	1.7	0.5	0.01	0.05	C65
Ureter	103	0.4	3.0	1.2	0.06	0.15	69	0.4	1.8	0.5	0.01	0.05	C66
Bladder	1234	4.6	35.7	13.6	0.55	1.53	399	2.1	10.1	2.8	0.11	0.32	C67
Other urinary organs	17	0.1	0.5	0.2	0.00	0.02	16	0.1	0.4	0.1	0.00	0.02	C68
Eye	9	0.0	0.3	0.2	0.01	0.01	5	0.0	0.1	0.2	0.01	0.01	C69
Brain, nervous system	128	0.5	3.7	2.4	0.15	0.24	99	0.5	2.5	1.8	0.11	0.14	C70-72
Thyroid	190	0.7	5.5	3.1	0.22	0.33	593	3.1	15.1	9.4	0.74	0.97	C73
Adrenal gland	6	0.0	0.2	0.1	0.01	0.01	4	0.0	0.1	0.2	0.01	0.01	C74
Other endocrine	7	0.0	0.2	0.3	0.02	0.02	6	0.0	0.2	0.2	0.01	0.01	C75
Hodgkin lymphoma	28	0.1	0.8	0.6	0.04	0.06	22	0.1	0.6	0.4	0.02	0.03	C81
Non-Hodgkin lymphoma	627	2.3	18.1	8.3	0.44	0.93	604	3.1	15.4	6.6	0.39	0.70	C82-85,C96
Immunoproliferative diseases	12	0.0	0.3	0.1	0.00	0.02	11	0.1	0.3	0.1	0.01	0.01	C88
Multiple myeloma	177	0.7	5.1	1.8	0.07	0.20	156	0.8	4.0	1.1	0.04	0.13	C90
Lymphoid leukaemia	347	1.3	10.0	5.0	0.28	0.53	280	1.4	7.1	3.4	0.19	0.33	C91
Myeloid leukaemia	291	1.1	8.4	4.5	0.24	0.46	185	1.0	4.7	2.2	0.13	0.23	C92-94
Leukaemia unspecified	20	0.1	0.6	0.3	0.01	0.03	15	0.1	0.4	0.2	0.01	0.01	C95
Myeloproliferative disorders	26	0.1	0.8	0.3	0.01	0.03	25	0.1	0.6	0.3	0.01	0.02	MPD
Myelodysplastic syndromes	211	0.8	6.1	2.4	0.07	0.23	178	0.9	4.5	1.8	0.09	0.17	MDS
Other and unspecified	177	0.7	5.1	1.9	0.08	0.18	261	1.3	6.6	2.1	0.09	0.17	O&U
All sites	27486	795.2	325.9	15.24	38.29		20089	510.9	209.8	13.11	22.74	C00-96	
All sites except C44	26871	100.0	319.2	14.99	37.58		19346	492.0	204.7	12.90	22.24	C00-96 exc. C44	

Japan, Niigata Prefecture

REGISTRATION AREA

The Niigata Prefectural Cancer Registry covers Niigata Prefecture, which is located on the coast of the Sea of Japan and is about 300 km north of Tokyo. The prefecture has a population of about 2.5 million and is known for the cultivation of rice, its heavy snowfalls, and its natural beauty.

CANCER CARE FACILITIES

The prefecture has nine hospitals with radiotherapy facilities.

REGISTRY STRUCTURE AND METHODS

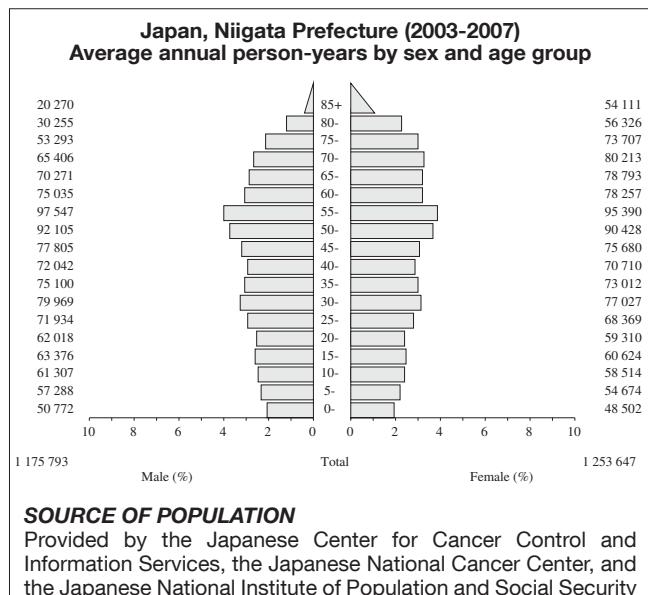
The registry was established in 1991 by the prefectural government, in cooperation with the Niigata Medical Association, to collect cancer information and help establish cancer control programmes in Niigata. The registry follows the standard Japanese cancer registry system. Cancer registration forms are submitted voluntarily to the Niigata Medical Association by hospitals and clinics, and are then transferred to the Niigata Cancer Center Hospital. Data from screening programmes are obtained from the Niigata Association for Cancer Prevention.

USE OF THE DATA

The registry has published an annual online report since 1991 and provides more detailed data to medical researchers. Registry data are also used to perform quality control for screening programmes.

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by the Japanese Center for Cancer Control and Information Services, the Japanese National Cancer Center, and the Japanese National Institute of Population and Social Security Research, based on estimates interpolated and extrapolated from 2001 and 2005 census data.

NOTES ON THE DATA

†C67 (bladder cancer) includes neoplasms of uncertain or unknown behaviour together with invasive cancers.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	72.4	Breast	49.0
Trachea, bronchus and lung	42.8	Stomach	27.5
Colon	32.0	Colon	20.9
Rectum	21.3	Trachea, bronchus and lung	12.9
Prostate	20.1	Rectum	9.1
Oesophagus	15.2	Cervix uteri	8.6
Liver	12.3	Ovary	8.4
Pancreas	10.6	Corpus uteri	8.1
Bladder	8.5	Pancreas	5.7
Gallbladder etc.	7.1	Thyroid	5.3
All sites	293.3	All sites	193.9

Japan, Niigata Prefecture (2003-2007)

S I T E	Male						Female						
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	ICD-10
Lip	9	0.0	0.2	0.1	0.00	0.00	7	0.0	0.1	0.0	0.00	0.01	C00
Tongue	191	0.5	3.2	1.6	0.11	0.19	103	0.4	1.6	0.7	0.04	0.07	C01-02
Mouth	152	0.4	2.6	1.1	0.06	0.14	115	0.4	1.8	0.6	0.03	0.07	C03-06
Salivary glands	51	0.1	0.9	0.4	0.03	0.05	34	0.1	0.5	0.3	0.02	0.03	C07-08
Tonsil	17	0.0	0.3	0.2	0.02	0.02	5	0.0	0.1	0.0	0.00	0.00	C09
Other oropharynx	116	0.3	2.0	1.0	0.07	0.12	14	0.0	0.2	0.1	0.01	0.01	C10
Nasopharynx	33	0.1	0.6	0.3	0.03	0.04	15	0.1	0.2	0.2	0.01	0.02	C11
Hypopharynx	209	0.5	3.6	1.5	0.08	0.20	37	0.1	0.6	0.3	0.02	0.03	C12-13
Pharynx unspecified	8	0.0	0.1	0.1	0.00	0.00	3	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	2156	5.2	36.7	15.2	0.77	2.03	334	1.1	5.3	1.8	0.10	0.22	C15
Stomach	10372	25.0	176.4	72.4	3.52	9.01	5147	17.6	82.1	27.5	1.50	3.15	C16
Small intestine	126	0.3	2.1	1.0	0.06	0.11	78	0.3	1.2	0.4	0.02	0.04	C17
Colon	4546	11.0	77.3	32.0	1.59	3.89	3926	13.4	62.6	20.9	1.12	2.47	C18
Rectum	2792	6.7	47.5	21.3	1.28	2.63	1530	5.2	24.4	9.1	0.55	1.08	C19-20
Anus	41	0.1	0.7	0.3	0.02	0.03	45	0.2	0.7	0.2	0.01	0.02	C21
Liver	1769	4.3	30.1	12.3	0.62	1.52	954	3.3	15.2	4.3	0.16	0.53	C22
Gallbladder etc.	1219	2.9	20.7	7.1	0.21	0.72	1426	4.9	22.7	4.9	0.14	0.46	C23-24
Pancreas	1583	3.8	26.9	10.6	0.51	1.20	1342	4.6	21.4	5.7	0.21	0.63	C25
Nose, sinuses etc.	92	0.2	1.6	0.7	0.04	0.08	55	0.2	0.9	0.3	0.02	0.03	C30-31
Larynx	412	1.0	7.0	2.9	0.17	0.38	18	0.1	0.3	0.1	0.00	0.01	C32
Trachea, bronchus and lung	6828	16.5	116.1	42.8	1.71	4.93	2491	8.5	39.7	12.9	0.70	1.50	C33-34
Other thoracic organs	78	0.2	1.3	0.8	0.04	0.08	43	0.1	0.7	0.4	0.03	0.04	C37-38
Bone	50	0.1	0.9	0.7	0.05	0.06	46	0.2	0.7	0.7	0.04	0.05	C40-41
Melanoma of skin	47	0.1	0.8	0.4	0.03	0.04	76	0.3	1.2	0.6	0.04	0.06	C43
Other skin	319		5.4	2.2	0.10	0.24	291		4.6	1.3	0.06	0.12	C44
Mesothelioma	85	0.2	1.4	0.6	0.04	0.07	18	0.1	0.3	0.1	0.01	0.01	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	123	0.3	2.1	1.4	0.08	0.12	79	0.3	1.3	0.9	0.06	0.08	C47+C49
Breast	22	0.1	0.4	0.1	0.01	0.01	4957	17.0	79.1	49.0	4.01	5.19	C50
Vulva					50	0.2	0.8	0.3	0.01	0.03	C51		
Vagina					21	0.1	0.3	0.2	0.01	0.02	C52		
Cervix uteri					748	2.6	11.9	8.6	0.70	0.80	C53		
Corpus uteri					869	3.0	13.9	8.1	0.69	0.91	C54		
Uterus unspecified					49	0.2	0.8	0.2	0.01	0.02	C55		
Ovary					880	3.0	14.0	8.4	0.64	0.86	C56		
Other female genital organs					31	0.1	0.5	0.2	0.02	0.03	C57		
Placenta					5	0.0	0.1	0.1	0.01	0.01	C58		
Penis	30	0.1	0.5	0.2	0.01	0.02							C60
Prostate	3266	7.9	55.6	20.1	0.64	2.59							C61
Testis	138	0.3	2.3	2.2	0.17	0.18							C62
Other male genital organs	15	0.0	0.3	0.1	0.01	0.01							C63
Kidney	598	1.4	10.2	5.0	0.31	0.58	273	0.9	4.4	1.7	0.10	0.19	C64
Renal pelvis	150	0.4	2.6	1.0	0.04	0.11	75	0.3	1.2	0.3	0.01	0.03	C65
Urere	140	0.3	2.4	0.9	0.03	0.10	105	0.4	1.7	0.4	0.01	0.05	C66
†Bladder	1289	3.1	21.9	8.5	0.40	0.92	425	1.5	6.8	1.9	0.09	0.19	C67
Other urinary organs	7	0.0	0.1	0.0	0.00	0.00	4	0.0	0.1	0.0	0.00	0.00	C68
Eye	11	0.0	0.2	0.3	0.01	0.02	11	0.0	0.2	0.3	0.01	0.02	C69
Brain, nervous system	192	0.5	3.3	2.4	0.15	0.21	166	0.6	2.6	1.7	0.11	0.15	C70-72
Thyroid	168	0.4	2.9	1.7	0.13	0.18	530	1.8	8.5	5.3	0.38	0.54	C73
Adrenal gland	15	0.0	0.3	0.2	0.01	0.02	9	0.0	0.1	0.1	0.01	0.01	C74
Other endocrine	11	0.0	0.2	0.3	0.02	0.02	7	0.0	0.1	0.1	0.00	0.01	C75
Hodgkin lymphoma	33	0.1	0.6	0.5	0.03	0.04	22	0.1	0.4	0.3	0.02	0.03	C81
Non-Hodgkin lymphoma	830	2.0	14.1	6.6	0.36	0.71	694	2.4	11.1	4.4	0.25	0.50	C82-85,C96
Immunoproliferative diseases	16	0.0	0.3	0.1	0.00	0.01	7	0.0	0.1	0.0	0.00	0.00	C88
Multiple myeloma	249	0.6	4.2	1.6	0.08	0.18	280	1.0	4.5	1.2	0.06	0.13	C90
Lymphoid leukaemia	113	0.3	1.9	2.3	0.12	0.14	96	0.3	1.5	1.5	0.08	0.11	C91
Myeloid leukaemia	423	1.0	7.2	3.9	0.21	0.37	270	0.9	4.3	2.3	0.12	0.21	C92-94
Leukaemia unspecified	40	0.1	0.7	0.3	0.01	0.03	24	0.1	0.4	0.1	0.01	0.01	C95
Myeloproliferative disorders	10	0.0	0.2	0.1	0.00	0.01	9	0.0	0.1	0.1	0.01	0.01	MPD
Myelodysplastic syndromes	107	0.3	1.8	0.6	0.02	0.06	73	0.3	1.2	0.3	0.02	0.03	MDS
Other and unspecified	480	1.2	8.2	3.1	0.12	0.31	560	1.9	8.9	2.4	0.10	0.20	O&U
All sites	41777		710.6	293.3	14.14	34.73	29482		470.3	193.9	12.39	21.01	C00-96
All sites except C44	41458	100.0	705.2	291.1	14.04	34.49	29191	100.0	465.7	192.6	12.33	20.89	C00-96 exc. C44

† See note following population pyramid

Japan, Osaka Prefecture

REGISTRATION AREA

The Osaka Cancer Registry (OCR) covers Osaka Prefecture in central Japan. The prefecture has the second smallest area (1894 km^2) but the second highest population density (4655 residents/ km^2) of Japan's 47 prefectures. In 2005, the population was 8.8 million (98% Japanese, 1.3% Korean, and 0.3% Chinese). About 26.2% of workers are employed in industry, 70.7% in commerce, and 0.6% in agriculture.

REGISTRY STRUCTURE AND METHODS

The OCR has been operating, in cooperation with the Osaka Prefectural Health and Medical Department (OPHMD), the Osaka Medical Association (OMA), and the Osaka Medical Center for Cancer and Cardiovascular Diseases (OMCCD), since 1962. The central registry is located within the OMCCD's Center for Cancer Control and Statistics. The OMA asks all medical institutions in the prefecture to submit reports when cancer cases are diagnosed, and these reports are transferred monthly from the OMA to the central registry. Data from resident death certificates mentioning cancer are also obtained (through the OPHMD). To evaluate cancer survival in the prefecture, the registry has progressively undertaken active follow-up to determine vital status. High-quality survival data are available for patients diagnosed within the prefecture excluding the capital city of Osaka since 1975, and for all patients diagnosed within the prefecture since 1993. The proportion of cases that are lost to follow-up has been 1–2% at 5 years after diagnosis.

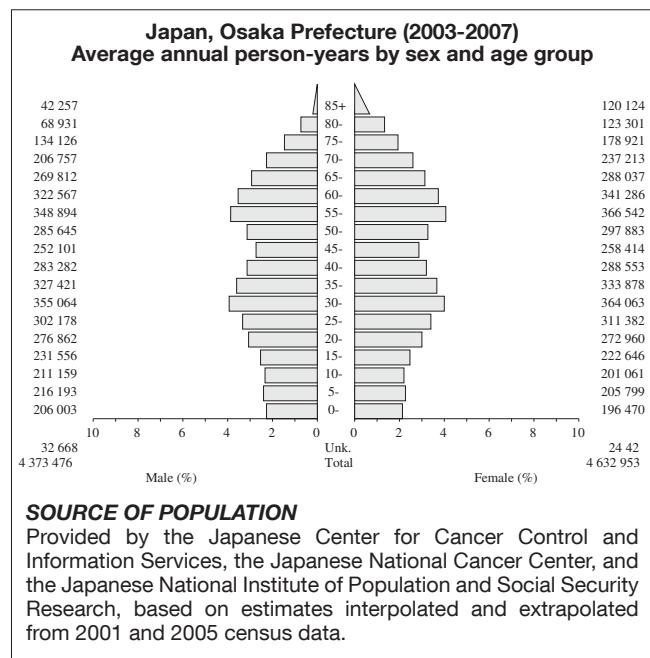
USE OF THE DATA

The registry publishes annual reports on cancer incidence, treatment statistics, and survival. Summary

statistics are also available in English from the OMCCD's website (http://www.mc.pref.osaka.jp/ocr_e/index.html).

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by the Japanese Center for Cancer Control and Information Services, the Japanese National Cancer Center, and the Japanese National Institute of Population and Social Security Research, based on estimates interpolated and extrapolated from 2001 and 2005 census data.

NOTES ON THE DATA

*Low MV%. High M:I ratios.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	45.3	Breast	37.3
Trachea, bronchus and lung	41.6	Stomach	17.3
Liver	25.6	Colon	14.4
Colon	20.5	Trachea, bronchus and lung	13.9
Prostate	16.3	Liver	8.7
Rectum	13.4	Cervix uteri	7.1
Oesophagus	11.3	Rectum	6.5
Pancreas	9.4	Ovary	6.0
Bladder	8.2	Pancreas	5.8
Non-Hodgkin lymphoma	6.4	Corpus uteri	5.4
All sites	244.3	All sites	158.8

*Japan, Osaka Prefecture (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	9	0.0	0.0	0.0	0.00	0.00	19	0.0	0.1	0.0	0.00	0.00	C00
Tongue	699	0.6	3.2	1.7	0.11	0.21	373	0.5	1.6	0.8	0.05	0.08	C01-02
Mouth	598	0.5	2.7	1.4	0.08	0.17	399	0.5	1.7	0.7	0.03	0.07	C03-06
Salivary glands	157	0.1	0.7	0.4	0.02	0.04	125	0.2	0.5	0.3	0.02	0.03	C07-08
Tonsil	67	0.1	0.3	0.2	0.01	0.02	31	0.0	0.1	0.1	0.01	0.01	C09
Other oropharynx	334	0.3	1.5	0.8	0.05	0.10	75	0.1	0.3	0.2	0.01	0.02	C10
Nasopharynx	165	0.2	0.8	0.4	0.03	0.05	60	0.1	0.3	0.1	0.01	0.02	C11
Hypopharynx	743	0.7	3.4	1.7	0.11	0.22	79	0.1	0.3	0.2	0.01	0.02	C12-13
Pharynx unspecified	89	0.1	0.4	0.2	0.01	0.02	13	0.0	0.1	0.0	0.00	0.00	C14
Oesophagus	4963	4.5	22.7	11.3	0.66	1.45	1006	1.3	4.3	1.9	0.11	0.22	C15
Stomach	20763	18.9	94.9	45.3	2.15	5.36	9897	12.7	42.7	17.3	0.90	1.89	C16
Small intestine	303	0.3	1.4	0.7	0.04	0.08	227	0.3	1.0	0.4	0.03	0.05	C17
Colon	9437	8.6	43.2	20.5	0.93	2.38	8442	10.8	36.4	14.4	0.72	1.62	C18
Rectum	5853	5.3	26.8	13.4	0.77	1.69	3337	4.3	14.4	6.5	0.40	0.76	C19-20
Anus	186	0.2	0.9	0.4	0.03	0.05	141	0.2	0.6	0.2	0.01	0.03	C21
Liver	11922	10.9	54.5	25.6	1.12	3.26	5689	7.3	24.6	8.7	0.27	1.06	C22
Gallbladder etc.	2511	2.3	11.5	5.2	0.18	0.56	2668	3.4	11.5	3.8	0.12	0.39	C23-24
Pancreas	4343	4.0	19.9	9.4	0.44	1.10	3698	4.7	16.0	5.8	0.24	0.66	C25
Nose, sinuses etc.	268	0.2	1.2	0.6	0.04	0.07	157	0.2	0.7	0.3	0.01	0.03	C30-31
Larynx	1196	1.1	5.5	2.6	0.14	0.33	97	0.1	0.4	0.2	0.01	0.02	C32
Trachea, bronchus and lung	19929	18.2	91.1	41.6	1.60	4.64	8408	10.8	36.3	13.9	0.64	1.57	C33-34
Other thoracic organs	198	0.2	0.9	0.6	0.04	0.06	126	0.2	0.5	0.3	0.02	0.03	C37-38
Bone	145	0.1	0.7	0.6	0.04	0.05	101	0.1	0.4	0.4	0.02	0.03	C40-41
Melanoma of skin	110	0.1	0.5	0.3	0.02	0.03	117	0.2	0.5	0.3	0.02	0.03	C43
Other skin	781		3.6	1.7	0.07	0.17	680		2.9	1.1	0.05	0.11	C44
Mesothelioma	415	0.4	1.9	0.9	0.04	0.11	129	0.2	0.6	0.2	0.01	0.03	C45
Kaposi sarcoma	4	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	326	0.3	1.5	1.1	0.06	0.10	271	0.3	1.2	0.8	0.05	0.07	C47+C49
Breast	91	0.1	0.4	0.2	0.01	0.02	13918	17.9	60.1	37.3	2.99	3.98	C50
Vulva							164	0.2	0.7	0.3	0.01	0.03	C51
Vagina							75	0.1	0.3	0.1	0.01	0.01	C52
Cervix uteri							2509	3.2	10.8	7.1	0.56	0.70	C53
Corpus uteri							2114	2.7	9.1	5.4	0.44	0.60	C54
Uterus unspecified							520	0.7	2.2	1.0	0.06	0.10	C55
Ovary							2271	2.9	9.8	6.0	0.46	0.62	C56
Other female genital organs							48	0.1	0.2	0.1	0.01	0.01	C57
Placenta							5	0.0	0.0	0.0	0.00	0.00	C58
Penis	83	0.1	0.4	0.2	0.01	0.02							C60
Prostate	8193	7.5	37.5	16.3	0.43	1.93							C61
Testis	313	0.3	1.4	1.3	0.10	0.10							C62
Other male genital organs	64	0.1	0.3	0.1	0.01	0.01							C63
Kidney	1831	1.7	8.4	4.5	0.27	0.52	880	1.1	3.8	1.7	0.09	0.19	C64
Renal pelvis	443	0.4	2.0	0.9	0.04	0.11	178	0.2	0.8	0.3	0.01	0.04	C65
Ureter	337	0.3	1.5	0.7	0.02	0.08	200	0.3	0.9	0.3	0.01	0.03	C66
Bladder	3941	3.6	18.0	8.2	0.33	0.91	1218	1.6	5.3	1.9	0.08	0.20	C67
Other urinary organs	51	0.0	0.2	0.1	0.00	0.01	48	0.1	0.2	0.1	0.00	0.01	C68
Eye	24	0.0	0.1	0.1	0.01	0.01	31	0.0	0.1	0.2	0.01	0.01	C69
Brain, nervous system	695	0.6	3.2	2.4	0.13	0.21	641	0.8	2.8	2.0	0.11	0.16	C70-72
Thyroid	529	0.5	2.4	1.4	0.09	0.15	1518	1.9	6.6	3.8	0.28	0.41	C73
Adrenal gland	81	0.1	0.4	0.5	0.02	0.03	49	0.1	0.2	0.3	0.01	0.02	C74
Other endocrine	47	0.0	0.2	0.3	0.01	0.02	16	0.0	0.1	0.1	0.00	0.01	C75
Hodgkin lymphoma	137	0.1	0.6	0.4	0.03	0.04	75	0.1	0.3	0.3	0.02	0.02	C81
Non-Hodgkin lymphoma	2573	2.3	11.8	6.4	0.32	0.67	2056	2.6	8.9	4.1	0.23	0.44	C82-85,C96
Immunoproliferative diseases	37	0.0	0.2	0.1	0.00	0.01	24	0.0	0.1	0.0	0.00	0.00	C88
Multiple myeloma	597	0.5	2.7	1.3	0.05	0.14	576	0.7	2.5	0.9	0.04	0.11	C90
Lymphoid leukaemia	536	0.5	2.5	2.2	0.12	0.17	447	0.6	1.9	1.9	0.10	0.14	C91
Myeloid leukaemia	1162	1.1	5.3	3.2	0.17	0.33	740	0.9	3.2	2.1	0.12	0.18	C92-94
Leukaemia unspecified	105	0.1	0.5	0.3	0.01	0.02	93	0.1	0.4	0.2	0.01	0.01	C95
Myeloproliferative disorders	50	0.0	0.2	0.1	0.00	0.01	49	0.1	0.2	0.1	0.00	0.01	MPD
Myelodysplastic syndromes	573	0.5	2.6	1.2	0.04	0.12	301	0.4	1.3	0.4	0.01	0.04	MDS
Other and unspecified	1358	1.2	6.2	3.2	0.14	0.31	1453	1.9	6.3	2.2	0.10	0.21	O&U
All sites	110365	504.7	244.3	11.15	28.29		78582	339.2	158.8	9.55	17.14	C00-96	
All sites except C44	109584	100.0	242.6	11.08	28.12		77902	100.0	157.7	9.51	17.03	C00-96 exc. C44	

*See note following population pyramid

Japan, Saga Prefecture

REGISTRATION AREA

The Saga Prefectural Cancer Registry covers Saga Prefecture, which is located in southern Japan and has an area of 2439.65 km².

REGISTRY STRUCTURE AND METHODS

The Saga Cancer Survey was initiated in 1973 by the prefectural government in cooperation with the Saga Medical Association and was redesigned as the population-based Saga Cancer Registry in 1984. The registry has been located within the Saga General Health Association since 1998, and the prefectural government's Health and Welfare Head Office provides financial support. Case finding and data collection are carried out passively. The registry asks all medical institutions to voluntarily submit cancer case reports to the registry. Death certificate information from all local health authorities is transferred from the prefectural government to the registry monthly. Registry staff members also visit major hospitals to collect information on cancer cases. Resident case reports are exchanged between Saga and the neighbouring prefectures of Nagasaki and Fukuoka. Since 1992, all registered cases are coded using a unique automated system. Duplicate entries are identified through automatic linking of patient-related data. Reports of possible multiple primary tumours are carefully reviewed based on tumour site, histological type, and date of diagnosis. In 2011, a national standardized database system for regional cancer registration was established.

INTERPRETING THE RESULTS

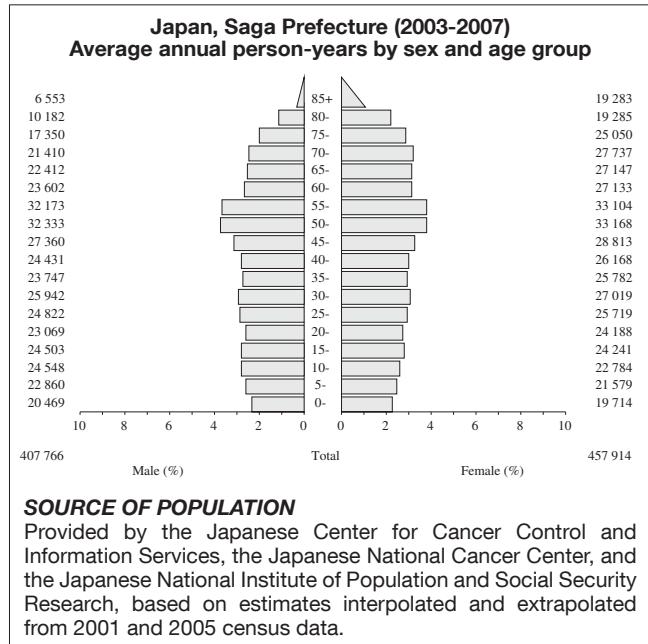
The most striking cancer trend in Saga Prefecture is the extremely high mortality rate associated with liver cancer. Although much effort has been made to improve the accuracy and completeness of the registry's data, complete follow-up and detailed analysis of prognosis have not been performed.

USE OF THE DATA

The registry disseminates information on the nature and extent of the cancer burden in Saga Prefecture and provides statistical support to the prefecture's Cancer Prevention Project. The registry publishes an annual report on cancer incidence and mortality, and registry data have been used in several epidemiological studies.

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by the Japanese Center for Cancer Control and Information Services, the Japanese National Cancer Center, and the Japanese National Institute of Population and Social Security Research, based on estimates interpolated and extrapolated from 2001 and 2005 census data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	51.2	Breast	34.1
Trachea, bronchus and lung	40.7	Stomach	18.9
Liver	32.5	Colon	14.0
Prostate	24.1	Trachea, bronchus and lung	12.6
Colon	22.4	Liver	11.1
Rectum	14.9	Cervix uteri	8.9
Pancreas	10.5	Corpus uteri	6.6
Oesophagus	9.7	Ovary	6.4
Non-Hodgkin lymphoma	8.0	Rectum	6.1
Bladder	6.9	Pancreas	5.7
All sites	275.0	All sites	163.4

Japan, Saga Prefecture (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	2	0.0	0.1	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C00
Tongue	63	0.5	3.1	1.6	0.10	0.19	38	0.4	1.7	0.8	0.06	0.09	C01-02
Mouth	53	0.4	2.6	1.3	0.07	0.14	47	0.5	2.1	0.7	0.04	0.06	C03-06
Salivary glands	18	0.1	0.9	0.4	0.02	0.05	15	0.2	0.7	0.2	0.02	0.02	C07-08
Tonsil	4	0.0	0.2	0.1	0.01	0.02	3	0.0	0.1	0.0	0.00	0.00	C09
Other oropharynx	38	0.3	1.9	1.1	0.08	0.14	6	0.1	0.3	0.1	0.01	0.02	C10
Nasopharynx	20	0.2	1.0	0.6	0.06	0.07	3	0.0	0.1	0.1	0.01	0.01	C11
Hypopharynx	56	0.4	2.7	1.2	0.06	0.16	7	0.1	0.3	0.2	0.01	0.02	C12-13
Pharynx unspecified	5	0.0	0.2	0.1	0.01	0.02	3	0.0	0.1	0.0	0.00	0.00	C14
Oesophagus	433	3.3	21.2	9.7	0.56	1.25	76	0.8	3.3	1.3	0.08	0.13	C15
Stomach	2463	19.0	120.8	51.2	2.38	6.23	1286	13.8	56.2	18.9	1.00	2.14	C16
Small intestine	41	0.3	2.0	1.0	0.07	0.11	26	0.3	1.1	0.4	0.02	0.04	C17
Colon	1091	8.4	53.5	22.4	1.04	2.65	1006	10.8	43.9	14.0	0.73	1.55	C18
Rectum	654	5.0	32.1	14.9	0.85	1.87	394	4.2	17.2	6.1	0.35	0.70	C19-20
Anus	11	0.1	0.5	0.2	0.01	0.02	9	0.1	0.4	0.1	0.00	0.01	C21
Liver	1484	11.4	72.8	32.5	1.69	4.17	881	9.4	38.5	11.1	0.33	1.42	C22
Gallbladder etc.	330	2.5	16.2	5.9	0.17	0.59	470	5.0	20.5	5.1	0.18	0.50	C23-24
Pancreas	513	4.0	25.2	10.5	0.52	1.24	463	5.0	20.2	5.7	0.26	0.60	C25
Nose, sinuses etc.	31	0.2	1.5	0.7	0.04	0.08	19	0.2	0.8	0.4	0.02	0.04	C30-31
Larynx	129	1.0	6.3	2.9	0.14	0.39	4	0.0	0.2	0.1	0.00	0.01	C32
Trachea, bronchus and lung	2182	16.8	107.0	40.7	1.45	4.66	896	9.6	39.1	12.6	0.61	1.46	C33-34
Other thoracic organs	38	0.3	1.9	1.2	0.08	0.11	19	0.2	0.8	0.6	0.05	0.06	C37-38
Bone	12	0.1	0.6	0.4	0.03	0.03	9	0.1	0.4	0.2	0.01	0.02	C40-41
Melanoma of skin	24	0.2	1.2	0.5	0.03	0.04	25	0.3	1.1	0.5	0.03	0.05	C43
Other skin	199		9.8	4.0	0.14	0.38	222		9.7	2.4	0.09	0.21	C44
Mesothelioma	40	0.3	2.0	0.8	0.04	0.09	17	0.2	0.7	0.3	0.02	0.03	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	26	0.2	1.3	0.5	0.03	0.06	25	0.3	1.1	0.7	0.05	0.06	C47+C49
Breast	8	0.1	0.4	0.2	0.01	0.03	1316	14.1	57.5	34.1	2.73	3.72	C50
Vulva							20	0.2	0.9	0.3	0.02	0.04	C51
Vagina							15	0.2	0.7	0.2	0.01	0.03	C52
Cervix uteri							317	3.4	13.8	8.9	0.71	0.85	C53
Corpus uteri							265	2.8	11.6	6.6	0.55	0.77	C54
Uterus unspecified							29	0.3	1.3	0.4	0.02	0.04	C55
Ovary							243	2.6	10.6	6.4	0.51	0.65	C56
Other female genital organs							11	0.1	0.5	0.2	0.01	0.04	C57
Placenta							1	0.0	0.0	0.1	0.00	0.00	C58
Penis	21	0.2	1.0	0.4	0.02	0.03							C60
Prostate	1328	10.2	65.1	24.1	0.61	3.00							C61
Testis	31	0.2	1.5	1.6	0.12	0.12							C62
Other male genital organs	15	0.1	0.7	0.3	0.01	0.04							C63
Kidney	219	1.7	10.7	5.4	0.36	0.64	117	1.3	5.1	1.9	0.09	0.22	C64
Renal pelvis	45	0.3	2.2	0.9	0.03	0.11	26	0.3	1.1	0.3	0.01	0.04	C65
Ureter	54	0.4	2.6	1.0	0.03	0.13	33	0.4	1.4	0.3	0.01	0.04	C66
Bladder	368	2.8	18.0	6.9	0.24	0.73	150	1.6	6.6	1.7	0.05	0.17	C67
Other urinary organs	7	0.1	0.3	0.1	0.01	0.01	11	0.1	0.5	0.1	0.00	0.02	C68
Eye	3	0.0	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C69
Brain, nervous system	76	0.6	3.7	2.4	0.15	0.24	53	0.6	2.3	1.5	0.09	0.13	C70-72
Thyroid	52	0.4	2.6	1.3	0.07	0.14	128	1.4	5.6	2.6	0.18	0.30	C73
Adrenal gland	9	0.1	0.4	0.7	0.04	0.04	4	0.0	0.2	0.4	0.02	0.02	C74
Other endocrine	5	0.0	0.2	0.3	0.02	0.02	2	0.0	0.1	0.0	0.00	0.01	C75
Hodgkin lymphoma	17	0.1	0.8	0.7	0.04	0.07	9	0.1	0.4	0.5	0.03	0.03	C81
Non-Hodgkin lymphoma	342	2.6	16.8	8.0	0.42	0.87	278	3.0	12.1	5.0	0.30	0.52	C82-85,C96
Immunoproliferative diseases	8	0.1	0.4	0.2	0.01	0.02	1	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	92	0.7	4.5	1.8	0.07	0.18	104	1.1	4.5	1.4	0.06	0.16	C90
Lymphoid leukaemia	146	1.1	7.2	4.4	0.26	0.46	100	1.1	4.4	2.8	0.16	0.26	C91
Myeloid leukaemia	148	1.1	7.3	3.8	0.21	0.41	106	1.1	4.6	2.3	0.15	0.23	C92-94
Leukaemia unspecified	4	0.0	0.2	0.1	0.01	0.01	6	0.1	0.3	0.1	0.00	0.01	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	88	0.7	4.3	1.5	0.04	0.15	82	0.9	3.6	1.0	0.03	0.11	MDS
Other and unspecified	122	0.9	6.0	2.4	0.09	0.25	155	1.7	6.8	1.9	0.08	0.20	O&U
All sites	13168		645.9	275.0	12.54	32.50	9552		417.2	163.4	9.80	17.86	C00-96
All sites except C44	12969	100.0	636.1	271.0	12.41	32.12	9330	100.0	407.5	161.1	9.72	17.65	C00-96 exc. C44

Republic of Korea

REGISTRATION AREA

The Korea Central Cancer Registry (KCCR) covers the Republic of Korea in East Asia. In 2005, the population was 4.8 million, with 9.1% aged more than 65 years. The country's population density (493 residents/km²) is one of the highest in the world. Due to rapid urbanization, 90% of the population is classified as urban. Most residents are ethnic Koreans, and the national language is Korean.

CANCER CARE FACILITIES

All residents are covered by the National Health Insurance system, and national cancer control programmes have been in place since 1996. In 2005, 1000 of the country's 1500 teaching hospitals and general hospitals provided specialized cancer diagnostic and therapeutic services, and 2500 of the country's 26 000 private clinics provided general cancer care services.

REGISTRY STRUCTURE AND METHODS

The KCCR began as a hospital-based nationwide cancer registry, initiated by the Ministry of Health and Welfare in 1980. The registry is located within the Division of Cancer Registration and Surveillance at the Republic of Korea's National Cancer Center. There are also 11 population-based regional cancer registries in the country. The KCCR is responsible for collecting and managing nationwide cancer registry data, providing technical and financial support to the regional cancer registries, providing training for cancer registrars, and providing annual nationwide cancer statistics. Incident cancer cases are passively reported to the KCCR by more than 180 voluntarily participating hospitals, and medical records on potential cancer cases identified from the National Health Insurance data are actively reviewed. Vital status is obtained by linking the incidence records with death certificate data. The Cancer Act provides the legal basis for cancer registration. The KCCR is staffed by four full-time faculty members, a physician, a data manager,

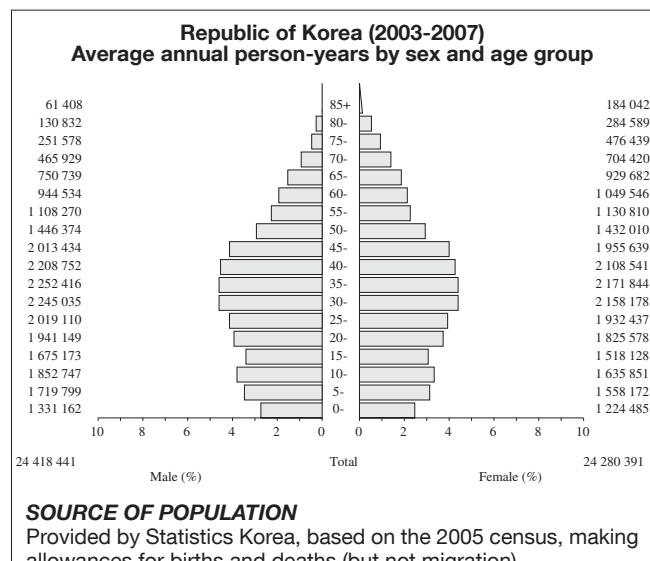
six statisticians, and eight cancer registrars. Financial support is provided by the government.

USE OF THE DATA

The KCCR publishes the *Annual Report of Cancer Statistics in Korea* and contributes to several scientific journal articles on cancer statistics and short-term predictions every year. Statistics tables and aggregated registry data are provided to policy-makers and cancer researchers upon request.

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by Statistics Korea, based on the 2005 census, making allowances for births and deaths (but not migration).

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	64.6	Thyroid	37.4
Trachea, bronchus and lung	49.8	Breast	31.6
Liver	41.3	Stomach	25.4
Colon	21.2	Trachea, bronchus and lung	13.4
Rectum	19.5	Cervix uteri	12.5
Prostate	16.5	Colon	12.4
Bladder	9.6	Liver	11.2
Gallbladder etc.	8.2	Rectum	10.2
Pancreas	8.0	Gallbladder etc.	5.7
Oesophagus	7.4	Ovary	5.4
All sites	306.1	All sites	206.5

Republic of Korea (2003-2007)

SITE	Male						Female						
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	§ No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	ICD-10
Lip	127	0.0	0.1	0.1	0.01	0.01	64	0.0	0.1	0.0	0.00	0.00	C00
Tongue	1422	0.4	1.2	1.1	0.07	0.13	695	0.2	0.6	0.4	0.03	0.05	C01-02
Mouth	1404	0.4	1.1	1.1	0.06	0.14	658	0.2	0.5	0.4	0.02	0.05	C03-06
Salivary glands	905	0.2	0.7	0.7	0.04	0.08	683	0.2	0.6	0.4	0.03	0.04	C07-08
Tonsil	966	0.2	0.8	0.7	0.05	0.09	175	0.1	0.1	0.1	0.01	0.01	C09
Other oropharynx	340	0.1	0.3	0.3	0.02	0.04	40	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	1315	0.3	1.1	0.9	0.07	0.11	466	0.1	0.4	0.3	0.02	0.03	C11
Hypopharynx	1592	0.4	1.3	1.3	0.06	0.17	109	0.0	0.1	0.1	0.00	0.01	C12-13
Pharynx unspecified	139	0.0	0.1	0.1	0.01	0.01	33	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	9203	2.4	7.5	7.4	0.35	0.99	884	0.3	0.7	0.5	0.02	0.05	C15
Stomach	84325	21.7	69.1	64.6	3.64	8.00	42641	13.0	35.1	25.4	1.49	2.95	C16
Small intestine	1379	0.4	1.1	1.0	0.06	0.12	1028	0.3	0.8	0.6	0.04	0.08	C17
Colon	27218	7.0	22.3	21.2	1.13	2.63	20732	6.3	17.1	12.4	0.72	1.49	C18
Rectum	25382	6.5	20.8	19.5	1.14	2.43	16848	5.1	13.9	10.2	0.63	1.23	C19-20
Anus	450	0.1	0.4	0.4	0.02	0.04	482	0.1	0.4	0.3	0.02	0.03	C21
Liver	55652	14.3	45.6	41.3	2.82	4.94	18479	5.6	15.2	11.2	0.67	1.36	C22
Gallbladder etc.	10071	2.6	8.2	8.2	0.34	0.95	10085	3.1	8.3	5.7	0.25	0.67	C23-24
Pancreas	10127	2.6	8.3	8.0	0.39	0.97	8081	2.5	6.7	4.6	0.20	0.55	C25
Nose, sinuses etc.	904	0.2	0.7	0.7	0.04	0.08	560	0.2	0.5	0.3	0.02	0.04	C30-31
Larynx	5113	1.3	4.2	4.1	0.21	0.53	408	0.1	0.3	0.2	0.01	0.03	C32
Trachea, bronchus and lung	61462	15.8	50.3	49.8	1.95	6.19	23322	7.1	19.2	13.4	0.63	1.52	C33-34
Other thoracic organs	1195	0.3	1.0	0.9	0.05	0.10	697	0.2	0.6	0.5	0.03	0.05	C37-38
Bone	1220	0.3	1.0	1.0	0.06	0.08	996	0.3	0.8	0.8	0.05	0.06	C40-41
Melanoma of skin	881	0.2	0.7	0.7	0.04	0.08	872	0.3	0.7	0.5	0.03	0.06	C43
Other skin	4253		3.5	3.4	0.15	0.38	5509		4.5	3.1	0.13	0.33	C44
Mesothelioma	252	0.1	0.2	0.2	0.01	0.02	144	0.0	0.1	0.1	0.01	0.01	C45
Kaposi sarcoma	138	0.0	0.1	0.1	0.00	0.01	33	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	2014	0.5	1.6	1.6	0.09	0.16	1621	0.5	1.3	1.2	0.07	0.11	C47+C49
Breast	250	0.1	0.2	0.2	0.01	0.02	50300	15.3	41.4	31.6	2.70	3.20	C50
Vulva							426	0.1	0.4	0.3	0.01	0.03	C51
Vagina							295	0.1	0.2	0.2	0.01	0.02	C52
Cervix uteri							20234	6.2	16.7	12.5	0.95	1.34	C53
Corpus uteri							6071	1.9	5.0	3.9	0.34	0.42	C54
Uterus unspecified							567	0.2	0.5	0.3	0.02	0.03	C55
Ovary							8243	2.5	6.8	5.4	0.40	0.55	C56
Other female genital organs							262	0.1	0.2	0.2	0.01	0.02	C57
Placenta							271	0.1	0.2	0.2	0.01	0.01	C58
Penis	282	0.1	0.2	0.2	0.01	0.02							C60
Prostate	19678	5.1	16.1	16.5	0.47	2.01							C61
Testis	823	0.2	0.7	0.6	0.04	0.04							C62
Other male genital organs	192	0.0	0.2	0.2	0.01	0.02							C63
Kidney	8154	2.1	6.7	6.1	0.40	0.72	3794	1.2	3.1	2.5	0.16	0.28	C64
Renal pelvis	841	0.2	0.7	0.7	0.03	0.08	331	0.1	0.3	0.2	0.01	0.02	C65
Ureter	866	0.2	0.7	0.7	0.03	0.09	457	0.1	0.4	0.3	0.01	0.03	C66
Bladder	11962	3.1	9.8	9.6	0.42	1.12	3000	0.9	2.5	1.7	0.07	0.19	C67
Other urinary organs	182	0.0	0.1	0.1	0.01	0.02	126	0.0	0.1	0.1	0.00	0.01	C68
Eye	272	0.1	0.2	0.3	0.02	0.02	243	0.1	0.2	0.3	0.01	0.02	C69
Brain, nervous system	4084	1.1	3.3	3.3	0.20	0.31	3673	1.1	3.0	2.7	0.16	0.25	C70-72
Thyroid	9699	2.5	7.9	6.4	0.51	0.66	58098	17.7	47.9	37.4	3.17	3.67	C73
Adrenal gland	351	0.1	0.3	0.4	0.02	0.03	291	0.1	0.2	0.3	0.02	0.02	C74
Other endocrine	287	0.1	0.2	0.3	0.02	0.02	162	0.0	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	597	0.2	0.5	0.5	0.03	0.04	298	0.1	0.2	0.2	0.01	0.02	C81
Non-Hodgkin lymphoma	8645	2.2	7.1	6.6	0.40	0.71	6519	2.0	5.4	4.2	0.28	0.46	C82-85,C96
Immunoproliferative diseases	49	0.0	0.0	0.0	0.00	0.00	7	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	1935	0.5	1.6	1.5	0.08	0.19	1788	0.5	1.5	1.1	0.06	0.15	C90
Lymphoid leukaemia	1604	0.4	1.3	1.7	0.09	0.11	1231	0.4	1.0	1.3	0.07	0.09	C91
Myeloid leukaemia	4111	1.1	3.4	3.2	0.20	0.31	3275	1.0	2.7	2.3	0.16	0.22	C92-94
Leukaemia unspecified	862	0.2	0.7	0.7	0.03	0.07	751	0.2	0.6	0.5	0.02	0.04	C95
Myeloproliferative disorders	1129	0.3	0.9	0.8	0.05	0.10	891	0.3	0.7	0.6	0.04	0.07	MPD
Myelodysplastic syndromes	1368	0.4	1.1	1.1	0.05	0.12	918	0.3	0.8	0.6	0.04	0.07	MDS
Other and unspecified	5014	1.3	4.1	4.1	0.16	0.45	4474	1.4	3.7	2.6	0.11	0.26	O&U
All sites	392686		321.6	306.1	16.16	36.76	333341		274.6	206.5	14.01	22.31	C00-96
All sites except C44	388433	100.0	318.1	302.7	16.01	36.38	327832	100.0	270.0	203.4	13.88	21.98	C00-96 exc. C44

§ Includes 5 cases of unknown age

Republic of Korea, Busan

REGISTRATION AREA

The Busan Cancer Registry (BSCR) covers the metropolitan city of Busan (with an area of 531.2 km²) on the south-eastern tip of the Korean Peninsula. In 2005, the population of Busan was approximately 3.6 million (99.6% ethnic Korean).

CANCER CARE FACILITIES

In 2010, there were about 150 hospitals in Busan: four university hospitals, 20 cancer-reporting general hospitals, and about 120 other small and medium-sized hospitals.

REGISTRY STRUCTURE AND METHODS

The BSCR was established in 1995 in cooperation with the cancer centres of four university hospitals, and is administratively supported by the Busan Metropolitan Government and the city's medical association. The national cancer control programme provides financial support, and the Korea Central Cancer Registry (KCCR) provides technical support. There are 24 hospitals in Busan that report all inpatient cases and some outpatient cases directly to the KCCR, and the KCCR annually sends the BSCR all information on cancer patients with a Busan address at the time of diagnosis. Additional cancer cases from outpatient clinics are identified from the records of hospitals' anatomical pathology, diagnostic radiology, and radiation oncology departments. An additional 120 small and medium-sized hospitals cooperate with the BSCR. Two part-time medical officers visit these hospitals, collect the medical records of newly diagnosed cancer patients, and register the cases. These registrations are then reviewed by other registry personnel.

INTERPRETING THE RESULTS

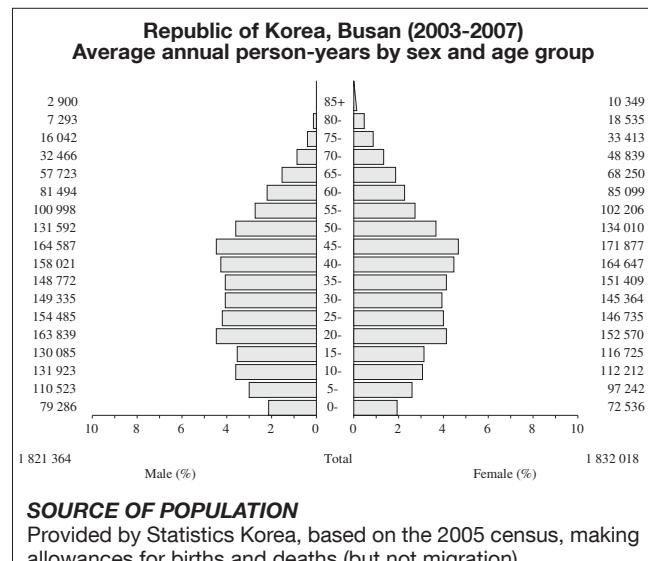
There are organized screening programmes for breast, cervical, colorectal, gastric, and liver cancers.

USE OF THE DATA

The BSCR holds an annual conference to report and discuss cancer registration activities in Busan. The registry also publishes a biennial report that provides basic statistics on cancer incidence that may be helpful for the evaluation of local cancer management programmes.

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by Statistics Korea, based on the 2005 census, making allowances for births and deaths (but not migration).

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	61.9	Breast	30.5
Liver	48.7	Thyroid	26.1
Trachea, bronchus and lung	47.1	Stomach	25.9
Colon	19.4	Cervix uteri	13.3
Rectum	17.3	Liver	13.1
Prostate	15.2	Trachea, bronchus and lung	12.9
Bladder	11.0	Colon	11.5
Gallbladder etc.	9.1	Rectum	9.2
Pancreas	7.8	Gallbladder etc.	7.5
Oesophagus	7.3	Ovary	5.7
All sites	300.1	All sites	195.0

Republic of Korea, Busan (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	4	0.0	0.0	0.0	0.00	0.01	1	0.0	0.0	0.0	0.00	0.00	C00
Tongue	113	0.4	1.2	1.0	0.08	0.12	55	0.2	0.6	0.4	0.03	0.05	C01-02
Mouth	103	0.4	1.1	1.0	0.06	0.12	53	0.2	0.6	0.4	0.03	0.04	C03-06
Salivary glands	58	0.2	0.6	0.6	0.03	0.07	55	0.2	0.6	0.5	0.04	0.04	C07-08
Tonsil	64	0.2	0.7	0.7	0.04	0.07	14	0.1	0.2	0.1	0.01	0.01	C09
Other oropharynx	26	0.1	0.3	0.3	0.02	0.03	5	0.0	0.1	0.0	0.00	0.00	C10
Nasopharynx	100	0.3	1.1	0.9	0.07	0.11	44	0.2	0.5	0.4	0.03	0.04	C11
Hypopharynx	122	0.4	1.3	1.3	0.06	0.16	15	0.1	0.2	0.1	0.01	0.02	C12-13
Pharynx unspecified	15	0.1	0.2	0.2	0.01	0.01	2	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	700	2.4	7.7	7.3	0.34	0.94	78	0.3	0.9	0.6	0.03	0.05	C15
Stomach	6343	21.7	69.7	61.9	3.57	7.54	3332	13.7	36.4	25.9	1.54	2.92	C16
Small intestine	103	0.4	1.1	1.0	0.06	0.11	65	0.3	0.7	0.5	0.03	0.06	C17
Colon	1897	6.5	20.8	19.4	0.97	2.30	1465	6.0	16.0	11.5	0.64	1.35	C18
Rectum	1777	6.1	19.5	17.3	1.02	2.16	1170	4.8	12.8	9.2	0.58	1.08	C19-20
Anus	29	0.1	0.3	0.3	0.02	0.03	31	0.1	0.3	0.2	0.01	0.03	C21
Liver	5176	17.7	56.8	48.7	3.21	5.66	1667	6.9	18.2	13.1	0.71	1.57	C22
Gallbladder etc.	855	2.9	9.4	9.1	0.39	1.11	967	4.0	10.6	7.5	0.31	0.88	C23-24
Pancreas	761	2.6	8.4	7.8	0.37	0.97	575	2.4	6.3	4.4	0.18	0.52	C25
Nose, sinuses etc.	77	0.3	0.8	0.7	0.05	0.07	48	0.2	0.5	0.4	0.02	0.04	C30-31
Larynx	408	1.4	4.5	4.2	0.20	0.56	33	0.1	0.4	0.2	0.01	0.03	C32
Trachea, bronchus and lung	4335	14.8	47.6	47.1	1.82	5.78	1686	7.0	18.4	12.9	0.55	1.40	C33-34
Other thoracic organs	99	0.3	1.1	1.1	0.06	0.11	60	0.2	0.7	0.5	0.03	0.05	C37-38
Bone	88	0.3	1.0	0.9	0.05	0.08	74	0.3	0.8	0.8	0.05	0.06	C40-41
Melanoma of skin	56	0.2	0.6	0.5	0.03	0.06	59	0.2	0.6	0.5	0.03	0.05	C43
Other skin	297		3.3	3.1	0.14	0.35	334		3.6	2.6	0.12	0.26	C44
Mesothelioma	18	0.1	0.2	0.2	0.01	0.02	11	0.0	0.1	0.1	0.01	0.01	C45
Kaposi sarcoma	5	0.0	0.1	0.1	0.00	0.00	2	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	155	0.5	1.7	1.6	0.09	0.15	119	0.5	1.3	1.2	0.08	0.10	C47+C49
Breast	21	0.1	0.2	0.2	0.01	0.02	3953	16.3	43.2	30.5	2.60	3.13	C50
Vulva							24	0.1	0.3	0.2	0.01	0.02	C51
Vagina							15	0.1	0.2	0.1	0.01	0.02	C52
Cervix uteri							1704	7.0	18.6	13.3	0.99	1.43	C53
Corpus uteri							481	2.0	5.3	3.7	0.33	0.40	C54
Uterus unspecified							52	0.2	0.6	0.4	0.03	0.04	C55
Ovary							692	2.9	7.6	5.7	0.40	0.58	C56
Other female genital organs							32	0.1	0.3	0.2	0.02	0.03	C57
Placenta							31	0.1	0.3	0.3	0.02	0.02	C58
Penis	24	0.1	0.3	0.3	0.01	0.02							C60
Prostate	1294	4.4	14.2	15.2	0.39	1.83							C61
Testis	53	0.2	0.6	0.6	0.04	0.04							C62
Other male genital organs	16	0.1	0.2	0.2	0.01	0.02							C63
Kidney	642	2.2	7.0	6.2	0.38	0.74	340	1.4	3.7	2.9	0.17	0.33	C64
Renal pelvis	51	0.2	0.6	0.5	0.03	0.05	34	0.1	0.4	0.3	0.01	0.03	C65
Ureter	84	0.3	0.9	0.9	0.05	0.10	43	0.2	0.5	0.3	0.01	0.04	C66
Bladder	1016	3.5	11.2	11.0	0.44	1.23	251	1.0	2.7	1.9	0.08	0.20	C67
Other urinary organs	23	0.1	0.3	0.2	0.01	0.02	12	0.0	0.1	0.1	0.01	0.01	C68
Eye	16	0.1	0.2	0.3	0.02	0.02	10	0.0	0.1	0.2	0.01	0.01	C69
Brain, nervous system	302	1.0	3.3	3.1	0.20	0.32	277	1.1	3.0	2.6	0.15	0.25	C70-72
Thyroid	476	1.6	5.2	4.2	0.31	0.44	3234	13.3	35.3	26.1	2.17	2.56	C73
Adrenal gland	29	0.1	0.3	0.5	0.03	0.03	22	0.1	0.2	0.3	0.02	0.02	C74
Other endocrine	14	0.0	0.2	0.2	0.01	0.01	11	0.0	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	41	0.1	0.5	0.4	0.03	0.04	22	0.1	0.2	0.2	0.01	0.02	C81
Non-Hodgkin lymphoma	585	2.0	6.4	5.9	0.36	0.59	425	1.8	4.6	3.5	0.25	0.40	C82-85,C96
Immunoproliferative diseases	3	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	124	0.4	1.4	1.3	0.06	0.16	114	0.5	1.2	0.9	0.05	0.12	C90
Lymphoid leukaemia	99	0.3	1.1	1.5	0.08	0.09	92	0.4	1.0	1.5	0.08	0.09	C91
Myeloid leukaemia	289	1.0	3.2	2.9	0.19	0.28	202	0.8	2.2	2.0	0.12	0.18	C92-94
Leukaemia unspecified	46	0.2	0.5	0.6	0.02	0.05	34	0.1	0.4	0.3	0.01	0.03	C95
Myeloproliferative disorders	58	0.2	0.6	0.6	0.03	0.06	49	0.2	0.5	0.4	0.03	0.04	MPD
Myelodysplastic syndromes	94	0.3	1.0	1.0	0.06	0.11	65	0.3	0.7	0.5	0.03	0.06	MDS
Other and unspecified	365	1.2	4.0	4.1	0.16	0.46	328	1.4	3.6	2.5	0.10	0.24	O&U
All sites	29549		324.5	300.1	15.69	35.46	24569		268.2	195.0	12.79	20.99	C00-96
All sites except C44	29252	100.0	321.2	296.9	15.54	35.11	24235	100.0	264.6	192.4	12.67	20.73	C00-96 exc. C44

Republic of Korea, Daegu

REGISTRATION AREA

The Daegu Cancer Registry (DCR) covers the urban, extended metropolitan city of Daegu in the south-east of the Republic of Korea. The city has an area of 885.56 km² and is surrounded by mountains, which provide a well-defined geographical border. The climate is characterized by large temperature differences between summer and winter.

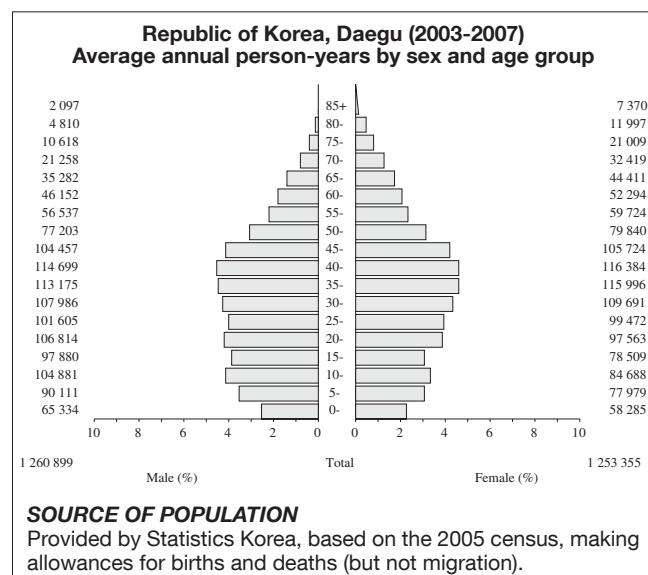
REGISTRY STRUCTURE AND METHODS

The DCR has been registering incident cancer cases since 1997. It is located in the Daegu-Gyeongbuk Regional Cancer Center within Kyungpook National University Hospital and is staffed by two physicians and a medical records technician. The DCR works closely with the Korea Central Cancer Registry (KCCR), which classifies all malignant neoplasms according to ICD-O-3. To improve the completeness of the nationwide data, several information sources are used: national death certification data from Statistics Korea, medical claims data from the National Health Insurance Corporation (NHIC), and additional medical record reviews. The list of KCCR-registered cases and a list of cancer cases from claims made through the NHIC within each region are sent to the regional registries to find missing cases. The regional registries collect data both passively and actively. The KCCR also sends the DCR lists of patients with suspected cancers in non-KCCR-registered Daegu hospitals, and the DCR medical records technician visits each non-registered hospital to identify cancer cases in the medical records. The KCCR collects reports from KCCR-registered hospitals directly and receives data on patients in non-registered hospitals from the DCR.

A database of cancer patients in Daegu is compiled by the KCCR (after checking for duplicates) and sent to the DCR. The DCR then uses these data to determine annual cancer incidence rates in Daegu. The DCR also records vital status when the information is available, for example from medical records, death certificates, or official cancer mortality data.

CONTRIBUTORS

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10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	64.2	Thyroid	47.8
Trachea, bronchus and lung	51.4	Breast	31.7
Liver	43.1	Stomach	27.1
Colon	21.9	Trachea, bronchus and lung	14.1
Rectum	19.5	Cervix uteri	12.5
Prostate	15.0	Colon	12.1
Gallbladder etc.	10.0	Liver	11.2
Bladder	9.2	Rectum	10.7
Pancreas	7.8	Gallbladder etc.	7.2
Oesophagus	7.7	Ovary	5.7
All sites	310.8	All sites	221.1

Republic of Korea, Daegu (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	5	0.0	0.1	0.1	0.00	0.01	5	0.0	0.1	0.1	0.00	0.01	C00
Tongue	64	0.3	1.0	0.9	0.07	0.13	31	0.2	0.5	0.4	0.03	0.05	C01-02
Mouth	74	0.4	1.2	1.2	0.07	0.14	44	0.2	0.7	0.5	0.03	0.05	C03-06
Salivary glands	40	0.2	0.6	0.6	0.03	0.07	19	0.1	0.3	0.2	0.01	0.03	C07-08
Tonsil	45	0.2	0.7	0.7	0.04	0.09	13	0.1	0.2	0.2	0.02	0.02	C09
Other oropharynx	10	0.1	0.2	0.2	0.01	0.02	1	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	52	0.3	0.8	0.7	0.06	0.09	19	0.1	0.3	0.2	0.02	0.03	C11
Hypopharynx	85	0.5	1.3	1.4	0.07	0.19	3	0.0	0.0	0.0	0.01	0.01	C12-13
Pharynx unspecified	8	0.0	0.1	0.2	0.01	0.02	2	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	449	2.4	7.1	7.7	0.38	1.01	47	0.3	0.7	0.6	0.02	0.07	C15
Stomach	4061	21.6	64.4	64.2	3.74	7.91	2212	12.5	35.3	27.1	1.63	3.19	C16
Small intestine	67	0.4	1.1	1.1	0.06	0.12	64	0.4	1.0	0.8	0.06	0.08	C17
Colon	1351	7.2	21.4	21.9	1.22	2.72	995	5.6	15.9	12.1	0.67	1.41	C18
Rectum	1204	6.4	19.1	19.5	1.11	2.43	876	4.9	14.0	10.7	0.61	1.28	C19-20
Anus	24	0.1	0.4	0.4	0.02	0.05	21	0.1	0.3	0.3	0.02	0.03	C21
Liver	2830	15.1	44.9	43.1	2.92	4.92	908	5.1	14.5	11.2	0.62	1.34	C22
Gallbladder etc.	568	3.0	9.0	10.0	0.37	1.15	601	3.4	9.6	7.2	0.30	0.82	C23-24
Pancreas	453	2.4	7.2	7.8	0.40	0.92	378	2.1	6.0	4.6	0.22	0.53	C25
Nose, sinuses etc.	39	0.2	0.6	0.6	0.04	0.07	32	0.2	0.5	0.4	0.02	0.05	C30-31
Larynx	271	1.4	4.3	4.6	0.24	0.61	21	0.1	0.3	0.2	0.01	0.01	C32
Trachea, bronchus and lung	2937	15.6	46.6	51.4	2.03	6.42	1172	6.6	18.7	14.1	0.60	1.54	C33-34
Other thoracic organs	57	0.3	0.9	0.9	0.05	0.09	30	0.2	0.5	0.4	0.03	0.04	C37-38
Bone	69	0.4	1.1	1.1	0.07	0.09	62	0.3	1.0	0.9	0.06	0.07	C40-41
Melanoma of skin	39	0.2	0.6	0.6	0.03	0.08	43	0.2	0.7	0.5	0.03	0.06	C43
Other skin	230		3.6	3.8	0.18	0.41	277		4.4	3.4	0.14	0.38	C44
Mesothelioma	9	0.0	0.1	0.1	0.01	0.02	8	0.0	0.1	0.1	0.01	0.01	C45
Kaposi sarcoma	3	0.0	0.0	0.0	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	106	0.6	1.7	1.7	0.10	0.17	94	0.5	1.5	1.3	0.09	0.13	C47+C49
Breast	19	0.1	0.3	0.3	0.01	0.03	2670	15.0	42.6	31.7	2.67	3.25	C50
Vulva							17	0.1	0.3	0.2	0.01	0.02	C51
Vagina							24	0.1	0.4	0.3	0.02	0.03	C52
Cervix uteri							1037	5.8	16.5	12.5	0.93	1.38	C53
Corpus uteri							254	1.4	4.1	3.1	0.28	0.33	C54
Uterus unspecified							17	0.1	0.3	0.2	0.01	0.02	C55
Ovary							445	2.5	7.1	5.7	0.43	0.57	C56
Other female genital organs							18	0.1	0.3	0.2	0.01	0.02	C57
Placenta							11	0.1	0.2	0.1	0.01	0.01	C58
Penis	11	0.1	0.2	0.2	0.00	0.02							C60
Prostate	795	4.2	12.6	15.0	0.39	1.78							C61
Testis	45	0.2	0.7	0.7	0.05	0.05							C62
Other male genital organs	15	0.1	0.2	0.2	0.02	0.04							C63
Kidney	411	2.2	6.5	6.4	0.42	0.73	219	1.2	3.5	2.8	0.16	0.32	C64
Renal pelvis	40	0.2	0.6	0.7	0.03	0.07	16	0.1	0.3	0.2	0.01	0.02	C65
Ureter	38	0.2	0.6	0.7	0.02	0.10	16	0.1	0.3	0.2	0.01	0.02	C66
Bladder	534	2.8	8.5	9.2	0.38	1.11	141	0.8	2.2	1.7	0.05	0.19	C67
Other urinary organs	7	0.0	0.1	0.1	0.01	0.01	5	0.0	0.1	0.1	0.00	0.01	C68
Eye	13	0.1	0.2	0.3	0.02	0.02	11	0.1	0.2	0.2	0.01	0.02	C69
Brain, nervous system	209	1.1	3.3	3.4	0.20	0.29	168	0.9	2.7	2.3	0.14	0.21	C70-72
Thyroid	481	2.6	7.6	6.5	0.50	0.70	3941	22.2	62.9	47.8	4.05	4.67	C73
Adrenal gland	16	0.1	0.3	0.3	0.02	0.02	14	0.1	0.2	0.4	0.02	0.02	C74
Other endocrine	9	0.0	0.1	0.1	0.01	0.01	4	0.0	0.1	0.0	0.00	0.00	C75
Hodgkin lymphoma	35	0.2	0.6	0.5	0.03	0.05	14	0.1	0.2	0.2	0.02	0.02	C81
Non-Hodgkin lymphoma	427	2.3	6.8	6.8	0.42	0.72	360	2.0	5.7	4.8	0.31	0.51	C82-85,C96
Immunoproliferative diseases	2	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	74	0.4	1.2	1.2	0.06	0.15	79	0.4	1.3	1.0	0.05	0.14	C90
Lymphoid leukaemia	74	0.4	1.2	1.5	0.08	0.10	52	0.3	0.8	1.0	0.05	0.07	C91
Myeloid leukaemia	174	0.9	2.8	2.7	0.16	0.25	159	0.9	2.5	2.2	0.15	0.21	C92-94
Leukaemia unspecified	56	0.3	0.9	1.0	0.05	0.09	31	0.2	0.5	0.5	0.03	0.04	C95
Myeloproliferative disorders	31	0.2	0.5	0.5	0.03	0.05	43	0.2	0.7	0.6	0.04	0.07	MPD
Myelodysplastic syndromes	69	0.4	1.1	1.2	0.05	0.13	44	0.2	0.7	0.6	0.03	0.07	MDS
Other and unspecified	268	1.4	4.3	4.7	0.20	0.53	234	1.3	3.7	2.9	0.13	0.30	O&U
All sites	19003		301.4	310.8	16.51	37.00	18022		287.6	221.1	14.90	23.81	C00-96
All sites except C44	18773	100.0	297.8	307.0	16.33	36.59	17745	100.0	283.2	217.8	14.76	23.44	C00-96 exc. C44

Republic of Korea, Daejeon

REGISTRATION AREA

The Daejeon Cancer Registry (DJCR) covers the metropolitan city of Daejeon in the centre of the Republic of Korea, 167.3 km from Seoul, 294 km from Busan, and 169 km from Gwangju. The city originally developed from farms and houses among the hillsides and valleys of the four mountains that surround Daejeon and along the three streams that run through it. Daejeon has an area of 540 km² and is the fifth largest city in the Republic of Korea, with a population of 1.5 million in 2007.

CANCER CARE FACILITIES

Both the public and private sectors provide cancer-related services in this region. In 2007, secondary and tertiary medical care was provided by nine general hospitals and 20 other hospitals. The DJCR cooperates with six hospitals that also participate in the national registry, and with many hospitals that do not.

REGISTRY STRUCTURE AND METHODS

The DJCR has been in operation since 1998. It is located in the Daejeon Regional Cancer Center within Chungnam National University Hospital and is staffed by a physician and three full-time registrars. The DJCR is responsible for collecting, analysing, and managing Daejeon cancer statistics and for analysing and summarizing data from Daejeon cancer registries. The data sources used to estimate cancer incidence in Daejeon are the DJCR database, the Korea Central Cancer Registry (KCCR) database, additional medical record reviews, and cancer mortality data from Statistics Korea – for identifying death-certificate-only (DCO) cases.

INTERPRETING THE RESULTS

In an effort to improve the quality of the KCCR data, an evaluation of data completeness was conducted for the cases diagnosed during 1999–2007, using the flow method developed by Bullard et al. (2000).

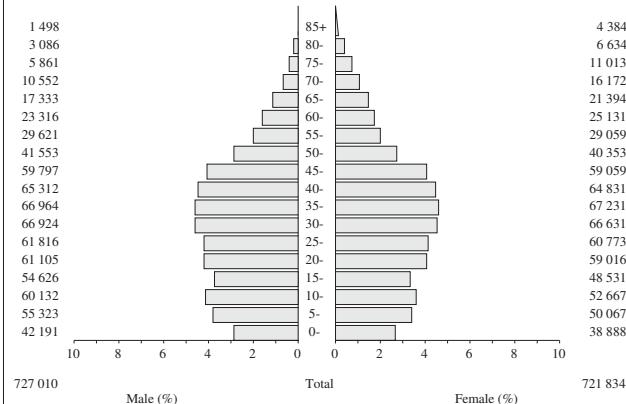
USE OF THE DATA

The registry publishes an annual report on cancer incidence, highlighting trends and changes. Special studies of cancer survival are also carried out using registry data, and registry data are essential for evaluating various cancer control programmes in Daejeon, including the National Cancer Screening Program.

CONTRIBUTORS

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Republic of Korea, Daejeon (2003-2007)
Average annual person-years by sex and age group



SOURCE OF POPULATION

Provided by Statistics Korea, based on the 2005 census, making allowances for births and deaths (but not migration).

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	75.4	Thyroid	53.2
Trachea, bronchus and lung	46.6	Breast	35.4
Liver	35.0	Stomach	27.6
Colon	24.0	Cervix uteri	14.4
Rectum	21.7	Colon	12.9
Prostate	17.8	Trachea, bronchus and lung	12.6
Bladder	9.1	Rectum	11.7
Pancreas	8.1	Liver	10.4
Non-Hodgkin lymphoma	7.1	Gallbladder etc.	5.2
Gallbladder etc.	7.1	Ovary	5.2
All sites	311.8	All sites	230.0

Republic of Korea, Daejeon (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	2	0.0	0.1	0.1	0.00	0.00	2	0.0	0.1	0.0	0.00	0.00	C00
Tongue	38	0.4	1.0	1.0	0.05	0.11	18	0.2	0.5	0.5	0.03	0.04	C01-02
Mouth	31	0.3	0.9	0.9	0.05	0.11	15	0.2	0.4	0.3	0.01	0.04	C03-06
Salivary glands	23	0.2	0.6	0.7	0.04	0.10	20	0.2	0.6	0.5	0.03	0.05	C07-08
Tonsil	18	0.2	0.5	0.5	0.03	0.05	3	0.0	0.1	0.1	0.00	0.01	C09
Other oropharynx	9	0.1	0.2	0.3	0.01	0.04	3	0.0	0.1	0.1	0.00	0.01	C10
Nasopharynx	35	0.3	1.0	0.9	0.07	0.11	7	0.1	0.2	0.1	0.01	0.01	C11
Hypopharynx	27	0.3	0.7	0.9	0.04	0.11	3	0.0	0.1	0.1	0.01	0.01	C12-13
Pharynx unspecified	4	0.0	0.1	0.1	0.01	0.01	2	0.0	0.1	0.0	0.00	0.00	C14
Oesophagus	201	2.0	5.5	6.5	0.30	0.81	29	0.3	0.8	0.7	0.02	0.06	C15
Stomach	2535	25.1	69.7	75.4	4.42	9.34	1188	12.1	32.9	27.6	1.62	3.17	C16
Small intestine	42	0.4	1.2	1.3	0.06	0.19	33	0.3	0.9	0.8	0.05	0.10	C17
Colon	769	7.6	21.2	24.0	1.26	3.06	539	5.5	14.9	12.9	0.75	1.56	C18
Rectum	714	7.1	19.6	21.7	1.32	2.69	487	5.0	13.5	11.7	0.69	1.41	C19-20
Anus	13	0.1	0.4	0.4	0.02	0.05	25	0.3	0.7	0.6	0.04	0.05	C21
Liver	1230	12.2	33.8	35.0	2.28	4.31	421	4.3	11.7	10.4	0.62	1.31	C22
Gallbladder etc.	220	2.2	6.1	7.1	0.30	0.79	219	2.2	6.1	5.2	0.24	0.61	C23-24
Pancreas	251	2.5	6.9	8.1	0.43	0.97	185	1.9	5.1	4.4	0.20	0.51	C25
Nose, sinuses etc.	19	0.2	0.5	0.5	0.05	0.07	9	0.1	0.2	0.2	0.01	0.02	C30-31
Larynx	138	1.4	3.8	4.5	0.22	0.62	7	0.1	0.2	0.2	0.02	0.02	C32
Trachea, bronchus and lung	1416	14.0	39.0	46.6	1.87	5.65	542	5.5	15.0	12.6	0.57	1.40	C33-34
Other thoracic organs	37	0.4	1.0	1.1	0.05	0.13	23	0.2	0.6	0.5	0.04	0.06	C37-38
Bone	32	0.3	0.9	1.0	0.06	0.08	30	0.3	0.8	0.9	0.06	0.08	C40-41
Melanoma of skin	26	0.3	0.7	0.8	0.03	0.07	24	0.2	0.7	0.6	0.04	0.06	C43
Other skin	99	2.7	3.1	3.1	0.16	0.35	124		3.4	2.7	0.09	0.24	C44
Mesothelioma	9	0.1	0.2	0.3	0.01	0.03	6	0.1	0.2	0.2	0.01	0.02	C45
Kaposi sarcoma	3	0.0	0.1	0.1	0.00	0.00	3	0.0	0.1	0.1	0.00	0.01	C46
Connective and soft tissue	53	0.5	1.5	1.5	0.10	0.13	51	0.5	1.4	1.3	0.07	0.12	C47+C49
Breast	4	0.0	0.1	0.1	0.00	0.01	1586	16.2	43.9	35.4	2.97	3.71	C50
Vulva							4	0.0	0.1	0.1	0.01	0.01	C51
Vagina							5	0.1	0.1	0.1	0.01	0.01	C52
Cervix uteri							638	6.5	17.7	14.4	1.10	1.56	C53
Corpus uteri							180	1.8	5.0	4.1	0.34	0.42	C54
Uterus unspecified							13	0.1	0.4	0.3	0.02	0.03	C55
Ovary							216	2.2	6.0	5.2	0.38	0.56	C56
Other female genital organs							7	0.1	0.2	0.2	0.01	0.02	C57
Placenta							7	0.1	0.2	0.1	0.01	0.01	C58
Penis	5	0.0	0.1	0.1	0.02	0.02							C60
Prostate	503	5.0	13.8	17.8	0.48	2.14							C61
Testis	22	0.2	0.6	0.6	0.04	0.04							C62
Other male genital organs	6	0.1	0.2	0.2	0.01	0.02							C63
Kidney	230	2.3	6.3	6.6	0.38	0.86	88	0.9	2.4	2.2	0.15	0.26	C64
Renal pelvis	18	0.2	0.5	0.6	0.04	0.06	11	0.1	0.3	0.3	0.01	0.04	C65
Ureter	24	0.2	0.7	0.8	0.04	0.09	16	0.2	0.4	0.4	0.03	0.05	C66
Bladder	282	2.8	7.8	9.1	0.42	0.98	64	0.7	1.8	1.4	0.04	0.16	C67
Other urinary organs	1	0.0	0.0	0.0	0.00	0.00	7	0.1	0.2	0.2	0.00	0.02	C68
Eye	9	0.1	0.2	0.3	0.02	0.02	3	0.0	0.1	0.1	0.00	0.01	C69
Brain, nervous system	108	1.1	3.0	3.1	0.18	0.30	102	1.0	2.8	2.9	0.16	0.26	C70-72
Thyroid	296	2.9	8.1	6.9	0.55	0.71	2405	24.5	66.6	53.2	4.59	5.17	C73
Adrenal gland	16	0.2	0.4	0.5	0.03	0.04	7	0.1	0.2	0.3	0.01	0.02	C74
Other endocrine	12	0.1	0.3	0.4	0.02	0.03	4	0.0	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	14	0.1	0.4	0.4	0.03	0.03	4	0.0	0.1	0.1	0.01	0.01	C81
Non-Hodgkin lymphoma	250	2.5	6.9	7.1	0.43	0.75	182	1.9	5.0	4.3	0.29	0.46	C82-85,C96
Immunoproliferative diseases	4	0.0	0.1	0.1	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	51	0.5	1.4	1.5	0.09	0.19	52	0.5	1.4	1.3	0.08	0.17	C90
Lymphoid leukaemia	54	0.5	1.5	1.9	0.11	0.12	35	0.4	1.0	1.3	0.08	0.08	C91
Myeloid leukaemia	97	1.0	2.7	2.8	0.17	0.27	105	1.1	2.9	2.6	0.18	0.27	C92-94
Leukaemia unspecified	22	0.2	0.6	0.8	0.02	0.06	14	0.1	0.4	0.3	0.01	0.03	C95
Myeloproliferative disorders	49	0.5	1.3	1.5	0.06	0.18	29	0.3	0.8	0.8	0.05	0.09	MPD
Myelodysplastic syndromes	30	0.3	0.8	0.9	0.04	0.11	18	0.2	0.5	0.4	0.02	0.05	MDS
Other and unspecified	103	1.0	2.8	3.4	0.13	0.37	111	1.1	3.1	2.6	0.12	0.24	O&U
All sites	10204	280.7	311.8	16.54	37.39		9931		275.2	230.0	15.91	24.74	C00-96
All sites except C44	10105	100.0	278.0	308.8	16.38	37.04	9807	100.0	271.7	227.3	15.82	24.51	C00-96 exc. C44

Republic of Korea, Gwangju

REGISTRATION AREA

The Gwangju Cancer Registry covers the metropolitan city of Gwangju near the south-western tip of the Korean Peninsula. The city has a population of 1.4 million and is the economic, educational, and cultural centre of the mainly rural surrounding provinces. There is some manufacturing in the city, including an automobile assembly plant, but the majority of Gwangju's workforce is employed in the service industry.

CANCER CARE FACILITIES

In 2007, the city had five referral hospitals (with facilities for radiotherapy, chemotherapy, and/or cancer surgery) and 70 other hospitals.

REGISTRY STRUCTURE AND METHODS

The registry was established in 1997. It is staffed by a director, part-time medical personnel, and three full-time registrars. The registry has a management committee composed of directors and oncologists from major hospitals and the chief of the city's health department. There is also a practical committee composed of hospital medical record keepers, to handle the practical details of cancer registration. The majority of the case information is linked to the Korea Central Cancer Registry (KCCR), which receives data from teaching hospitals throughout the country. Medical insurance claims data are also used, particularly for cases seen in non-teaching hospitals. Pathology reports, outpatient department reports, and radiation oncology records are also examined for supplemental information. The registrar reviews all information obtained from hospital visits and medical record checks, and the verified cases are then registered. Data obtained from outside sources are reviewed with the collaboration of the Republic of Korea's National Cancer Center and other regional cancer registries in the country. Death certificate data are obtained from Statistics Korea and matched against medical records.

INTERPRETING THE RESULTS

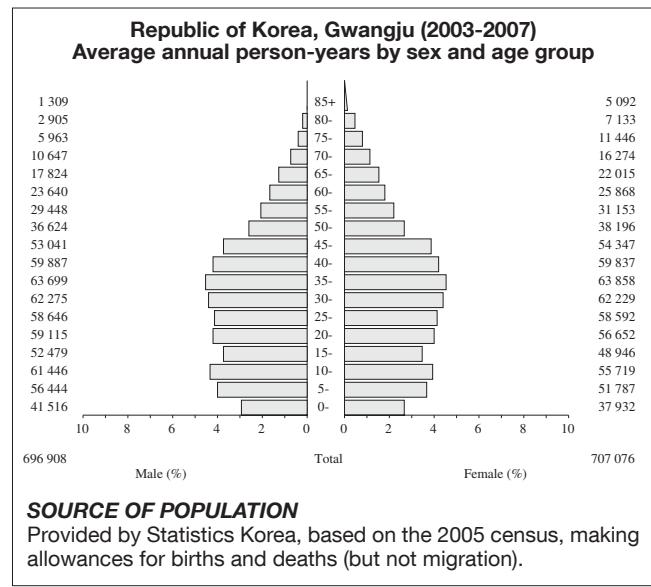
The medical practice of thyroid cancer screening increased during 2003–2007. There were no other changes in any factors that may have influenced incidence rates during the period.

USE OF THE DATA

The registry publishes an annual report on cancer incidence and other statistics, which are recognized as official public data of Gwangju Metropolitan City. The registry also submits an annual report to the municipal government.

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by Statistics Korea, based on the 2005 census, making allowances for births and deaths (but not migration).

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	60.9	Thyroid	70.7
Trachea, bronchus and lung	50.8	Breast	27.9
Liver	46.4	Stomach	27.6
Colon	23.2	Trachea, bronchus and lung	13.5
Rectum	20.9	Colon	12.8
Prostate	20.7	Cervix uteri	12.2
Thyroid	13.2	Liver	11.5
Bladder	12.2	Rectum	10.4
Gallbladder etc.	10.1	Gallbladder etc.	6.2
Pancreas	9.5	Pancreas	5.2
All sites	333.6	All sites	243.4

Republic of Korea, Gwangju (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	5	0.0	0.1	0.1	0.01	0.01	1	0.0	0.0	0.0	0.00	0.00	C00
Tongue	34	0.3	1.0	1.0	0.06	0.12	20	0.2	0.6	0.5	0.03	0.05	C01-02
Mouth	35	0.3	1.0	1.1	0.06	0.15	18	0.2	0.5	0.4	0.02	0.04	C03-06
Salivary glands	34	0.3	1.0	1.1	0.06	0.13	17	0.2	0.5	0.4	0.02	0.04	C07-08
Tonsil	16	0.2	0.5	0.5	0.04	0.05	2	0.0	0.1	0.0	0.00	0.01	C09
Other oropharynx	21	0.2	0.6	0.6	0.05	0.07	2	0.0	0.1	0.1	0.01	0.01	C10
Nasopharynx	48	0.5	1.4	1.3	0.11	0.15	14	0.1	0.4	0.3	0.02	0.03	C11
Hypopharynx	48	0.5	1.4	1.6	0.08	0.21	3	0.0	0.1	0.1	0.00	0.00	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	2	0.0	0.1	0.0	0.00	0.00	C14
Oesophagus	236	2.3	6.8	7.9	0.40	1.02	28	0.3	0.8	0.6	0.02	0.07	C15
Stomach	1968	18.9	56.5	60.9	3.41	7.50	1174	11.6	33.2	27.6	1.62	3.31	C16
Small intestine	32	0.3	0.9	1.1	0.04	0.12	18	0.2	0.5	0.4	0.02	0.04	C17
Colon	728	7.0	20.9	23.2	1.16	3.06	547	5.4	15.5	12.8	0.63	1.57	C18
Rectum	673	6.5	19.3	20.9	1.23	2.70	430	4.2	12.2	10.4	0.59	1.32	C19-20
Anus	10	0.1	0.3	0.3	0.02	0.02	18	0.2	0.5	0.4	0.02	0.04	C21
Liver	1547	14.8	44.4	46.4	3.07	5.73	476	4.7	13.5	11.5	0.70	1.38	C22
Gallbladder etc.	301	2.9	8.6	10.1	0.36	1.14	271	2.7	7.7	6.2	0.28	0.68	C23-24
Pancreas	280	2.7	8.0	9.5	0.38	1.06	225	2.2	6.4	5.2	0.20	0.66	C25
Nose, sinuses etc.	22	0.2	0.6	0.7	0.04	0.08	20	0.2	0.6	0.5	0.04	0.06	C30-31
Larynx	113	1.1	3.2	3.6	0.19	0.46	11	0.1	0.3	0.2	0.00	0.04	C32
Trachea, bronchus and lung	1501	14.4	43.1	50.8	1.97	6.00	591	5.8	16.7	13.5	0.64	1.54	C33-34
Other thoracic organs	39	0.4	1.1	1.2	0.07	0.12	13	0.1	0.4	0.3	0.02	0.02	C37-38
Bone	32	0.3	0.9	1.0	0.05	0.07	20	0.2	0.6	0.5	0.03	0.04	C40-41
Melanoma of skin	23	0.2	0.7	0.7	0.04	0.06	33	0.3	0.9	0.8	0.03	0.09	C43
Other skin	155		4.4	5.1	0.19	0.54	195		5.5	4.4	0.19	0.52	C44
Mesothelioma	3	0.0	0.1	0.1	0.01	0.01	3	0.0	0.1	0.1	0.00	0.02	C45
Kaposi sarcoma	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	43	0.4	1.2	1.2	0.08	0.14	42	0.4	1.2	1.1	0.07	0.10	C47+C49
Breast	7	0.1	0.2	0.2	0.01	0.03	1213	11.9	34.3	27.9	2.34	2.84	C50
Vulva							14	0.1	0.4	0.3	0.01	0.02	C51
Vagina							8	0.1	0.2	0.2	0.01	0.01	C52
Cervix uteri							526	5.2	14.9	12.2	0.92	1.34	C53
Corpus uteri							132	1.3	3.7	3.2	0.28	0.36	C54
Uterus unspecified							14	0.1	0.4	0.3	0.02	0.02	C55
Ovary							190	1.9	5.4	4.5	0.31	0.44	C56
Other female genital organs							6	0.1	0.2	0.2	0.02	0.02	C57
Placenta							7	0.1	0.2	0.1	0.01	0.01	C58
Penis	6	0.1	0.2	0.2	0.01	0.02							C60
Prostate	570	5.5	16.4	20.7	0.53	2.34							C61
Testis	16	0.2	0.5	0.5	0.03	0.03							C62
Other male genital organs	1	0.0	0.0	0.0	0.00	0.00							C63
Kidney	197	1.9	5.7	5.6	0.38	0.66	94	0.9	2.7	2.3	0.16	0.28	C64
Renal pelvis	30	0.3	0.9	1.0	0.06	0.13	5	0.0	0.1	0.1	0.01	0.02	C65
Ureter	20	0.2	0.6	0.7	0.01	0.09	6	0.1	0.2	0.1	0.01	0.02	C66
Bladder	370	3.5	10.6	12.2	0.54	1.37	87	0.9	2.5	1.9	0.07	0.20	C67
Other urinary organs	2	0.0	0.1	0.1	0.00	0.01	3	0.0	0.1	0.1	0.00	0.00	C68
Eye	4	0.0	0.1	0.1	0.01	0.02	6	0.1	0.2	0.3	0.01	0.01	C69
Brain, nervous system	120	1.2	3.4	3.5	0.25	0.33	107	1.1	3.0	3.0	0.20	0.29	C70-72
Thyroid	531	5.1	15.2	13.2	1.08	1.32	3064	30.2	86.7	70.7	6.00	6.98	C73
Adrenal gland	11	0.1	0.3	0.4	0.02	0.02	13	0.1	0.4	0.6	0.03	0.04	C74
Other endocrine	15	0.1	0.4	0.5	0.03	0.04	4	0.0	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	13	0.1	0.4	0.4	0.02	0.04	3	0.0	0.1	0.1	0.01	0.01	C81
Non-Hodgkin lymphoma	235	2.3	6.7	7.0	0.43	0.77	198	1.9	5.6	4.8	0.31	0.54	C82-85,C96
Immunoproliferative diseases	1	0.0	0.0	0.0	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	48	0.5	1.4	1.6	0.07	0.22	66	0.6	1.9	1.6	0.08	0.22	C90
Lymphoid leukaemia	45	0.4	1.3	1.8	0.10	0.12	44	0.4	1.2	1.7	0.09	0.12	C91
Myeloid leukaemia	121	1.2	3.5	3.5	0.24	0.32	98	1.0	2.8	2.7	0.20	0.23	C92-94
Leukaemia unspecified	13	0.1	0.4	0.4	0.02	0.06	17	0.2	0.5	0.5	0.03	0.04	C95
Myeloproliferative disorders	52	0.5	1.5	1.4	0.10	0.16	38	0.4	1.1	0.9	0.06	0.09	MPD
Myelodysplastic syndromes	38	0.4	1.1	1.2	0.05	0.16	37	0.4	1.0	0.9	0.07	0.12	MDS
Other and unspecified	164	1.6	4.7	5.5	0.23	0.67	157	1.5	4.4	3.5	0.16	0.34	O&U
All sites	10578		303.6	333.6	17.40	39.69	10351		292.8	243.4	16.62	26.31	C00-96
All sites except C44	10423	100.0	299.1	328.4	17.21	39.14	10156	100.0	287.3	239.0	16.43	25.79	C00-96 exc. C44

Republic of Korea, Incheon

REGISTRATION AREA

The Incheon Cancer Registry (ICR) covers the metropolitan city of Incheon, which is located on the western coast of the Korean Peninsula, with the sea to the west and metropolitan Seoul to the east. Incheon is the third largest city in the Republic of Korea, with a population of about 2.8 million in 2010 (98.2% ethnic Korean).

CANCER CARE FACILITIES

There are more than 100 medical institutions in Incheon, including three university hospitals offering full cancer diagnostic and treatment services. Two other hospitals have full cancer treatment facilities, 10 provide chemotherapy, three provide radiotherapy, and 49 perform cancer surgery.

REGISTRY STRUCTURE AND METHODS

The ICR was established in 1997 by Inha University in collaboration with the Korea Central Cancer Registry (KCCR). The ICR's primary data source is registry files from the KCCR, which the national registry receives from each of the country's regional cancer registries (including the ICR), allowing the ICR to register resident cases diagnosed within Incheon and outside of Incheon. The second major data source is non-KCCR-registered hospitals in Incheon. Other sources are health insurance documents (such as medical insurance claims) and death records from Statistics Korea. Follow-up information is obtained primarily by passive methods.

INTERPRETING THE RESULTS

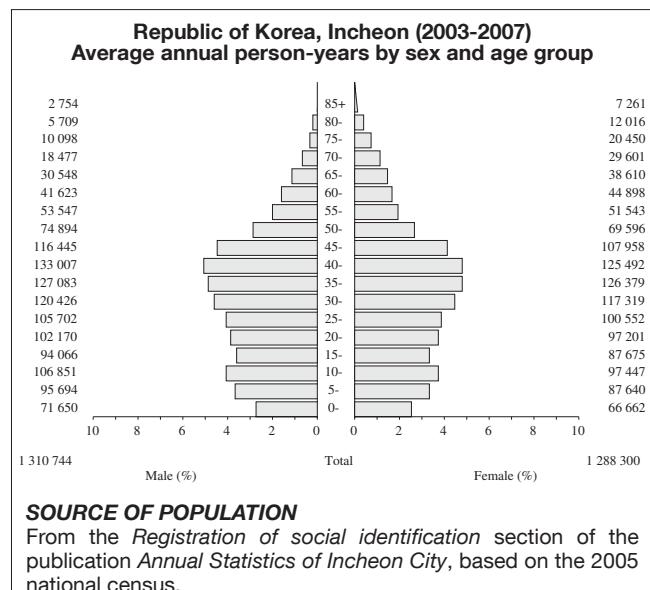
National cancer screening programmes have been established for gastric, liver, cervical, colon, and breast cancers. The incidence rate of cervical cancer has decreased very rapidly, whereas the incidence rates of breast and thyroid cancers have increased.

USE OF THE DATA

The ICR annually reports cancer incidence by site, sex, and age (excluding extent of disease and survival) to the government. Policy-makers use regional cancer registry data, including ICR data, for developing health services and laws.

CONTRIBUTORS

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Moon Hee Lee
Leem Jong Han
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In Suh Park



SOURCE OF POPULATION

From the *Registration of social identification* section of the publication *Annual Statistics of Incheon City*, based on the 2005 national census.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	58.6	Breast	33.5
Trachea, bronchus and lung	45.1	Thyroid	23.2
Liver	33.5	Stomach	21.9
Colon	21.5	Cervix uteri	13.9
Rectum	19.5	Colon	13.2
Prostate	13.6	Trachea, bronchus and lung	12.5
Bladder	10.0	Liver	10.6
Pancreas	8.1	Rectum	10.0
Gallbladder etc.	6.8	Gallbladder etc.	5.9
Non-Hodgkin lymphoma	6.5	Ovary	5.7
All sites	277.2	All sites	190.3

Republic of Korea, Incheon (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	6	0.0	0.1	0.1	0.00	0.01	1	0.0	0.0	0.0	0.00	0.00	C00
Tongue	74	0.5	1.1	1.1	0.09	0.14	34	0.2	0.5	0.4	0.02	0.05	C01-02
Mouth	62	0.4	0.9	1.1	0.05	0.12	20	0.1	0.3	0.3	0.02	0.03	C03-06
Salivary glands	41	0.3	0.6	0.6	0.04	0.07	33	0.2	0.5	0.5	0.03	0.04	C07-08
Tonsil	43	0.3	0.7	0.6	0.05	0.08	7	0.0	0.1	0.1	0.01	0.01	C09
Other oropharynx	9	0.1	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	60	0.4	0.9	0.9	0.06	0.10	23	0.2	0.4	0.3	0.02	0.03	C11
Hypopharynx	56	0.3	0.9	1.0	0.05	0.14	5	0.0	0.1	0.1	0.01	0.01	C12-13
Pharynx unspecified	4	0.0	0.1	0.1	0.00	0.01	3	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	304	1.9	4.6	5.6	0.29	0.73	33	0.2	0.5	0.4	0.02	0.04	C15
Stomach	3563	21.8	54.4	58.6	3.49	7.24	1691	11.7	26.3	21.9	1.32	2.56	C16
Small intestine	65	0.4	1.0	1.0	0.05	0.12	51	0.4	0.8	0.7	0.04	0.08	C17
Colon	1281	7.8	19.5	21.5	1.20	2.64	990	6.8	15.4	13.2	0.82	1.55	C18
Rectum	1178	7.2	18.0	19.5	1.15	2.43	760	5.2	11.8	10.0	0.61	1.21	C19-20
Anus	15	0.1	0.2	0.3	0.02	0.04	23	0.2	0.4	0.3	0.02	0.03	C21
Liver	2251	13.8	34.3	33.5	2.41	3.91	779	5.4	12.1	10.6	0.64	1.30	C22
Gallbladder etc.	378	2.3	5.8	6.8	0.31	0.88	439	3.0	6.8	5.9	0.31	0.72	C23-24
Pancreas	466	2.8	7.1	8.1	0.43	0.94	377	2.6	5.9	5.0	0.23	0.60	C25
Nose, sinuses etc.	41	0.3	0.6	0.6	0.05	0.08	20	0.1	0.3	0.2	0.01	0.04	C30-31
Larynx	227	1.4	3.5	4.1	0.21	0.54	17	0.1	0.3	0.2	0.01	0.03	C32
Trachea, bronchus and lung	2456	15.0	37.5	45.1	1.93	5.69	959	6.6	14.9	12.5	0.60	1.44	C33-34
Other thoracic organs	59	0.4	0.9	1.0	0.05	0.10	40	0.3	0.6	0.6	0.03	0.05	C37-38
Bone	77	0.5	1.2	1.2	0.08	0.11	53	0.4	0.8	0.8	0.05	0.08	C40-41
Melanoma of skin	43	0.3	0.7	0.7	0.04	0.08	40	0.3	0.6	0.6	0.04	0.07	C43
Other skin	191	2.9	3.3	3.3	0.15	0.38	225		3.5	2.9	0.12	0.30	C44
Mesothelioma	20	0.1	0.3	0.3	0.02	0.03	6	0.0	0.1	0.1	0.00	0.01	C45
Kaposi sarcoma	15	0.1	0.2	0.3	0.01	0.02	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	80	0.5	1.2	1.3	0.08	0.13	77	0.5	1.2	1.0	0.07	0.09	C47+C49
Breast	15	0.1	0.2	0.3	0.02	0.03	2773	19.1	43.0	33.5	2.90	3.40	C50
Vulva							18	0.1	0.3	0.2	0.01	0.03	C51
Vagina							12	0.1	0.2	0.2	0.01	0.02	C52
Cervix uteri							1119	7.7	17.4	13.9	1.04	1.47	C53
Corpus uteri							319	2.2	5.0	4.1	0.34	0.44	C54
Uterus unspecified							18	0.1	0.3	0.2	0.01	0.02	C55
Ovary							434	3.0	6.7	5.7	0.43	0.58	C56
Other female genital organs							8	0.1	0.1	0.1	0.01	0.01	C57
Placenta							8	0.1	0.1	0.1	0.01	0.01	C58
Penis	9	0.1	0.1	0.2	0.00	0.02							C60
Prostate	688	4.2	10.5	13.6	0.41	1.69							C61
Testis	38	0.2	0.6	0.5	0.04	0.04							C62
Other male genital organs	7	0.0	0.1	0.1	0.00	0.02							C63
Kidney	371	2.3	5.7	5.6	0.39	0.64	176	1.2	2.7	2.4	0.17	0.28	C64
Renal pelvis	34	0.2	0.5	0.6	0.03	0.07	12	0.1	0.2	0.2	0.01	0.02	C65
Ureter	42	0.3	0.6	0.8	0.03	0.11	14	0.1	0.2	0.2	0.01	0.03	C66
Bladder	555	3.4	8.5	10.0	0.43	1.21	113	0.8	1.8	1.5	0.05	0.18	C67
Other urinary organs	8	0.0	0.1	0.1	0.01	0.02	5	0.0	0.1	0.1	0.00	0.01	C68
Eye	8	0.0	0.1	0.2	0.01	0.01	17	0.1	0.3	0.4	0.02	0.03	C69
Brain, nervous system	209	1.3	3.2	3.2	0.20	0.30	197	1.4	3.1	3.0	0.20	0.28	C70-72
Thyroid	283	1.7	4.3	3.7	0.29	0.37	1857	12.8	28.8	23.2	1.91	2.26	C73
Adrenal gland	13	0.1	0.2	0.3	0.01	0.02	12	0.1	0.2	0.2	0.01	0.02	C74
Other endocrine	15	0.1	0.2	0.2	0.02	0.02	9	0.1	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	24	0.1	0.4	0.4	0.02	0.03	17	0.1	0.3	0.3	0.01	0.02	C81
Non-Hodgkin lymphoma	432	2.6	6.6	6.5	0.43	0.76	313	2.2	4.9	4.3	0.30	0.45	C82-85,C96
Immunoproliferative diseases	3	0.0	0.0	0.1	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	90	0.5	1.4	1.5	0.09	0.20	71	0.5	1.1	1.0	0.05	0.13	C90
Lymphoid leukaemia	88	0.5	1.3	1.7	0.08	0.13	65	0.4	1.0	1.2	0.06	0.09	C91
Myeloid leukaemia	205	1.3	3.1	3.2	0.20	0.33	139	1.0	2.2	2.0	0.13	0.18	C92-94
Leukaemia unspecified	19	0.1	0.3	0.3	0.01	0.03	33	0.2	0.5	0.5	0.01	0.04	C95
Myeloproliferative disorders	66	0.4	1.0	1.0	0.05	0.12	40	0.3	0.6	0.5	0.04	0.06	MPD
Myelodysplastic syndromes	59	0.4	0.9	1.0	0.05	0.12	60	0.4	0.9	0.8	0.04	0.11	MDS
Other and unspecified	215	1.3	3.3	3.8	0.15	0.40	172	1.2	2.7	2.2	0.09	0.23	O&U
All sites	16561	252.7	277.2	15.31	33.47		14737		228.8	190.3	12.95	20.77	C00-96
All sites except C44	16370	100.0	273.9	15.16	33.08		14512	100.0	225.3	187.4	12.83	20.47	C00-96 exc. C44

Republic of Korea, Jejudo

REGISTRATION AREA

The Jejudo Cancer Registry (JCR) covers the population of Jeju Province (also called Jejudo) off the southern tip of the Korean Peninsula. Jeju is the nation's largest island, with a total area of 1848 km². The mean annual temperature is 16 °C, and the mean annual rainfall is about 1158 mm. Jeju is known within the country as the clean island because it has no industrial factories creating pollution.

CANCER CARE FACILITIES

In 2005, the city had two general hospitals and four other hospitals, for a total of 1625 hospital beds. Two traditional medicine hospitals also provide palliative care to cancer patients.

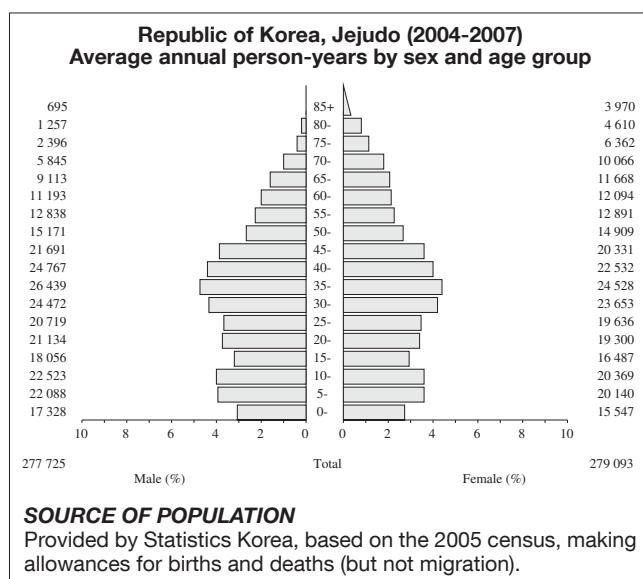
REGISTRY STRUCTURE AND METHODS

The JCR is located in the Jeju Regional Cancer Center. It uses several information sources, and about 87% of the JCR data are registered through the Korea Central Cancer Registry (KCCR), which operates by voluntary reporting from teaching hospitals throughout the country. The second most important information source is active case finding by the registrars, who visit about 81% of potential cancer patients who make insurance claims related to cancer to the National Health Insurance Corporation. Insurance claims data are also a good source for tracking cases notified by death certificate only. The JCR's third most important information source is death certificates, which allow the registry to determine the vital status of previously registered cases and to register death-certificate-only (DCO) cases. Death certificates provided by Statistics Korea cover all deaths occurring in the country and

include the full national resident registration number issued to every citizen at birth. The quality of death certificates in Jeju Province is good; about 98% are medically certified. The use of both health insurance data and mortality data enhances the completeness of registration. The JCR evaluates the validity of its data using the IARC-CHECK program and re-abstracts medical records to correct any errors.

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by Statistics Korea, based on the 2005 census, making allowances for births and deaths (but not migration).

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	57.3	Thyroid	37.1
Liver	51.6	Breast	24.4
Trachea, bronchus and lung	40.3	Stomach	22.6
Colon	20.6	Cervix uteri	15.1
Prostate	17.6	Liver	12.4
Rectum	14.3	Trachea, bronchus and lung	10.6
Gallbladder etc.	10.4	Colon	10.3
Bladder	9.2	Gallbladder etc.	8.5
Pancreas	8.4	Rectum	8.2
Oesophagus	8.3	Ovary	5.3
All sites	301.1	All sites	195.8

Republic of Korea, Jejudo (2004-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	3	0.1	0.3	0.3	0.02	0.02	1	0.0	0.1	0.1	0.00	0.01	C00
Tongue	16	0.5	1.4	1.4	0.09	0.16	12	0.4	1.1	0.8	0.07	0.09	C01-02
Mouth	11	0.3	1.0	0.9	0.06	0.14	7	0.2	0.6	0.4	0.02	0.04	C03-06
Salivary glands	2	0.1	0.2	0.1	0.01	0.01	5	0.2	0.4	0.4	0.02	0.02	C07-08
Tonsil	20	0.6	1.8	1.5	0.09	0.20	3	0.1	0.3	0.2	0.01	0.02	C09
Other oropharynx	4	0.1	0.4	0.3	0.03	0.04	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	15	0.4	1.4	1.1	0.10	0.14	7	0.2	0.6	0.5	0.05	0.06	C11
Hypopharynx	24	0.7	2.2	2.0	0.14	0.26	1	0.0	0.1	0.1	0.01	0.01	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	92	2.6	8.3	8.3	0.38	1.02	7	0.2	0.6	0.4	0.01	0.03	C15
Stomach	681	19.4	61.3	57.3	3.28	6.97	384	13.0	34.4	22.6	1.35	2.54	C16
Small intestine	11	0.3	1.0	0.9	0.04	0.10	3	0.1	0.3	0.1	0.00	0.02	C17
Colon	247	7.0	22.2	20.6	1.22	2.62	172	5.8	15.4	10.3	0.60	1.21	C18
Rectum	174	5.0	15.7	14.3	0.92	1.80	130	4.4	11.6	8.2	0.56	1.01	C19-20
Anus	5	0.1	0.5	0.5	0.00	0.05	4	0.1	0.4	0.3	0.03	0.03	C21
Liver	633	18.1	57.0	51.6	3.60	5.90	208	7.0	18.6	12.4	0.77	1.46	C22
Gallbladder etc.	118	3.4	10.6	10.4	0.47	1.32	166	5.6	14.9	8.5	0.36	0.96	C23-24
Pancreas	97	2.8	8.7	8.4	0.36	0.97	74	2.5	6.6	3.6	0.12	0.41	C25
Nose, sinuses etc.	7	0.2	0.6	0.5	0.03	0.06	4	0.1	0.4	0.2	0.02	0.03	C30-31
Larynx	61	1.7	5.5	5.2	0.34	0.61	2	0.1	0.2	0.1	0.00	0.02	C32
Trachea, bronchus and lung	458	13.1	41.2	40.3	1.50	5.03	187	6.3	16.8	10.6	0.57	1.39	C33-34
Other thoracic organs	12	0.3	1.1	1.1	0.04	0.15	3	0.1	0.3	0.3	0.02	0.02	C37-38
Bone	17	0.5	1.5	1.5	0.09	0.13	18	0.6	1.6	1.3	0.09	0.13	C40-41
Melanoma of skin	8	0.2	0.7	0.6	0.03	0.06	10	0.3	0.9	0.6	0.03	0.09	C43
Other skin	40		3.6	3.6	0.18	0.43	72		6.4	3.6	0.13	0.38	C44
Mesothelioma	4	0.1	0.4	0.3	0.03	0.03	2	0.1	0.2	0.1	0.00	0.01	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	13	0.4	1.2	1.2	0.07	0.11	14	0.5	1.3	1.2	0.08	0.10	C47+C49
Breast	2	0.1	0.2	0.1	0.02	0.02	342	11.6	30.6	24.4	2.07	2.45	C50
Vulva							2	0.1	0.2	0.1	0.01	0.02	C51
Vagina							3	0.1	0.3	0.2	0.01	0.03	C52
Cervix uteri							217	7.3	19.4	15.1	1.26	1.59	C53
Corpus uteri							36	1.2	3.2	2.6	0.23	0.29	C54
Uterus unspecified							11	0.4	1.0	0.8	0.08	0.10	C55
Ovary							76	2.6	6.8	5.3	0.38	0.58	C56
Other female genital organs							1	0.0	0.1	0.1	0.00	0.01	C57
Placenta							8	0.3	0.7	0.6	0.05	0.05	C58
Penis	3	0.1	0.3	0.3	0.00	0.01							C60
Prostate	196	5.6	17.6	17.6	0.39	2.25							C61
Testis	5	0.1	0.5	0.5	0.03	0.03							C62
Other male genital organs	2	0.1	0.2	0.2	0.00	0.01							C63
Kidney	92	2.6	8.3	7.5	0.49	0.85	31	1.0	2.8	2.0	0.12	0.21	C64
Renal pelvis	5	0.1	0.5	0.4	0.03	0.04	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	12	0.3	1.1	1.1	0.07	0.12	4	0.1	0.4	0.2	0.01	0.01	C66
Bladder	102	2.9	9.2	9.2	0.40	0.95	29	1.0	2.6	1.6	0.09	0.20	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	3	0.1	0.3	0.2	0.02	0.02	C68
Eye	1	0.0	0.1	0.1	0.01	0.01	2	0.1	0.2	0.2	0.01	0.01	C69
Brain, nervous system	37	1.1	3.3	3.6	0.21	0.32	42	1.4	3.8	3.2	0.18	0.30	C70-72
Thyroid	96	2.7	8.6	7.2	0.53	0.74	508	17.2	45.5	37.1	3.11	3.74	C73
Adrenal gland	4	0.1	0.4	0.4	0.02	0.04	1	0.0	0.1	0.2	0.01	0.01	C74
Other endocrine	7	0.2	0.6	0.7	0.04	0.04	4	0.1	0.4	0.3	0.02	0.02	C75
Hodgkin lymphoma	7	0.2	0.6	0.5	0.05	0.05	5	0.2	0.4	0.4	0.03	0.03	C81
Non-Hodgkin lymphoma	73	2.1	6.6	6.0	0.41	0.65	70	2.4	6.3	4.8	0.29	0.46	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	18	0.5	1.6	1.5	0.08	0.19	20	0.7	1.8	1.2	0.06	0.15	C90
Lymphoid leukaemia	18	0.5	1.6	1.9	0.10	0.16	14	0.5	1.3	1.7	0.09	0.09	C91
Myeloid leukaemia	36	1.0	3.2	2.8	0.21	0.32	35	1.2	3.1	3.1	0.20	0.26	C92-94
Leukaemia unspecified	7	0.2	0.6	0.8	0.04	0.05	5	0.2	0.4	0.3	0.01	0.02	C95
Myeloproliferative disorders	4	0.1	0.4	0.3	0.03	0.05	4	0.1	0.4	0.3	0.02	0.04	MPD
Myelodysplastic syndromes	5	0.1	0.5	0.4	0.03	0.05	5	0.2	0.4	0.3	0.01	0.03	MDS
Other and unspecified	39	1.1	3.5	3.5	0.18	0.33	52	1.8	4.7	2.6	0.09	0.31	O&U
All sites	3544	319.0	301.1	16.48	35.60		3026	271.1	195.8	13.39	21.14	C00-96	
All sites except C44	3504	100.0	297.6	16.30	35.17		2954	100.0	264.6	192.3	13.25	20.76	C00-96 exc. C44

Republic of Korea, Seoul

REGISTRATION AREA

The Seoul Cancer Registry (SCR) covers the metropolitan city of Seoul, the capital of the Republic of Korea. In 2010, the population was 9.8 million, about 20% of the national population.

CANCER CARE FACILITIES

In 2009, there were 59 general hospitals and 161 other hospitals in Seoul. There were also 7197 clinics and 25 community health centres, but cancer is rarely diagnosed in these facilities. There were 3334 clinics and hospitals practising traditional medicine. More than 90% of cancers occurring in Seoul residents are treated within Seoul.

REGISTRY STRUCTURE AND METHODS

The SCR was established in 1991. It was located in Seoul National University College of Medicine's Department of Preventive Medicine until 2008, when it was moved to the Republic of Korea's National Cancer Center. The SCR uses several information sources, and about 90% of SCR data are registered through the Korea Central Cancer Registry (KCCR), which operates by voluntary reporting from more than 180 hospitals throughout the country. The second most important information source is active medical record reviews performed for potential cases identified from national health insurance data. The third most important information source is death certificates, which allow the registry to determine the vital status of previously registered cases and to register death-certificate-only (DCO) cases. The quality of death certificates in Seoul is good; in 2007, 99.6% were medically certified.

INTERPRETING THE RESULTS

In 1996, the national government initiated its first comprehensive 10-year plan for cancer control. As part of the plan, the National Cancer Screening Program (administered by the Ministry of Health and Welfare) was established in 1999 to provide free screening for

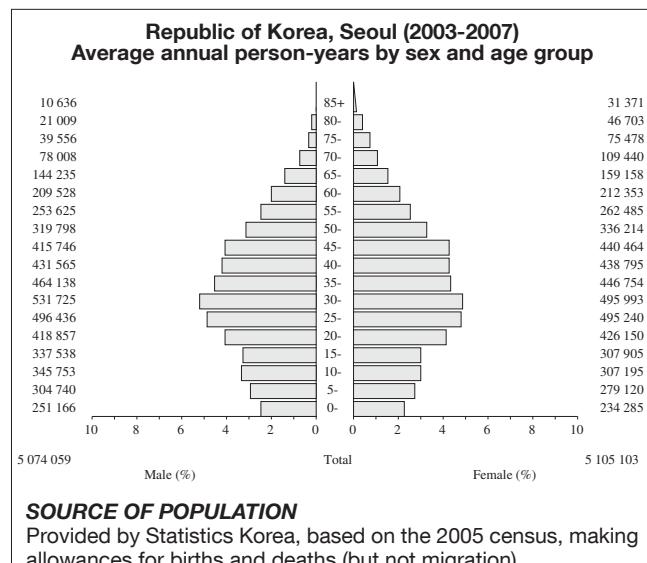
gastric, breast, and cervical cancers. There has been a sharp increase in the incidence of thyroid cancer, but this increase may reflect improved diagnostic techniques rather than a true increase in occurrence.

USE OF THE DATA

SCR data have been used for health services planning and epidemiological research. Incidence tables containing registry data are published annually, as part of the *Annual Report of Cancer Statistics in Korea*.

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by Statistics Korea, based on the 2005 census, making allowances for births and deaths (but not migration).

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	57.3	Thyroid	41.2
Trachea, bronchus and lung	42.7	Breast	37.3
Liver	36.4	Stomach	23.0
Colon	24.8	Colon	14.4
Prostate	22.7	Trachea, bronchus and lung	13.3
Rectum	20.2	Cervix uteri	12.0
Bladder	10.3	Liver	10.6
Pancreas	7.8	Rectum	10.3
Thyroid	7.8	Ovary	6.0
Non-Hodgkin lymphoma	7.5	Gallbladder etc.	5.2
All sites	296.6	All sites	216.0

Republic of Korea, Seoul (2003-2007)

SITE	Male						Female						
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	§ No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	ICD-10
Lip	19	0.0	0.1	0.1	0.00	0.01	8	0.0	0.0	0.0	0.00	0.00	C00
Tongue	306	0.4	1.2	1.1	0.07	0.13	158	0.2	0.6	0.5	0.03	0.06	C01-02
Mouth	260	0.4	1.0	1.0	0.06	0.12	142	0.2	0.6	0.4	0.03	0.05	C03-06
Salivary glands	195	0.3	0.8	0.7	0.05	0.08	161	0.2	0.6	0.5	0.04	0.05	C07-08
Tonsil	250	0.3	1.0	0.9	0.06	0.11	40	0.1	0.2	0.1	0.01	0.01	C09
Other oropharynx	46	0.1	0.2	0.2	0.01	0.03	9	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	283	0.4	1.1	1.0	0.07	0.11	100	0.1	0.4	0.3	0.02	0.03	C11
Hypopharynx	211	0.3	0.8	0.9	0.04	0.11	11	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	13	0.0	0.1	0.0	0.00	0.00	4	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	1321	1.8	5.2	5.5	0.25	0.70	133	0.2	0.5	0.4	0.02	0.04	C15
Stomach	14808	20.0	58.4	57.3	3.18	7.03	7441	10.8	29.2	23.0	1.35	2.60	C16
Small intestine	288	0.4	1.1	1.1	0.06	0.13	190	0.3	0.7	0.6	0.04	0.08	C17
Colon	6209	8.4	24.5	24.8	1.25	3.09	4519	6.6	17.7	14.4	0.80	1.73	C18
Rectum	5290	7.1	20.9	20.2	1.18	2.50	3264	4.7	12.8	10.3	0.65	1.22	C19-20
Anus	106	0.1	0.4	0.4	0.02	0.06	91	0.1	0.4	0.3	0.02	0.04	C21
Liver	10083	13.6	39.7	36.4	2.52	4.30	3300	4.8	12.9	10.6	0.60	1.27	C22
Gallbladder etc.	1638	2.2	6.5	7.0	0.29	0.78	1654	2.4	6.5	5.2	0.22	0.61	C23-24
Pancreas	1919	2.6	7.6	7.8	0.38	0.91	1480	2.1	5.8	4.7	0.19	0.54	C25
Nose, sinuses etc.	166	0.2	0.7	0.6	0.04	0.08	93	0.1	0.4	0.3	0.02	0.04	C30-31
Larynx	894	1.2	3.5	3.6	0.18	0.46	64	0.1	0.3	0.2	0.01	0.03	C32
Trachea, bronchus and lung	10027	13.5	39.5	42.7	1.66	5.11	4247	6.2	16.6	13.3	0.64	1.53	C33-34
Other thoracic organs	249	0.3	1.0	0.9	0.06	0.09	137	0.2	0.5	0.5	0.03	0.04	C37-38
Bone	231	0.3	0.9	0.9	0.06	0.07	210	0.3	0.8	0.8	0.05	0.07	C40-41
Melanoma of skin	168	0.2	0.7	0.6	0.03	0.07	166	0.2	0.7	0.5	0.03	0.06	C43
Other skin	761		3.0	3.2	0.13	0.35	881		3.5	2.7	0.12	0.28	C44
Mesothelioma	50	0.1	0.2	0.2	0.01	0.03	22	0.0	0.1	0.1	0.00	0.01	C45
Kaposi sarcoma	41	0.1	0.2	0.2	0.00	0.01	10	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	453	0.6	1.8	1.8	0.11	0.18	325	0.5	1.3	1.2	0.07	0.11	C47+C49
Breast	54	0.1	0.2	0.2	0.01	0.02	12655	18.4	49.6	37.3	3.17	3.84	C50
Vulva							101	0.1	0.4	0.3	0.02	0.04	C51
Vagina							67	0.1	0.3	0.2	0.01	0.02	C52
Cervix uteri							4023	5.8	15.8	12.0	0.89	1.29	C53
Corpus uteri							1473	2.1	5.8	4.5	0.38	0.49	C54
Uterus unspecified							130	0.2	0.5	0.4	0.03	0.04	C55
Ovary							1888	2.7	7.4	6.0	0.44	0.61	C56
Other female genital organs							55	0.1	0.2	0.2	0.01	0.02	C57
Placenta							53	0.1	0.2	0.1	0.01	0.01	C58
Penis	44	0.1	0.2	0.2	0.01	0.02							C60
Prostate	4974	6.7	19.6	22.7	0.63	2.77							C61
Testis	203	0.3	0.8	0.7	0.05	0.05							C62
Other male genital organs	35	0.0	0.1	0.2	0.01	0.02							C63
Kidney	1894	2.6	7.5	7.1	0.43	0.84	805	1.2	3.2	2.6	0.17	0.29	C64
Renal pelvis	211	0.3	0.8	0.8	0.05	0.11	80	0.1	0.3	0.3	0.01	0.04	C65
Ureter	151	0.2	0.6	0.6	0.03	0.08	94	0.1	0.4	0.3	0.01	0.04	C66
Bladder	2446	3.3	9.6	10.3	0.44	1.20	616	0.9	2.4	2.0	0.09	0.22	C67
Other urinary organs	32	0.0	0.1	0.1	0.00	0.02	29	0.0	0.1	0.1	0.00	0.01	C68
Eye	60	0.1	0.2	0.3	0.02	0.02	60	0.1	0.2	0.3	0.02	0.02	C69
Brain, nervous system	822	1.1	3.2	3.2	0.19	0.30	721	1.0	2.8	2.7	0.16	0.25	C70-72
Thyroid	2465	3.3	9.7	7.8	0.61	0.79	13883	20.2	54.4	41.2	3.49	4.11	C73
Adrenal gland	74	0.1	0.3	0.5	0.02	0.03	57	0.1	0.2	0.4	0.02	0.02	C74
Other endocrine	55	0.1	0.2	0.3	0.02	0.02	39	0.1	0.2	0.1	0.01	0.01	C75
Hodgkin lymphoma	137	0.2	0.5	0.5	0.03	0.05	75	0.1	0.3	0.3	0.02	0.02	C81
Non-Hodgkin lymphoma	1931	2.6	7.6	7.5	0.43	0.83	1408	2.0	5.5	4.6	0.30	0.48	C82-85,C96
Immunoproliferative diseases	10	0.0	0.0	0.0	0.00	0.01	2	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	435	0.6	1.7	1.8	0.08	0.21	361	0.5	1.4	1.2	0.06	0.15	C90
Lymphoid leukaemia	337	0.5	1.3	1.7	0.09	0.11	246	0.4	1.0	1.3	0.07	0.09	C91
Myeloid leukaemia	849	1.1	3.3	3.3	0.19	0.32	673	1.0	2.6	2.3	0.15	0.22	C92-94
Leukaemia unspecified	167	0.2	0.7	0.7	0.03	0.07	152	0.2	0.6	0.6	0.02	0.06	C95
Myeloproliferative disorders	247	0.3	1.0	0.9	0.06	0.11	197	0.3	0.8	0.7	0.04	0.08	MPD
Myelodysplastic syndromes	242	0.3	1.0	1.0	0.05	0.11	159	0.2	0.6	0.5	0.03	0.06	MDS
Other and unspecified	747	1.0	2.9	3.1	0.14	0.35	783	1.1	3.1	2.5	0.11	0.24	O&U
All sites	74907	295.3	296.6	15.39	35.12		69745	273.2	216.0	14.74	23.31	C00-96	
All sites except C44	74146	100.0	292.3	293.4	15.26	34.78	68864	100.0	269.8	213.2	14.63	23.02	C00-96 exc. C44

\$Includes 1 case of unknown age

Republic of Korea, Ulsan

REGISTRATION AREA

The Ulsan Cancer Registry (UCR) covers the metropolitan city of Ulsan, a port city in the south-east of the Republic of Korea. In 2009, the population was 1.1 million, with about 83% of residents living in urban areas. The mean annual temperature is 14 °C, and the mean annual rainfall is 1161 mm. Ulsan has rapidly become an industrialized city and accounts for 15.6% of the country's manufacturing industry.

CANCER CARE FACILITIES

All residents are covered by the National Health Insurance Plan. In 2010, Ulsan had 1510 private clinics and 78 hospitals: one university general hospital, three other general hospitals, 67 smaller hospitals, four dental hospitals, and three traditional medicine hospitals. The university hospital provides cancer surgery, chemotherapy, and radiotherapy services.

REGISTRY STRUCTURE AND METHODS

The UCR is located in Ulsan University Hospital's Department of Occupational and Environmental Medicine and is staffed by three part-time physicians and one full-time registrar. Approximately 79% of UCR data are registered through the Korea Central Cancer Registry (KCCR), which identifies incident cancer cases through a nationwide hospital-based cancer registration system that covers all general hospitals in the country. The second most important information source is medical claims data from the National Health Insurance Corporation. The third most important information source is death certificates (from Statistics Korea), which cover all deaths that occur in the Republic of Korea and include the full national resident registration number (RRN) issued to every citizen at birth. The RRN is also helpful for tracking cases notified by death certificate only. Several additional data sources, such as records from pathology laboratories and radiotherapy departments, also help the registry to identify unregistered cases. The UCR evaluates the

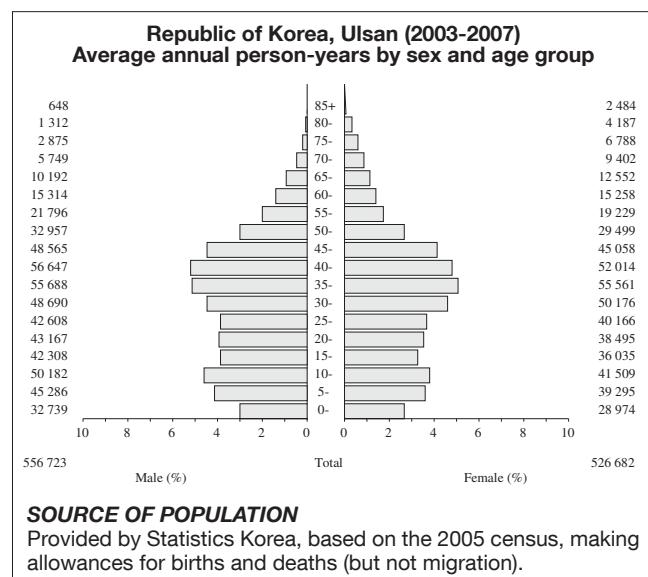
validity of its data using the IARC-CHECK program and re-abstracts medical records to correct any errors.

USE OF THE DATA

The UCR publishes an annual report on cancer incidence and mortality in Ulsan. Registry data have been used in several epidemiological studies on primary, secondary, and tertiary cancer prevention.

CONTRIBUTORS

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10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Stomach	69.2	Thyroid	40.9
Trachea, bronchus and lung	56.2	Breast	29.0
Liver	42.2	Stomach	28.6
Colon	20.4	Trachea, bronchus and lung	14.1
Rectum	17.8	Colon	13.3
Prostate	15.1	Liver	12.3
Bladder	10.8	Cervix uteri	11.0
Gallbladder etc.	9.9	Rectum	10.8
Pancreas	8.4	Gallbladder etc.	6.3
Oesophagus	7.8	Pancreas	5.6
All sites	318.5	All sites	214.9

Republic of Korea, Ulsan (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	1	0.0	0.0	0.1	0.01	0.01	2	0.0	0.1	0.1	0.01	0.01	C00
Tongue	22	0.3	0.8	0.9	0.06	0.06	11	0.2	0.4	0.3	0.02	0.05	C01-02
Mouth	24	0.4	0.9	1.1	0.08	0.14	6	0.1	0.2	0.2	0.01	0.02	C03-06
Salivary glands	15	0.2	0.5	0.7	0.03	0.06	12	0.2	0.5	0.4	0.03	0.03	C07-08
Tonsil	13	0.2	0.5	0.6	0.04	0.09	7	0.1	0.3	0.2	0.02	0.02	C09
Other oropharynx	6	0.1	0.2	0.3	0.02	0.03	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	30	0.4	1.1	1.0	0.08	0.10	10	0.2	0.4	0.3	0.03	0.04	C11
Hypopharynx	16	0.2	0.6	0.8	0.05	0.11	1	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	3	0.0	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	141	2.1	5.1	7.8	0.31	1.00	16	0.3	0.6	0.6	0.04	0.08	C15
Stomach	1570	23.1	56.4	69.2	4.05	8.43	827	13.2	31.4	28.6	1.86	3.21	C16
Small intestine	17	0.2	0.6	0.6	0.05	0.07	18	0.3	0.7	0.7	0.04	0.08	C17
Colon	459	6.7	16.5	20.4	1.22	2.60	362	5.8	13.7	13.3	0.78	1.50	C18
Rectum	406	6.0	14.6	17.8	1.09	2.38	291	4.7	11.1	10.8	0.70	1.29	C19-20
Anus	9	0.1	0.3	0.4	0.01	0.06	5	0.1	0.2	0.2	0.01	0.01	C21
Liver	1007	14.8	36.2	42.2	2.85	5.06	324	5.2	12.3	12.3	0.78	1.49	C22
Gallbladder etc.	191	2.8	6.9	9.9	0.39	1.25	172	2.8	6.5	6.3	0.24	0.70	C23-24
Pancreas	159	2.3	5.7	8.4	0.32	1.07	146	2.3	5.5	5.6	0.27	0.64	C25
Nose, sinuses etc.	16	0.2	0.6	0.7	0.05	0.08	15	0.2	0.6	0.6	0.03	0.08	C30-31
Larynx	94	1.4	3.4	4.9	0.24	0.59	8	0.1	0.3	0.3	0.00	0.03	C32
Trachea, bronchus and lung	1019	15.0	36.6	56.2	2.04	7.04	392	6.3	14.9	14.1	0.64	1.59	C33-34
Other thoracic organs	26	0.4	0.9	1.0	0.07	0.11	14	0.2	0.5	0.4	0.04	0.05	C37-38
Bone	19	0.3	0.7	0.6	0.04	0.06	29	0.5	1.1	1.1	0.08	0.09	C40-41
Melanoma of skin	13	0.2	0.5	0.7	0.02	0.06	17	0.3	0.6	0.6	0.03	0.06	C43
Other skin	66		2.4	3.5	0.13	0.36	95		3.6	3.5	0.13	0.35	C44
Mesothelioma	7	0.1	0.3	0.3	0.03	0.03	3	0.0	0.1	0.1	0.01	0.01	C45
Kaposi sarcoma	1	0.0	0.0	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	30	0.4	1.1	1.3	0.07	0.16	19	0.3	0.7	0.7	0.04	0.07	C47+C49
Breast	6	0.1	0.2	0.3	0.01	0.05	974	15.6	37.0	29.0	2.50	2.91	C50
Vulva							8	0.1	0.3	0.3	0.02	0.03	C51
Vagina							10	0.2	0.4	0.4	0.02	0.06	C52
Cervix uteri							343	5.5	13.0	11.0	0.88	1.22	C53
Corpus uteri							118	1.9	4.5	4.0	0.36	0.44	C54
Uterus unspecified							13	0.2	0.5	0.4	0.03	0.03	C55
Ovary							146	2.3	5.5	5.1	0.41	0.51	C56
Other female genital organs							2	0.0	0.1	0.1	0.00	0.01	C57
Placenta							5	0.1	0.2	0.1	0.01	0.01	C58
Penis	8	0.1	0.3	0.4	0.02	0.08							C60
Prostate	247	3.6	8.9	15.1	0.42	1.76							C61
Testis	20	0.3	0.7	0.6	0.04	0.04							C62
Other male genital organs	3	0.0	0.1	0.2	0.00	0.01							C63
Kidney	179	2.6	6.4	6.8	0.50	0.81	68	1.1	2.6	2.4	0.14	0.30	C64
Renal pelvis	15	0.2	0.5	0.7	0.05	0.06	2	0.0	0.1	0.1	0.00	0.01	C65
Ureter	16	0.2	0.6	0.9	0.03	0.11	8	0.1	0.3	0.3	0.02	0.02	C66
Bladder	212	3.1	7.6	10.8	0.46	1.21	52	0.8	2.0	1.9	0.10	0.21	C67
Other urinary organs	2	0.0	0.1	0.1	0.01	0.02	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	5	0.1	0.2	0.4	0.02	0.02	4	0.1	0.2	0.2	0.01	0.01	C69
Brain, nervous system	85	1.2	3.1	3.6	0.19	0.39	87	1.4	3.3	3.2	0.18	0.28	C70-72
Thyroid	233	3.4	8.4	7.5	0.60	0.79	1321	21.2	50.2	40.9	3.47	4.09	C73
Adrenal gland	3	0.0	0.1	0.2	0.01	0.01	6	0.1	0.2	0.3	0.02	0.02	C74
Other endocrine	6	0.1	0.2	0.2	0.01	0.01	7	0.1	0.3	0.2	0.01	0.02	C75
Hodgkin lymphoma	10	0.1	0.4	0.4	0.03	0.06	6	0.1	0.2	0.2	0.02	0.03	C81
Non-Hodgkin lymphoma	163	2.4	5.9	5.9	0.40	0.64	115	1.8	4.4	4.0	0.27	0.46	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	35	0.5	1.3	1.6	0.09	0.21	28	0.4	1.1	1.1	0.06	0.13	C90
Lymphoid leukaemia	41	0.6	1.5	2.0	0.10	0.14	32	0.5	1.2	1.6	0.08	0.12	C91
Myeloid leukaemia	78	1.1	2.8	2.9	0.18	0.23	71	1.1	2.7	2.5	0.17	0.25	C92-94
Leukaemia unspecified	12	0.2	0.4	0.6	0.03	0.06	6	0.1	0.2	0.2	0.01	0.02	C95
Myeloproliferative disorders	19	0.3	0.7	0.7	0.05	0.06	13	0.2	0.5	0.4	0.02	0.04	MPD
Myelodysplastic syndromes	17	0.2	0.6	0.8	0.05	0.09	24	0.4	0.9	0.9	0.06	0.09	MDS
Other and unspecified	78	1.1	2.8	4.2	0.19	0.52	66	1.1	2.5	2.5	0.11	0.23	O&U
All sites	6873	246.9	318.5	16.85	38.38		6337		240.6	214.9	14.81	23.04	C00-96
All sites except C44	6807	100.0	315.0	16.72	38.02		6242	100.0	237.0	211.4	14.69	22.69	C00-96 exc. C44

Kuwait

REGISTRATION AREA

The Kuwait Cancer Registry (KCR) covers the entire country of Kuwait. In 2011, the population was 3.6 million: 32% Kuwaiti nationals and 68% non-Kuwaitis (expatriates). The expatriates living in Kuwait are a heterogeneous and transitory group; most are from either south-eastern Asia (38%) or Arab countries (28%). The population of Kuwait is relatively young; about 50% of Kuwaiti and 25% of non-Kuwaiti residents are aged less than 20 years.

CANCER CARE FACILITIES

Kuwait is divided into five health districts: Capital, Hawalli, Farwaniya, Ahmadi, and Al-Jahra. Each district has several primary/family health care clinics and a public general hospital. There are also several centralized specialist hospitals in the country, including the Kuwait Cancer Control Center (KCCC), which is Kuwait's only oncology centre.

REGISTRY STRUCTURE AND METHODS

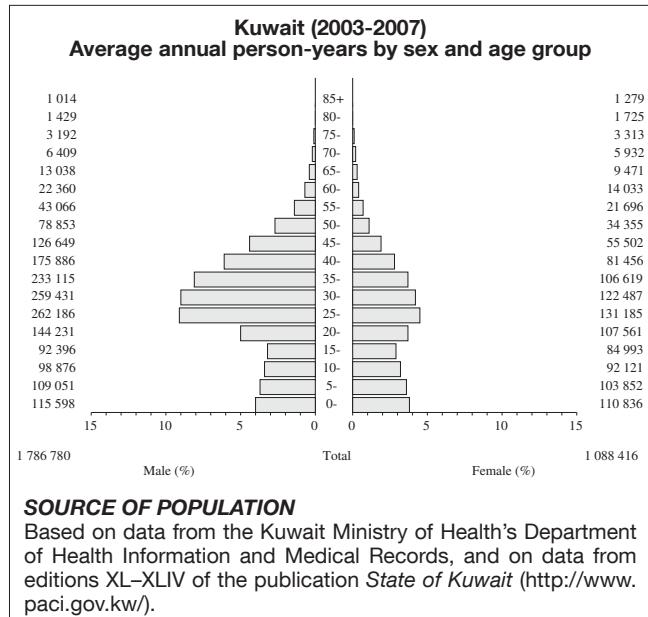
The registry was established at Al-Sabah Hospital in 1971 to study the incidence and morphology of cancers among the Kuwaiti population. The registry later became a unit of the KCCC, which was established in 1982. Cancer notification is mandated by ministerial regulations. Cancer registration is comprehensive because almost all resident cases not initially diagnosed or treated at the KCCC (including those initially treated at other hospitals or abroad) are ultimately referred to the KCCC for further treatment or follow-up. The registry's information sources are case notes and reports from the pathology departments of the KCCC and other hospitals. Mortality data are obtained from the Health and Vital Statistics Division of the Kuwait Ministry of Health. All coding and data entry is carried out by registry employees. The registry is staffed by a consultant cancer epidemiologist, an administrator, three cancer registrars, and a secretary.

USE OF THE DATA

The registry publishes an annual report on cancer incidence, highlighting trends and changes. Registry data are used for research and for the planning and evaluation of cancer care facilities.

CONTRIBUTORS

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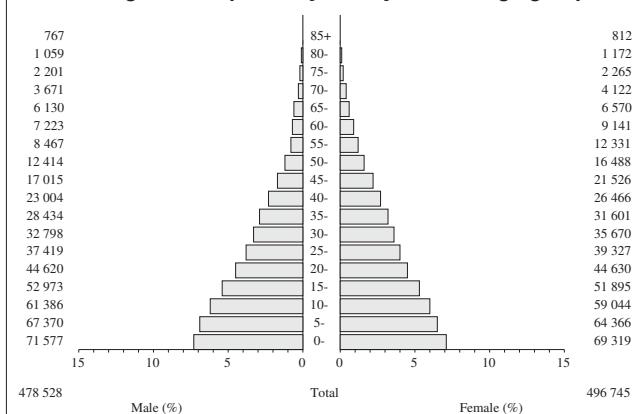
SOURCE OF POPULATION

Based on data from the Kuwait Ministry of Health's Department of Health Information and Medical Records, and on data from editions XL–XLIV of the publication *State of Kuwait* (<http://www.paci.gov.kw/>).

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Prostate	13.3	Breast	46.0
Trachea, bronchus and lung	11.1	Colon	7.9
Non-Hodgkin lymphoma	7.1	Corpus uteri	7.0
Bladder	7.0	Thyroid	6.2
Colon	6.9	Non-Hodgkin lymphoma	5.8
Liver	5.6	Ovary	5.1
Rectum	3.6	Trachea, bronchus and lung	4.7
Lymphoid leukaemia	3.6	Cervix uteri	4.6
Other and unspecified	3.3	Rectum	4.1
Myeloid leukaemia	3.3	Other and unspecified	3.9
All sites	94.1	All sites	129.4

Kuwait: Kuwaitis (2003-2007)
Average annual person-years by sex and age group

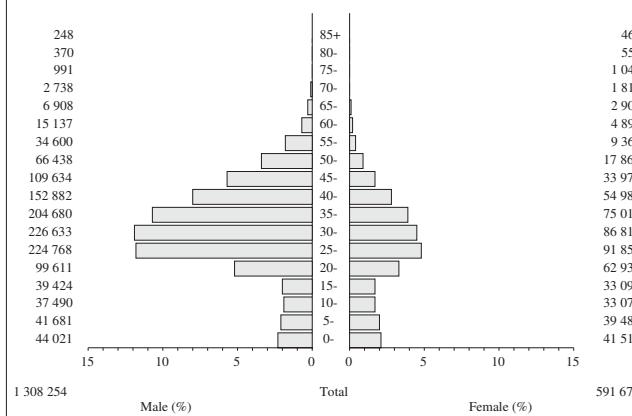


KUWAIT: KUWAITIS
10 MAJOR CANCERS, ASR (WORLD) PER 100 000

	Male	Female	
Prostate	14.9	Breast	50.1
Trachea, bronchus and lung	13.8	Colon	9.2
Colon	11.2	Thyroid	9.0
Non-Hodgkin lymphoma	10.9	Corpus uteri	7.8
Bladder	7.7	Non-Hodgkin lymphoma	5.9
Liver	6.0	Trachea, bronchus and lung	4.9
Rectum	5.0	Ovary	4.5
Myeloid leukaemia	4.4	Rectum	4.5
Other and unspecified	4.3	Cervix uteri	4.0
Stomach	4.2	Other and unspecified	3.8
All sites	123.6	All sites	137.7

NOTES ON THE DATA: *No official mortality data.

Kuwait: Non-Kuwaitis (2003-2007)
Average annual person-years by sex and age group



KUWAIT: NON-KUWAITIS
10 MAJOR CANCERS, ASR (WORLD) PER 100 000

	Male	Female	
Prostate	12.5	Breast	44.7
Trachea, bronchus and lung	8.8	Colon	7.2
Bladder	7.9	Ovary	6.3
Non-Hodgkin lymphoma	5.8	Non-Hodgkin lymphoma	6.2
Colon	5.3	Corpus uteri	6.0
Liver	5.2	Cervix uteri	5.0
Pancreas	3.4	Thyroid	4.4
Lymphoid leukaemia	3.3	Other and unspecified	4.3
Myeloid leukaemia	3.0	Trachea, bronchus and lung	4.2
Rectum	3.0	Rectum	3.9
All sites	83.2	All sites	129.2

NOTES ON THE DATA: *No official mortality data.

Kuwait (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	4	0.1	0.0	0.1	0.00	0.01	3	0.1	0.1	0.1	0.00	0.00	C00
Tongue	30	0.8	0.3	0.6	0.03	0.07	15	0.4	0.3	0.5	0.03	0.08	C01-02
Mouth	17	0.5	0.2	0.3	0.02	0.03	14	0.4	0.3	0.7	0.03	0.09	C03-06
Salivary glands	17	0.5	0.2	0.5	0.02	0.05	9	0.2	0.2	0.2	0.02	0.02	C07-08
Tonsil	4	0.1	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	52	1.4	0.6	0.7	0.05	0.08	27	0.7	0.5	0.8	0.04	0.12	C11
Hypopharynx	8	0.2	0.1	0.1	0.01	0.01	2	0.1	0.0	0.1	0.00	0.01	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	26	0.7	0.3	1.0	0.02	0.07	15	0.4	0.3	0.8	0.03	0.13	C15
Stomach	109	3.0	1.2	3.0	0.15	0.26	44	1.1	0.8	1.6	0.09	0.21	C16
Small intestine	12	0.3	0.1	0.3	0.01	0.05	8	0.2	0.1	0.3	0.01	0.04	C17
Colon	281	7.8	3.1	6.9	0.36	0.92	201	5.1	3.7	7.9	0.45	1.05	C18
Rectum	154	4.3	1.7	3.6	0.21	0.47	110	2.8	2.0	4.1	0.28	0.54	C19-20
Anus	11	0.3	0.1	0.1	0.01	0.01	9	0.2	0.2	0.3	0.01	0.04	C21
Liver	156	4.3	1.7	5.6	0.23	0.63	43	1.1	0.8	2.3	0.08	0.27	C22
Gallbladder etc.	43	1.2	0.5	1.2	0.06	0.18	34	0.9	0.6	1.6	0.07	0.13	C23-24
Pancreas	92	2.6	1.0	3.3	0.10	0.35	65	1.6	1.2	3.2	0.13	0.37	C25
Nose, sinuses etc.	11	0.3	0.1	0.3	0.02	0.02	7	0.2	0.1	0.1	0.01	0.01	C30-31
Larynx	61	1.7	0.7	1.8	0.07	0.26	12	0.3	0.2	0.6	0.02	0.06	C32
Trachea, bronchus and lung	310	8.6	3.5	11.1	0.37	1.43	93	2.4	1.7	4.7	0.22	0.62	C33-34
Other thoracic organs	17	0.5	0.2	0.4	0.01	0.06	9	0.2	0.2	0.3	0.03	0.03	C37-38
Bone	38	1.1	0.4	0.5	0.04	0.04	28	0.7	0.5	0.6	0.04	0.04	C40-41
Melanoma of skin	15	0.4	0.2	0.2	0.02	0.03	8	0.2	0.1	0.3	0.02	0.04	C43
Other skin	63	0.7	0.7	1.9	0.06	0.18	27		0.5	1.0	0.06	0.12	C44
Mesothelioma	22	0.6	0.2	0.5	0.03	0.08	6	0.2	0.1	0.2	0.01	0.03	C45
Kaposi sarcoma	5	0.1	0.1	0.1	0.01	0.01	2	0.1	0.0	0.1	0.00	0.01	C46
Connective and soft tissue	70	2.0	0.8	0.9	0.06	0.10	23	0.6	0.4	0.6	0.04	0.04	C47+C49
Breast	15	0.4	0.2	0.4	0.02	0.06	1532	38.8	28.2	46.0	3.39	5.38	C50
Vulva							10	0.3	0.2	0.3	0.02	0.03	C51
Vagina							1	0.0	0.0	0.1	0.00	0.00	C52
Cervix uteri							161	4.1	3.0	4.6	0.32	0.52	C53
Corpus uteri							156	4.0	2.9	7.0	0.38	0.89	C54
Uterus unspecified							29	0.7	0.5	1.1	0.07	0.12	C55
Ovary							152	3.9	2.8	5.1	0.34	0.61	C56
Other female genital organs							4	0.1	0.1	0.2	0.01	0.02	C57
Placenta							1	0.0	0.0	0.0	0.00	0.00	C58
Penis	1	0.0	0.0	0.1	0.00	0.02							C60
Prostate	275	7.7	3.1	13.3	0.31	1.62							C61
Testis	69	1.9	0.8	0.6	0.05	0.05							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	93	2.6	1.0	2.5	0.11	0.26	47	1.2	0.9	1.7	0.13	0.21	C64
Renal pelvis	6	0.2	0.1	0.1	0.01	0.02	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	1	0.0	0.0	0.0	0.00	0.01	1	0.0	0.0	0.1	0.01	0.01	C66
Bladder	228	6.4	2.6	7.0	0.30	0.89	61	1.5	1.1	3.0	0.13	0.38	C67
Other urinary organs	1	0.0	0.0	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	3	0.1	0.0	0.0	0.00	0.00	5	0.1	0.1	0.1	0.00	0.00	C69
Brain, nervous system	132	3.7	1.5	2.4	0.13	0.27	62	1.6	1.1	1.8	0.11	0.18	C70-72
Thyroid	100	2.8	1.1	1.4	0.09	0.15	306	7.8	5.6	6.2	0.48	0.61	C73
Adrenal gland	7	0.2	0.1	0.1	0.01	0.01	10	0.3	0.2	0.3	0.01	0.03	C74
Other endocrine	2	0.1	0.0	0.0	0.00	0.00	1	0.0	0.0	0.1	0.00	0.01	C75
Hodgkin lymphoma	138	3.8	1.5	1.7	0.11	0.13	89	2.3	1.6	1.7	0.10	0.13	C81
Non-Hodgkin lymphoma	368	10.3	4.1	7.1	0.39	0.79	185	4.7	3.4	5.8	0.39	0.66	C82-85,C96
Immunoproliferative diseases	4	0.1	0.0	0.1	0.00	0.03	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	51	1.4	0.6	1.3	0.06	0.19	34	0.9	0.6	1.3	0.12	0.15	C90
Lymphoid leukaemia	191	5.3	2.1	3.6	0.20	0.25	99	2.5	1.8	2.9	0.12	0.29	C91
Myeloid leukaemia	199	5.5	2.2	3.3	0.17	0.35	104	2.6	1.9	2.6	0.18	0.27	C92-94
Leukaemia unspecified	5	0.1	0.1	0.2	0.00	0.02	3	0.1	0.1	0.1	0.00	0.00	C95
Myeloproliferative disorders	7	0.2	0.1	0.2	0.01	0.01	4	0.1	0.1	0.1	0.01	0.01	MPD
Myelodysplastic syndromes	10	0.3	0.1	0.2	0.01	0.01	6	0.2	0.1	0.2	0.01	0.02	MDS
Other and unspecified	117	3.3	1.3	3.3	0.12	0.35	96	2.4	1.8	3.9	0.22	0.45	O&U
All sites	3651	40.9	94.1	4.06	10.89		3975	73.0	129.4	8.29	15.11	C00-96	
All sites except C44	3588	100.0	92.2	3.99	10.71		3948	100.0	128.4	8.23	14.99	C00-96 exc. C44	

*Kuwait: Kuwaitis (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	1	0.1	0.0	0.1	0.00	0.02	2	0.1	0.1	0.2	0.00	0.00	C00
Tongue	9	0.6	0.4	0.7	0.02	0.09	8	0.4	0.3	0.5	0.04	0.06	C01-02
Mouth	5	0.3	0.2	0.4	0.02	0.03	6	0.3	0.2	0.6	0.01	0.09	C03-06
Salivary glands	4	0.3	0.2	0.4	0.00	0.02	5	0.2	0.2	0.2	0.02	0.02	C07-08
Tonsil	2	0.1	0.1	0.2	0.02	0.02	1	0.0	0.0	0.1	0.01	0.01	C09
Other oropharynx	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	30	1.9	1.3	1.8	0.14	0.19	15	0.7	0.6	0.9	0.06	0.12	C11
Hypopharynx	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.1	0.00	0.02	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	12	0.8	0.5	1.1	0.03	0.10	9	0.4	0.4	0.8	0.01	0.14	C15
Stomach	48	3.1	2.0	4.2	0.27	0.38	23	1.1	0.9	1.5	0.09	0.19	C16
Small intestine	7	0.4	0.3	0.6	0.04	0.11	2	0.1	0.1	0.2	0.01	0.02	C17
Colon	128	8.2	5.3	11.2	0.73	1.45	130	6.1	5.2	9.2	0.58	1.17	C18
Rectum	56	3.6	2.3	5.0	0.32	0.65	65	3.0	2.6	4.5	0.35	0.56	C19-20
Anus	4	0.3	0.2	0.3	0.04	0.04	6	0.3	0.2	0.4	0.01	0.06	C21
Liver	66	4.2	2.8	6.0	0.21	0.78	25	1.2	1.0	2.2	0.07	0.25	C22
Gallbladder etc.	21	1.3	0.9	2.1	0.13	0.31	19	0.9	0.8	1.5	0.05	0.12	C23-24
Pancreas	42	2.7	1.8	3.9	0.16	0.46	39	1.8	1.6	3.0	0.15	0.39	C25
Nose, sinuses etc.	3	0.2	0.1	0.2	0.02	0.02	3	0.1	0.1	0.1	0.01	0.01	C30-31
Larynx	25	1.6	1.0	2.3	0.10	0.34	3	0.1	0.1	0.2	0.01	0.02	C32
Trachea, bronchus and lung	143	9.2	6.0	13.8	0.45	1.87	59	2.8	2.4	4.9	0.22	0.68	C33-34
Other thoracic organs	10	0.6	0.4	0.7	0.03	0.11	6	0.3	0.2	0.3	0.03	0.03	C37-38
Bone	20	1.3	0.8	0.8	0.06	0.06	16	0.7	0.6	0.6	0.05	0.05	C40-41
Melanoma of skin	2	0.1	0.1	0.1	0.00	0.02	3	0.1	0.1	0.2	0.01	0.02	C43
Other skin	18	0.8	0.5	1.5	0.06	0.13	20	0.8	0.8	1.3	0.08	0.15	C44
Mesothelioma	4	0.3	0.2	0.3	0.02	0.04	1	0.0	0.0	0.1	0.00	0.00	C45
Kaposi sarcoma	4	0.3	0.2	0.3	0.03	0.03	2	0.1	0.1	0.2	0.00	0.02	C46
Connective and soft tissue	20	1.3	0.8	1.2	0.07	0.13	12	0.6	0.5	0.6	0.05	0.05	C47+C49
Breast	6	0.4	0.3	0.6	0.05	0.08	791	37.0	31.8	50.1	3.86	5.67	C50
Vulva							6	0.3	0.2	0.4	0.02	0.04	C51
Vagina							1	0.0	0.0	0.1	0.00	0.00	C52
Cervix uteri							60	2.8	2.4	4.0	0.27	0.44	C53
Corpus uteri							102	4.8	4.1	7.8	0.47	0.97	C54
Uterus unspecified							18	0.8	0.7	1.3	0.09	0.15	C55
Ovary							71	3.3	2.9	4.5	0.28	0.50	C56
Other female genital organs							0	0.0	0.0	0.0	0.00	0.00	C57
Placenta							1	0.0	0.0	0.0	0.00	0.00	C58
Penis	0	0.0	0.0	0.0	0.00	0.00							C60
Prostate	145	9.3	6.1	14.9	0.46	1.81							C61
Testis	30	1.9	1.3	1.3	0.11	0.11							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	50	3.2	2.1	4.1	0.21	0.45	27	1.3	1.1	1.8	0.15	0.22	C64
Renal pelvis	2	0.1	0.1	0.1	0.00	0.02	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	1	0.1	0.0	0.1	0.00	0.02	1	0.0	0.0	0.1	0.01	0.01	C66
Bladder	87	5.6	3.6	7.7	0.45	0.91	33	1.5	1.3	2.7	0.10	0.35	C67
Other urinary organs	1	0.1	0.0	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C69
Brain, nervous system	61	3.9	2.5	3.8	0.24	0.42	40	1.9	1.6	2.1	0.14	0.18	C70-72
Thyroid	44	2.8	1.8	2.8	0.23	0.28	182	8.5	7.3	9.0	0.71	0.88	C73
Adrenal gland	4	0.3	0.2	0.1	0.01	0.01	8	0.4	0.3	0.4	0.02	0.04	C74
Other endocrine	1	0.1	0.0	0.0	0.00	0.00	1	0.0	0.0	0.1	0.00	0.02	C75
Hodgkin lymphoma	66	4.2	2.8	3.1	0.21	0.24	49	2.3	2.0	1.9	0.12	0.16	C81
Non-Hodgkin lymphoma	163	10.4	6.8	10.9	0.72	1.14	97	4.5	3.9	5.9	0.42	0.64	C82-85,C96
Immunoproliferative diseases	2	0.1	0.1	0.2	0.01	0.04	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	18	1.2	0.8	1.6	0.10	0.21	20	0.9	0.8	1.4	0.12	0.16	C90
Lymphoid leukaemia	84	5.4	3.5	3.5	0.16	0.24	54	2.5	2.2	2.5	0.11	0.27	C91
Myeloid leukaemia	70	4.5	2.9	4.4	0.27	0.45	53	2.5	2.1	2.7	0.20	0.28	C92-94
Leukaemia unspecified	2	0.1	0.1	0.2	0.01	0.01	1	0.0	0.0	0.0	0.00	0.00	C95
Myeloproliferative disorders	3	0.2	0.1	0.3	0.01	0.01	2	0.1	0.1	0.2	0.02	0.02	MPD
Myelodysplastic syndromes	5	0.3	0.2	0.3	0.02	0.02	5	0.2	0.2	0.3	0.02	0.04	MDS
Other and unspecified	49	3.1	2.0	4.3	0.18	0.46	52	2.4	2.1	3.8	0.24	0.45	O&U
All sites	1578	66.0	123.6	6.42	14.31		2158	86.9	137.7	9.28	15.74	C00-96	
All sites except C44	1560	100.0	122.1	6.36	14.18		2138	100.0	136.4	9.20	15.59	C00-96 exc. C44	

*See note following population pyramid

*Kuwait: Non-Kuwaitis (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	3	0.1	0.0	0.0	0.00	0.00	1	0.1	0.0	0.0	0.00	0.00	C00
Tongue	21	1.0	0.3	0.4	0.03	0.06	7	0.4	0.2	0.6	0.02	0.13	C01-02
Mouth	12	0.6	0.2	0.3	0.03	0.03	8	0.4	0.3	0.8	0.07	0.07	C03-06
Salivary glands	13	0.6	0.2	0.6	0.02	0.07	4	0.2	0.1	0.2	0.02	0.02	C07-08
Tonsil	2	0.1	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	22	1.1	0.3	0.4	0.03	0.05	12	0.7	0.4	1.0	0.02	0.17	C11
Hypopharynx	8	0.4	0.1	0.1	0.01	0.01	1	0.1	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	14	0.7	0.2	1.0	0.01	0.05	6	0.3	0.2	0.7	0.06	0.09	C15
Stomach	61	3.0	0.9	2.6	0.11	0.24	21	1.2	0.7	2.0	0.10	0.25	C16
Small intestine	5	0.2	0.1	0.1	0.01	0.01	6	0.3	0.2	0.4	0.02	0.05	C17
Colon	153	7.5	2.3	5.3	0.26	0.66	71	3.9	2.4	7.2	0.33	0.95	C18
Rectum	98	4.8	1.5	3.0	0.18	0.37	45	2.5	1.5	3.9	0.20	0.56	C19-20
Anus	7	0.3	0.1	0.1	0.01	0.01	3	0.2	0.1	0.1	0.01	0.01	C21
Liver	90	4.4	1.4	5.2	0.23	0.44	18	1.0	0.6	2.2	0.09	0.30	C22
Gallbladder etc.	22	1.1	0.3	0.8	0.04	0.08	15	0.8	0.5	2.0	0.12	0.17	C23-24
Pancreas	50	2.5	0.8	3.4	0.08	0.30	26	1.4	0.9	3.9	0.12	0.37	C25
Nose, sinuses etc.	8	0.4	0.1	0.2	0.01	0.03	4	0.2	0.1	0.1	0.01	0.01	C30-31
Larynx	36	1.8	0.6	1.3	0.07	0.20	9	0.5	0.3	1.4	0.03	0.15	C32
Trachea, bronchus and lung	167	8.2	2.6	8.8	0.36	1.01	34	1.9	1.1	4.2	0.20	0.50	C33-34
Other thoracic organs	7	0.3	0.1	0.3	0.01	0.01	3	0.2	0.1	0.2	0.02	0.02	C37-38
Bone	18	0.9	0.3	0.4	0.02	0.02	12	0.7	0.4	0.6	0.03	0.03	C40-41
Melanoma of skin	13	0.6	0.2	0.3	0.02	0.03	5	0.3	0.2	0.5	0.03	0.07	C43
Other skin	45	0.7	0.2	2.5	0.07	0.25	7	0.2	0.2	0.7	0.04	0.07	C44
Mesothelioma	18	0.9	0.3	0.9	0.04	0.11	5	0.3	0.2	0.6	0.02	0.07	C45
Kaposi sarcoma	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	50	2.5	0.8	0.8	0.06	0.07	11	0.6	0.4	0.6	0.02	0.02	C47+C49
Breast	9	0.4	0.1	0.5	0.01	0.06	741	40.9	25.0	44.7	3.02	5.43	C50
Vulva							4	0.2	0.1	0.3	0.03	0.03	C51
Vagina							0	0.0	0.0	0.0	0.00	0.00	C52
Cervix uteri							101	5.6	3.4	5.0	0.35	0.62	C53
Corpus uteri							54	3.0	1.8	6.0	0.28	0.82	C54
Uterus unspecified							11	0.6	0.4	0.7	0.05	0.05	C55
Ovary							81	4.5	2.7	6.3	0.43	0.85	C56
Other female genital organs							4	0.2	0.1	0.4	0.02	0.06	C57
Placenta							0	0.0	0.0	0.0	0.00	0.00	C58
Penis	1	0.0	0.0	0.1	0.00	0.04							C60
Prostate	130	6.4	2.0	12.5	0.26	1.50							C61
Testis	39	1.9	0.6	0.5	0.03	0.03							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	43	2.1	0.7	1.5	0.08	0.17	20	1.1	0.7	1.7	0.11	0.20	C64
Renal pelvis	4	0.2	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	141	7.0	2.2	7.9	0.26	1.05	28	1.5	0.9	3.6	0.17	0.43	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	3	0.1	0.0	0.1	0.00	0.00	4	0.2	0.1	0.2	0.01	0.01	C69
Brain, nervous system	71	3.5	1.1	1.9	0.10	0.23	22	1.2	0.7	1.7	0.10	0.22	C70-72
Thyroid	56	2.8	0.9	0.9	0.06	0.11	124	6.9	4.2	4.4	0.34	0.38	C73
Adrenal gland	3	0.1	0.0	0.1	0.00	0.00	2	0.1	0.1	0.1	0.00	0.00	C74
Other endocrine	1	0.0	0.0	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	72	3.6	1.1	1.3	0.09	0.10	40	2.2	1.4	1.4	0.10	0.10	C81
Non-Hodgkin lymphoma	205	10.1	3.1	5.8	0.30	0.70	88	4.9	3.0	6.2	0.36	0.76	C82-85,C96
Immunoproliferative diseases	2	0.1	0.0	0.1	0.00	0.02	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	33	1.6	0.5	1.3	0.04	0.21	14	0.8	0.5	1.3	0.13	0.13	C90
Lymphoid leukaemia	107	5.3	1.6	3.3	0.20	0.22	45	2.5	1.5	3.5	0.14	0.30	C91
Myeloid leukaemia	129	6.4	2.0	3.0	0.14	0.35	51	2.8	1.7	3.0	0.18	0.29	C92-94
Leukaemia unspecified	3	0.1	0.0	0.2	0.00	0.04	2	0.1	0.1	0.2	0.00	0.00	C95
Myeloproliferative disorders	4	0.2	0.1	0.2	0.01	0.02	2	0.1	0.1	0.1	0.00	0.00	MPD
Myelodysplastic syndromes	5	0.2	0.1	0.4	0.00	0.00	1	0.1	0.0	0.1	0.00	0.00	MDS
Other and unspecified	68	3.4	1.0	2.7	0.10	0.29	44	2.4	1.5	4.3	0.20	0.48	O&U
All sites	2073	31.7	83.2	3.44	9.27		1817	61.4	129.2	7.62	15.25	C00-96	
All sites except C44	2028	100.0	80.7	3.37	9.02		1810	100.0	128.4	7.58	15.17	C00-96 exc. C44	

*See note following population pyramid

Malaysia, Penang

REGISTRATION AREA

The Penang Cancer Registry (PCR) covers the state of Penang in the north-west of Peninsular Malaysia. The state has a population of slightly more than 1 million and consists of an island and a strip of mainland, with a total land area of 1149 km². The island (about 300 km²) is linked to the mainland by a 13.5 km bridge. Penang has five health districts: Timur Laut and Barat Daya on the island and Seberang Perai Utara, Seberang Perai Tengah, and Seberang Perai Selatan on the mainland. The population is 45% Chinese, 45% Malay, 10% Indian, and 0.4% of other ethnicities. Penang has a higher average economic attainment and per capita income than most other Malaysian states.

CANCER CARE FACILITIES

Penang serves as a hub for cancer care not only for its own residents but also for patients from nearby states (e.g. Kedah, Perlis, and Perak) and neighbouring countries (e.g. Indonesia).

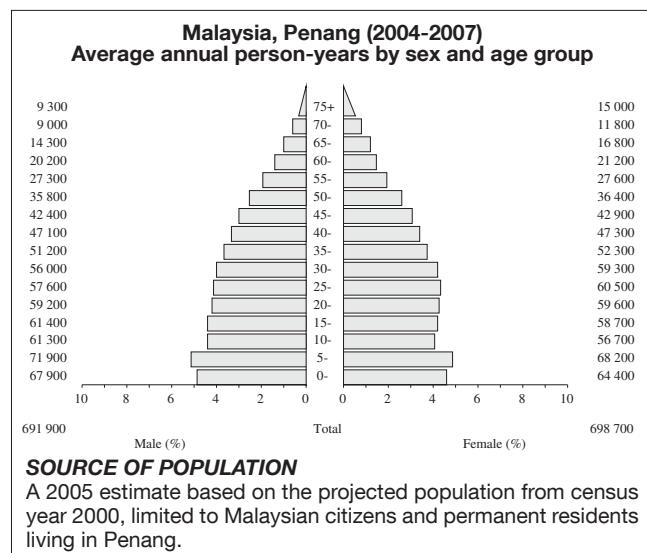
REGISTRY STRUCTURE AND METHODS

The PCR was established in 1994 and was the first regional population-based registry in Malaysia. Registration is based primarily on voluntary notification. The registry records basic epidemiological and clinical data on all cancer cases diagnosed in Penang (regardless of citizenship, place of residence, or basis of diagnosis). However, only cases occurring in Penang residents (Malaysian citizens or permanent residents living in Penang at the time of diagnosis) are included in data analysis. The registry receives notifications (submitted using a standardized notification form) from all types of medical facilities in Penang. To ensure data completeness, active case finding and routine checks are carried out using discharge records from public and private hospitals and pathology records from public and private laboratories, supplemented

by case detection from death records (provided by the state's registration department). Any cases identified from pathology or death records are checked against previously registered cases. Additional missing data for these cases are also obtained by review of the relevant hospital records.

CONTRIBUTORS

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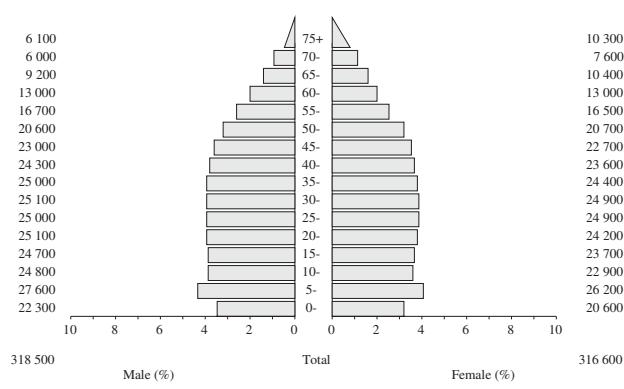
NOTES ON THE DATA

*No official mortality data. No DCO registrations.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	28.4	Breast	49.8
Prostate	15.0	Cervix uteri	12.5
Colon	14.8	Colon	11.8
Rectum	10.6	Trachea, bronchus and lung	9.0
Stomach	8.8	Ovary	8.2
Nasopharynx	8.5	Corpus uteri	7.0
Liver	8.1	Rectum	6.8
Bladder	7.3	Stomach	4.8
Other and unspecified	5.9	Other and unspecified	3.9
Non-Hodgkin lymphoma	5.2	Liver	3.7
All sites	156.4	All sites	153.9

Malaysia, Penang: Chinese (2004-2007)
Average annual person-years by sex and age group

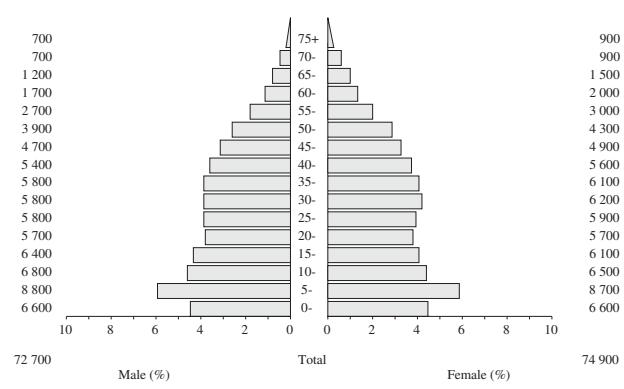


NOTES ON THE DATA: *No official mortality data. No DCO registrations.

MALAYSIA: CHINESE
10 MAJOR CANCERS, ASR (WORLD) PER 100 000

	Male	Female
Trachea, bronchus and lung	32.2	Breast
Colon	18.2	Colon
Prostate	17.7	Cervix uteri
Nasopharynx	12.9	Trachea, bronchus and lung
Rectum	12.0	Ovary
Stomach	10.8	Rectum
Liver	10.5	Corpus uteri
Bladder	6.9	Stomach
Other and unspecified	6.7	Other and unspecified
Non-melanoma skin cancer	5.7	Non-Hodgkin lymphoma
All sites	179.4	All sites

Malaysia, Penang: Indian (2004-2007)
Average annual person-years by sex and age group

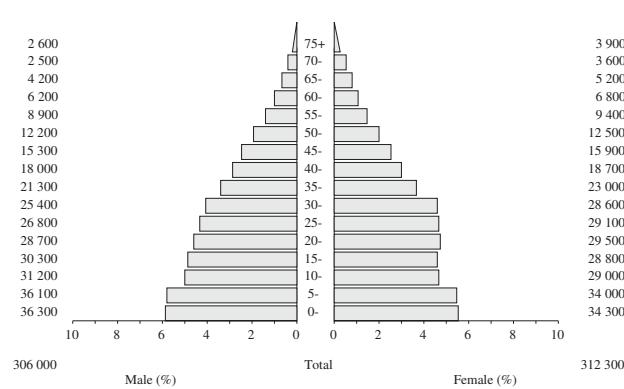


NOTES ON THE DATA: *No official mortality data. No DCO registrations.

MALAYSIA: INDIAN
10 MAJOR CANCERS, ASR (WORLD) PER 100 000

	Male	Female
Trachea, bronchus and lung	18.8	Breast
Colon	13.1	Corpus uteri
Prostate	11.3	Cervix uteri
Stomach	8.7	Ovary
Bladder	6.9	Stomach
Rectum	5.9	Colon
Tongue	5.4	Trachea, bronchus and lung
Larynx	5.3	Liver
Oesophagus	5.0	Rectum
Hypopharynx	4.9	Other and unspecified
All sites	128.5	All sites

Malaysia, Penang: Malay (2004-2007)
Average annual person-years by sex and age group



NOTES ON THE DATA: *No official mortality data. No DCO registrations.

MALAYSIA: MALAY
10 MAJOR CANCERS, ASR (WORLD) PER 100 000

	Male	Female
Trachea, bronchus and lung	19.9	Breast
Prostate	8.5	Cervix uteri
Rectum	7.8	Ovary
Bladder	7.6	Colon
Colon	7.1	Corpus uteri
Other and unspecified	4.5	Rectum
Liver	4.3	Trachea, bronchus and lung
Non-Hodgkin lymphoma	4.2	Other and unspecified
Stomach	3.5	Non-Hodgkin lymphoma
Brain, nervous system	3.3	Liver
All sites	104.1	All sites

*Malaysia, Penang (2004-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	2	0.1	0.1	0.1	0.00	0.00	2	0.0	0.1	0.1	0.00	0.00	C00
Tongue	32	0.9	1.2	1.4	0.06	0.20	19	0.5	0.7	0.7	0.05	0.07	C01-02
Mouth	24	0.7	0.9	1.1	0.06	0.13	17	0.4	0.6	0.7	0.03	0.08	C03-06
Salivary glands	14	0.4	0.5	0.6	0.04	0.08	13	0.3	0.5	0.5	0.04	0.04	C07-08
Tonsil	11	0.3	0.4	0.5	0.05	0.06	9	0.2	0.3	0.3	0.02	0.05	C09
Other oropharynx	8	0.2	0.3	0.4	0.02	0.05	2	0.0	0.1	0.1	0.01	0.01	C10
Nasopharynx	220	6.5	7.9	8.5	0.64	0.93	79	1.9	2.8	2.9	0.24	0.32	C11
Hypopharynx	18	0.5	0.7	0.9	0.03	0.16	3	0.1	0.1	0.1	0.01	0.01	C12-13
Pharynx unspecified	3	0.1	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	57	1.7	2.1	2.7	0.13	0.34	30	0.7	1.1	1.2	0.04	0.13	C15
Stomach	189	5.6	6.8	8.8	0.39	1.00	128	3.1	4.6	4.8	0.21	0.52	C16
Small intestine	10	0.3	0.4	0.5	0.03	0.05	7	0.2	0.3	0.2	0.01	0.03	C17
Colon	317	9.4	11.5	14.8	0.62	1.77	313	7.7	11.2	11.8	0.55	1.37	C18
Rectum	232	6.9	8.4	10.6	0.58	1.26	177	4.3	6.3	6.8	0.41	0.85	C19-20
Anus	6	0.2	0.2	0.3	0.01	0.03	6	0.1	0.2	0.2	0.02	0.03	C21
Liver	187	5.5	6.8	8.1	0.48	0.95	96	2.4	3.4	3.7	0.16	0.44	C22
Gallbladder etc.	24	0.7	0.9	1.1	0.07	0.15	29	0.7	1.0	1.2	0.03	0.14	C23-24
Pancreas	74	2.2	2.7	3.4	0.15	0.32	61	1.5	2.2	2.4	0.16	0.28	C25
Nose, sinuses etc.	15	0.4	0.5	0.7	0.03	0.06	4	0.1	0.1	0.2	0.01	0.02	C30-31
Larynx	73	2.2	2.6	3.5	0.15	0.44	5	0.1	0.2	0.2	0.01	0.01	C32
Trachea, bronchus and lung	610	18.0	22.0	28.4	1.35	3.47	231	5.7	8.3	9.0	0.51	1.10	C33-34
Other thoracic organs	19	0.6	0.7	0.8	0.05	0.08	11	0.3	0.4	0.4	0.03	0.05	C37-38
Bone	45	1.3	1.6	1.7	0.11	0.18	27	0.7	1.0	1.0	0.06	0.10	C40-41
Melanoma of skin	8	0.2	0.3	0.3	0.02	0.03	12	0.3	0.4	0.4	0.02	0.06	C43
Other skin	103		3.7	4.7	0.20	0.56	79		2.8	3.0	0.17	0.31	C44
Mesothelioma	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	2	0.1	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	35	1.0	1.3	1.4	0.08	0.12	30	0.7	1.1	1.1	0.06	0.13	C47+C49
Breast	13	0.4	0.5	0.6	0.03	0.09	1374	33.7	49.2	49.8	4.03	5.42	C50
Vulva							10	0.2	0.4	0.4	0.02	0.05	C51
Vagina							9	0.2	0.3	0.3	0.01	0.03	C52
Cervix uteri							342	8.4	12.2	12.5	0.92	1.44	C53
Corpus uteri							188	4.6	6.7	7.0	0.55	0.84	C54
Uterus unspecified							12	0.3	0.4	0.5	0.04	0.06	C55
Ovary							228	5.6	8.2	8.2	0.64	0.89	C56
Other female genital organs							3	0.1	0.1	0.1	0.01	0.02	C57
Placenta							3	0.1	0.1	0.1	0.01	0.01	C58
Penis	9	0.3	0.3	0.5	0.01	0.05							C60
Prostate	290	8.6	10.5	15.0	0.28	1.78							C61
Testis	30	0.9	1.1	1.1	0.07	0.09							C62
Other male genital organs	1	0.0	0.0	0.0	0.00	0.00							C63
Kidney	78	2.3	2.8	3.3	0.21	0.41	44	1.1	1.6	1.7	0.12	0.20	C64
Renal pelvis	4	0.1	0.1	0.2	0.01	0.02	1	0.0	0.0	0.0	0.00	0.00	C65
Ureter	4	0.1	0.1	0.2	0.00	0.02	4	0.1	0.1	0.1	0.01	0.01	C66
Bladder	157	4.6	5.7	7.3	0.30	0.83	45	1.1	1.6	1.7	0.06	0.21	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C68
Eye	2	0.1	0.1	0.1	0.00	0.00	6	0.1	0.2	0.2	0.01	0.02	C69
Brain, nervous system	78	2.3	2.8	3.0	0.21	0.27	62	1.5	2.2	2.3	0.14	0.22	C70-72
Thyroid	26	0.8	0.9	1.1	0.06	0.12	75	1.8	2.7	2.6	0.18	0.28	C73
Adrenal gland	4	0.1	0.1	0.2	0.02	0.02	3	0.1	0.1	0.1	0.01	0.01	C74
Other endocrine	6	0.2	0.2	0.2	0.02	0.02	2	0.0	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	31	0.9	1.1	1.2	0.07	0.09	10	0.2	0.4	0.4	0.02	0.03	C81
Non-Hodgkin lymphoma	125	3.7	4.5	5.2	0.34	0.58	96	2.4	3.4	3.5	0.22	0.42	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	13	0.4	0.5	0.7	0.03	0.11	18	0.4	0.6	0.7	0.03	0.12	C90
Lymphoid leukaemia	54	1.6	2.0	2.0	0.11	0.18	33	0.8	1.2	1.3	0.07	0.09	C91
Myeloid leukaemia	63	1.9	2.3	2.4	0.14	0.28	80	2.0	2.9	2.9	0.22	0.27	C92-94
Leukaemia unspecified	22	0.7	0.8	1.0	0.05	0.06	9	0.2	0.3	0.3	0.02	0.03	C95
Myeloproliferative disorders	2	0.1	0.1	0.1	0.01	0.01	2	0.0	0.1	0.1	0.00	0.02	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	134	4.0	4.8	5.9	0.32	0.66	105	2.6	3.8	3.9	0.24	0.43	O&U
All sites	3485		125.9	156.4	7.62	18.12	4155		148.7	153.9	10.46	17.29	C00-96
All sites except C44	3382	100.0	122.2	151.7	7.42	17.57	4076	100.0	145.8	150.9	10.29	16.98	C00-96 exc. C44

*See note following population pyramid

*Malaysia, Penang: Chinese (2004-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.0	0.00	0.00	C00
Tongue	15	0.6	1.2	1.1	0.06	0.15	10	0.4	0.8	0.6	0.05	0.05	C01-02
Mouth	14	0.6	1.1	1.0	0.05	0.10	6	0.2	0.5	0.3	0.02	0.04	C03-06
Salivary glands	10	0.4	0.8	0.7	0.05	0.09	10	0.4	0.8	0.6	0.05	0.06	C07-08
Tonsil	10	0.4	0.8	0.7	0.07	0.09	3	0.1	0.2	0.2	0.02	0.03	C09
Other oropharynx	5	0.2	0.4	0.4	0.02	0.06	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	194	8.3	15.2	12.9	1.03	1.40	60	2.2	4.7	4.0	0.34	0.44	C11
Hypopharynx	8	0.3	0.6	0.6	0.03	0.08	0	0.0	0.0	0.0	0.00	0.00	C12-I3
Pharynx unspecified	2	0.1	0.2	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	36	1.5	2.8	2.7	0.12	0.35	13	0.5	1.0	0.8	0.02	0.08	C15
Stomach	143	6.1	11.2	10.8	0.46	1.22	95	3.6	7.5	5.7	0.26	0.59	C16
Small intestine	7	0.3	0.5	0.5	0.03	0.05	5	0.2	0.4	0.3	0.02	0.04	C17
Colon	241	10.3	18.9	18.2	0.76	2.21	247	9.3	19.5	15.2	0.68	1.73	C18
Rectum	165	7.1	13.0	12.0	0.67	1.40	124	4.6	9.8	7.8	0.44	0.96	C19-20
Anus	2	0.1	0.2	0.2	0.00	0.03	2	0.1	0.2	0.1	0.00	0.01	C21
Liver	146	6.3	11.5	10.5	0.64	1.25	61	2.3	4.8	3.9	0.15	0.47	C22
Gallbladder etc.	14	0.6	1.1	1.1	0.06	0.16	24	0.9	1.9	1.5	0.04	0.17	C23-24
Pancreas	57	2.4	4.5	4.3	0.18	0.38	42	1.6	3.3	2.8	0.18	0.32	C25
Nose, sinuses etc.	10	0.4	0.8	0.7	0.04	0.06	2	0.1	0.2	0.1	0.00	0.02	C30-31
Larynx	50	2.1	3.9	3.8	0.16	0.47	3	0.1	0.2	0.2	0.01	0.01	C32
Trachea, bronchus and lung	430	18.4	33.8	32.2	1.48	4.06	177	6.6	14.0	11.3	0.66	1.42	C33-34
Other thoracic organs	14	0.6	1.1	1.0	0.07	0.11	7	0.3	0.6	0.5	0.05	0.06	C37-38
Bone	32	1.4	2.5	2.4	0.14	0.25	18	0.7	1.4	1.2	0.07	0.13	C40-41
Melanoma of skin	5	0.2	0.4	0.4	0.03	0.05	6	0.2	0.5	0.4	0.01	0.05	C43
Other skin	76	6.0	5.7	5.7	0.21	0.67	61		4.8	3.7	0.22	0.37	C44
Mesothelioma	1	0.0	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	2	0.1	0.2	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	18	0.8	1.4	1.3	0.08	0.10	18	0.7	1.4	1.3	0.06	0.16	C47+C49
Breast	9	0.4	0.7	0.7	0.03	0.10	896	33.6	70.8	57.5	4.64	6.26	C50
Vulva							5	0.2	0.4	0.3	0.01	0.04	C51
Vagina							4	0.1	0.3	0.2	0.00	0.01	C52
Cervix uteri							231	8.7	18.2	14.8	1.11	1.67	C53
Corpus uteri							99	3.7	7.8	6.3	0.50	0.74	C54
Uterus unspecified							7	0.3	0.6	0.5	0.05	0.06	C55
Ovary							124	4.6	9.8	8.1	0.64	0.90	C56
Other female genital organs							1	0.0	0.1	0.1	0.01	0.01	C57
Placenta							2	0.1	0.2	0.1	0.01	0.01	C58
Penis	6	0.3	0.5	0.5	0.02	0.06							C60
Prostate	222	9.5	17.4	17.7	0.33	2.08							C61
Testis	10	0.4	0.8	0.7	0.05	0.05							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	57	2.4	4.5	4.0	0.26	0.47	31	1.2	2.4	2.1	0.15	0.26	C64
Renal pelvis	3	0.1	0.2	0.2	0.01	0.02	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	4	0.2	0.3	0.3	0.00	0.03	4	0.1	0.3	0.2	0.01	0.01	C66
Bladder	91	3.9	7.1	6.9	0.27	0.79	33	1.2	2.6	2.0	0.07	0.22	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	2	0.1	0.2	0.2	0.01	0.01	3	0.1	0.2	0.3	0.01	0.03	C69
Brain, nervous system	39	1.7	3.1	2.9	0.21	0.26	38	1.4	3.0	3.0	0.18	0.26	C70-72
Thyroid	12	0.5	0.9	0.9	0.05	0.09	43	1.6	3.4	2.9	0.21	0.29	C73
Adrenal gland	2	0.1	0.2	0.1	0.02	0.02	0	0.0	0.0	0.0	0.00	0.00	C74
Other endocrine	3	0.1	0.2	0.2	0.02	0.02	2	0.1	0.2	0.1	0.02	0.02	C75
Hodgkin lymphoma	8	0.3	0.6	0.6	0.03	0.05	6	0.2	0.5	0.4	0.03	0.03	C81
Non-Hodgkin lymphoma	77	3.3	6.0	5.6	0.33	0.63	61	2.3	4.8	4.0	0.23	0.46	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	7	0.3	0.5	0.5	0.03	0.08	11	0.4	0.9	0.7	0.02	0.12	C90
Lymphoid leukaemia	22	0.9	1.7	1.9	0.08	0.19	19	0.7	1.5	1.7	0.09	0.12	C91
Myeloid leukaemia	31	1.3	2.4	2.3	0.13	0.26	44	1.6	3.5	3.1	0.21	0.29	C92-94
Leukaemia unspecified	7	0.3	0.5	0.7	0.02	0.05	7	0.3	0.6	0.5	0.03	0.03	C95
Myeloproliferative disorders	1	0.0	0.1	0.1	0.00	0.01	1	0.0	0.1	0.1	0.00	0.02	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	90	3.9	7.1	6.7	0.39	0.69	63	2.4	5.0	4.0	0.26	0.40	O&U
All sites	2410		189.2	179.4	8.76	20.78	2730		215.6	175.6	11.81	19.48	C00-96
All sites except C44	2334	100.0	183.2	173.7	8.54	20.10	2669	100.0	210.8	171.9	11.59	19.10	C00-96 exc. C44

*See note following population pyramid

*Malaysia, Penang: Indian (2004-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C00
Tongue	11	4.3	3.8	5.4	0.14	0.91	4	0.9	1.3	1.9	0.10	0.19	C01-02
Mouth	7	2.7	2.4	4.0	0.09	0.58	10	2.2	3.3	4.8	0.13	0.66	C03-06
Salivary glands	0	0.0	0.0	0.0	0.00	0.00	1	0.2	0.3	0.3	0.03	0.03	C07-08
Tonsil	1	0.4	0.3	0.3	0.02	0.02	4	0.9	1.3	1.4	0.07	0.21	C09
Other oropharynx	1	0.4	0.3	0.3	0.02	0.02	1	0.2	0.3	0.3	0.03	0.03	C10
Nasopharynx	3	1.2	1.0	2.1	0.00	0.36	4	0.9	1.3	1.7	0.17	0.17	C11
Hypopharynx	7	2.7	2.4	4.9	0.07	1.14	3	0.7	1.0	1.2	0.05	0.05	C12-13
Pharynx unspecified	1	0.4	0.3	0.6	0.07	0.07	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	9	3.5	3.1	5.0	0.29	0.78	9	2.0	3.0	3.9	0.27	0.27	C15
Stomach	18	7.0	6.2	8.7	0.45	1.12	15	3.4	5.0	7.1	0.33	0.72	C16
Small intestine	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C17
Colon	26	10.2	8.9	13.1	0.56	1.48	17	3.8	5.7	6.4	0.37	0.68	C18
Rectum	12	4.7	4.1	5.9	0.29	0.61	12	2.7	4.0	5.3	0.28	0.78	C19-20
Anus	0	0.0	0.0	0.0	0.00	0.00	1	0.2	0.3	0.3	0.03	0.03	C21
Liver	8	3.1	2.8	3.5	0.19	0.30	12	2.7	4.0	5.4	0.25	0.55	C22
Gallbladder etc.	2	0.8	0.7	1.3	0.07	0.07	1	0.2	0.3	0.5	0.00	0.08	C23-24
Pancreas	5	2.0	1.7	2.3	0.10	0.38	4	0.9	1.3	1.7	0.13	0.13	C25
Nose, sinuses etc.	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C30-31
Larynx	12	4.7	4.1	5.3	0.36	0.64	2	0.4	0.7	0.8	0.10	0.10	C32
Trachea, bronchus and lung	38	14.8	13.1	18.8	1.12	1.89	14	3.1	4.7	5.7	0.33	0.58	C33-34
Other thoracic organs	0	0.0	0.0	0.0	0.00	0.00	1	0.2	0.3	0.2	0.02	0.02	C37-38
Bone	2	0.8	0.7	1.1	0.02	0.02	3	0.7	1.0	1.3	0.04	0.18	C40-41
Melanoma of skin	1	0.4	0.3	0.7	0.00	0.00	2	0.4	0.7	1.1	0.06	0.06	C43
Other skin	7		2.4	2.8	0.21	0.38	3		1.0	1.3	0.09	0.23	C44
Mesothelioma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	1	0.4	0.3	0.7	0.00	0.00	2	0.4	0.7	0.6	0.04	0.04	C47+C49
Breast	1	0.4	0.3	0.3	0.03	0.03	150	33.6	50.1	53.6	4.31	6.11	C50
Vulva					2	0.4	0.7	0.9	0.04	0.18	C51		
Vagina					2	0.4	0.7	0.8	0.03	0.11	C52		
Cervix uteri					35	7.8	11.7	14.0	0.97	1.83	C53		
Corpus uteri					41	9.2	13.7	15.8	1.08	1.91	C54		
Uterus unspecified					3	0.7	1.0	1.4	0.10	0.10	C55		
Ovary					34	7.6	11.3	11.2	0.81	1.18	C56		
Other female genital organs					0	0.0	0.0	0.0	0.00	0.00	C57		
Placenta					0	0.0	0.0	0.0	0.00	0.00	C58		
Penis	2	0.8	0.7	1.3	0.00	0.10							C60
Prostate	18	7.0	6.2	11.3	0.18	1.03							C61
Testis	2	0.8	0.7	0.6	0.04	0.04							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	5	2.0	1.7	2.3	0.08	0.44	6	1.3	2.0	1.9	0.19	0.19	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	14	5.5	4.8	6.9	0.38	0.66	3	0.7	1.0	1.1	0.12	0.12	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C69
Brain, nervous system	6	2.3	2.1	1.9	0.18	0.18	2	0.4	0.7	0.6	0.07	0.07	C70-72
Thyroid	2	0.8	0.7	0.9	0.03	0.13	8	1.8	2.7	2.8	0.24	0.33	C73
Adrenal gland	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C74
Other endocrine	1	0.4	0.3	0.3	0.02	0.02	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	5	2.0	1.7	2.0	0.09	0.19	1	0.2	0.3	0.4	0.02	0.02	C81
Non-Hodgkin lymphoma	9	3.5	3.1	3.2	0.27	0.27	8	1.8	2.7	2.6	0.18	0.32	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	2	0.8	0.7	1.2	0.02	0.20	2	0.4	0.7	1.1	0.00	0.28	C90
Lymphoid leukaemia	4	1.6	1.4	1.1	0.08	0.08	3	0.7	1.0	1.1	0.06	0.06	C91
Myeloid leukaemia	6	2.3	2.1	1.9	0.17	0.17	10	2.2	3.3	3.2	0.29	0.29	C92-94
Leukaemia unspecified	5	2.0	1.7	2.4	0.20	0.20	1	0.2	0.3	0.6	0.00	0.14	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	9	3.5	3.1	3.8	0.31	0.49	13	2.9	4.3	5.0	0.18	0.71	O&U
All sites	263		90.4	128.5	6.17	15.03	449		149.9	171.3	11.64	19.75	C00-96
All sites except C44	256	100.0	88.0	125.7	5.96	14.65	446	100.0	148.9	170.0	11.55	19.52	C00-96 exc. C44

*See note following population pyramid

*Malaysia, Penang: Malay (2004-2007)

SITE	Male						Female						
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	ICD-10
Lip	2	0.3	0.2	0.4	0.00	0.00	1	0.1	0.1	0.1	0.00	0.00	C00
Tongue	6	0.8	0.5	0.9	0.04	0.10	5	0.5	0.4	0.6	0.03	0.07	C01-02
Mouth	3	0.4	0.2	0.4	0.05	0.05	1	0.1	0.1	0.1	0.00	0.00	C03-06
Salivary glands	4	0.5	0.3	0.5	0.03	0.08	2	0.2	0.2	0.2	0.02	0.02	C07-08
Tonsil	0	0.0	0.0	0.0	0.00	0.00	2	0.2	0.2	0.2	0.01	0.04	C09
Other oropharynx	2	0.3	0.2	0.2	0.02	0.02	1	0.1	0.1	0.1	0.01	0.01	C10
Nasopharynx	23	3.0	1.9	2.9	0.14	0.24	15	1.6	1.2	1.5	0.10	0.16	C11
Hypopharynx	3	0.4	0.2	0.6	0.02	0.07	0	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	12	1.6	1.0	1.9	0.12	0.18	8	0.9	0.6	1.1	0.01	0.17	C15
Stomach	27	3.5	2.2	3.5	0.20	0.39	16	1.7	1.3	1.8	0.09	0.25	C16
Small intestine	3	0.4	0.2	0.4	0.01	0.06	1	0.1	0.1	0.1	0.00	0.02	C17
Colon	48	6.2	3.9	7.1	0.33	0.76	48	5.2	3.8	5.4	0.34	0.73	C18
Rectum	53	6.8	4.3	7.8	0.44	1.04	41	4.4	3.3	4.8	0.37	0.60	C19-20
Anus	4	0.5	0.3	0.6	0.01	0.01	3	0.3	0.2	0.4	0.04	0.04	C21
Liver	33	4.3	2.7	4.3	0.23	0.46	21	2.3	1.7	2.4	0.12	0.26	C22
Gallbladder etc.	8	1.0	0.7	1.2	0.09	0.14	4	0.4	0.3	0.5	0.03	0.10	C23-24
Pancreas	11	1.4	0.9	1.4	0.08	0.14	14	1.5	1.1	1.6	0.12	0.21	C25
Nose, sinuses etc.	5	0.6	0.4	0.9	0.02	0.08	1	0.1	0.1	0.1	0.02	0.02	C30-31
Larynx	11	1.4	0.9	1.7	0.07	0.28	0	0.0	0.0	0.0	0.00	0.00	C32
Trachea, bronchus and lung	138	17.8	11.3	19.9	1.04	2.22	39	4.2	3.1	4.4	0.24	0.52	C33-34
Other thoracic organs	5	0.6	0.4	0.5	0.02	0.05	3	0.3	0.2	0.3	0.01	0.04	C37-38
Bone	11	1.4	0.9	1.0	0.09	0.09	6	0.6	0.5	0.5	0.03	0.03	C40-41
Melanoma of skin	2	0.3	0.2	0.2	0.01	0.01	4	0.4	0.3	0.4	0.02	0.05	C43
Other skin	15	1.2	1.2	1.9	0.09	0.23	15		1.2	1.5	0.09	0.19	C44
Mesothelioma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	15	1.9	1.2	1.5	0.10	0.16	10	1.1	0.8	0.9	0.06	0.09	C47+C49
Breast	3	0.4	0.2	0.3	0.01	0.06	318	34.2	25.5	31.3	2.60	3.29	C50
Vulva							3	0.3	0.2	0.3	0.03	0.03	C51
Vagina							3	0.3	0.2	0.3	0.03	0.03	C52
Cervix uteri							71	7.6	5.7	7.3	0.52	0.82	C53
Corpus uteri							47	5.0	3.8	5.1	0.42	0.63	C54
Uterus unspecified							2	0.2	0.2	0.2	0.01	0.05	C55
Ovary							69	7.4	5.5	6.6	0.51	0.66	C56
Other female genital organs							2	0.2	0.2	0.2	0.01	0.05	C57
Placenta							1	0.1	0.1	0.1	0.01	0.01	C58
Penis	1	0.1	0.1	0.2	0.00	0.03							C60
Prostate	48	6.2	3.9	8.5	0.17	1.08							C61
Testis	18	2.3	1.5	1.6	0.09	0.19							C62
Other male genital organs	1	0.1	0.1	0.1	0.00	0.00							C63
Kidney	16	2.1	1.3	2.0	0.13	0.29	7	0.8	0.6	0.7	0.05	0.07	C64
Renal pelvis	1	0.1	0.1	0.1	0.01	0.01	1	0.1	0.1	0.1	0.01	0.01	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	51	6.6	4.2	7.6	0.30	0.83	9	1.0	0.7	1.2	0.03	0.19	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	1	0.1	0.1	0.1	0.00	0.00	C68
Eye	0	0.0	0.0	0.0	0.00	0.00	3	0.3	0.2	0.2	0.01	0.01	C69
Brain, nervous system	32	4.1	2.6	3.3	0.21	0.29	22	2.4	1.8	2.0	0.12	0.22	C70-72
Thyroid	12	1.6	1.0	1.5	0.07	0.19	22	2.4	1.8	2.0	0.11	0.25	C73
Adrenal gland	2	0.3	0.2	0.2	0.02	0.02	3	0.3	0.2	0.2	0.01	0.01	C74
Other endocrine	2	0.3	0.2	0.2	0.02	0.02	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	18	2.3	1.5	1.6	0.12	0.12	3	0.3	0.2	0.3	0.01	0.04	C81
Non-Hodgkin lymphoma	38	4.9	3.1	4.2	0.33	0.49	27	2.9	2.2	2.8	0.20	0.36	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	4	0.5	0.3	0.7	0.02	0.13	5	0.5	0.4	0.6	0.05	0.09	C90
Lymphoid leukaemia	28	3.6	2.3	2.1	0.15	0.15	11	1.2	0.9	1.0	0.06	0.06	C91
Myeloid leukaemia	26	3.4	2.1	2.7	0.14	0.32	26	2.8	2.1	2.4	0.21	0.21	C92-94
Leukaemia unspecified	10	1.3	0.8	1.0	0.05	0.05	1	0.1	0.1	0.1	0.00	0.00	C95
Myeloproliferative disorders	1	0.1	0.1	0.2	0.02	0.02	1	0.1	0.1	0.1	0.01	0.01	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	33	4.3	2.7	4.5	0.16	0.60	27	2.9	2.2	2.9	0.21	0.35	O&U
All sites	789		64.5	104.1	5.29	11.77	946		75.7	97.3	6.99	11.07	C00-96
All sites except C44	774	100.0	63.2	102.2	5.20	11.54	931	100.0	74.5	95.8	6.90	10.88	C00-96 exc. C44

*See note following population pyramid

Philippines, Manila

REGISTRATION AREA

The Philippine Cancer Society-Manila Cancer Registry (PCS-MCR) covers the four major cities (Manila, Quezon, Pasay, and Caloocan) of the National Capital Region (NCR) of the Philippines (the country's major urban region). The registration area is 274.2 km², in 2007 had a population of 6.1 million, and is located in the south-western portion of the island of Luzon. The city of Manila proper is the capital of the Philippines and the country's main port, hub of commerce and trade, and seat of cultural and intellectual activities. Of all the cities in the Philippines, those covered by the PCS-MCR have had the longest exposure to a lifestyle typical of industrialized countries, and these four cities have consistently shown the highest cancer incidence rates in the country.

REGISTRY STRUCTURE AND METHODS

Registration began in 1983. The registry is staffed by seven trained employees, who conduct active case finding from a variety of data sources, mainly the 172 public and private hospitals in the NCR and the neighbouring province of Rizal. The PCS-MCR works in collaboration with the Philippine Department of Health-Rizal Cancer Registry (DOH-RCR), which covers the province of Rizal and the NCR cities and municipalities not covered by the PCS-MCR. The two registries cover a combined population of about 13.2 million. Hospital data sources include patients' main medical records as well as radiotherapy, haematology, nuclear medicine, and hospital tumour registry records. The PCS-MCR and the DOH-RCR use CanReg4 software, similar notification forms, and similar registration procedures, and they generally produce combined reports.

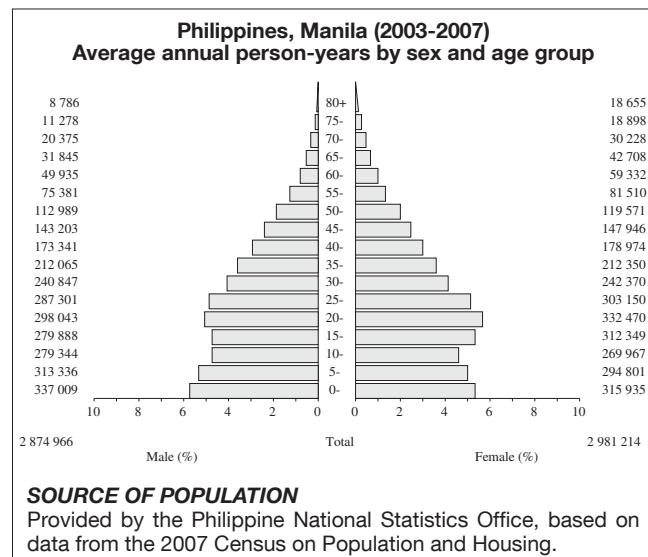
USE OF THE DATA

Two serial publications that include registry data are *Cancer in the Philippines* and *Philippine Cancer Facts*

and *Estimates*. In collaboration with the German Cancer Research Center, the PCS-MCR has also published relative survival data for adult gastric, colorectal, liver, lung, breast, cervical, ovarian, and thyroid cancers and leukaemia (1993–2002 data) and for childhood leukaemia and lymphoma (1996–2005 data). Incidence maps have been generated in collaboration with the Finnish Cancer Registry. Registry data are used for programme planning and evaluation, cancer research, and training initiatives.

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by the Philippine National Statistics Office, based on data from the 2007 Census on Population and Housing.

NOTES ON THE DATA

*No official mortality data. Low MV%.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	45.9	Breast	60.1
Prostate	32.8	Cervix uteri	17.0
Liver	21.1	Trachea, bronchus and lung	14.8
Colon	17.2	Colon	13.4
Rectum	10.2	Ovary	12.6
Other and unspecified	9.8	Thyroid	12.4
Stomach	7.9	Corpus uteri	10.5
Non-Hodgkin lymphoma	6.1	Other and unspecified	9.0
Larynx	5.9	Liver	7.4
Nasopharynx	5.5	Rectum	6.9
All sites	217.7	All sites	213.0

*Philippines, Manila (2003-2007)

S I T E	Male						Female						ICD-10
	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	1	0.0	0.0	0.0	0.00	0.00	3	0.0	0.0	0.0	0.00	0.00	C00
Tongue	125	0.8	0.9	1.6	0.11	0.19	95	0.4	0.6	1.0	0.05	0.13	C01-02
Mouth	113	0.7	0.8	1.5	0.09	0.17	92	0.4	0.6	0.9	0.05	0.08	C03-06
Salivary glands	72	0.4	0.5	0.8	0.06	0.08	86	0.4	0.6	0.8	0.05	0.09	C07-08
Tonsil	49	0.3	0.3	0.6	0.04	0.08	18	0.1	0.1	0.2	0.01	0.02	C09
Other oropharynx	14	0.1	0.1	0.2	0.01	0.01	11	0.0	0.1	0.1	0.01	0.01	C10
Nasopharynx	544	3.4	3.8	5.5	0.39	0.62	232	1.0	1.6	2.0	0.14	0.21	C11
Hypopharynx	20	0.1	0.1	0.3	0.01	0.03	8	0.0	0.1	0.1	0.01	0.01	C12-13
Pharynx unspecified	72	0.4	0.5	0.9	0.05	0.11	30	0.1	0.2	0.3	0.01	0.03	C14
Oesophagus	193	1.2	1.3	2.7	0.14	0.32	83	0.4	0.6	0.9	0.03	0.10	C15
Stomach	538	3.3	3.7	7.9	0.32	0.86	437	1.9	2.9	4.7	0.23	0.55	C16
Small intestine	51	0.3	0.4	0.7	0.03	0.09	27	0.1	0.2	0.3	0.02	0.03	C17
Colon	1245	7.7	8.7	17.2	0.79	1.96	1259	5.6	8.4	13.4	0.63	1.56	C18
Rectum	781	4.8	5.4	10.2	0.58	1.25	670	3.0	4.5	6.9	0.39	0.81	C19-20
Anus	28	0.2	0.2	0.3	0.02	0.03	28	0.1	0.2	0.3	0.02	0.03	C21
Liver	1686	10.4	11.7	21.1	1.18	2.41	706	3.1	4.7	7.4	0.35	0.83	C22
Gallbladder etc.	85	0.5	0.6	1.2	0.05	0.15	127	0.6	0.9	1.4	0.07	0.18	C23-24
Pancreas	298	1.8	2.1	4.2	0.19	0.50	334	1.5	2.2	3.7	0.15	0.41	C25
Nose, sinuses etc.	73	0.5	0.5	0.9	0.05	0.11	45	0.2	0.3	0.4	0.03	0.04	C30-31
Larynx	400	2.5	2.8	5.9	0.33	0.79	69	0.3	0.5	0.7	0.05	0.10	C32
Trachea, bronchus and lung	3168	19.6	22.0	45.9	2.27	5.66	1379	6.2	9.3	14.8	0.74	1.78	C33-34
Other thoracic organs	44	0.3	0.3	0.5	0.02	0.04	33	0.1	0.2	0.3	0.02	0.04	C37-38
Bone	272	1.7	1.9	2.5	0.15	0.26	214	1.0	1.4	1.8	0.11	0.17	C40-41
Melanoma of skin	59	0.4	0.4	0.8	0.04	0.07	62	0.3	0.4	0.6	0.04	0.07	C43
Other skin	301	2.1	2.1	4.0	0.20	0.44	289		1.9	3.0	0.13	0.35	C44
Mesothelioma	3	0.0	0.0	0.1	0.00	0.00	3	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	2	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	219	1.4	1.5	2.4	0.13	0.25	231	1.0	1.5	2.0	0.13	0.20	C47+C49
Breast	93	0.6	0.6	1.1	0.06	0.13	6491	29.0	43.5	60.1	4.46	6.77	C50
Vulva							42	0.2	0.3	0.5	0.02	0.06	C51
Vagina							33	0.1	0.2	0.3	0.02	0.03	C52
Cervix uteri							1991	8.9	13.4	17.0	1.34	1.82	C53
Corpus uteri							1108	4.9	7.4	10.5	0.85	1.22	C54
Uterus unspecified							238	1.1	1.6	2.2	0.15	0.26	C55
Ovary							1440	6.4	9.7	12.6	0.96	1.35	C56
Other female genital organs							15	0.1	0.1	0.2	0.01	0.02	C57
Placenta							40	0.2	0.3	0.2	0.02	0.02	C58
Penis	37	0.2	0.3	0.5	0.02	0.04							C60
Prostate	1833	11.4	12.8	32.8	0.71	3.63							C61
Testis	132	0.8	0.9	0.9	0.07	0.08							C62
Other male genital organs	12	0.1	0.1	0.2	0.01	0.01							C63
Kidney	396	2.5	2.8	4.8	0.28	0.57	221	1.0	1.5	2.1	0.14	0.21	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	3	0.0	0.0	0.0	0.00	0.01	2	0.0	0.0	0.0	0.00	0.00	C66
Bladder	314	1.9	2.2	4.6	0.19	0.53	135	0.6	0.9	1.5	0.06	0.17	C67
Other urinary organs	3	0.0	0.0	0.0	0.00	0.00	5	0.0	0.0	0.1	0.00	0.01	C68
Eye	48	0.3	0.3	0.4	0.02	0.02	51	0.2	0.3	0.4	0.02	0.03	C69
Brain, nervous system	299	1.9	2.1	2.7	0.16	0.26	259	1.2	1.7	2.3	0.13	0.23	C70-72
Thyroid	372	2.3	2.6	3.7	0.25	0.43	1579	7.0	10.6	12.4	0.92	1.28	C73
Adrenal gland	14	0.1	0.1	0.2	0.01	0.02	10	0.0	0.1	0.1	0.01	0.01	C74
Other endocrine	9	0.1	0.1	0.1	0.00	0.00	6	0.0	0.0	0.1	0.01	0.01	C75
Hodgkin lymphoma	66	0.4	0.5	0.5	0.04	0.05	68	0.3	0.5	0.5	0.03	0.04	C81
Non-Hodgkin lymphoma	548	3.4	3.8	6.1	0.35	0.65	541	2.4	3.6	5.1	0.28	0.58	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	98	0.6	0.7	1.4	0.07	0.16	87	0.4	0.6	0.9	0.06	0.11	C90
Lymphoid leukaemia	335	2.1	2.3	2.5	0.13	0.16	254	1.1	1.7	2.0	0.11	0.14	C91
Myeloid leukaemia	384	2.4	2.7	3.5	0.20	0.31	376	1.7	2.5	3.2	0.19	0.32	C92-94
Leukaemia unspecified	192	1.2	1.3	1.6	0.10	0.14	214	1.0	1.4	1.7	0.09	0.17	C95
Myeloproliferative disorders	20	0.1	0.1	0.2	0.01	0.02	17	0.1	0.1	0.1	0.01	0.02	MPD
Myelodysplastic syndromes	2	0.0	0.0	0.0	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	771	4.8	5.4	9.8	0.55	1.21	910	4.1	6.1	9.0	0.52	1.04	O&U
All sites	16437	114.3	217.7	10.51	24.97		22704	152.3	213.0	13.86	23.75	C00-96	
All sites except C44	16136	100.0	112.3	213.7	10.31	24.53	22415	100.0	150.4	209.9	13.73	23.40	C00-96 exc. C44

*Includes 136 cases of unknown age

\$Includes 216 cases of unknown age

*See note following population pyramid

Philippines, Rizal

REGISTRATION AREA

The Department of Health-Rizal Cancer Registry (DOH-RCR) covers the 26 municipalities of the original province of Rizal in the Philippines. In 1975, 12 of these municipalities were incorporated into the National Capital Region (NCR), and 6 of the 12 have since become cities (in 1994–1999). Of the 14 municipalities that remained in Rizal, one has become a city (in 1999). The registration area is 1343 km² and in 2007 had a population of 7.2 million. Between the 2000 and 2007 censuses, the population increased by 22%.

REGISTRY STRUCTURE AND METHODS

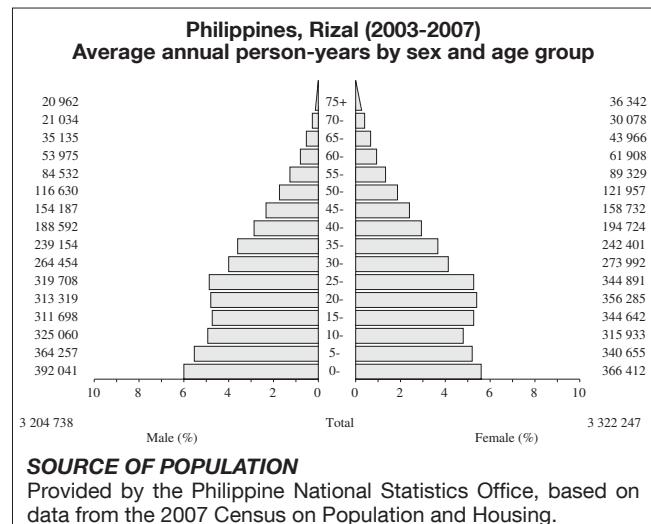
The DOH-RCR was the country's first population-based cancer registry. From 1974 to 1979, data collection was entirely passive, with the registry relying on notifications submitted by physicians and hospitals. This approach proved to be unsatisfactory, so active registration began in 1980, with registry assistants trained to abstract data from hospital records and death certificates. The DOH-RCR is located in the city of Pasig at the Rizal Medical Center, which has fully funded the registry since 1975. The DOH-RCR is headed by a general surgeon and staffed by two full-time registry clerks and 10 part-time cancer registry research assistants (who work collaboratively with the Philippine Department of Health and the Philippine Cancer Society). The DOH-RCR also works in collaboration with the Philippine Cancer Society-Manila Cancer Registry (PCS-MCR) to send registry staff members to the 172 public and private hospitals in the NCR and Rizal. Hospital data sources include patients' main medical records as well as records from cancer centres; tumour clinics; and radiotherapy, haematology, nuclear medicine, and imaging facilities. The DOH-RCR and the PCS-MCR use CanReg4 software, similar notification forms, and similar registration procedures, and they generally produce combined reports.

USE OF THE DATA

Two serial publications that include registry data are *Cancer in the Philippines* and *Philippine Cancer Facts and Estimates*. In collaboration with the German Cancer Research Center, the DOH-RCR has also published relative survival data for adult gastric, colorectal, liver, lung, breast, cervical, ovarian, and thyroid cancers and leukaemia (1993–2002 data) and for childhood leukaemia and lymphoma (1996–2005 data). Incidence maps have been generated in collaboration with the Finnish Cancer Registry. Registry data are used for programme planning and evaluation and for cancer research.

CONTRIBUTORS

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SOURCE OF POPULATION

Provided by the Philippine National Statistics Office, based on data from the 2007 Census on Population and Housing.

NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	43.7	Breast	57.0
Prostate	31.4	Cervix uteri	16.6
Liver	18.3	Trachea, bronchus and lung	13.8
Colon	15.4	Colon	11.6
Rectum	9.0	Ovary	11.3
Other and unspecified	9.0	Thyroid	10.9
Stomach	6.7	Corpus uteri	9.6
Non-Hodgkin lymphoma	6.1	Other and unspecified	7.2
Nasopharynx	4.9	Liver	6.7
Pancreas	4.6	Rectum	6.3
All sites	197.5	All sites	197.2

*Philippines, Rizal (2003-2007)

SITE	Male						Female						ICD-10
	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	9	0.1	0.1	0.1	0.01	0.01	5	0.0	0.0	0.1	0.00	0.01	C00
Tongue	123	0.8	0.8	1.4	0.08	0.17	97	0.4	0.6	1.0	0.05	0.14	C01-02
Mouth	95	0.6	0.6	1.2	0.06	0.16	112	0.5	0.7	1.2	0.05	0.15	C03-06
Salivary glands	82	0.5	0.5	0.9	0.06	0.10	78	0.4	0.5	0.7	0.04	0.06	C07-08
Tonsil	48	0.3	0.3	0.5	0.04	0.07	16	0.1	0.1	0.2	0.01	0.02	C09
Other oropharynx	17	0.1	0.1	0.2	0.01	0.03	11	0.1	0.1	0.1	0.00	0.01	C10
Nasopharynx	528	3.4	3.3	4.9	0.36	0.55	273	1.3	1.6	2.3	0.16	0.25	C11
Hypopharynx	21	0.1	0.1	0.3	0.02	0.04	9	0.0	0.1	0.1	0.01	0.01	C12-13
Pharynx unspecified	35	0.2	0.2	0.4	0.03	0.05	23	0.1	0.1	0.2	0.01	0.02	C14
Oesophagus	185	1.2	1.2	2.4	0.13	0.32	68	0.3	0.4	0.7	0.03	0.09	C15
Stomach	514	3.3	3.2	6.7	0.33	0.81	402	1.8	2.4	4.1	0.19	0.48	C16
Small intestine	51	0.3	0.3	0.6	0.04	0.07	33	0.2	0.2	0.3	0.02	0.04	C17
Colon	1184	7.5	7.4	15.4	0.74	1.76	1130	5.2	6.8	11.6	0.57	1.31	C18
Rectum	757	4.8	4.7	9.0	0.46	1.09	633	2.9	3.8	6.3	0.35	0.74	C19-20
Anus	17	0.1	0.1	0.2	0.01	0.03	19	0.1	0.1	0.2	0.01	0.03	C21
Liver	1583	10.1	9.9	18.3	1.10	2.13	663	3.0	4.0	6.7	0.30	0.77	C22
Gallbladder etc.	88	0.6	0.5	1.1	0.06	0.13	124	0.6	0.7	1.3	0.07	0.17	C23-24
Pancreas	357	2.3	2.2	4.6	0.23	0.57	377	1.7	2.3	3.9	0.19	0.43	C25
Nose, sinuses etc.	98	0.6	0.6	1.0	0.07	0.10	70	0.3	0.4	0.6	0.04	0.07	C30-31
Larynx	326	2.1	2.0	4.4	0.23	0.58	55	0.3	0.3	0.6	0.03	0.07	C32
Trachea, bronchus and lung	3189	20.3	19.9	43.7	2.17	5.47	1308	6.0	7.9	13.8	0.69	1.68	C33-34
Other thoracic organs	43	0.3	0.3	0.5	0.03	0.06	32	0.1	0.2	0.3	0.02	0.03	C37-38
Bone	261	1.7	1.6	2.2	0.14	0.23	220	1.0	1.3	1.7	0.11	0.17	C40-41
Melanoma of skin	49	0.3	0.3	0.6	0.04	0.07	47	0.2	0.3	0.5	0.02	0.06	C43
Other skin	239	1.5	1.5	3.0	0.13	0.30	254		1.5	2.5	0.13	0.28	C44
Mesothelioma	4	0.0	0.0	0.0	0.00	0.00	6	0.0	0.0	0.1	0.00	0.01	C45
Kaposi sarcoma	2	0.0	0.0	0.0	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	180	1.1	1.1	1.7	0.10	0.17	209	1.0	1.3	1.7	0.11	0.18	C47+C49
Breast	66	0.4	0.4	0.8	0.04	0.09	6560	30.1	39.5	57.0	4.34	6.42	C50
Vulva							41	0.2	0.2	0.4	0.02	0.05	C51
Vagina							31	0.1	0.2	0.3	0.02	0.04	C52
Cervix uteri							2008	9.2	12.1	16.6	1.33	1.81	C53
Corpus uteri							1070	4.9	6.4	9.6	0.77	1.11	C54
Uterus unspecified							239	1.1	1.4	2.2	0.14	0.25	C55
Ovary							1336	6.1	8.0	11.3	0.81	1.27	C56
Other female genital organs							17	0.1	0.1	0.2	0.01	0.02	C57
Placenta							48	0.2	0.3	0.3	0.02	0.02	C58
Penis	32	0.2	0.2	0.4	0.02	0.04							C60
Prostate	1875	11.9	11.7	31.4	0.68	3.43							C61
Testis	98	0.6	0.6	0.6	0.04	0.06							C62
Other male genital organs	4	0.0	0.0	0.1	0.00	0.00							C63
Kidney	334	2.1	2.1	3.7	0.25	0.43	203	0.9	1.2	1.8	0.12	0.22	C64
Renal pelvis	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	5	0.0	0.0	0.1	0.00	0.00	3	0.0	0.0	0.0	0.00	0.00	C66
Bladder	308	2.0	1.9	4.3	0.17	0.46	150	0.7	0.9	1.6	0.07	0.16	C67
Other urinary organs	1	0.0	0.0	0.0	0.00	0.00	3	0.0	0.0	0.0	0.00	0.00	C68
Eye	65	0.4	0.4	0.4	0.02	0.03	52	0.2	0.3	0.4	0.02	0.03	C69
Brain, nervous system	335	2.1	2.1	3.0	0.18	0.30	274	1.3	1.6	2.1	0.14	0.22	C70-72
Thyroid	341	2.2	2.1	3.3	0.21	0.36	1477	6.8	8.9	10.9	0.82	1.13	C73
Adrenal gland	14	0.1	0.1	0.1	0.01	0.01	11	0.1	0.1	0.1	0.00	0.00	C74
Other endocrine	12	0.1	0.1	0.1	0.00	0.00	4	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	67	0.4	0.4	0.5	0.03	0.04	54	0.2	0.3	0.4	0.02	0.03	C81
Non-Hodgkin lymphoma	577	3.7	3.6	6.1	0.31	0.66	505	2.3	3.0	4.5	0.25	0.52	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	85	0.5	0.5	1.1	0.06	0.15	107	0.5	0.6	1.1	0.06	0.14	C90
Lymphoid leukaemia	310	2.0	1.9	2.1	0.10	0.14	219	1.0	1.3	1.5	0.07	0.10	C91
Myeloid leukaemia	347	2.2	2.2	3.0	0.18	0.30	382	1.8	2.3	3.0	0.18	0.30	C92-94
Leukaemia unspecified	195	1.2	1.2	1.6	0.08	0.15	199	0.9	1.2	1.5	0.09	0.14	C95
Myeloproliferative disorders	28	0.2	0.2	0.3	0.02	0.03	25	0.1	0.2	0.2	0.01	0.02	MPD
Myelodysplastic syndromes	16	0.1	0.1	0.2	0.00	0.03	17	0.1	0.1	0.1	0.01	0.01	MDS
Other and unspecified	760	4.8	4.7	9.0	0.50	1.02	763	3.5	4.6	7.2	0.41	0.84	O&U
All sites	15961	99.6	197.5	9.57	22.82		22072	132.9	197.2	12.97	22.13	C00-96	
All sites except C44	15722	100.0	98.1	194.6	9.44	22.52	21818	100.0	131.3	194.7	12.84	21.85	C00-96 exc. C44

*Includes 56 cases of unknown age

\$Includes 85 cases of unknown age

*See note following population pyramid

Qatar: Qatari

REGISTRATION AREA

The Qatar Cancer Registry (QCR) covers all cancer cases diagnosed in Qatar. In 2004, the population was 744 000. During 1997–2004, the population increased an average of 6.0% annually, compared with an annual average of 3.7% during 1986–1997. This rapid increase is attributed to an influx of workers due to the country's strong economy.

CANCER CARE FACILITIES

General health care is provided mainly by Hamad Medical Corporation, one of the leading specialized health care providers in the Gulf Arab states. Qatar's main cancer centre is located in Al Amal Hospital and is equipped with the latest therapeutic and diagnostic equipment.

REGISTRY STRUCTURE AND METHODS

The QCR was founded in 1989 as a hospital-based cancer registry in Hamad General Hospital. The registry was expanded to cover the entire country in 2003, and was relocated to Al Amal Hospital in 2004. The registry is staffed by a director, a data manager, and a full-time registrar, who are supported by a scientific board. The QCR routinely collects data from sources including general hospitals, private hospitals and clinics, specialized hospitals and centres, pathology and haematology laboratories, the Overseas Medical Offices Department of Qatar's Supreme Council of Health, and death registration offices. The registry is supported by Qatar's National Center for Cancer Care and Research, Hamad Medical Corporation, the Supreme Council of Health, and the Qatar Statistics Authority.

INTERPRETING THE RESULTS

It is difficult to estimate the number of cases that are undiagnosed or missed from registration, but the number of unreported cases is expected to decrease in future years with the implementation of electronic registration methods. Cancer mortality data for the Qatari population are fairly complete.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

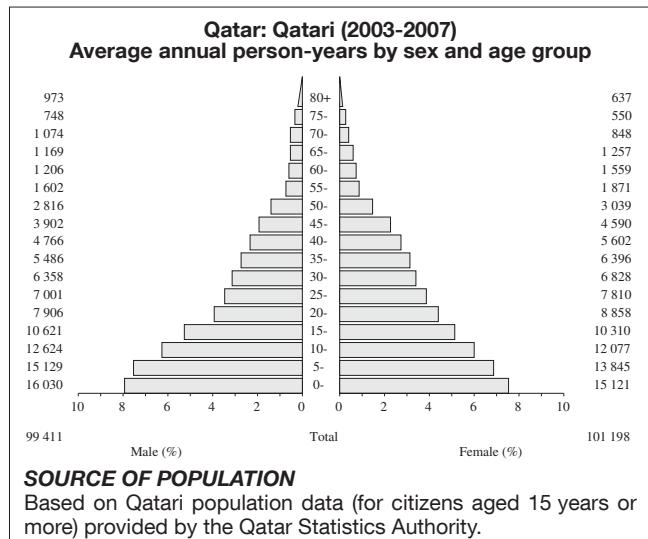
Male		Female	
Trachea, bronchus and lung	19.2	Breast	45.7
Liver	14.1	Colon	9.1
Colon	13.6	Thyroid	7.7
Prostate	10.4	Non-Hodgkin lymphoma	7.6
Non-Hodgkin lymphoma	8.3	Rectum	7.5
Bladder	7.6	Corpus uteri	6.9
Non-melanoma skin cancer	7.3	Ovary	6.4
Stomach	6.8	Cervix uteri	5.3
Rectum	6.6	Liver	5.2
Larynx	6.5	Stomach	4.6
All sites	154.7	All sites	151.1

USE OF THE DATA

The registry regularly publishes reports on the distribution of various types of cancer by age and sex. These reports are used by health planners and policy-makers to assess cancer burden, allocate resources, and evaluate prevention and control activities. The QCR is also a regular contributor to the Gulf Cancer Consortium database.

CONTRIBUTORS

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Qatar: Qatari (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C00
Tongue	3	0.7	0.6	0.9	0.10	0.10	2	0.4	0.4	0.7	0.02	0.10	C01-02
Mouth	0	0.0	0.0	0.0	0.00	0.00	2	0.4	0.4	0.5	0.01	0.01	C03-06
Salivary glands	1	0.2	0.2	0.2	0.02	0.02	0	0.0	0.0	0.0	0.00	0.00	C07-08
Tonsil	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	5	1.2	1.0	1.7	0.08	0.26	4	0.9	0.8	1.7	0.02	0.30	C11
Hypopharynx	1	0.2	0.2	0.5	0.00	0.09	0	0.0	0.0	0.0	0.00	0.00	C12-13
Pharynx unspecified	1	0.2	0.2	0.5	0.00	0.09	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	8	2.0	1.6	2.4	0.10	0.19	11	2.4	2.2	4.2	0.17	0.60	C15
Stomach	17	4.2	3.4	6.8	0.46	0.92	12	2.6	2.4	4.6	0.22	0.62	C16
Small intestine	3	0.7	0.6	1.0	0.09	0.09	0	0.0	0.0	0.0	0.00	0.00	C17
Colon	32	8.0	6.4	13.6	1.06	1.67	26	5.6	5.1	9.1	0.82	1.06	C18
Rectum	13	3.2	2.6	6.6	0.51	0.95	21	4.5	4.2	7.5	0.47	0.90	C19-20
Anus	1	0.2	0.2	0.5	0.00	0.09	0	0.0	0.0	0.0	0.00	0.00	C21
Liver	35	8.7	7.0	14.1	0.46	2.16	13	2.8	2.6	5.2	0.15	0.74	C22
Gallbladder etc.	4	1.0	0.8	0.9	0.00	0.00	8	1.7	1.6	3.2	0.08	0.55	C23-24
Pancreas	7	1.7	1.4	2.8	0.10	0.35	7	1.5	1.4	2.6	0.23	0.31	C25
Nose, sinuses etc.	3	0.7	0.6	1.1	0.04	0.12	0	0.0	0.0	0.0	0.00	0.00	C30-31
Larynx	16	4.0	3.2	6.5	0.43	0.78	1	0.2	0.2	0.3	0.00	0.00	C32
Trachea, bronchus and lung	48	12.0	9.7	19.2	1.09	2.80	10	2.1	2.0	4.1	0.19	0.51	C33-34
Other thoracic organs	1	0.2	0.2	0.3	0.02	0.02	0	0.0	0.0	0.0	0.00	0.00	C37-38
Bone	4	1.0	0.8	0.8	0.06	0.06	3	0.6	0.6	0.5	0.04	0.04	C40-41
Melanoma of skin	1	0.2	0.2	0.4	0.00	0.09	0	0.0	0.0	0.0	0.00	0.00	C43
Other skin	17		3.4	7.3	0.19	1.06	11		2.2	3.9	0.30	0.50	C44
Mesothelioma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	5	1.2	1.0	1.6	0.13	0.13	2	0.4	0.4	0.6	0.01	0.13	C46
Connective and soft tissue	8	2.0	1.6	2.1	0.09	0.18	9	1.9	1.8	2.4	0.17	0.25	C47+C49
Breast	1	0.2	0.2	0.4	0.04	0.04	150	32.2	29.6	45.7	3.82	4.93	C50
Vulva							0	0.0	0.0	0.0	0.00	0.00	C51
Vagina							0	0.0	0.0	0.0	0.00	0.00	C52
Cervix uteri							17	3.6	3.4	5.3	0.45	0.57	C53
Corpus uteri							20	4.3	4.0	6.9	0.62	0.62	C54
Uterus unspecified							4	0.9	0.8	1.4	0.17	0.17	C55
Ovary							21	4.5	4.2	6.4	0.59	0.67	C56
Other female genital organs							1	0.2	0.2	0.3	0.02	0.02	C57
Placenta							2	0.4	0.4	0.4	0.03	0.03	C58
Penis	0	0.0	0.0	0.0	0.00	0.00							C60
Prostate	27	6.7	5.4	10.4	0.47	1.18							C61
Testis	4	1.0	0.8	1.1	0.09	0.09							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	16	4.0	3.2	5.2	0.20	0.65	8	1.7	1.6	2.4	0.18	0.26	C64
Renal pelvis	1	0.2	0.2	0.4	0.04	0.04	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	1	0.2	0.2	0.5	0.00	0.09	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	19	4.7	3.8	7.6	0.40	1.03	4	0.9	0.8	1.9	0.06	0.42	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C69
Brain, nervous system	15	3.7	3.0	5.6	0.33	0.78	17	3.6	3.4	4.3	0.31	0.31	C70-72
Thyroid	8	2.0	1.6	2.6	0.19	0.37	32	6.9	6.3	7.7	0.54	0.66	C73
Adrenal gland	0	0.0	0.0	0.0	0.00	0.00	2	0.4	0.4	0.7	0.02	0.10	C74
Other endocrine	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	15	3.7	3.0	4.4	0.42	0.42	10	2.1	2.0	1.7	0.11	0.11	C81
Non-Hodgkin lymphoma	24	6.0	4.8	8.3	0.64	1.00	21	4.5	4.2	7.6	0.56	0.92	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	5	1.2	1.0	2.4	0.12	0.39	2	0.4	0.4	0.8	0.10	0.10	C90
Lymphoid leukaemia	17	4.2	3.4	3.7	0.20	0.38	5	1.1	1.0	1.1	0.10	0.10	C91
Myeloid leukaemia	13	3.2	2.6	3.3	0.20	0.29	9	1.9	1.8	2.4	0.11	0.27	C92-94
Leukaemia unspecified	1	0.2	0.2	0.4	0.00	0.09	4	0.9	0.8	0.7	0.04	0.04	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	1	0.2	0.2	0.2	0.01	0.01	MPD
Myelodysplastic syndromes	4	1.0	0.8	1.4	0.06	0.14	1	0.2	0.2	0.5	0.00	0.12	MDS
Other and unspecified	13	3.2	2.6	5.4	0.37	0.64	4	0.9	0.8	1.4	0.07	0.15	O&U
All sites	418		84.1	154.7	8.77	19.81	477		94.3	151.1	10.79	17.16	C00-96
All sites except C44	401	100.0	80.7	147.4	8.59	18.75	466	100.0	92.1	147.2	10.49	16.66	C00-96 exc. C44

Saudi Arabia, Riyadh: Saudi

REGISTRATION AREA

The National Saudi Cancer Registry (SCR) covers the entire country of Saudi Arabia, but the data included in this volume are for the province of Riyadh, which has an area of 412 000 km² (17% of the country's total area). The province is home to 25% of the national population, with an annual population growth rate of about 3.85%. In 2010, the population was 6.8 million (63.4% Saudis). The provincial and national capital is the city of Riyadh, which is divided into 15 municipal districts and is the 80th richest city in the world. The city has numerous educational, financial, agricultural, cultural, technical, and social organizations, as well as the world's largest all-female university (Princess Nora Bint Abdul Rahman University).

CANCER CARE FACILITIES

The health sector is highly developed. Health services are provided by government hospitals and supplemented by private hospitals. Residents have access to modern cancer centres offering a complete range of services. The government provides cancer treatment within major specialized tertiary care hospitals. The King Faisal Specialist Hospital and Research Centre (KFSH&RC) in Riyadh has the largest cancer facility in the Gulf region, providing high-quality surgery, chemotherapy, radiation, and palliative care. It treats approximately 30% of the country's overall cancers and 70% of paediatric cancers.

REGISTRY STRUCTURE AND METHODS

The SCR began registering cases in 1994, and is funded by the Ministry of Finance of Saudi Arabia. The main office is at the KFSH&RC, and there are 11 regional branches. The SCR uses multiple data sources, including death notifications and death certificates (since 2005). The registry has also performed extensive retrospective data collection for cancer deaths that occurred before 2005. Registrars actively collect cases from 295 hospitals and histopathology laboratories, and the SCR also receives notifications directly from hospital-based registries.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Liver	13.0	Breast	21.1
Non-Hodgkin lymphoma	8.6	Thyroid	10.2
Prostate	7.9	Non-Hodgkin lymphoma	7.1
Colon	6.9	Colon	6.3
Trachea, bronchus and lung	6.3	Liver	6.0
Bladder	5.6	Other and unspecified	4.7
Rectum	5.3	Corpus uteri	4.4
Stomach	4.4	Rectum	4.0
Other and unspecified	4.4	Ovary	3.3
Non-melanoma skin cancer	3.8	Non-melanoma skin cancer	3.2
All sites	104.1	All sites	103.9

INTERPRETING THE RESULTS

Cancer screening is provided by some hospitals and charity organizations.

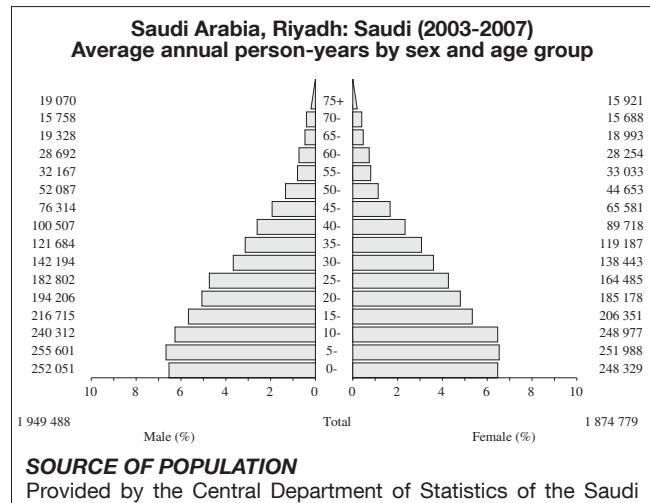
USE OF THE DATA

The SCR publishes an annual cancer incidence report. Registry data are also used for epidemiological studies, programme evaluation, and research projects.

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SOURCE OF POPULATION

Provided by the Central Department of Statistics of the Saudi Arabian Ministry of Planning, based on the 2004 census, with an estimated 2.5% growth rate among Saudis.

NOTES ON THE DATA

*No official mortality data. High MV%. Low DCO rates.

*Saudi Arabia, Riyadh: Saudi (2003-2007)

S I T E	Male						Female						ICD-10
	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	6	0.1	0.1	0.1	0.00	0.01	4	0.1	0.0	0.1	0.01	0.01	C00
Tongue	35	0.7	0.4	0.7	0.06	0.08	18	0.3	0.2	0.4	0.03	0.06	C01-02
Mouth	25	0.5	0.3	0.5	0.02	0.06	29	0.5	0.3	0.6	0.05	0.06	C03-06
Salivary glands	18	0.3	0.2	0.3	0.02	0.04	17	0.3	0.2	0.3	0.01	0.02	C07-08
Tonsil	4	0.1	0.0	0.1	0.01	0.01	3	0.1	0.0	0.1	0.00	0.01	C09
Other oropharynx	1	0.0	0.0	0.0	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	136	2.6	1.4	2.2	0.18	0.22	54	1.0	0.6	1.0	0.07	0.11	C11
Hypopharynx	5	0.1	0.1	0.1	0.01	0.01	13	0.2	0.1	0.3	0.02	0.02	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	69	1.3	0.7	1.6	0.06	0.14	50	0.9	0.5	1.3	0.07	0.17	C15
Stomach	190	3.7	1.9	4.4	0.18	0.49	106	2.0	1.1	2.3	0.11	0.27	C16
Small intestine	26	0.5	0.3	0.5	0.02	0.07	13	0.2	0.1	0.3	0.02	0.03	C17
Colon	322	6.3	3.3	6.9	0.35	0.85	292	5.4	3.1	6.3	0.45	0.71	C18
Rectum	245	4.8	2.5	5.3	0.30	0.66	182	3.4	1.9	4.0	0.26	0.43	C19-20
Anus	9	0.2	0.1	0.2	0.02	0.03	14	0.3	0.1	0.3	0.02	0.04	C21
Liver	531	10.3	5.4	13.0	0.55	1.66	242	4.5	2.6	6.0	0.37	0.74	C22
Gallbladder etc.	54	1.0	0.6	1.2	0.04	0.16	102	1.9	1.1	2.5	0.13	0.30	C23-24
Pancreas	132	2.6	1.4	3.2	0.16	0.41	76	1.4	0.8	1.9	0.09	0.24	C25
Nose, sinuses etc.	13	0.3	0.1	0.2	0.01	0.01	10	0.2	0.1	0.2	0.01	0.02	C30-31
Larynx	73	1.4	0.7	1.7	0.11	0.21	6	0.1	0.1	0.1	0.01	0.01	C32
Trachea, bronchus and lung	275	5.3	2.8	6.3	0.32	0.85	98	1.8	1.0	2.2	0.14	0.24	C33-34
Other thoracic organs	19	0.4	0.2	0.3	0.02	0.03	13	0.2	0.1	0.2	0.02	0.03	C37-38
Bone	84	1.6	0.9	0.8	0.06	0.06	46	0.9	0.5	0.5	0.04	0.04	C40-41
Melanoma of skin	14	0.3	0.1	0.3	0.02	0.03	16	0.3	0.2	0.4	0.02	0.03	C43
Other skin	177	1.8	1.8	3.8	0.14	0.43	146		1.6	3.2	0.19	0.38	C44
Mesothelioma	4	0.1	0.0	0.1	0.01	0.01	6	0.1	0.1	0.1	0.01	0.02	C45
Kaposi sarcoma	27	0.5	0.3	0.6	0.05	0.07	16	0.3	0.2	0.4	0.03	0.04	C46
Connective and soft tissue	93	1.8	1.0	1.3	0.07	0.12	72	1.3	0.8	0.9	0.06	0.07	C47+C49
Breast	25	0.5	0.3	0.5	0.03	0.06	1179	21.9	12.6	21.1	1.61	2.30	C50
Vulva							5	0.1	0.1	0.1	0.01	0.02	C51
Vagina							6	0.1	0.1	0.1	0.01	0.01	C52
Cervix uteri							103	1.9	1.1	2.0	0.15	0.22	C53
Corpus uteri							184	3.4	2.0	4.4	0.27	0.57	C54
Uterus unspecified							14	0.3	0.1	0.3	0.02	0.05	C55
Ovary							181	3.4	1.9	3.3	0.24	0.35	C56
Other female genital organs							11	0.2	0.1	0.2	0.02	0.03	C57
Placenta							15	0.3	0.2	0.2	0.02	0.02	C58
Penis	2	0.0	0.0	0.1	0.00	0.01							C60
Prostate	322	6.3	3.3	7.9	0.22	1.00							C61
Testis	61	1.2	0.6	0.6	0.05	0.05							C62
Other male genital organs	1	0.0	0.0	0.0	0.00	0.00							C63
Kidney	178	3.5	1.8	3.5	0.19	0.39	121	2.2	1.3	2.3	0.17	0.25	C64
Renal pelvis	9	0.2	0.1	0.2	0.02	0.03	3	0.1	0.0	0.1	0.00	0.01	C65
Ureter	1	0.0	0.0	0.0	0.00	0.01	3	0.1	0.0	0.1	0.00	0.00	C66
Bladder	266	5.2	2.7	5.6	0.31	0.64	59	1.1	0.6	1.3	0.08	0.13	C67
Other urinary organs	1	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.01	C68
Eye	26	0.5	0.3	0.4	0.01	0.03	19	0.4	0.2	0.2	0.01	0.01	C69
Brain, nervous system	230	4.5	2.4	3.5	0.22	0.38	152	2.8	1.6	2.1	0.12	0.21	C70-72
Thyroid	161	3.1	1.7	2.5	0.19	0.27	705	13.1	7.5	10.2	0.76	0.99	C73
Adrenal gland	16	0.3	0.2	0.2	0.01	0.01	14	0.3	0.1	0.2	0.01	0.01	C74
Other endocrine	14	0.3	0.1	0.1	0.01	0.01	1	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	201	3.9	2.1	2.2	0.14	0.18	162	3.0	1.7	2.0	0.11	0.18	C81
Non-Hodgkin lymphoma	490	9.5	5.0	8.6	0.48	0.93	358	6.7	3.8	7.1	0.38	0.81	C82-85,C96
Immunoproliferative diseases	2	0.0	0.0	0.0	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	74	1.4	0.8	1.7	0.09	0.23	45	0.8	0.5	1.0	0.06	0.13	C90
Lymphoid leukaemia	247	4.8	2.5	2.9	0.14	0.23	140	2.6	1.5	1.7	0.07	0.14	C91
Myeloid leukaemia	167	3.2	1.7	2.5	0.13	0.28	157	2.9	1.7	2.5	0.15	0.28	C92-94
Leukaemia unspecified	18	0.3	0.2	0.3	0.01	0.03	9	0.2	0.1	0.1	0.01	0.01	C95
Myeloproliferative disorders	24	0.5	0.2	0.5	0.02	0.06	17	0.3	0.2	0.4	0.03	0.05	MPD
Myelodysplastic syndromes	6	0.1	0.1	0.1	0.01	0.01	11	0.2	0.1	0.2	0.02	0.03	MDS
Other and unspecified	198	3.8	2.0	4.4	0.22	0.50	208	3.9	2.2	4.7	0.25	0.52	O&U
All sites	5327	54.7	104.1	5.29	12.05		5527	59.0	103.9	6.79	11.41	C00-96	
All sites except C44	5150	100.0	100.4	5.15	11.62		5381	100.0	100.7	6.60	11.04	C00-96 exc. C44	

*Includes 2 cases of unknown age

\$Includes 2 cases of unknown age

*See note following population pyramid

Singapore

REGISTRATION AREA

The Singapore Cancer Registry covers the country of Singapore. In 2010, the population was 5.1 million: 74.1% Chinese, 13.4% Malay, 9.2% Indian, and 3.3% of other ethnicities.

CANCER CARE FACILITIES

Primary health care is provided by 18 public outpatient clinics and 2384 private clinics. There are also seven public and seven private hospitals. Health care is paid for mainly by government subsidies, employment benefits, and personal savings (Medisave). There is also a basic medical insurance plan (MediShield) for catastrophic illnesses (including cancer) that covers all citizens and permanent residents.

REGISTRY STRUCTURE AND METHODS

The National Registry of Diseases Office (NRDO) was set up by the Ministry of Health Singapore to manage registry operations. The National Registry of Diseases Act of 2007 allows the NRDO to collect incidence data on selected diseases, and cancer notification became mandatory in 2009. Patient identifiers are encrypted before being added to the database. The registry receives pathology reports, hospital listings, notifications from practitioners, and death certificates. Registry coordinators verify each notification against hospital and clinic records, and interrater reliability is evaluated against an internal gold standard. The registry is staffed by eight employees: two nurse managers, two senior executives, a senior staff nurse, a staff nurse, and two management support staff members. Additional quality assurance, data management, and epidemiological staff members also support the registry.

INTERPRETING THE RESULTS

The registry used ICD-O-2 coding during 1993–2002 and switched to ICD-O-3 in 2003. Since 1998, the registry has also used the fourth edition of the WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues. Organized screening was implemented for breast cancer in 2002, for cervical cancer in 2004, and for colorectal cancer in 2011.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

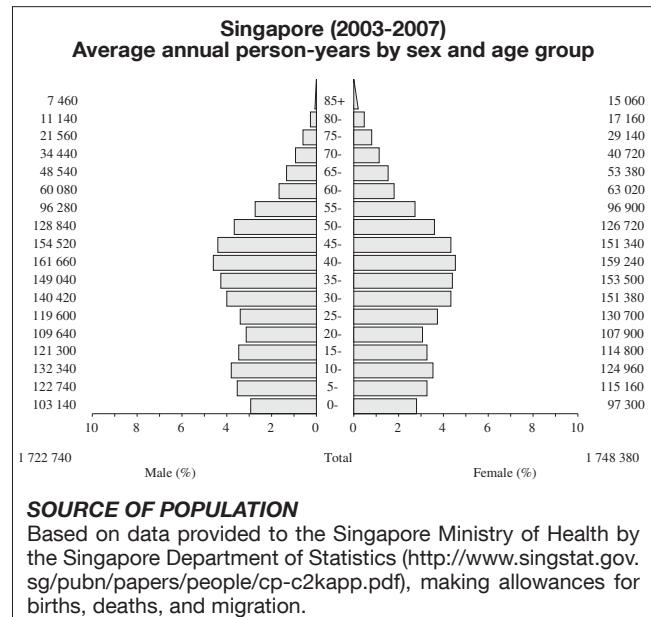
Male		Female	
Trachea, bronchus and lung	41.1	Breast	57.8
Prostate	24.2	Colon	19.0
Colon	22.9	Trachea, bronchus and lung	16.3
Liver	17.4	Corpus uteri	11.7
Rectum	16.8	Rectum	9.5
Stomach	14.0	Ovary	9.0
Nasopharynx	10.9	Cervix uteri	8.9
Non-melanoma skin cancer	9.7	Stomach	7.1
Non-Hodgkin lymphoma	9.0	Non-melanoma skin cancer	6.6
Bladder	7.1	Thyroid	5.9
All sites	229.6	All sites	198.6

USE OF THE DATA

The registry provides annual online reports on cancer incidence and publishes reports on incidence and survival every 5 years. The data are also used for the annual Singapore Burden of Disease Study, hospital audits, resource projections, and research. The statistics exclude in situ cancers and data on non-permanent residents.

CONTRIBUTORS

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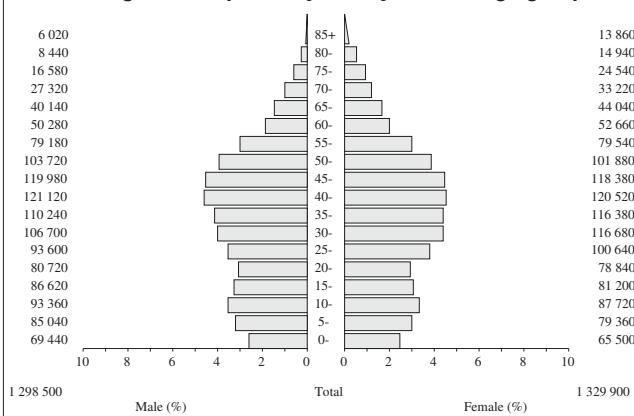
SOURCE OF POPULATION

Based on data provided to the Singapore Ministry of Health by the Singapore Department of Statistics (<http://www.singstat.gov.sg/pubn/papers/people/cp-c2kapp.pdf>), making allowances for births, deaths, and migration.

NOTES ON THE DATA

†C67 (bladder cancer) includes neoplasms of uncertain or unknown behaviour together with invasive cancers.

Singapore: Chinese (2003-2007)
Average annual person-years by sex and age group

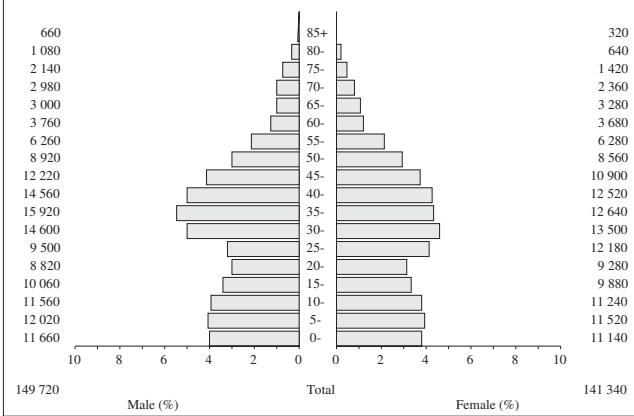


NOTES ON THE DATA: †C67 (bladder cancer) includes neoplasms of uncertain or unknown behaviour together with invasive cancers.

SINGAPORE: CHINESE
10 MAJOR CANCERS, ASR (WORLD) PER 100 000

	Male	Female
Trachea, bronchus and lung	44.7	Breast
Colon	25.6	Colon
Prostate	25.6	Trachea, bronchus and lung
Liver	19.0	Corpus uteri
Rectum	18.4	Rectum
Stomach	15.9	Cervix uteri
Nasopharynx	12.6	Ovary
Non-melanoma skin cancer	10.1	Stomach
Non-Hodgkin lymphoma	9.3	Non-melanoma skin cancer
Bladder	7.4	Thyroid
All sites	247.2	All sites

Singapore: Indian (2003-2007)
Average annual person-years by sex and age group

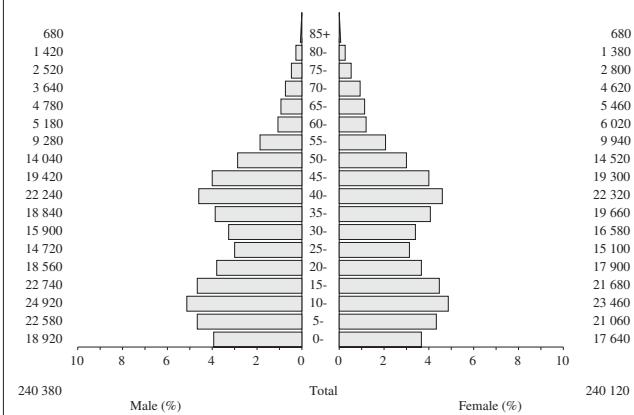


NOTES ON THE DATA: †C67 (bladder cancer) includes neoplasms of uncertain or unknown behaviour together with invasive cancers.

SINGAPORE: INDIAN
10 MAJOR CANCERS, ASR (WORLD) PER 100 000

	Male	Female
Trachea, bronchus and lung	17.4	Breast
Prostate	15.9	Corpus uteri
Rectum	9.7	Ovary
Stomach	9.2	Colon
Liver	9.0	Thyroid
Colon	7.8	Stomach
Non-Hodgkin lymphoma	5.5	Non-Hodgkin lymphoma
Bladder	5.4	Trachea, bronchus and lung
Kidney	5.0	Rectum
Other and unspecified	4.5	Cervix uteri
All sites	132.8	All sites

Singapore: Malay (2003-2007)
Average annual person-years by sex and age group



NOTES ON THE DATA: †C67 (bladder cancer) includes neoplasms of uncertain or unknown behaviour together with invasive cancers.

SINGAPORE: MALAY
10 MAJOR CANCERS, ASR (WORLD) PER 100 000

	Male	Female
Trachea, bronchus and lung	34.0	Breast
Prostate	17.9	Trachea, bronchus and lung
Colon	14.5	Colon
Liver	12.6	Corpus uteri
Rectum	10.7	Ovary
Non-Hodgkin lymphoma	10.4	Non-Hodgkin lymphoma
Nasopharynx	6.9	Cervix uteri
Bladder	5.9	Thyroid
Other and unspecified	5.7	Rectum
Pancreas	4.7	Pancreas
All sites	165.4	All sites

Singapore (2003-2007)

S I T E	Male						Female						
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	ICD-10
Lip	6	0.0	0.1	0.1	0.00	0.01	4	0.0	0.0	0.0	0.00	0.00	C00
Tongue	154	0.7	1.8	1.6	0.08	0.18	74	0.3	0.8	0.6	0.03	0.07	C01-02
Mouth	127	0.6	1.5	1.3	0.07	0.18	62	0.3	0.7	0.5	0.02	0.05	C03-06
Salivary glands	67	0.3	0.8	0.7	0.04	0.06	64	0.3	0.7	0.5	0.04	0.05	C07-08
Tonsil	66	0.3	0.8	0.7	0.04	0.09	19	0.1	0.2	0.2	0.01	0.01	C09
Other oropharynx	16	0.1	0.2	0.2	0.01	0.02	5	0.0	0.1	0.0	0.00	0.00	C10
Nasopharynx	1207	5.8	14.0	10.9	0.87	1.20	405	1.8	4.6	3.5	0.27	0.36	C11
Hypopharynx	111	0.5	1.3	1.2	0.06	0.15	12	0.1	0.1	0.1	0.00	0.01	C12-13
Pharynx unspecified	16	0.1	0.2	0.2	0.01	0.02	3	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	335	1.6	3.9	3.6	0.17	0.43	83	0.4	0.9	0.6	0.02	0.04	C15
Stomach	1325	6.3	15.4	14.0	0.46	1.53	850	3.9	9.7	7.1	0.26	0.73	C16
Small intestine	66	0.3	0.8	0.7	0.03	0.09	48	0.2	0.5	0.4	0.02	0.05	C17
Colon	2184	10.4	25.4	22.9	0.95	2.69	2229	10.2	25.5	19.0	0.88	2.09	C18
Rectum	1647	7.9	19.1	16.8	0.88	2.00	1091	5.0	12.5	9.5	0.50	1.12	C19-20
Anus	59	0.3	0.7	0.6	0.03	0.06	43	0.2	0.5	0.3	0.01	0.03	C21
Liver	1663	7.9	19.3	17.4	0.88	2.08	534	2.4	6.1	4.6	0.16	0.50	C22
Gallbladder etc.	173	0.8	2.0	1.8	0.07	0.23	218	1.0	2.5	1.9	0.07	0.20	C23-24
Pancreas	569	2.7	6.6	5.9	0.25	0.70	466	2.1	5.3	4.0	0.17	0.44	C25
Nose, sinuses etc.	78	0.4	0.9	0.8	0.05	0.11	49	0.2	0.6	0.4	0.02	0.04	C30-31
Larynx	353	1.7	4.1	3.7	0.18	0.42	33	0.2	0.4	0.3	0.01	0.03	C32
Trachea, bronchus and lung	3852	18.4	44.7	41.1	1.47	4.92	1898	8.7	21.7	16.3	0.72	1.83	C33-34
Other thoracic organs	79	0.4	0.9	0.9	0.05	0.08	44	0.2	0.5	0.4	0.03	0.04	C37-38
Bone	61	0.3	0.7	0.7	0.04	0.05	47	0.2	0.5	0.5	0.04	0.04	C40-41
Melanoma of skin	50	0.2	0.6	0.5	0.03	0.05	57	0.3	0.7	0.5	0.03	0.05	C43
Other skin	930		10.8	9.7	0.42	1.01	787		9.0	6.6	0.24	0.69	C44
Mesothelioma	43	0.2	0.5	0.5	0.02	0.07	9	0.0	0.1	0.1	0.01	0.01	C45
Kaposi sarcoma	10	0.0	0.1	0.1	0.01	0.01	2	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	178	0.8	2.1	1.9	0.12	0.18	128	0.6	1.5	1.2	0.08	0.11	C47+C49
Breast	17	0.1	0.2	0.2	0.01	0.02	6717	30.7	76.8	57.8	4.58	6.31	C50
Vulva							69	0.3	0.8	0.6	0.03	0.06	C51
Vagina							38	0.2	0.4	0.3	0.02	0.04	C52
Cervix uteri							1013	4.6	11.6	8.9	0.59	1.02	C53
Corpus uteri							1327	6.1	15.2	11.7	0.92	1.35	C54
Uterus unspecified							10	0.0	0.1	0.1	0.00	0.01	C55
Ovary							1003	4.6	11.5	9.0	0.68	0.92	C56
Other female genital organs							27	0.1	0.3	0.2	0.02	0.03	C57
Placenta							11	0.1	0.1	0.1	0.01	0.01	C58
Penis	52	0.2	0.6	0.5	0.02	0.06							C60
Prostate	2190	10.4	25.4	24.2	0.83	3.03							C61
Testis	119	0.6	1.4	1.3	0.09	0.09							C62
Other male genital organs	38	0.2	0.4	0.4	0.02	0.06							C63
Kidney	549	2.6	6.4	5.4	0.33	0.66	266	1.2	3.0	2.5	0.14	0.29	C64
Renal pelvis	52	0.2	0.6	0.5	0.03	0.06	33	0.2	0.4	0.3	0.01	0.04	C65
Ureter	24	0.1	0.3	0.3	0.02	0.04	24	0.1	0.3	0.2	0.01	0.02	C66
† Bladder	680	3.2	7.9	7.1	0.27	0.76	223	1.0	2.6	1.9	0.07	0.22	C67
Other urinary organs	7	0.0	0.1	0.1	0.00	0.00	9	0.0	0.1	0.1	0.00	0.01	C68
Eye	19	0.1	0.2	0.3	0.01	0.02	16	0.1	0.2	0.3	0.01	0.02	C69
Brain, nervous system	230	1.1	2.7	2.4	0.16	0.23	191	0.9	2.2	2.1	0.12	0.17	C70-72
Thyroid	215	1.0	2.5	2.1	0.14	0.23	650	3.0	7.4	5.9	0.45	0.57	C73
Adrenal gland	19	0.1	0.2	0.2	0.01	0.02	17	0.1	0.2	0.2	0.01	0.02	C74
Other endocrine	15	0.1	0.2	0.2	0.01	0.01	8	0.0	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	96	0.5	1.1	1.0	0.06	0.10	64	0.3	0.7	0.8	0.05	0.06	C81
Non-Hodgkin lymphoma	863	4.1	10.0	9.0	0.49	1.00	630	2.9	7.2	5.8	0.37	0.62	C82-85,C96
Immunoproliferative diseases	1	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	154	0.7	1.8	1.6	0.09	0.19	129	0.6	1.5	1.2	0.05	0.14	C90
Lymphoid leukaemia	206	1.0	2.4	2.9	0.15	0.20	153	0.7	1.8	2.2	0.12	0.15	C91
Myeloid leukaemia	303	1.4	3.5	3.2	0.19	0.30	264	1.2	3.0	2.6	0.15	0.27	C92-94
Leukaemia unspecified	28	0.1	0.3	0.3	0.01	0.04	26	0.1	0.3	0.2	0.01	0.02	C95
Myeloproliferative disorders	25	0.1	0.3	0.3	0.01	0.04	25	0.1	0.3	0.2	0.01	0.02	MPD
Myelodysplastic syndromes	64	0.3	0.7	0.7	0.02	0.07	39	0.2	0.4	0.3	0.02	0.03	MDS
Other and unspecified	502	2.4	5.8	5.3	0.22	0.58	455	2.1	5.2	3.9	0.17	0.39	O&U
All sites	21893		254.2	229.6	10.47	26.44	22702		259.7	198.6	12.28	21.43	C00-96
All sites except C44	20963	100.0	243.4	219.9	10.06	25.42	21915	100.0	250.7	192.0	12.04	20.73	C00-96 exc. C44

† See note following population pyramid

Singapore: Chinese (2003-2007)

S I T E	Male						Female						
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	(%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	(%)	ICD-10
Lip	5	0.0	0.1	0.1	0.01	0.01	3	0.0	0.0	0.0	0.00	0.00	C00
Tongue	122	0.7	1.9	1.5	0.08	0.18	52	0.3	0.8	0.6	0.03	0.06	C01-02
Mouth	101	0.6	1.6	1.3	0.07	0.17	46	0.2	0.7	0.4	0.02	0.04	C03-06
Salivary glands	56	0.3	0.9	0.7	0.04	0.06	55	0.3	0.8	0.6	0.04	0.05	C07-08
Tonsil	57	0.3	0.9	0.7	0.04	0.09	18	0.1	0.3	0.2	0.02	0.02	C09
Other oropharynx	14	0.1	0.2	0.2	0.01	0.03	4	0.0	0.1	0.0	0.00	0.00	C10
Nasopharynx	1108	6.2	17.1	12.6	1.01	1.37	383	2.1	5.8	4.1	0.32	0.42	C11
Hypopharynx	103	0.6	1.6	1.4	0.07	0.18	10	0.1	0.2	0.1	0.00	0.01	C12-13
Pharynx unspecified	15	0.1	0.2	0.2	0.01	0.02	3	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	306	1.7	4.7	4.1	0.19	0.50	74	0.4	1.1	0.6	0.01	0.04	C15
Stomach	1195	6.6	18.4	15.9	0.50	1.71	782	4.2	11.8	7.8	0.29	0.81	C16
Small intestine	50	0.3	0.8	0.7	0.03	0.08	38	0.2	0.6	0.4	0.02	0.04	C17
Colon	1957	10.9	30.1	25.6	1.04	3.01	2029	10.9	30.5	20.7	0.95	2.29	C18
Rectum	1442	8.0	22.2	18.4	0.95	2.15	986	5.3	14.8	10.4	0.54	1.21	C19-20
Anus	51	0.3	0.8	0.6	0.03	0.06	38	0.2	0.6	0.4	0.01	0.03	C21
Liver	1451	8.1	22.3	19.0	0.95	2.27	471	2.5	7.1	4.8	0.16	0.53	C22
Gallbladder etc.	139	0.8	2.1	1.9	0.07	0.24	191	1.0	2.9	1.9	0.08	0.21	C23-24
Pancreas	487	2.7	7.5	6.3	0.25	0.75	408	2.2	6.1	4.2	0.17	0.47	C25
Nose, sinuses etc.	70	0.4	1.1	0.9	0.06	0.11	42	0.2	0.6	0.4	0.03	0.05	C30-31
Larynx	302	1.7	4.7	4.0	0.19	0.46	24	0.1	0.4	0.2	0.01	0.03	C32
Trachea, bronchus and lung	3338	18.5	51.4	44.7	1.53	5.32	1713	9.2	25.8	17.6	0.76	1.99	C33-34
Other thoracic organs	67	0.4	1.0	1.0	0.06	0.09	40	0.2	0.6	0.5	0.03	0.05	C37-38
Bone	45	0.2	0.7	0.7	0.04	0.05	35	0.2	0.5	0.5	0.03	0.04	C40-41
Melanoma of skin	37	0.2	0.6	0.5	0.03	0.05	50	0.3	0.8	0.5	0.03	0.05	C43
Other skin	761		11.7	10.1	0.38	1.01	703		10.6	7.0	0.24	0.75	C44
Mesothelioma	37	0.2	0.6	0.5	0.02	0.07	6	0.0	0.1	0.1	0.01	0.01	C45
Kaposi sarcoma	8	0.0	0.1	0.1	0.01	0.01	2	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	156	0.9	2.4	2.1	0.13	0.21	113	0.6	1.7	1.4	0.09	0.13	C47+C49
Breast	14	0.1	0.2	0.2	0.01	0.02	5528	29.6	83.1	59.2	4.71	6.45	C50
Vulva							62	0.3	0.9	0.6	0.04	0.07	C51
Vagina							31	0.2	0.5	0.4	0.03	0.04	C52
Cervix uteri							865	4.6	13.0	9.4	0.63	1.07	C53
Corpus uteri							1097	5.9	16.5	12.0	0.96	1.37	C54
Uterus unspecified							7	0.0	0.1	0.1	0.00	0.00	C55
Ovary							817	4.4	12.3	9.1	0.68	0.92	C56
Other female genital organs							20	0.1	0.3	0.2	0.02	0.03	C57
Placenta							9	0.0	0.1	0.1	0.01	0.01	C58
Penis	43	0.2	0.7	0.5	0.02	0.06							C60
Prostate	1856	10.3	28.6	25.6	0.86	3.22							C61
Testis	93	0.5	1.4	1.3	0.09	0.09							C62
Other male genital organs	37	0.2	0.6	0.5	0.02	0.06							C63
Kidney	447	2.5	6.9	5.5	0.33	0.69	220	1.2	3.3	2.5	0.14	0.30	C64
Renal pelvis	48	0.3	0.7	0.6	0.03	0.07	28	0.2	0.4	0.3	0.01	0.03	C65
Ureter	21	0.1	0.3	0.3	0.02	0.04	22	0.1	0.3	0.2	0.01	0.02	C66
†Bladder	556	3.1	8.6	7.4	0.26	0.77	196	1.1	2.9	2.0	0.08	0.22	C67
Other urinary organs	7	0.0	0.1	0.1	0.00	0.01	8	0.0	0.1	0.1	0.00	0.01	C68
Eye	16	0.1	0.2	0.4	0.02	0.02	15	0.1	0.2	0.3	0.02	0.02	C69
Brain, nervous system	178	1.0	2.7	2.5	0.16	0.23	164	0.9	2.5	2.4	0.14	0.20	C70-72
Thyroid	172	1.0	2.6	2.1	0.15	0.23	498	2.7	7.5	5.7	0.43	0.55	C73
Adrenal gland	13	0.1	0.2	0.3	0.01	0.02	11	0.1	0.2	0.1	0.01	0.01	C74
Other endocrine	11	0.1	0.2	0.2	0.01	0.01	8	0.0	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	64	0.4	1.0	0.9	0.06	0.09	39	0.2	0.6	0.7	0.04	0.04	C81
Non-Hodgkin lymphoma	704	3.9	10.8	9.3	0.50	1.02	494	2.6	7.4	5.6	0.37	0.58	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	108	0.6	1.7	1.4	0.07	0.17	93	0.5	1.4	1.0	0.04	0.11	C90
Lymphoid leukaemia	159	0.9	2.4	3.0	0.16	0.21	123	0.7	1.8	2.4	0.13	0.16	C91
Myeloid leukaemia	240	1.3	3.7	3.2	0.18	0.31	210	1.1	3.2	2.7	0.15	0.27	C92-94
Leukaemia unspecified	23	0.1	0.4	0.3	0.01	0.04	22	0.1	0.3	0.3	0.01	0.02	C95
Myeloproliferative disorders	19	0.1	0.3	0.2	0.01	0.04	20	0.1	0.3	0.2	0.02	0.02	MPD
Myelodysplastic syndromes	52	0.3	0.8	0.7	0.02	0.07	33	0.2	0.5	0.3	0.02	0.03	MDS
Other and unspecified	412	2.3	6.3	5.3	0.21	0.57	391	2.1	5.9	4.0	0.19	0.40	O&U
All sites	18773		289.1	247.2	10.99	28.33	19351		291.0	207.5	12.79	22.35	C00-96
All sites except C44	18012	100.0	277.4	237.1	10.61	27.32	18648	100.0	280.4	200.5	12.55	21.60	C00-96 exc. C44

† See note following population pyramid

Singapore: Indian (2003-2007)

S I T E	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C00
Tongue	23	2.4	3.1	3.2	0.13	0.33	9	1.0	1.3	1.3	0.03	0.18	C01-02
Mouth	17	1.8	2.3	2.4	0.19	0.36	14	1.5	2.0	2.4	0.11	0.36	C03-06
Salivary glands	5	0.5	0.7	0.6	0.04	0.04	2	0.2	0.3	0.3	0.02	0.02	C07-08
Tonsil	7	0.7	0.9	0.9	0.02	0.12	0	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	2	0.2	0.3	0.4	0.03	0.06	1	0.1	0.1	0.2	0.03	0.03	C10
Nasopharynx	8	0.8	1.1	1.1	0.10	0.10	2	0.2	0.3	0.3	0.02	0.06	C11
Hypopharynx	7	0.7	0.9	0.9	0.10	0.10	1	0.1	0.1	0.2	0.00	0.04	C12-13
Pharynx unspecified	1	0.1	0.1	0.1	0.00	0.03	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	16	1.7	2.1	2.0	0.13	0.23	7	0.7	1.0	0.8	0.03	0.07	C15
Stomach	68	7.2	9.1	9.2	0.33	1.13	29	3.1	4.1	4.7	0.18	0.49	C16
Small intestine	4	0.4	0.5	0.5	0.03	0.07	8	0.9	1.1	1.2	0.03	0.16	C17
Colon	55	5.8	7.3	7.8	0.39	0.96	48	5.1	6.8	6.8	0.29	0.72	C18
Rectum	71	7.5	9.5	9.7	0.59	1.22	24	2.6	3.4	3.8	0.21	0.57	C19-20
Anus	1	0.1	0.1	0.1	0.00	0.03	2	0.2	0.3	0.2	0.02	0.02	C21
Liver	66	7.0	8.8	9.0	0.43	1.03	18	1.9	2.5	3.1	0.10	0.35	C22
Gallbladder etc.	16	1.7	2.1	2.1	0.12	0.25	8	0.9	1.1	1.2	0.01	0.07	C23-24
Pancreas	31	3.3	4.1	4.0	0.27	0.51	13	1.4	1.8	2.1	0.08	0.24	C25
Nose, sinuses etc.	3	0.3	0.4	0.5	0.02	0.08	0	0.0	0.0	0.0	0.00	0.00	C30-31
Larynx	22	2.3	2.9	3.1	0.16	0.36	2	0.2	0.3	0.3	0.01	0.05	C32
Trachea, bronchus and lung	125	13.3	16.7	17.4	0.90	2.14	28	3.0	4.0	4.3	0.18	0.52	C33-34
Other thoracic organs	2	0.2	0.3	0.2	0.01	0.01	1	0.1	0.1	0.1	0.02	0.02	C37-38
Bone	6	0.6	0.8	0.8	0.05	0.05	4	0.4	0.6	0.5	0.05	0.05	C40-41
Melanoma of skin	2	0.2	0.3	0.2	0.01	0.01	1	0.1	0.1	0.1	0.01	0.01	C43
Other skin	23		3.1	3.5	0.21	0.38	14		2.0	2.0	0.13	0.25	C44
Mesothelioma	1	0.1	0.1	0.1	0.00	0.00	1	0.1	0.1	0.3	0.00	0.00	C45
Kaposi sarcoma	1	0.1	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	4	0.4	0.5	0.5	0.04	0.04	4	0.4	0.6	0.7	0.03	0.03	C47+C49
Breast	1	0.1	0.1	0.2	0.03	0.03	365	39.0	51.6	49.0	3.61	5.38	C50
Vulva							2	0.2	0.3	0.3	0.02	0.05	C51
Vagina							2	0.2	0.3	0.3	0.02	0.02	C52
Cervix uteri							25	2.7	3.5	3.7	0.26	0.45	C53
Corpus uteri							79	8.4	11.2	11.7	0.76	1.38	C54
Uterus unspecified							0	0.0	0.0	0.0	0.00	0.00	C55
Ovary							58	6.2	8.2	7.6	0.54	0.80	C56
Other female genital organs							2	0.2	0.3	0.2	0.03	0.03	C57
Placenta							0	0.0	0.0	0.0	0.00	0.00	C58
Penis	3	0.3	0.4	0.3	0.03	0.03							C60
Prostate	117	12.4	15.6	15.9	0.48	2.02							C61
Testis	7	0.7	0.9	0.9	0.07	0.07							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	36	3.8	4.8	5.0	0.30	0.60	20	2.1	2.8	3.0	0.21	0.41	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	1	0.1	0.1	0.1	0.02	0.02	C65
Ureter	1	0.1	0.1	0.2	0.00	0.03	1	0.1	0.1	0.2	0.00	0.04	C66
†Bladder	40	4.2	5.3	5.4	0.20	0.60	11	1.2	1.6	1.9	0.06	0.26	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C69
Brain, nervous system	19	2.0	2.5	2.7	0.23	0.30	10	1.1	1.4	1.4	0.13	0.13	C70-72
Thyroid	12	1.3	1.6	1.8	0.09	0.23	39	4.2	5.5	4.8	0.36	0.50	C73
Adrenal gland	3	0.3	0.4	0.3	0.03	0.03	3	0.3	0.4	0.5	0.02	0.06	C74
Other endocrine	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	12	1.3	1.6	1.6	0.09	0.16	8	0.9	1.1	1.4	0.06	0.15	C81
Non-Hodgkin lymphoma	41	4.4	5.5	5.5	0.37	0.57	30	3.2	4.2	4.4	0.22	0.47	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	12	1.3	1.6	1.6	0.11	0.21	9	1.0	1.3	1.5	0.05	0.26	C90
Lymphoid leukaemia	18	1.9	2.4	3.0	0.15	0.18	7	0.7	1.0	1.2	0.07	0.07	C91
Myeloid leukaemia	18	1.9	2.4	2.4	0.17	0.17	12	1.3	1.7	1.8	0.09	0.17	C92-94
Leukaemia unspecified	1	0.1	0.1	0.2	0.00	0.03	0	0.0	0.0	0.0	0.00	0.00	C95
Myeloproliferative disorders	2	0.2	0.3	0.2	0.02	0.02	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	4	0.4	0.5	0.6	0.03	0.10	3	0.3	0.4	0.5	0.04	0.04	MDS
Other and unspecified	31	3.3	4.1	4.5	0.19	0.56	21	2.2	3.0	3.0	0.11	0.31	O&U
All sites	965		128.9	132.8	6.89	15.58	949		134.3	135.4	8.26	15.30	C00-96
All sites except C44	942	100.0	125.8	129.3	6.67	15.20	935	100.0	132.3	133.5	8.13	15.06	C00-96 exc. C44

† See note following population pyramid

Singapore: Malay (2003-2007)

S I T E	Male						Female						
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	ICD-10
Lip	1	0.1	0.1	0.1	0.00	0.02	1	0.0	0.1	0.1	0.00	0.00	C00
Tongue	5	0.3	0.4	0.4	0.02	0.02	12	0.6	1.0	0.9	0.04	0.04	C01-02
Mouth	7	0.4	0.6	0.7	0.01	0.11	2	0.1	0.2	0.2	0.00	0.00	C03-06
Salivary glands	6	0.4	0.5	0.5	0.02	0.04	7	0.3	0.6	0.5	0.04	0.04	C07-08
Tonsil	2	0.1	0.2	0.1	0.01	0.01	1	0.0	0.1	0.1	0.00	0.00	C09
Other oropharynx	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	84	4.9	7.0	6.9	0.53	0.79	17	0.8	1.4	1.3	0.13	0.14	C11
Hypopharynx	1	0.1	0.1	0.1	0.01	0.01	1	0.0	0.1	0.1	0.01	0.01	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	11	0.6	0.9	1.1	0.07	0.12	2	0.1	0.2	0.2	0.02	0.02	C15
Stomach	50	2.9	4.2	4.6	0.20	0.56	33	1.6	2.7	2.6	0.10	0.29	C16
Small intestine	6	0.4	0.5	0.7	0.03	0.12	1	0.0	0.1	0.1	0.00	0.00	C17
Colon	145	8.5	12.1	14.5	0.74	1.57	136	6.6	11.3	12.2	0.69	1.45	C18
Rectum	113	6.7	9.4	10.7	0.55	1.38	76	3.7	6.3	7.1	0.40	0.84	C19-20
Anus	7	0.4	0.6	0.7	0.03	0.06	2	0.1	0.2	0.2	0.00	0.04	C21
Liver	131	7.7	10.9	12.6	0.73	1.45	40	1.9	3.3	3.6	0.15	0.42	C22
Gallbladder etc.	15	0.9	1.2	1.4	0.05	0.18	17	0.8	1.4	1.4	0.04	0.21	C23-24
Pancreas	47	2.8	3.9	4.7	0.23	0.54	43	2.1	3.6	3.9	0.21	0.41	C25
Nose, sinuses etc.	4	0.2	0.3	0.3	0.02	0.05	7	0.3	0.6	0.5	0.02	0.06	C30-31
Larynx	24	1.4	2.0	2.1	0.08	0.15	6	0.3	0.5	0.5	0.02	0.02	C32
Trachea, bronchus and lung	355	20.9	29.5	34.0	1.48	4.16	143	7.0	11.9	12.2	0.69	1.38	C33-34
Other thoracic organs	10	0.6	0.8	0.8	0.05	0.05	3	0.1	0.2	0.2	0.01	0.01	C37-38
Bone	8	0.5	0.7	0.8	0.04	0.07	7	0.3	0.6	0.6	0.04	0.04	C40-41
Melanoma of skin	2	0.1	0.2	0.1	0.01	0.01	5	0.2	0.4	0.4	0.01	0.01	C43
Other skin	36	3.0	3.5	3.5	0.14	0.44	38		3.2	3.3	0.16	0.32	C44
Mesothelioma	4	0.2	0.3	0.4	0.01	0.05	2	0.1	0.2	0.1	0.01	0.01	C45
Kaposi sarcoma	1	0.1	0.1	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	14	0.8	1.2	1.1	0.07	0.09	9	0.4	0.7	0.7	0.05	0.06	C47+C49
Breast	2	0.1	0.2	0.1	0.01	0.01	712	34.7	59.3	53.6	4.30	5.89	C50
Vulva							4	0.2	0.3	0.3	0.01	0.01	C51
Vagina							4	0.2	0.3	0.3	0.01	0.03	C52
Cervix uteri							103	5.0	8.6	8.4	0.51	1.05	C53
Corpus uteri							137	6.7	11.4	11.0	0.79	1.33	C54
Uterus unspecified							3	0.1	0.2	0.2	0.01	0.03	C55
Ovary							116	5.6	9.7	9.1	0.72	1.01	C56
Other female genital organs							3	0.1	0.2	0.2	0.01	0.03	C57
Placenta							2	0.1	0.2	0.2	0.01	0.01	C58
Penis	2	0.1	0.2	0.2	0.01	0.04							C60
Prostate	171	10.1	14.2	17.9	0.63	1.99							C61
Testis	15	0.9	1.2	1.2	0.08	0.08							C62
Other male genital organs	1	0.1	0.1	0.1	0.00	0.03							C63
Kidney	48	2.8	4.0	4.3	0.28	0.48	21	1.0	1.7	1.7	0.08	0.22	C64
Renal pelvis	4	0.2	0.3	0.4	0.03	0.05	4	0.2	0.3	0.4	0.00	0.08	C65
Ureter	2	0.1	0.2	0.2	0.00	0.03	1	0.0	0.1	0.1	0.00	0.00	C66
†Bladder	62	3.6	5.2	5.9	0.28	0.67	14	0.7	1.2	1.2	0.06	0.18	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.1	0.00	0.02	C68
Eye	2	0.1	0.2	0.2	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C69
Brain, nervous system	23	1.4	1.9	2.0	0.15	0.17	16	0.8	1.3	1.2	0.06	0.06	C70-72
Thyroid	28	1.6	2.3	2.3	0.14	0.23	96	4.7	8.0	7.5	0.61	0.71	C73
Adrenal gland	3	0.2	0.2	0.2	0.02	0.02	3	0.1	0.2	0.4	0.02	0.04	C74
Other endocrine	3	0.2	0.2	0.3	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	17	1.0	1.4	1.4	0.08	0.13	15	0.7	1.2	1.2	0.08	0.08	C81
Non-Hodgkin lymphoma	109	6.4	9.1	10.4	0.53	1.26	99	4.8	8.2	8.5	0.51	1.04	C82-85,C96
Immunoproliferative diseases	1	0.1	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	31	1.8	2.6	3.2	0.18	0.40	26	1.3	2.2	2.3	0.14	0.27	C90
Lymphoid leukaemia	22	1.3	1.8	1.9	0.10	0.15	18	0.9	1.5	1.8	0.11	0.11	C91
Myeloid leukaemia	38	2.2	3.2	3.3	0.20	0.25	38	1.9	3.2	3.0	0.16	0.30	C92-94
Leukaemia unspecified	3	0.2	0.2	0.3	0.00	0.05	3	0.1	0.2	0.2	0.00	0.04	C95
Myeloproliferative disorders	3	0.2	0.2	0.2	0.02	0.02	3	0.1	0.2	0.2	0.01	0.02	MPD
Myelodysplastic syndromes	3	0.2	0.2	0.4	0.03	0.05	3	0.1	0.2	0.2	0.02	0.02	MDS
Other and unspecified	53	3.1	4.4	5.7	0.31	0.71	36	1.8	3.0	3.2	0.09	0.35	O&U
All sites	1735	144.4	165.4		8.26	18.91	2092		174.2	169.5	11.15	18.77	C00-96
All sites except C44	1699	100.0	141.4	161.8	8.11	18.47	2054	100.0	171.1	166.2	10.99	18.46	C00-96 exc. C44

† See note following population pyramid

Thailand, Bangkok

REGISTRATION AREA

The Bangkok Cancer Registry covers the metropolis of Bangkok in the Chao Phraya River delta of central Thailand. Bangkok is the national capital and the country's centre of politics, economy, education, culture, and transportation. It is also one of the most important commercial centres in south-eastern Asia. The area has a tropical wet and dry climate, with long hours of sunshine and high temperatures and humidity. Bangkok is composed of 50 districts, with a total area of 1569 km².

CANCER CARE FACILITIES

The Bangkok Metropolitan Administration is the local authority responsible for residents' well-being, with some financial support from the central government. Nine of Thailand's 12 government cancer centres are located in Bangkok: the National Cancer Institute of Thailand, King Chulalongkorn Memorial Hospital, Siriraj Hospital, Ramathibodi Hospital, Phra Mongkutklao Hospital, the Queen Sirikit National Institute of Child Health, Rajavithi Hospital, Vajira Hospital, and Bhumibol Adulyadej Hospital. There are also three international private cancer centres: Bangkok Hospital, Bumrungrad International Hospital, and Samitivej Hospital. Bangkok has a physician-to-population ratio of 1:793, compared with 1:6237 in other parts of Thailand.

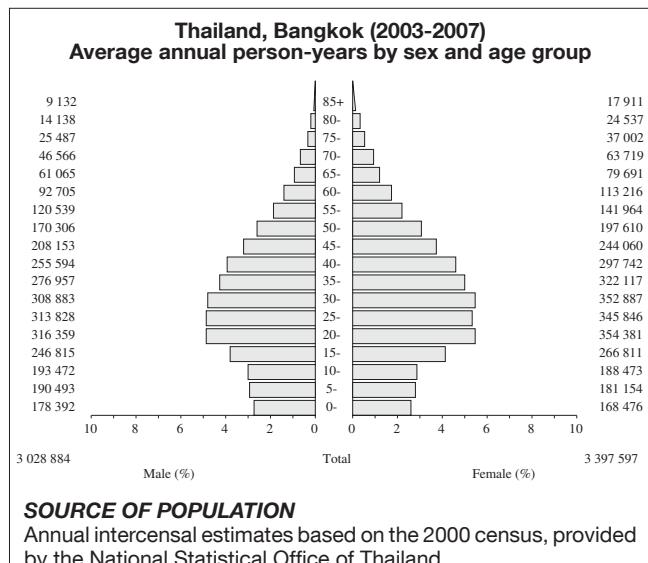
REGISTRY STRUCTURE AND METHODS

The registry collects information on all cancer cases in Bangkok and sends data on non-resident patients treated in Bangkok to other cancer registries. The registry is part of the National Cancer Institute of Thailand, which first established a population-based

cancer registry for the metropolis of Bangkok in 1990. Data are collected both actively and passively from government cancer centres, university hospitals, government hospitals, private hospitals, pathology laboratories, and death certificates. All death certificates are matched against the registry database, and efforts are made to trace further information before registering any case as a death-certificate-only (DCO) case.

CONTRIBUTORS

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SOURCE OF POPULATION

Annual intercensal estimates based on the 2000 census, provided by the National Statistical Office of Thailand.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	32.1	Breast	34.3
Liver	24.0	Cervix uteri	17.1
Colon	14.6	Trachea, bronchus and lung	11.9
Prostate	12.6	Colon	9.7
Other and unspecified	11.9	Other and unspecified	7.2
Rectum	6.5	Liver	6.8
Thyroid	5.6	Thyroid	5.8
Bladder	5.0	Ovary	5.7
Stomach	4.9	Corpus uteri	4.7
Oesophagus	4.6	Rectum	4.0
All sites	168.7	All sites	140.8

Thailand, Bangkok (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	9	0.0	0.1	0.1	0.00	0.01	17	0.1	0.1	0.1	0.00	0.01	C00
Tongue	294	1.3	1.9	2.0	0.14	0.24	123	0.5	0.7	0.6	0.04	0.06	C01-02
Mouth	279	1.3	1.8	2.0	0.12	0.22	150	0.6	0.9	0.8	0.03	0.08	C03-06
Salivary glands	59	0.3	0.4	0.4	0.03	0.05	68	0.3	0.4	0.4	0.02	0.04	C07-08
Tonsil	124	0.6	0.8	0.9	0.05	0.10	34	0.1	0.2	0.2	0.01	0.02	C09
Other oropharynx	29	0.1	0.2	0.2	0.01	0.03	6	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	633	2.9	4.2	4.1	0.29	0.41	235	0.9	1.4	1.2	0.09	0.12	C11
Hypopharynx	109	0.5	0.7	0.8	0.05	0.09	15	0.1	0.1	0.1	0.00	0.01	C12-13
Pharynx unspecified	42	0.2	0.3	0.3	0.02	0.03	8	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	607	2.8	4.0	4.6	0.25	0.54	102	0.4	0.6	0.6	0.03	0.06	C15
Stomach	636	2.9	4.2	4.9	0.23	0.53	573	2.3	3.4	3.2	0.17	0.33	C16
Small intestine	56	0.3	0.4	0.4	0.03	0.05	62	0.2	0.4	0.3	0.02	0.04	C17
Colon	1885	8.5	12.4	14.6	0.67	1.69	1719	6.8	10.1	9.7	0.47	1.09	C18
Rectum	866	3.9	5.7	6.5	0.37	0.79	692	2.7	4.1	4.0	0.23	0.48	C19-20
Anus	28	0.1	0.2	0.2	0.01	0.03	40	0.2	0.2	0.2	0.01	0.02	C21
Liver	3342	15.1	22.1	24.0	1.48	2.94	1193	4.7	7.0	6.8	0.34	0.78	C22
Gallbladder etc.	415	1.9	2.7	3.1	0.16	0.36	366	1.5	2.2	2.1	0.09	0.24	C23-24
Pancreas	503	2.3	3.3	3.9	0.18	0.45	429	1.7	2.5	2.5	0.10	0.32	C25
Nose, sinuses etc.	88	0.4	0.6	0.6	0.04	0.05	48	0.2	0.3	0.2	0.02	0.02	C30-31
Larynx	443	2.0	2.9	3.4	0.17	0.40	53	0.2	0.3	0.3	0.02	0.03	C32
Trachea, bronchus and lung	4132	18.7	27.3	32.1	1.37	3.82	2100	8.3	12.4	11.9	0.61	1.36	C33-34
Other thoracic organs	51	0.2	0.3	0.3	0.02	0.03	42	0.2	0.2	0.2	0.02	0.02	C37-38
Bone	157	0.7	1.0	1.1	0.07	0.11	143	0.6	0.8	0.9	0.06	0.07	C40-41
Melanoma of skin	58	0.3	0.4	0.4	0.02	0.04	45	0.2	0.3	0.2	0.01	0.03	C43
Other skin	323		2.1	2.6	0.11	0.22	393		2.3	2.2	0.09	0.21	C44
Mesothelioma	4	0.0	0.0	0.0	0.00	0.00	4	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	5	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	185	0.8	1.2	1.3	0.08	0.13	171	0.7	1.0	1.0	0.06	0.09	C47+C49
Breast	44	0.2	0.3	0.3	0.02	0.03	6570	26.0	38.7	34.3	2.74	3.81	C50
Vulva							34	0.1	0.2	0.2	0.01	0.01	C51
Vagina							47	0.2	0.3	0.3	0.01	0.03	C52
Cervix uteri							3214	12.7	18.9	17.1	1.20	1.82	C53
Corpus uteri							836	3.3	4.9	4.7	0.37	0.56	C54
Uterus unspecified							190	0.8	1.1	1.1	0.07	0.12	C55
Ovary							1079	4.3	6.4	5.7	0.45	0.64	C56
Other female genital organs							21	0.1	0.1	0.1	0.01	0.01	C57
Placenta							15	0.1	0.1	0.1	0.00	0.00	C58
Penis	64	0.3	0.4	0.5	0.02	0.05							C60
Prostate	1501	6.8	9.9	12.6	0.34	1.41							C61
Testis	67	0.3	0.4	0.4	0.03	0.03							C62
Other male genital organs	10	0.0	0.1	0.1	0.01	0.01							C63
Kidney	208	0.9	1.4	1.5	0.08	0.17	118	0.5	0.7	0.7	0.04	0.07	C64
Renal pelvis	16	0.1	0.1	0.1	0.00	0.01	24	0.1	0.1	0.1	0.01	0.01	C65
Ureter	14	0.1	0.1	0.1	0.00	0.01	8	0.0	0.0	0.0	0.00	0.01	C66
Bladder	617	2.8	4.1	5.0	0.17	0.51	255	1.0	1.5	1.5	0.06	0.16	C67
Other urinary organs	10	0.0	0.1	0.1	0.00	0.01	20	0.1	0.1	0.1	0.01	0.01	C68
Eye	32	0.1	0.2	0.2	0.02	0.03	29	0.1	0.2	0.2	0.01	0.02	C69
Brain, nervous system	456	2.1	3.0	3.2	0.20	0.31	455	1.8	2.7	2.7	0.16	0.26	C70-72
Thyroid	773	3.5	5.1	5.6	0.31	0.64	1109	4.4	6.5	5.8	0.36	0.62	C73
Adrenal gland	14	0.1	0.1	0.1	0.01	0.01	20	0.1	0.1	0.1	0.01	0.01	C74
Other endocrine	20	0.1	0.1	0.1	0.01	0.02	15	0.1	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	44	0.2	0.3	0.3	0.02	0.02	33	0.1	0.2	0.2	0.01	0.02	C81
Non-Hodgkin lymphoma	565	2.6	3.7	3.9	0.24	0.42	531	2.1	3.1	2.9	0.19	0.33	C82-85,C96
Immunoproliferative diseases	1	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	143	0.6	0.9	1.0	0.06	0.10	141	0.6	0.8	0.8	0.05	0.09	C90
Lymphoid leukaemia	239	1.1	1.6	2.1	0.12	0.15	162	0.6	1.0	1.3	0.07	0.09	C91
Myeloid leukaemia	217	1.0	1.4	1.5	0.09	0.14	207	0.8	1.2	1.2	0.08	0.11	C92-94
Leukaemia unspecified	376	1.7	2.5	2.8	0.15	0.28	374	1.5	2.2	2.2	0.12	0.21	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	1602	7.3	10.6	11.9	0.64	1.32	1286	5.1	7.6	7.2	0.40	0.79	O&U
All sites	22395		147.9	168.7	8.51	19.07	25625		150.8	140.8	9.02	15.38	C00-96
All sites except C44	22072	100.0	145.7	166.0	8.40	18.85	25232	100.0	148.5	138.6	8.93	15.17	C00-96 exc. C44

Thailand, Chiang Mai

REGISTRATION AREA

The Chiang Mai Cancer Registry covers the province of Chiang Mai in Thailand. About 82% of residents were born in the province; the rest are Thai nationals, Chinese, Lao, or Hilltribe peoples. Most residents (91.8%) are Buddhist, and the rest are mainly either Christian or Muslim.

CANCER CARE FACILITIES

General health care is provided by the Chiang Mai Provincial Public Health Office through provincial and district hospitals. Cancer diagnostic services are available at most hospitals, but patients suspected to have cancer are typically referred by primary and secondary care facilities to the university hospital (Maharaj Nakorn Chiang Mai Hospital), which is the only hospital with full diagnostic and therapeutic facilities within the same institution, and the only hospital with radiotherapy equipment. There are about 6012 hospital beds and 1010 physicians in the province.

REGISTRY STRUCTURE AND METHODS

The registry has been population-based since 1983. It is located within the Maharaj Nakorn Chiang Mai Hospital and is fully supported by the Faculty of Medicine, Chiang Mai University. The registry is staffed by two part-time physicians, four full-time registrar nurses, and three practical nurses, and is supervised by the hospital's cancer committee. Data are collected actively from the university hospital, six government hospitals, 22 community hospitals, 12 private hospitals, and various medical clinics. Death certificates are provided by the Ministry of Public Health's Bureau of Policy and Strategy.

INTERPRETING THE RESULTS

The number of undiagnosed cancer cases is unknown, but the proportion is probably higher in rural areas. Because the Maharaj Nakorn Chiang Mai Hospital is the only university hospital in the area and has a full range of diagnostic facilities, it is unlikely that referred cases will be missed. There is an organized

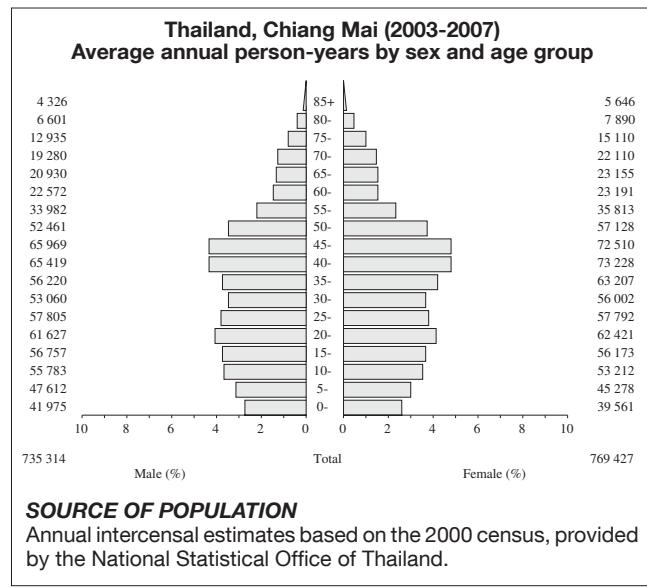
screening programme for cervical cancer, and there are occasional health education campaigns about common cancers in the region.

USE OF THE DATA

The registry has published annual reports since 1978, when it was a hospital-based registry. The registry also collaborates with the other Thai registries to report on national cancer incidence every 3–5 years.

CONTRIBUTORS

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SOURCE OF POPULATION

Annual intercensal estimates based on the 2000 census, provided by the National Statistical Office of Thailand.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	36.5	Breast	25.6
Liver	28.0	Trachea, bronchus and lung	25.0
Other and unspecified	10.5	Cervix uteri	23.9
Colon	7.1	Liver	10.4
Non-Hodgkin lymphoma	6.7	Other and unspecified	9.9
Stomach	6.2	Colon	5.6
Prostate	5.8	Ovary	5.1
Rectum	5.4	Non-Hodgkin lymphoma	4.8
Bladder	4.9	Stomach	4.1
Non-melanoma skin cancer	4.7	Corpus uteri	4.1
All sites	151.6	All sites	156.0

Thailand, Chiang Mai (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	11	0.2	0.3	0.3	0.02	0.03	22	0.3	0.6	0.5	0.01	0.07	C00
Tongue	58	0.9	1.6	1.3	0.10	0.16	23	0.3	0.6	0.4	0.04	0.04	C01-02
Mouth	59	0.9	1.6	1.3	0.08	0.14	49	0.7	1.3	0.9	0.04	0.09	C03-06
Salivary glands	20	0.3	0.5	0.4	0.03	0.05	25	0.3	0.6	0.5	0.03	0.06	C07-08
Tonsil	34	0.5	0.9	0.7	0.04	0.08	15	0.2	0.4	0.3	0.01	0.02	C09
Other oropharynx	9	0.1	0.2	0.2	0.01	0.03	4	0.1	0.1	0.1	0.01	0.01	C10
Nasopharynx	148	2.3	4.0	3.4	0.27	0.39	67	0.9	1.7	1.4	0.10	0.16	C11
Hypopharynx	52	0.8	1.4	1.1	0.05	0.10	14	0.2	0.4	0.3	0.01	0.04	C12-13
Pharynx unspecified	6	0.1	0.2	0.1	0.00	0.01	1	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	64	1.0	1.7	1.4	0.06	0.17	22	0.3	0.6	0.4	0.02	0.05	C15
Stomach	279	4.3	7.6	6.2	0.33	0.81	203	2.7	5.3	4.1	0.25	0.52	C16
Small intestine	20	0.3	0.5	0.5	0.02	0.05	13	0.2	0.3	0.3	0.02	0.04	C17
Colon	318	4.9	8.6	7.1	0.42	0.83	271	3.6	7.0	5.6	0.38	0.64	C18
Rectum	239	3.7	6.5	5.4	0.29	0.64	204	2.7	5.3	4.1	0.26	0.47	C19-20
Anus	6	0.1	0.2	0.1	0.01	0.01	16	0.2	0.4	0.3	0.01	0.03	C21
Liver	1248	19.3	33.9	28.0	1.95	3.30	508	6.8	13.2	10.4	0.65	1.25	C22
Gallbladder etc.	94	1.5	2.6	2.1	0.11	0.30	112	1.5	2.9	2.1	0.11	0.23	C23-24
Pancreas	82	1.3	2.2	1.9	0.10	0.24	100	1.3	2.6	2.0	0.11	0.25	C25
Nose, sinuses etc.	29	0.4	0.8	0.7	0.05	0.07	19	0.3	0.5	0.4	0.03	0.05	C30-31
Larynx	93	1.4	2.5	2.0	0.12	0.21	30	0.4	0.8	0.7	0.05	0.09	C32
Trachea, bronchus and lung	1577	24.4	42.9	36.5	1.93	4.76	1197	16.1	31.1	25.0	1.39	3.31	C33-34
Other thoracic organs	14	0.2	0.4	0.4	0.03	0.03	16	0.2	0.4	0.3	0.02	0.04	C37-38
Bone	29	0.4	0.8	0.7	0.03	0.06	25	0.3	0.6	0.6	0.04	0.05	C40-41
Melanoma of skin	28	0.4	0.8	0.5	0.03	0.06	19	0.3	0.5	0.4	0.02	0.04	C43
Other skin	209		5.7	4.7	0.23	0.48	190		4.9	3.6	0.15	0.37	C44
Mesothelioma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	4	0.1	0.1	0.1	0.01	0.01	3	0.0	0.1	0.1	0.01	0.01	C46
Connective and soft tissue	43	0.7	1.2	1.1	0.08	0.12	33	0.4	0.9	0.8	0.07	0.07	C47+C49
Breast	25	0.4	0.7	0.5	0.04	0.06	1309	17.6	34.0	25.6	2.08	2.70	C50
Vulva							39	0.5	1.0	0.8	0.05	0.08	C51
Vagina							13	0.2	0.3	0.3	0.02	0.03	C52
Cervix uteri							1231	16.5	32.0	23.9	1.92	2.52	C53
Corpus uteri							196	2.6	5.1	4.1	0.33	0.52	C54
Uterus unspecified							5	0.1	0.1	0.1	0.00	0.01	C55
Ovary							252	3.4	6.6	5.1	0.41	0.49	C56
Other female genital organs							7	0.1	0.2	0.1	0.01	0.01	C57
Placenta							9	0.1	0.2	0.2	0.01	0.01	C58
Penis	70	1.1	1.9	1.5	0.08	0.17							C60
Prostate	270	4.2	7.3	5.8	0.16	0.69							C61
Testis	28	0.4	0.8	0.7	0.05	0.06							C62
Other male genital organs	3	0.0	0.1	0.1	0.00	0.00							C63
Kidney	81	1.3	2.2	1.9	0.10	0.22	33	0.4	0.9	0.8	0.05	0.08	C64
Renal pelvis	7	0.1	0.2	0.2	0.01	0.02	5	0.1	0.1	0.1	0.00	0.02	C65
Ureter	2	0.0	0.1	0.0	0.00	0.01	4	0.1	0.1	0.1	0.00	0.02	C66
Bladder	236	3.7	6.4	4.9	0.19	0.56	115	1.5	3.0	2.3	0.12	0.28	C67
Other urinary organs	2	0.0	0.1	0.0	0.00	0.00	3	0.0	0.1	0.1	0.00	0.01	C68
Eye	13	0.2	0.4	0.3	0.02	0.03	10	0.1	0.3	0.3	0.01	0.01	C69
Brain, nervous system	71	1.1	1.9	2.0	0.12	0.18	77	1.0	2.0	1.8	0.13	0.17	C70-72
Thyroid	47	0.7	1.3	1.0	0.07	0.10	179	2.4	4.7	3.7	0.25	0.35	C73
Adrenal gland	3	0.0	0.1	0.1	0.01	0.01	2	0.0	0.1	0.1	0.01	0.01	C74
Other endocrine	5	0.1	0.1	0.2	0.01	0.01	7	0.1	0.2	0.2	0.01	0.02	C75
Hodgkin lymphoma	29	0.4	0.8	0.7	0.04	0.07	18	0.2	0.5	0.4	0.03	0.04	C81
Non-Hodgkin lymphoma	294	4.6	8.0	6.7	0.40	0.76	232	3.1	6.0	4.8	0.32	0.54	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	32	0.5	0.9	0.8	0.06	0.09	23	0.3	0.6	0.5	0.04	0.06	C90
Lymphoid leukaemia	47	0.7	1.3	1.6	0.08	0.09	38	0.5	1.0	1.4	0.07	0.09	C91
Myeloid leukaemia	110	1.7	3.0	2.7	0.15	0.24	116	1.6	3.0	2.8	0.17	0.27	C92-94
Leukaemia unspecified	12	0.2	0.3	0.3	0.02	0.02	10	0.1	0.3	0.2	0.01	0.02	C95
Myeloproliferative disorders	7	0.1	0.2	0.2	0.01	0.02	7	0.1	0.2	0.1	0.01	0.01	MPD
Myelodysplastic syndromes	25	0.4	0.7	0.6	0.04	0.07	31	0.4	0.8	0.6	0.04	0.07	MDS
Other and unspecified	469	7.3	12.8	10.5	0.63	1.23	472	6.3	12.3	9.9	0.60	1.18	O&U
All sites	6661		181.2	151.6	8.67	17.86	7645		198.7	156.0	10.53	17.63	C00-96
All sites except C44	6452	100.0	175.5	146.9	8.43	17.38	7455	100.0	193.8	152.4	10.39	17.26	C00-96 exc. C44

Thailand, Chonburi

REGISTRATION AREA

The Chonburi Cancer Registry covers the province of Chonburi in eastern Thailand, which has an area of 4363 km² and includes the country's most popular beach, Pattaya. In 2005, the population was 562 000 males and 584 000 females. Most people work in the industrial sector, and some are fishermen.

CANCER CARE FACILITIES

There are 26 hospitals in Chonburi, 10 of which provide cancer diagnostic services, surgery, and chemotherapy. The Chonburi Cancer Center (CCC) is the only institution in eastern Thailand that provides radiotherapy. Palliative care is provided in all hospitals. Patients suspected to have cancer are referred to the CCC, provincial hospitals, and private hospitals.

REGISTRY STRUCTURE AND METHODS

The registry is located within and funded by the CCC and is staffed by a part-time physician, a part-time expert consultant, a part-time nurse, and four full-time employees. Data collection is both passive and active. The registry collects cases from all Chonburi hospitals and the network of cancer registries in Thailand. Staff members visit the large hospitals to collect data, and community hospitals send notification forms to the registry. Cases are followed up through records matching with the Thai National Health Security Office's population database and all death certificates. When cancer is listed as the cause of death but no other information can be found, cases are categorized as death-certification-only (DCO) cases.

INTERPRETING THE RESULTS

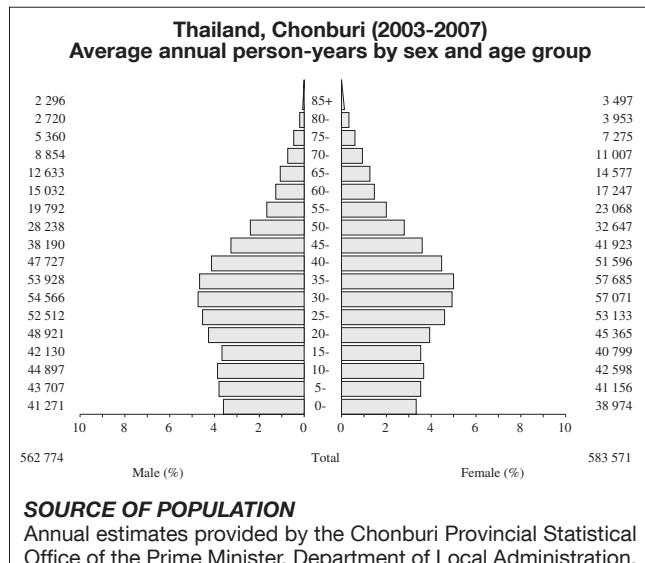
The number of undiagnosed cancer cases is unknown, but the proportion is probably higher in rural areas. Because the CCC offers a full range of diagnostic and treatment facilities, few residents seek cancer care outside the province. Cervical cancer screening is available in all hospitals. Mammography, alpha-fetoprotein (AFP) testing, and prostate-specific antigen (PSA) testing are common in the large hospitals.

USE OF THE DATA

The registry publishes a report on cancer incidence and mortality in Chonburi every 5 years and has joined with other registries to report national statistics every 3 years. Registry data are used by the local health authority to evaluate the effectiveness of cancer prevention, screening, and treatment initiatives. The registry is also involved in epidemiological research on cancers that are common in the province.

CONTRIBUTORS

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SOURCE OF POPULATION

Annual estimates provided by the Chonburi Provincial Statistical Office of the Prime Minister, Department of Local Administration, Ministry of Interior.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	38.9	Breast	33.8
Liver	21.6	Cervix uteri	26.1
Colon	10.1	Trachea, bronchus and lung	14.5
Prostate	8.1	Colon	7.6
Non-Hodgkin lymphoma	6.3	Thyroid	6.4
Rectum	6.1	Ovary	6.4
Oesophagus	6.1	Liver	5.8
Bladder	6.1	Corpus uteri	5.2
Other and unspecified	5.6	Non-melanoma skin cancer	5.1
Non-melanoma skin cancer	5.0	Non-Hodgkin lymphoma	4.9
All sites	166.8	All sites	156.0

Thailand, Chonburi (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	11	0.3	0.4	0.4	0.02	0.04	32	0.7	1.1	1.0	0.02	0.11	C00
Tongue	99	2.4	3.5	3.9	0.25	0.46	34	0.7	1.2	1.1	0.07	0.14	C01-02
Mouth	79	1.9	2.8	3.2	0.17	0.42	57	1.2	2.0	1.8	0.07	0.18	C03-06
Salivary glands	24	0.6	0.9	0.8	0.06	0.09	22	0.5	0.8	0.7	0.05	0.06	C07-08
Tonsil	27	0.7	1.0	1.0	0.07	0.10	4	0.1	0.1	0.1	0.01	0.02	C09
Other oropharynx	6	0.1	0.2	0.2	0.02	0.03	2	0.0	0.1	0.1	0.01	0.01	C10
Nasopharynx	131	3.2	4.7	4.6	0.34	0.50	63	1.3	2.2	1.8	0.15	0.17	C11
Hypopharynx	45	1.1	1.6	1.8	0.10	0.25	7	0.1	0.2	0.2	0.02	0.02	C12-13
Pharynx unspecified	6	0.1	0.2	0.3	0.00	0.03	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	144	3.5	5.1	6.1	0.37	0.78	32	0.7	1.1	1.1	0.03	0.12	C15
Stomach	112	2.7	4.0	4.3	0.21	0.51	118	2.5	4.0	3.6	0.21	0.38	C16
Small intestine	6	0.1	0.2	0.2	0.02	0.02	2	0.0	0.1	0.0	0.00	0.00	C17
Colon	260	6.3	9.2	10.1	0.56	1.15	226	4.7	7.7	7.6	0.42	0.92	C18
Rectum	160	3.9	5.7	6.1	0.34	0.72	109	2.3	3.7	3.5	0.22	0.43	C19-20
Anus	2	0.0	0.1	0.1	0.00	0.00	3	0.1	0.1	0.1	0.00	0.01	C21
Liver	561	13.6	19.9	21.6	1.55	2.57	176	3.7	6.0	5.8	0.32	0.68	C22
Gallbladder etc.	66	1.6	2.3	2.6	0.15	0.35	56	1.2	1.9	1.8	0.12	0.19	C23-24
Pancreas	64	1.6	2.3	2.5	0.15	0.28	78	1.6	2.7	2.5	0.12	0.29	C25
Nose, sinuses etc.	23	0.6	0.8	0.8	0.05	0.10	18	0.4	0.6	0.6	0.04	0.07	C30-31
Larynx	109	2.6	3.9	4.6	0.35	0.58	13	0.3	0.4	0.4	0.02	0.04	C32
Trachea, bronchus and lung	934	22.7	33.2	38.9	2.06	4.85	427	8.9	14.6	14.5	0.80	1.76	C33-34
Other thoracic organs	6	0.1	0.2	0.2	0.02	0.02	6	0.1	0.2	0.2	0.01	0.02	C37-38
Bone	20	0.5	0.7	0.7	0.04	0.06	16	0.3	0.5	0.6	0.04	0.05	C40-41
Melanoma of skin	16	0.4	0.6	0.7	0.04	0.07	16	0.3	0.5	0.5	0.02	0.06	C43
Other skin	129		4.6	5.0	0.22	0.54	152		5.2	5.1	0.24	0.56	C44
Mesothelioma	2	0.0	0.1	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	4	0.1	0.1	0.1	0.01	0.01	1	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	44	1.1	1.6	1.6	0.08	0.15	35	0.7	1.2	1.1	0.07	0.12	C47+C49
Breast	6	0.1	0.2	0.2	0.01	0.03	1133	23.6	38.8	33.8	2.78	3.61	C50
Vulva							15	0.3	0.5	0.4	0.03	0.05	C51
Vagina							5	0.1	0.2	0.2	0.01	0.02	C52
Cervix uteri							864	18.0	29.6	26.1	2.06	2.88	C53
Corpus uteri							158	3.3	5.4	5.2	0.43	0.61	C54
Uterus unspecified							0	0.0	0.0	0.0	0.00	0.00	C55
Ovary							208	4.3	7.1	6.4	0.45	0.67	C56
Other female genital organs							2	0.0	0.1	0.1	0.01	0.01	C57
Placenta							15	0.3	0.5	0.5	0.03	0.03	C58
Penis	32	0.8	1.1	1.3	0.12	0.16							C60
Prostate	189	4.6	6.7	8.1	0.24	0.85							C61
Testis	40	1.0	1.4	1.3	0.10	0.10							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	25	0.6	0.9	1.0	0.06	0.10	15	0.3	0.5	0.5	0.04	0.05	C64
Renal pelvis	6	0.1	0.2	0.3	0.01	0.04	6	0.1	0.2	0.2	0.01	0.03	C65
Ureter	1	0.0	0.0	0.0	0.00	0.00	4	0.1	0.1	0.1	0.01	0.01	C66
Bladder	147	3.6	5.2	6.1	0.26	0.68	27	0.6	0.9	0.9	0.05	0.09	C67
Other urinary organs	1	0.0	0.0	0.0	0.00	0.01	1	0.0	0.0	0.0	0.00	0.00	C68
Eye	7	0.2	0.2	0.3	0.02	0.03	6	0.1	0.2	0.1	0.01	0.01	C69
Brain, nervous system	71	1.7	2.5	2.5	0.16	0.24	66	1.4	2.3	2.3	0.15	0.21	C70-72
Thyroid	43	1.0	1.5	1.5	0.10	0.14	216	4.5	7.4	6.4	0.48	0.58	C73
Adrenal gland	2	0.0	0.1	0.1	0.00	0.00	3	0.1	0.1	0.1	0.01	0.01	C74
Other endocrine	2	0.0	0.1	0.1	0.00	0.00	3	0.1	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	13	0.3	0.5	0.5	0.03	0.03	8	0.2	0.3	0.3	0.01	0.03	C81
Non-Hodgkin lymphoma	181	4.4	6.4	6.3	0.44	0.64	146	3.0	5.0	4.9	0.36	0.49	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	20	0.5	0.7	0.8	0.06	0.08	29	0.6	1.0	1.0	0.07	0.10	C90
Lymphoid leukaemia	56	1.4	2.0	2.5	0.12	0.16	43	0.9	1.5	1.8	0.10	0.11	C91
Myeloid leukaemia	79	1.9	2.8	2.8	0.16	0.30	65	1.4	2.2	2.2	0.13	0.19	C92-94
Leukaemia unspecified	36	0.9	1.3	1.4	0.06	0.12	49	1.0	1.7	1.7	0.10	0.13	C95
Myeloproliferative disorders	27	0.7	1.0	1.0	0.07	0.10	17	0.4	0.6	0.6	0.04	0.05	MPD
Myelodysplastic syndromes	20	0.5	0.7	0.8	0.05	0.08	22	0.5	0.8	0.7	0.04	0.08	MDS
Other and unspecified	155	3.8	5.5	5.6	0.33	0.66	113	2.4	3.9	3.5	0.20	0.39	O&U
All sites	4249	151.0	166.8	9.64	19.25		4944	169.4	156.0	10.71	16.81	16.96	
All sites except C44	4120	100.0	146.4	9.42	18.72		4792	100.0	151.0	10.47	16.25	16.96	exc. C44

Thailand, Khon Kaen

REGISTRATION AREA

The Khon Kaen Cancer Registry covers the province of Khon Kaen in north-eastern Thailand. The province is 163 m above sea level, has an area of 10 886 km², and has a population of 1.7 million. It is bordered by the provinces of Loei, Nong Bua Lam Phu, and Udon Thani to the north; Kalasin and Maha Sarakham to the east; Buriram and Nakhon Ratchasima to the south; and Chaiyaphum and Phetchabun to the west. The climate is generally hot and dry, with a mean annual temperature of 28 °C and a mean annual rainfall of 1188 mm. The majority of the population is employed in rice farming.

CANCER CARE FACILITIES

Khon Kaen is divided into 26 health districts. The province's most important facility is Srinagarind Hospital (a 1000-bed university hospital), which is the largest referral centre in north-eastern Thailand. The hospital is well equipped and provides surgery, chemotherapy, and radiotherapy; immunotherapy and organ transplantation facilities are in development. The other institutions that provide data to the registry are the Khon Kaen Regional Hospital (with 867 beds), the Khon Kaen Central Hospital, two health promotion centres, two private hospitals, and 25 community hospitals. The physician-to-population ratio is about 1:3110.

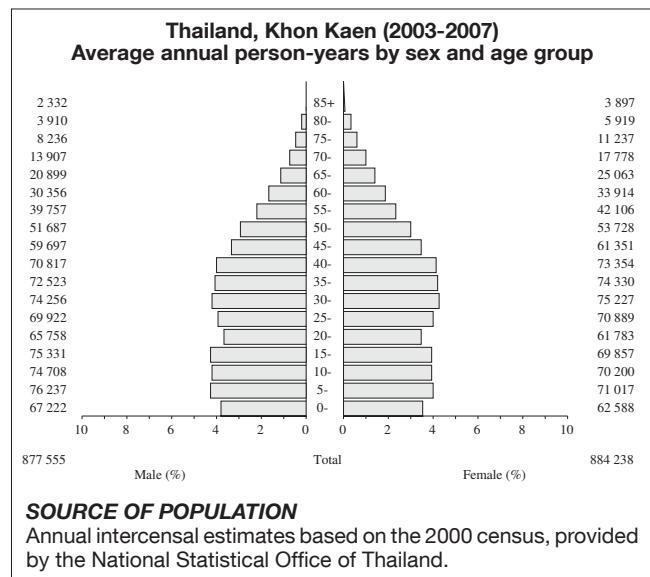
REGISTRY STRUCTURE AND METHODS

The registry was established within the Faculty of Medicine, Khon Kaen University in 1985. It collects data from all care facilities in the province, by both active and passive methods. Data on Khon Kaen residents are extracted from hospitals; the medical charts of patients diagnosed with cancer are reviewed and cases are registered by cancer unit staff members. Death certificates are collected from the civil registration system. All data are verified, checked for duplication, coded, and entered using CanReg

software. Questionable cases are traced back to the original information sources for clarification. All multiple primary cases are verified against the original records, and the physicians are consulted if necessary. Registered cases are followed up for vital status.

CONTRIBUTORS

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NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Liver	64.0	Liver	25.6
Trachea, bronchus and lung	18.4	Breast	18.6
Other and unspecified	7.6	Cervix uteri	11.8
Colon	5.7	Trachea, bronchus and lung	6.0
Gallbladder etc.	5.4	Ovary	5.3
Non-Hodgkin lymphoma	4.4	Colon	5.0
Rectum	4.4	Thyroid	4.7
Non-melanoma skin cancer	3.8	Other and unspecified	4.6
Prostate	3.1	Non-melanoma skin cancer	3.4
Bladder	3.0	Corpus uteri	3.3
All sites	148.1	All sites	116.2

*Thailand, Khon Kaen (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	11	0.2	0.3	0.3	0.01	0.04	74	1.3	1.7	1.6	0.04	0.22	C00
Tongue	53	0.9	1.2	1.2	0.07	0.13	39	0.7	0.9	0.8	0.05	0.09	C01-02
Mouth	46	0.8	1.0	1.1	0.06	0.11	72	1.3	1.6	1.5	0.05	0.17	C03-06
Salivary glands	21	0.4	0.5	0.5	0.03	0.06	13	0.2	0.3	0.3	0.02	0.02	C07-08
Tonsil	19	0.3	0.4	0.4	0.02	0.06	3	0.1	0.1	0.1	0.00	0.00	C09
Other oropharynx	3	0.1	0.1	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	106	1.8	2.4	2.3	0.17	0.25	50	0.9	1.1	1.0	0.09	0.10	C11
Hypopharynx	30	0.5	0.7	0.7	0.04	0.08	3	0.1	0.1	0.1	0.00	0.01	C12-13
Pharynx unspecified	1	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	37	0.6	0.8	0.9	0.05	0.11	13	0.2	0.3	0.3	0.01	0.02	C15
Stomach	104	1.7	2.4	2.5	0.13	0.30	85	1.5	1.9	1.7	0.11	0.20	C16
Small intestine	6	0.1	0.1	0.1	0.02	0.02	5	0.1	0.1	0.1	0.01	0.01	C17
Colon	238	4.0	5.4	5.7	0.32	0.69	243	4.4	5.5	5.0	0.30	0.53	C18
Rectum	178	3.0	4.1	4.4	0.23	0.52	116	2.1	2.6	2.3	0.11	0.30	C19-20
Anus	7	0.1	0.2	0.2	0.01	0.03	6	0.1	0.1	0.1	0.01	0.01	C21
Liver	2638	44.1	60.1	64.0	3.50	8.08	1220	21.9	27.6	25.6	1.25	3.32	C22
Gallbladder etc.	222	3.7	5.1	5.4	0.29	0.68	143	2.6	3.2	2.9	0.18	0.36	C23-24
Pancreas	39	0.7	0.9	0.9	0.06	0.12	40	0.7	0.9	0.8	0.05	0.10	C25
Nose, sinuses etc.	24	0.4	0.5	0.6	0.03	0.05	7	0.1	0.2	0.1	0.00	0.01	C30-31
Larynx	47	0.8	1.1	1.2	0.05	0.15	4	0.1	0.1	0.1	0.00	0.00	C32
Trachea, bronchus and lung	745	12.5	17.0	18.4	0.90	2.34	294	5.3	6.6	6.0	0.36	0.73	C33-34
Other thoracic organs	22	0.4	0.5	0.5	0.04	0.04	3	0.1	0.1	0.1	0.00	0.00	C37-38
Bone	25	0.4	0.6	0.6	0.04	0.05	22	0.4	0.5	0.5	0.02	0.04	C40-41
Melanoma of skin	19	0.3	0.4	0.5	0.02	0.07	26	0.5	0.6	0.5	0.03	0.07	C43
Other skin	150		3.4	3.8	0.15	0.44	161		3.6	3.4	0.11	0.34	C44
Mesothelioma	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	46	0.8	1.0	1.0	0.07	0.10	29	0.5	0.7	0.6	0.04	0.06	C47+C49
Breast	14	0.2	0.3	0.3	0.02	0.04	966	17.3	21.8	18.6	1.52	1.98	C50
Vulva							17	0.3	0.4	0.3	0.02	0.05	C51
Vagina							7	0.1	0.2	0.1	0.01	0.01	C52
Cervix uteri							621	11.1	14.0	11.8	0.94	1.26	C53
Corpus uteri							169	3.0	3.8	3.3	0.27	0.40	C54
Uterus unspecified							11	0.2	0.2	0.2	0.02	0.02	C55
Ovary							265	4.7	6.0	5.3	0.40	0.58	C56
Other female genital organs							3	0.1	0.1	0.1	0.00	0.00	C57
Placenta							17	0.3	0.4	0.3	0.03	0.03	C58
Penis	72	1.2	1.6	1.6	0.11	0.14							C60
Prostate	119	2.0	2.7	3.1	0.08	0.32							C61
Testis	16	0.3	0.4	0.3	0.02	0.02							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	37	0.6	0.8	0.9	0.06	0.09	32	0.6	0.7	0.7	0.05	0.06	C64
Renal pelvis	16	0.3	0.4	0.4	0.02	0.05	5	0.1	0.1	0.1	0.01	0.01	C65
Ureter	3	0.1	0.1	0.1	0.00	0.02	3	0.1	0.1	0.1	0.00	0.01	C66
Bladder	127	2.1	2.9	3.0	0.15	0.36	44	0.8	1.0	0.9	0.04	0.09	C67
Other urinary organs	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.01	C68
Eye	16	0.3	0.4	0.5	0.03	0.03	14	0.3	0.3	0.4	0.02	0.02	C69
Brain, nervous system	61	1.0	1.4	1.4	0.08	0.12	57	1.0	1.3	1.2	0.08	0.12	C70-72
Thyroid	42	0.7	1.0	0.9	0.05	0.10	241	4.3	5.5	4.7	0.32	0.46	C73
Adrenal gland	5	0.1	0.1	0.1	0.01	0.01	2	0.0	0.0	0.1	0.00	0.00	C74
Other endocrine	2	0.0	0.0	0.0	0.00	0.00	2	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	33	0.6	0.8	0.7	0.05	0.08	19	0.3	0.4	0.4	0.02	0.04	C81
Non-Hodgkin lymphoma	190	3.2	4.3	4.4	0.26	0.52	157	2.8	3.6	3.2	0.22	0.34	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	28	0.5	0.6	0.7	0.03	0.10	31	0.6	0.7	0.7	0.03	0.08	C90
Lymphoid leukaemia	56	0.9	1.3	1.5	0.08	0.11	37	0.7	0.8	1.0	0.05	0.08	C91
Myeloid leukaemia	98	1.6	2.2	2.3	0.14	0.25	90	1.6	2.0	1.9	0.13	0.18	C92-94
Leukaemia unspecified	14	0.2	0.3	0.3	0.02	0.03	17	0.3	0.4	0.3	0.02	0.03	C95
Myeloproliferative disorders	11	0.2	0.3	0.3	0.02	0.03	3	0.1	0.1	0.1	0.01	0.01	MPD
Myelodysplastic syndromes	13	0.2	0.3	0.3	0.01	0.05	10	0.2	0.2	0.2	0.01	0.03	MDS
Other and unspecified	316	5.3	7.2	7.6	0.42	0.93	227	4.1	5.1	4.6	0.27	0.56	O&U
All sites	6128		139.7	148.1	7.95	17.94	5741		129.9	116.2	7.36	13.19	C00-96
All sites except C44	5978	100.0	136.2	144.3	7.80	17.50	5580	100.0	126.2	112.8	7.25	12.85	C00-96 exc. C44

*See note following population pyramid

Thailand, Lampang

REGISTRATION AREA

The Lampang Cancer Registry covers the province of Lampang in northern Thailand.

REGISTRY STRUCTURE AND METHODS

The registry is located in Lampang Cancer Hospital. It uses passive methods of data collection from 21 information sources: cancer centres, general hospitals, community hospitals, private hospitals, university hospitals, the provincial public health service, and pathology laboratories. The data collected are registration number, name, residential address, date of birth, age, sex, date of diagnosis, site of cancer, histology, staging, extent of disease, method of diagnosis, treatment, date of last contact, and vital status. Primary site and histology are coded according to ICD-O-3. The registry uses the IARC rules (1990) for multiple primary tumours. Death certificates are obtained from the Thai Ministry of Public Health's Bureau of Policy and Strategy. All registered cases are passively followed up through record linkage with the Thai National Health Security Office's database. CanReg4 software is used for data entry and analysis.

INTERPRETING THE RESULTS

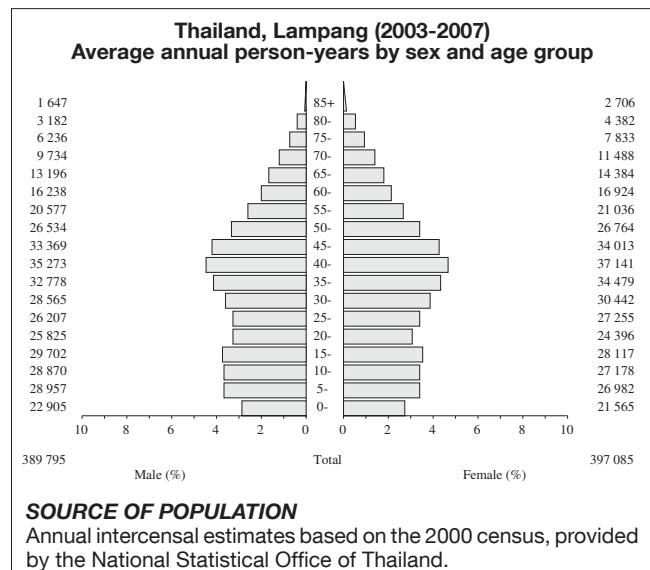
The registry's case ascertainment has been estimated to be more than 97% complete (Suwanrungruang et al., 2011). A national hepatitis B virus vaccination programme for children was started in 1992, and a national cervical cancer screening programme for women aged 35–54 years was launched in 1998. Other programmes, such as prostate-specific antigen (PSA) testing and screening for breast and colon cancers, have been established (although not nationwide) in provincial hospitals, university hospitals, cancer centres, and some private hospitals.

USE OF THE DATA

The registry publishes annual reports on hospital-based cancer registration and periodic reports on population-based cancer incidence, mortality, and survival. Registry data have been used in cancer research and by the local health authority for cancer control planning and the evaluation of cancer prevention, screening, and treatment initiatives.

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SOURCE OF POPULATION

Annual intercensal estimates based on the 2000 census, provided by the National Statistical Office of Thailand.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	48.8	Breast	28.2
Liver	37.2	Trachea, bronchus and lung	25.8
Other and unspecified	10.5	Cervix uteri	19.9
Colon	9.0	Liver	13.7
Non-Hodgkin lymphoma	6.5	Other and unspecified	8.2
Prostate	6.4	Ovary	6.5
Rectum	5.9	Colon	6.4
Bladder	5.6	Non-melanoma skin cancer	5.4
Stomach	4.4	Thyroid	4.5
Non-melanoma skin cancer	4.0	Non-Hodgkin lymphoma	4.4
All sites	172.9	All sites	159.3

Thailand, Lampang (2003-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	4	0.1	0.2	0.1	0.01	0.02	7	0.2	0.4	0.3	0.02	0.02	C00
Tongue	39	0.9	2.0	1.6	0.10	0.15	24	0.6	1.2	0.9	0.06	0.11	C01-02
Mouth	39	0.9	2.0	1.5	0.07	0.21	33	0.8	1.7	1.2	0.07	0.14	C03-06
Salivary glands	12	0.3	0.6	0.5	0.04	0.05	14	0.3	0.7	0.5	0.03	0.05	C07-08
Tonsil	14	0.3	0.7	0.6	0.03	0.04	5	0.1	0.3	0.2	0.01	0.01	C09
Other oropharynx	3	0.1	0.2	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	60	1.5	3.1	2.4	0.21	0.26	34	0.8	1.7	1.4	0.08	0.16	C11
Hypopharynx	14	0.3	0.7	0.6	0.03	0.06	2	0.0	0.1	0.1	0.01	0.01	C12-13
Pharynx unspecified	1	0.0	0.1	0.0	0.00	0.01	2	0.0	0.1	0.1	0.00	0.00	C14
Oesophagus	41	1.0	2.1	1.7	0.11	0.21	16	0.4	0.8	0.6	0.03	0.06	C15
Stomach	110	2.7	5.6	4.4	0.22	0.50	70	1.7	3.5	2.5	0.15	0.29	C16
Small intestine	2	0.0	0.1	0.1	0.00	0.01	9	0.2	0.5	0.3	0.01	0.03	C17
Colon	221	5.4	11.3	9.0	0.46	1.09	178	4.3	9.0	6.4	0.41	0.77	C18
Rectum	145	3.5	7.4	5.9	0.28	0.68	108	2.6	5.4	4.0	0.24	0.45	C19-20
Anus	1	0.0	0.1	0.0	0.00	0.00	6	0.1	0.3	0.2	0.00	0.02	C21
Liver	926	22.5	47.5	37.2	2.42	4.29	379	9.2	19.1	13.7	0.80	1.62	C22
Gallbladder etc.	78	1.9	4.0	3.2	0.16	0.38	86	2.1	4.3	3.1	0.13	0.39	C23-24
Pancreas	48	1.2	2.5	1.9	0.11	0.22	57	1.4	2.9	2.0	0.10	0.23	C25
Nose, sinuses etc.	17	0.4	0.9	0.7	0.05	0.08	12	0.3	0.6	0.4	0.03	0.04	C30-31
Larynx	44	1.1	2.3	1.9	0.10	0.24	16	0.4	0.8	0.6	0.02	0.08	C32
Trachea, bronchus and lung	1184	28.8	60.8	48.8	2.25	6.50	694	16.8	35.0	25.8	1.36	3.45	C33-34
Other thoracic organs	1	0.0	0.1	0.1	0.00	0.00	1	0.0	0.1	0.0	0.00	0.00	C37-38
Bone	13	0.3	0.7	0.6	0.02	0.05	13	0.3	0.7	0.5	0.03	0.05	C40-41
Melanoma of skin	9	0.2	0.5	0.4	0.01	0.05	15	0.4	0.8	0.6	0.03	0.05	C43
Other skin	96	4.9	4.9	4.0	0.23	0.44	149		7.5	5.4	0.24	0.59	C44
Mesothelioma	2	0.0	0.1	0.1	0.00	0.01	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	1	0.0	0.1	0.1	0.00	0.00	1	0.0	0.1	0.1	0.00	0.00	C46
Connective and soft tissue	21	0.5	1.1	0.9	0.07	0.08	20	0.5	1.0	0.9	0.06	0.09	C47+C49
Breast	7	0.2	0.4	0.3	0.01	0.04	770	18.6	38.8	28.2	2.25	3.02	C50
Vulva							21	0.5	1.1	0.8	0.04	0.09	C51
Vagina							3	0.1	0.2	0.1	0.02	0.02	C52
Cervix uteri							545	13.2	27.5	19.9	1.64	2.07	C53
Corpus uteri							84	2.0	4.2	3.2	0.28	0.35	C54
Uterus unspecified							0	0.0	0.0	0.0	0.00	0.00	C55
Ovary							162	3.9	8.2	6.5	0.48	0.63	C56
Other female genital organs							2	0.0	0.1	0.1	0.01	0.01	C57
Placenta							4	0.1	0.2	0.2	0.01	0.01	C58
Penis	26	0.6	1.3	1.1	0.06	0.13							C60
Prostate	160	3.9	8.2	6.4	0.14	0.65							C61
Testis	10	0.2	0.5	0.5	0.03	0.03							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	35	0.9	1.8	1.4	0.06	0.18	12	0.3	0.6	0.5	0.03	0.05	C64
Renal pelvis	31	0.8	1.6	1.2	0.08	0.17	12	0.3	0.6	0.5	0.03	0.06	C65
Ureter	4	0.1	0.2	0.1	0.00	0.01	3	0.1	0.2	0.1	0.01	0.01	C66
Bladder	138	3.4	7.1	5.6	0.22	0.72	57	1.4	2.9	1.9	0.07	0.23	C67
Other urinary organs	1	0.0	0.1	0.0	0.00	0.01	2	0.0	0.1	0.1	0.00	0.01	C68
Eye	4	0.1	0.2	0.3	0.01	0.01	3	0.1	0.2	0.1	0.01	0.01	C69
Brain, nervous system	46	1.1	2.4	2.0	0.14	0.17	43	1.0	2.2	1.7	0.12	0.16	C70-72
Thyroid	20	0.5	1.0	0.8	0.06	0.08	113	2.7	5.7	4.5	0.32	0.43	C73
Adrenal gland	3	0.1	0.2	0.1	0.00	0.02	3	0.1	0.2	0.1	0.01	0.01	C74
Other endocrine	3	0.1	0.2	0.1	0.01	0.02	2	0.0	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	6	0.1	0.3	0.3	0.02	0.03	5	0.1	0.3	0.2	0.02	0.02	C81
Non-Hodgkin lymphoma	156	3.8	8.0	6.5	0.39	0.75	117	2.8	5.9	4.4	0.26	0.48	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	37	0.9	1.9	1.5	0.07	0.17	27	0.7	1.4	1.0	0.05	0.13	C90
Lymphoid leukaemia	34	0.8	1.7	1.9	0.11	0.14	27	0.7	1.4	1.5	0.08	0.10	C91
Myeloid leukaemia	48	1.2	2.5	2.1	0.12	0.21	59	1.4	3.0	2.5	0.15	0.26	C92-94
Leukaemia unspecified	34	0.8	1.7	1.7	0.09	0.16	26	0.6	1.3	1.0	0.06	0.09	C95
Myeloproliferative disorders	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.1	0.0	0.00	0.00	MPD
Myelodysplastic syndromes	2	0.0	0.1	0.1	0.00	0.02	1	0.0	0.1	0.0	0.00	0.00	MDS
Other and unspecified	261	6.3	13.4	10.5	0.67	1.24	223	5.4	11.2	8.2	0.47	0.93	O&U
All sites	4212		216.1	172.9	9.30	20.63	4278		215.5	159.3	10.36	17.96	C00-96
All sites except C44	4116	100.0	211.2	168.9	9.07	20.19	4129	100.0	208.0	153.9	10.12	17.37	C00-96 exc. C44

Thailand, Songkhla

REGISTRATION AREA

The Songkhla Cancer Registry covers the province of Songkhla in southern Thailand. In 2000, the population was 1.3 million (80% Buddhist, 20% Muslim or Christian). Two cities in the province, Songkhla (the capital) and Hat Yai (the economic centre of southern Thailand), have high proportions of ethnic Chinese residents compared with other Thai cities.

CANCER CARE FACILITIES

Government health care facilities include three hospitals (with a total of more than 500 beds), 13 community hospitals, and many community health centres. In urban areas, there are also private clinics and hospitals. Prince of Songkla University's (PSU's) Songklanagarind Hospital is the larger of the two hospitals in southern Thailand that provide radiotherapy services. Patients suspected to have cancer are referred to Songkhla Hospital, Hat Yai Hospital, and Songklanagarind Hospital.

REGISTRY STRUCTURE AND METHODS

The registry is part of the PSU Cancer Centre, which has an advisory team of specialists in all major cancer fields. The registry is headed by a practising clinician and is staffed by two pathologists, a radiologist, an epidemiologist, two nurses, and eight support staff members. It uses active case finding from 23 sources: all hospitals in the province, the provincial health office, and the provincial population registration office. Death registration is relatively complete, but the recorded cause of death is not always accurate.

INTERPRETING THE RESULTS

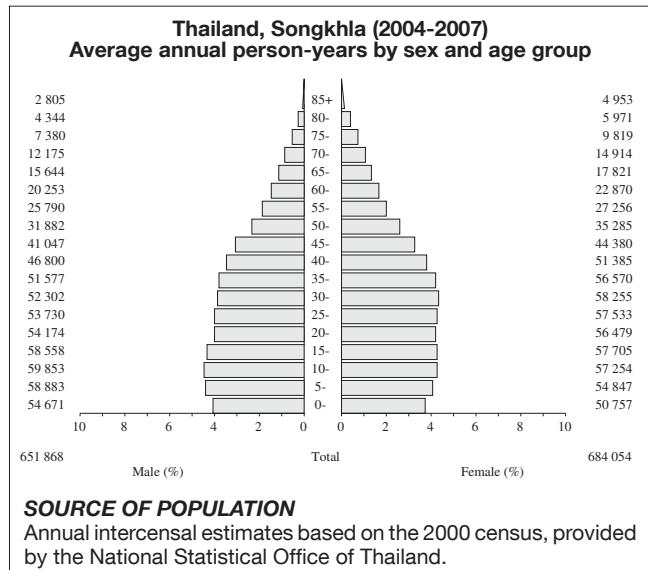
The number of undiagnosed and unregistered cases is believed to be low. Some residents (particularly in remote areas) visit hospitals in the two nearby provinces, some never enter the health care system, and a few seek care in Bangkok. There were no screening programmes during the reporting period, and prostate-specific antigen (PSA) testing is not common.

USE OF THE DATA

Registry data are used by government, academic, and public institutions. The registry collaborates with the National Cancer Institute of Thailand and other registries to provide national cancer statistics, projections, and recommendations.

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NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male	Female		
Trachea, bronchus and lung	25.3	Breast	21.6
Liver	16.4	Cervix uteri	15.2
Oesophagus	9.0	Trachea, bronchus and lung	6.6
Colon	7.4	Ovary	6.2
Other and unspecified	7.2	Colon	5.4
Prostate	7.1	Thyroid	4.8
Rectum	6.0	Other and unspecified	4.3
Non-Hodgkin lymphoma	5.8	Non-Hodgkin lymphoma	4.0
Bladder	4.8	Liver	3.9
Non-melanoma skin cancer	4.2	Corpus uteri	3.8
All sites	141.5	All sites	106.8

*Thailand, Songkhla (2004-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64	0-74	
Lip	3	0.1	0.1	0.1	0.01	0.01	11	0.4	0.4	0.3	0.00	0.04	C00
Tongue	93	2.7	3.6	3.7	0.21	0.42	17	0.6	0.6	0.6	0.04	0.06	C01-02
Mouth	94	2.7	3.6	3.8	0.17	0.44	34	1.1	1.2	1.0	0.03	0.10	C03-06
Salivary glands	9	0.3	0.3	0.4	0.02	0.05	17	0.6	0.6	0.5	0.04	0.04	C07-08
Tonsil	37	1.1	1.4	1.4	0.08	0.16	9	0.3	0.3	0.3	0.01	0.04	C09
Other oropharynx	25	0.7	1.0	1.0	0.03	0.09	1	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	93	2.7	3.6	3.5	0.29	0.35	31	1.0	1.1	1.0	0.08	0.12	C11
Hypopharynx	65	1.9	2.5	2.6	0.16	0.32	6	0.2	0.2	0.2	0.01	0.04	C12-13
Pharynx unspecified	6	0.2	0.2	0.2	0.01	0.01	3	0.1	0.1	0.1	0.00	0.01	C14
Oesophagus	219	6.3	8.4	9.0	0.55	1.09	43	1.4	1.6	1.4	0.06	0.19	C15
Stomach	76	2.2	2.9	3.0	0.13	0.34	45	1.5	1.6	1.6	0.08	0.19	C16
Small intestine	9	0.3	0.3	0.3	0.02	0.03	7	0.2	0.3	0.2	0.02	0.03	C17
Colon	186	5.4	7.1	7.4	0.38	0.93	160	5.2	5.8	5.4	0.32	0.61	C18
Rectum	148	4.3	5.7	6.0	0.28	0.70	94	3.1	3.4	3.1	0.19	0.37	C19-20
Anus	7	0.2	0.3	0.3	0.01	0.04	2	0.1	0.1	0.1	0.01	0.01	C21
Liver	415	12.0	15.9	16.4	1.23	1.82	116	3.8	4.2	3.9	0.17	0.47	C22
Gallbladder etc.	27	0.8	1.0	1.1	0.05	0.10	34	1.1	1.2	1.1	0.05	0.13	C23-24
Pancreas	58	1.7	2.2	2.3	0.14	0.27	44	1.4	1.6	1.5	0.07	0.19	C25
Nose, sinuses etc.	16	0.5	0.6	0.6	0.04	0.06	6	0.2	0.2	0.2	0.00	0.03	C30-31
Larynx	94	2.7	3.6	3.7	0.17	0.43	5	0.2	0.2	0.2	0.00	0.03	C32
Trachea, bronchus and lung	624	18.0	23.9	25.3	1.16	3.07	204	6.6	7.5	6.6	0.32	0.77	C33-34
Other thoracic organs	9	0.3	0.3	0.3	0.02	0.04	4	0.1	0.1	0.1	0.01	0.01	C37-38
Bone	20	0.6	0.8	0.8	0.04	0.10	13	0.4	0.5	0.5	0.02	0.03	C40-41
Melanoma of skin	10	0.3	0.4	0.4	0.03	0.04	10	0.3	0.4	0.3	0.02	0.04	C43
Other skin	109		4.2	4.2	0.20	0.36	113		4.1	3.5	0.14	0.33	C44
Mesothelioma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C45
Kaposi sarcoma	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	34	1.0	1.3	1.3	0.09	0.11	25	0.8	0.9	0.9	0.06	0.07	C47+C49
Breast	4	0.1	0.2	0.2	0.01	0.02	649	21.1	23.7	21.6	1.75	2.30	C50
Vulva							9	0.3	0.3	0.3	0.02	0.05	C51
Vagina							3	0.1	0.1	0.1	0.01	0.01	C52
Cervix uteri							459	14.9	16.8	15.2	1.20	1.61	C53
Corpus uteri							105	3.4	3.8	3.8	0.32	0.49	C54
Uterus unspecified							5	0.2	0.2	0.2	0.02	0.02	C55
Ovary							178	5.8	6.5	6.2	0.48	0.66	C56
Other female genital organs							4	0.1	0.1	0.1	0.02	0.02	C57
Placenta							13	0.4	0.5	0.4	0.03	0.03	C58
Penis	48	1.4	1.8	1.8	0.10	0.16							C60
Prostate	181	5.2	6.9	7.1	0.16	0.77							C61
Testis	7	0.2	0.3	0.2	0.02	0.03							C62
Other male genital organs	4	0.1	0.2	0.2	0.02	0.02							C63
Kidney	40	1.2	1.5	1.6	0.09	0.18	23	0.7	0.8	0.9	0.06	0.10	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	1	0.0	0.0	0.0	0.00	0.00	3	0.1	0.1	0.1	0.01	0.01	C66
Bladder	123	3.6	4.7	4.8	0.17	0.55	20	0.7	0.7	0.6	0.02	0.04	C67
Other urinary organs	2	0.1	0.1	0.1	0.00	0.02	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	15	0.4	0.6	0.6	0.04	0.04	7	0.2	0.3	0.3	0.02	0.02	C69
Brain, nervous system	72	2.1	2.8	2.7	0.16	0.26	72	2.3	2.6	2.6	0.16	0.25	C70-72
Thyroid	45	1.3	1.7	1.7	0.11	0.18	147	4.8	5.4	4.8	0.32	0.48	C73
Adrenal gland	3	0.1	0.1	0.1	0.01	0.01	4	0.1	0.1	0.2	0.01	0.01	C74
Other endocrine	3	0.1	0.1	0.1	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	21	0.6	0.8	0.8	0.06	0.07	14	0.5	0.5	0.5	0.04	0.04	C81
Non-Hodgkin lymphoma	148	4.3	5.7	5.8	0.34	0.65	117	3.8	4.3	4.0	0.24	0.45	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	33	1.0	1.3	1.3	0.08	0.13	34	1.1	1.2	1.2	0.06	0.14	C90
Lymphoid leukaemia	36	1.0	1.4	1.5	0.08	0.12	34	1.1	1.2	1.3	0.07	0.10	C91
Myeloid leukaemia	88	2.5	3.4	3.5	0.19	0.30	75	2.4	2.7	2.6	0.13	0.27	C92-94
Leukaemia unspecified	24	0.7	0.9	1.0	0.06	0.08	22	0.7	0.8	0.8	0.04	0.08	C95
Myeloproliferative disorders	1	0.0	0.0	0.0	0.00	0.00	2	0.1	0.1	0.1	0.00	0.00	MPD
Myelodysplastic syndromes	1	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	MDS
Other and unspecified	183	5.3	7.0	7.2	0.38	0.87	131	4.3	4.8	4.3	0.25	0.45	O&U
All sites	3569		136.9	141.5	7.54	15.85	3184		116.4	106.8	7.03	11.62	C00-96
All sites except C44	3460	100.0	132.7	137.3	7.35	15.48	3071	100.0	112.2	103.3	6.88	11.29	C00-96 exc. C44

*See note following population pyramid

Turkey, Antalya

REGISTRATION AREA

The Antalya Cancer Registry covers Antalya Province on the Mediterranean coast of southern Turkey. In 2006, the population was 1.7 million, with 74.8% of residents living in urban areas. In recent years, Antalya has experienced the fastest rate of population growth in Turkey, due to internal migration. The majority religion is Islam. Regional income comes from trade, agriculture (particularly commercial production of flowers, vegetables, and fruit), tourism, and construction.

CANCER CARE FACILITIES

General health care is provided mainly by primary health centres and government hospitals, but the number of private hospitals and health centres has increased in recent years. Patients suspected to have cancer are generally referred by primary and secondary care facilities to the Mediterranean University Hospital and government hospitals in central Antalya.

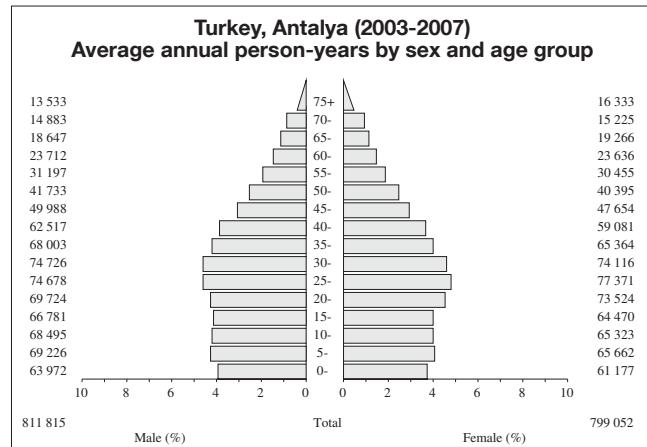
REGISTRY STRUCTURE AND METHODS

The registry was established in 1995. It is staffed by a full-time public health specialist (a physician) and two full-time health workers (trained as cancer registrars). An additional 17 registrars are based in hospitals and clinics. The registry actively collects data from all hospitals and some clinics that provide cancer diagnostic and treatment services in the province. The information sources are 13 government hospitals, a government education-research hospital, two university hospitals, 17 private hospitals, a private radiotherapy clinic, three private pathology laboratories, two radiology imaging centres, several private health centres, and the Center for Early Diagnosis and Screening of Cancer. The registry staff members working in government and university hospitals review the hospital archives and the records of departments involved in cancer diagnosis to identify and abstract information on cases. The death registration system is incomplete, particularly in rural areas, and cause of death is often not stated or is

simply listed as cardiorespiratory arrest. The registry uses ICD-O-3 for topography and histology coding and CanReg4 software for database management and data processing. The registry follows the *Middle East Cancer Consortium (MECC) Manual of Standards for Cancer Registration*.

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SOURCE OF POPULATION

Based on data collected by the primary health centres (for 2003–2006) and on data from the Turkish Statistical Institute's address-based population registration system (for 2007).

NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	48.8	Breast	36.0
Prostate	34.9	Non-melanoma skin cancer	20.3
Non-melanoma skin cancer	23.5	Corpus uteri	7.8
Bladder	19.7	Thyroid	7.8
Stomach	11.7	Ovary	7.5
Colon	9.2	Colon	7.5
Non-Hodgkin lymphoma	7.6	Trachea, bronchus and lung	6.6
Rectum	6.9	Stomach	6.0
Larynx	6.8	Cervix uteri	5.5
Other and unspecified	6.6	Non-Hodgkin lymphoma	5.2
All sites	237.8	All sites	161.5

*Turkey, Antalya (2003-2007)

SITE	Male						Female						ICD-10
	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	§No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	80	1.0	2.0	2.1	0.12	0.24	22	0.4	0.6	0.6	0.03	0.07	C00
Tongue	30	0.4	0.7	0.8	0.06	0.09	20	0.4	0.5	0.5	0.04	0.06	C01-02
Mouth	25	0.3	0.6	0.7	0.04	0.08	27	0.5	0.7	0.7	0.05	0.08	C03-06
Salivary glands	19	0.2	0.5	0.5	0.03	0.04	22	0.4	0.6	0.5	0.04	0.05	C07-08
Tonsil	11	0.1	0.3	0.3	0.02	0.04	0	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	1	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	64	0.8	1.6	1.6	0.12	0.17	23	0.4	0.6	0.5	0.05	0.06	C11
Hypopharynx	15	0.2	0.4	0.4	0.02	0.05	6	0.1	0.2	0.1	0.01	0.01	C12-13
Pharynx unspecified	1	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	55	0.7	1.4	1.5	0.09	0.15	39	0.7	1.0	1.0	0.07	0.11	C15
Stomach	424	5.4	10.4	11.7	0.64	1.40	238	4.3	6.0	6.0	0.29	0.64	C16
Small intestine	21	0.3	0.5	0.5	0.04	0.06	22	0.4	0.6	0.5	0.04	0.05	C17
Colon	335	4.3	8.3	9.2	0.55	1.08	282	5.1	7.1	7.5	0.38	0.83	C18
Rectum	251	3.2	6.2	6.9	0.43	0.81	173	3.1	4.3	4.5	0.30	0.54	C19-20
Anus	8	0.1	0.2	0.2	0.02	0.03	15	0.3	0.4	0.4	0.01	0.05	C21
Liver	136	1.7	3.4	3.9	0.21	0.45	72	1.3	1.8	2.0	0.09	0.23	C22
Gallbladder etc.	62	0.8	1.5	1.8	0.06	0.26	68	1.2	1.7	1.8	0.06	0.20	C23-24
Pancreas	218	2.8	5.4	6.2	0.30	0.76	131	2.4	3.3	3.5	0.13	0.45	C25
Nose, sinuses etc.	14	0.2	0.3	0.4	0.02	0.05	5	0.1	0.1	0.1	0.01	0.02	C30-31
Larynx	254	3.3	6.3	6.8	0.50	0.84	23	0.4	0.6	0.6	0.05	0.07	C32
Trachea, bronchus and lung	1757	22.6	43.3	48.8	3.16	6.12	246	4.5	6.2	6.6	0.39	0.75	C33-34
Other thoracic organs	19	0.2	0.5	0.5	0.04	0.04	14	0.3	0.4	0.4	0.03	0.03	C37-38
Bone	41	0.5	1.0	1.0	0.06	0.09	41	0.7	1.0	1.1	0.06	0.09	C40-41
Melanoma of skin	75	1.0	1.8	1.9	0.13	0.23	54	1.0	1.4	1.4	0.08	0.15	C43
Other skin	844		20.8	23.5	1.29	2.70	774		19.4	20.3	1.02	2.17	C44
Mesothelioma	59	0.8	1.5	1.6	0.12	0.23	28	0.5	0.7	0.8	0.04	0.09	C45
Kaposi sarcoma	26	0.3	0.6	0.7	0.03	0.09	20	0.4	0.5	0.6	0.02	0.07	C46
Connective and soft tissue	78	1.0	1.9	2.0	0.12	0.21	63	1.1	1.6	1.5	0.12	0.14	C47+C49
Breast	20	0.3	0.5	0.5	0.04	0.06	1463	26.5	36.6	36.0	2.90	3.84	C50
Vulva							15	0.3	0.4	0.4	0.01	0.04	C51
Vagina							6	0.1	0.2	0.2	0.01	0.01	C52
Cervix uteri							225	4.1	5.6	5.5	0.44	0.59	C53
Corpus uteri							298	5.4	7.5	7.8	0.60	0.92	C54
Uterus unspecified							29	0.5	0.7	0.7	0.05	0.06	C55
Ovary							296	5.4	7.4	7.5	0.53	0.80	C56
Other female genital organs							18	0.3	0.5	0.5	0.04	0.05	C57
Placenta							3	0.1	0.1	0.1	0.00	0.00	C58
Penis	1	0.0	0.0	0.0	0.00	0.01							C60
Prostate	1193	15.3	29.4	34.9	1.30	4.38							C61
Testis	137	1.8	3.4	2.9	0.20	0.23							C62
Other male genital organs	2	0.0	0.0	0.0	0.00	0.00							C63
Kidney	163	2.1	4.0	4.5	0.31	0.55	88	1.6	2.2	2.4	0.15	0.27	C64
Renal pelvis	13	0.2	0.3	0.3	0.02	0.04	4	0.1	0.1	0.1	0.00	0.02	C65
Ureter	4	0.1	0.1	0.1	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	703	9.0	17.3	19.7	1.01	2.29	122	2.2	3.1	3.2	0.17	0.35	C67
Other urinary organs	7	0.1	0.2	0.2	0.00	0.04	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	12	0.2	0.3	0.4	0.02	0.03	6	0.1	0.2	0.2	0.01	0.01	C69
Brain, nervous system	220	2.8	5.4	5.6	0.40	0.59	162	2.9	4.1	4.3	0.27	0.48	C70-72
Thyroid	83	1.1	2.0	2.1	0.16	0.24	329	6.0	8.2	7.8	0.63	0.77	C73
Adrenal gland	15	0.2	0.4	0.5	0.03	0.03	16	0.3	0.4	0.5	0.03	0.03	C74
Other endocrine	6	0.1	0.1	0.2	0.01	0.01	4	0.1	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	70	0.9	1.7	1.7	0.11	0.16	54	1.0	1.4	1.3	0.08	0.10	C81
Non-Hodgkin lymphoma	284	3.6	7.0	7.6	0.40	0.88	198	3.6	5.0	5.2	0.33	0.58	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	1	0.0	0.0	0.0	0.00	0.01	C88
Multiple myeloma	80	1.0	2.0	2.2	0.13	0.28	69	1.3	1.7	1.8	0.10	0.22	C90
Lymphoid leukaemia	138	1.8	3.4	4.0	0.21	0.33	66	1.2	1.7	2.0	0.10	0.12	C91
Myeloid leukaemia	159	2.0	3.9	4.1	0.24	0.46	97	1.8	2.4	2.5	0.15	0.22	C92-94
Leukaemia unspecified	11	0.1	0.3	0.3	0.01	0.02	10	0.2	0.3	0.3	0.01	0.02	C95
Myeloproliferative disorders	43	0.6	1.1	1.1	0.08	0.13	41	0.7	1.0	1.0	0.07	0.11	MPD
Myelodysplastic syndromes	97	1.2	2.4	2.7	0.11	0.36	84	1.5	2.1	2.2	0.11	0.27	MDS
Other and unspecified	243	3.1	6.0	6.6	0.33	0.70	159	2.9	4.0	4.3	0.17	0.49	O&U
All sites	8627		212.5	237.8	13.39	28.16	6293		157.5	161.5	10.38	17.45	C00-96
All sites except C44	7783	100.0	191.7	214.3	12.10	25.46	5519	100.0	138.1	141.3	9.35	15.27	C00-96 exc. C44

*Includes 18 cases of unknown age

\$Includes 6 cases of unknown age

*See note following population pyramid

Turkey, Edirne

REGISTRATION AREA

The Edirne Cancer Registry covers Edirne Province in the region of Anatolia in western Turkey. Two thirds of residents live in urban areas, and the majority religion is Islam. Edirne's population is decreasing due to external emigration. Regional income comes from livestock, agriculture, tourism, and small industries.

CANCER CARE FACILITIES

General health care is provided mainly by primary health centres and government hospitals. Patients suspected to have cancer are generally referred by primary and secondary care facilities to Trakya University Hospital and government hospitals in central Edirne. Some residents receive cancer diagnostic and treatment services outside the province.

REGISTRY STRUCTURE AND METHODS

The registry is staffed by five full-time health workers, and an additional eight staff members are based in hospitals. The registry collects data from all hospitals and some clinics that provide cancer diagnostic and treatment services in the province. During 2004–2007, the registry used active case finding from six government hospitals, a university hospital, and four private hospitals. The death registration system is incomplete, particularly in rural areas.

INTERPRETING THE RESULTS

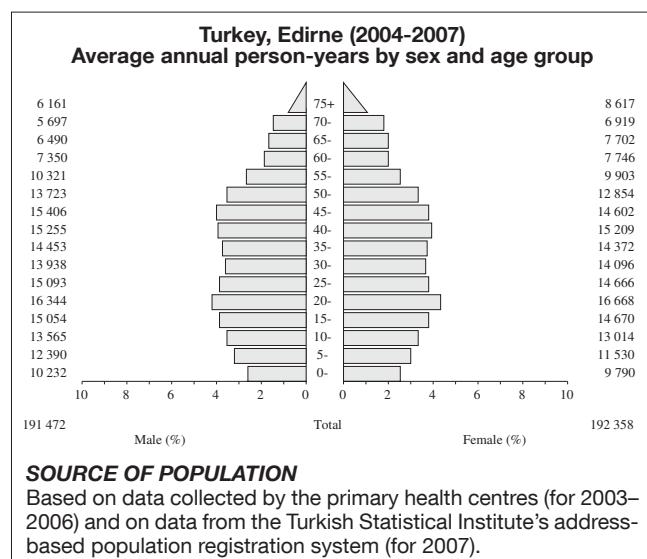
The number of undiagnosed cancer cases is unknown, but the proportion is probably higher among elderly residents in rural areas.

USE OF THE DATA

The registry publishes an annual report on cancer incidence, highlighting trends and changes.

CONTRIBUTORS

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SOURCE OF POPULATION

Based on data collected by the primary health centres (for 2003–2006) and on data from the Turkish Statistical Institute's address-based population registration system (for 2007).

NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	85.8	Breast	31.1
Non-melanoma skin cancer	34.1	Non-melanoma skin cancer	23.2
Bladder	18.7	Corpus uteri	7.8
Prostate	17.1	Thyroid	7.7
Stomach	16.6	Ovary	6.9
Larynx	11.2	Colon	6.7
Other and unspecified	10.3	Stomach	6.5
Colon	9.2	Trachea, bronchus and lung	5.5
Rectum	6.8	Other and unspecified	5.3
Brain, nervous system	6.8	Rectum	4.9
All sites	267.9	All sites	146.3

*Turkey, Edirne (2004-2007)

SITE	Male						Female						
	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	ICD-10
Lip	15	0.7	2.0	1.4	0.13	0.13	3	0.2	0.4	0.2	0.00	0.00	C00
Tongue	11	0.5	1.4	1.0	0.07	0.09	3	0.2	0.4	0.3	0.01	0.04	C01-02
Mouth	7	0.3	0.9	0.7	0.05	0.07	0	0.0	0.0	0.0	0.00	0.00	C03-06
Salivary glands	3	0.1	0.4	0.4	0.02	0.02	6	0.5	0.8	0.5	0.01	0.06	C07-08
Tonsil	3	0.1	0.4	0.3	0.01	0.01	0	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	2	0.1	0.3	0.2	0.03	0.03	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	15	0.7	2.0	1.5	0.11	0.15	6	0.5	0.8	0.6	0.06	0.06	C11
Hypopharynx	3	0.1	0.4	0.3	0.03	0.03	2	0.2	0.3	0.2	0.02	0.02	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	14	0.6	1.8	1.4	0.05	0.13	4	0.3	0.5	0.3	0.00	0.03	C15
Stomach	169	7.4	22.1	16.6	0.82	2.14	75	5.9	9.7	6.5	0.33	0.78	C16
Small intestine	6	0.3	0.8	0.6	0.05	0.05	4	0.3	0.5	0.4	0.05	0.05	C17
Colon	92	4.0	12.0	9.2	0.49	1.10	77	6.1	10.0	6.7	0.36	0.87	C18
Rectum	69	3.0	9.0	6.8	0.32	0.86	56	4.4	7.3	4.9	0.26	0.53	C19-20
Anus	3	0.1	0.4	0.4	0.02	0.04	1	0.1	0.1	0.1	0.00	0.02	C21
Liver	43	1.9	5.6	4.3	0.20	0.56	26	2.1	3.4	2.2	0.09	0.27	C22
Gallbladder etc.	12	0.5	1.6	1.2	0.08	0.17	18	1.4	2.3	1.5	0.09	0.19	C23-24
Pancreas	55	2.4	7.2	5.6	0.42	0.62	34	2.7	4.4	2.9	0.16	0.43	C25
Nose, sinuses etc.	2	0.1	0.3	0.2	0.02	0.02	1	0.1	0.1	0.1	0.00	0.02	C30-31
Larynx	110	4.8	14.4	11.2	0.87	1.31	7	0.6	0.9	0.7	0.05	0.11	C32
Trachea, bronchus and lung	846	36.9	110.5	85.8	5.81	10.97	61	4.8	7.9	5.5	0.35	0.73	C33-34
Other thoracic organs	6	0.3	0.8	0.7	0.06	0.06	4	0.3	0.5	0.4	0.01	0.06	C37-38
Bone	3	0.1	0.4	0.5	0.03	0.03	13	1.0	1.7	1.7	0.11	0.13	C40-41
Melanoma of skin	18	0.8	2.4	1.9	0.15	0.21	12	0.9	1.6	1.1	0.07	0.10	C43
Other skin	345		45.0	34.1	1.74	4.10	274		35.6	23.2	1.10	2.70	C44
Mesothelioma	7	0.3	0.9	0.7	0.07	0.07	4	0.3	0.5	0.3	0.00	0.05	C45
Kaposi sarcoma	4	0.2	0.5	0.4	0.00	0.04	0	0.0	0.0	0.0	0.00	0.00	C46
Connective and soft tissue	8	0.3	1.0	0.8	0.04	0.10	14	1.1	1.8	1.6	0.12	0.13	C47+C49
Breast	8	0.3	1.0	0.8	0.06	0.06	306	24.2	39.8	31.1	2.70	3.32	C50
Vulva							4	0.3	0.5	0.2	0.00	0.02	C51
Vagina							1	0.1	0.1	0.1	0.01	0.01	C52
Cervix uteri							24	1.9	3.1	2.5	0.23	0.27	C53
Corpus uteri							79	6.2	10.3	7.8	0.63	0.98	C54
Uterus unspecified							10	0.8	1.3	1.0	0.10	0.11	C55
Ovary							70	5.5	9.1	6.9	0.49	0.80	C56
Other female genital organs							0	0.0	0.0	0.0	0.00	0.00	C57
Placenta							0	0.0	0.0	0.0	0.00	0.00	C58
Penis	0	0.0	0.0	0.0	0.00	0.00							C60
Prostate	175	7.6	22.8	17.1	0.57	2.04							C61
Testis	26	1.1	3.4	3.1	0.23	0.23							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	35	1.5	4.6	3.5	0.22	0.37	18	1.4	2.3	2.1	0.15	0.21	C64
Renal pelvis	3	0.1	0.4	0.3	0.02	0.04	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	184	8.0	24.0	18.7	1.10	2.29	20	1.6	2.6	1.8	0.06	0.23	C67
Other urinary organs	4	0.2	0.5	0.4	0.02	0.06	0	0.0	0.0	0.0	0.00	0.00	C68
Eye	2	0.1	0.3	0.2	0.00	0.04	4	0.3	0.5	0.4	0.03	0.03	C69
Brain, nervous system	56	2.4	7.3	6.8	0.47	0.61	43	3.4	5.6	4.8	0.29	0.45	C70-72
Thyroid	19	0.8	2.5	2.0	0.17	0.19	75	5.9	9.7	7.7	0.62	0.70	C73
Adrenal gland	2	0.1	0.3	0.2	0.01	0.03	1	0.1	0.1	0.1	0.01	0.01	C74
Other endocrine	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	14	0.6	1.8	1.6	0.12	0.14	5	0.4	0.6	0.6	0.04	0.04	C81
Non-Hodgkin lymphoma	50	2.2	6.5	5.2	0.39	0.55	40	3.2	5.2	3.8	0.28	0.41	C82-85,C96
Immunoproliferative diseases	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	23	1.0	3.0	2.3	0.13	0.32	14	1.1	1.8	1.1	0.05	0.12	C90
Lymphoid leukaemia	25	1.1	3.3	3.2	0.19	0.30	15	1.2	1.9	2.4	0.13	0.18	C91
Myeloid leukaemia	26	1.1	3.4	2.9	0.18	0.24	30	2.4	3.9	3.3	0.21	0.31	C92-94
Leukaemia unspecified	2	0.1	0.3	0.2	0.03	0.03	3	0.2	0.4	0.3	0.01	0.03	C95
Myeloproliferative disorders	6	0.3	0.8	0.6	0.06	0.06	8	0.6	1.0	0.7	0.05	0.11	MPD
Myelodysplastic syndromes	4	0.2	0.5	0.3	0.00	0.00	4	0.3	0.5	0.3	0.01	0.03	MDS
Other and unspecified	102	4.5	13.3	10.3	0.62	1.26	59	4.7	7.7	5.3	0.32	0.65	O&U
All sites	2637		344.3	267.9	16.25	31.93	1538		199.9	146.3	9.68	16.39	C00-96
All sites except C44	2292	100.0	299.3	233.8	14.50	27.83	1264	100.0	164.3	123.2	8.57	13.69	C00-96 exc. C44

*See note following population pyramid

Turkey, Izmir

REGISTRATION AREA

The Izmir Cancer Registry (ICR) covers Izmir Province in the extreme west of Turkey, on the Aegean Sea coast. The province is divided into 30 districts. The provincial capital (the city of Izmir) is the third most populous city in Turkey, with a population of 3.7 million in 2007.

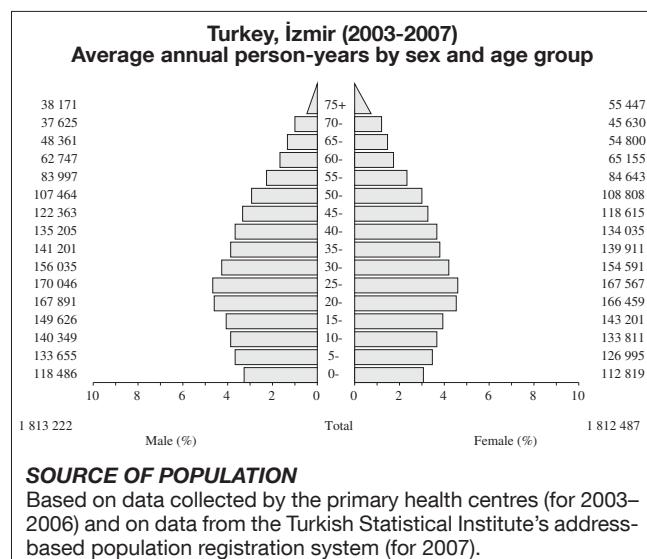
REGISTRY STRUCTURE AND METHODS

The ICR was the first population-based cancer registry in Turkey. It was founded in 1992 as a special project and is now a department of the Izmir Provincial Health Directorate. An advisory committee oversees the registry's activities and makes strategic decisions. All incident cancer cases (diagnosed by any method) are registered, including both invasive and *in situ* lesions at any anatomical site (including non-melanoma skin cancers) and benign tumours of the brain. For each case, the ICR collects a set of mandatory information items, which has been defined based on SEER registry rules. The registry uses IARC/IACR and European Network of Cancer Registries (ENCR) rules for multiple primary tumours. The ICR collects data from all health care facilities in the province, including university, provincial, municipal, and private hospitals; 23 private cancer centres; 25 private pathology laboratories; and several physicians' offices. Nine hospitals have hospital-based registries, from which the ICR receives data directly. These registries are supervised by the ICR and apply the same rules for collecting, abstracting, and coding data. For all other sources, data collection is active, carried out by three full-time medically qualified registry staff members who visit and collect cancer data from 15 hospitals and 12 clinics and laboratories. Routine quality control procedures, including internal checks and preparation and examination of cross-

tables, are carried out regularly. Case finding and re-abstracting audits, IARC DEPeds software, and cross-tabulations are also used periodically to identify erroneous data.

CONTRIBUTORS

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SOURCE OF POPULATION

Based on data collected by the primary health centres (for 2003–2006) and on data from the Turkish Statistical Institute's address-based population registration system (for 2007).

NOTES ON THE DATA

*No official mortality data. Fluctuation in rates from year to year.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	90.1	Breast	42.8
Prostate	36.3	Non-melanoma skin cancer	21.2
Non-melanoma skin cancer	29.2	Thyroid	14.3
Bladder	26.4	Trachea, bronchus and lung	10.0
Stomach	13.6	Corpus uteri	10.0
Colon	12.5	Colon	7.9
Larynx	11.7	Stomach	6.9
Other and unspecified	11.0	Other and unspecified	6.8
Rectum	8.8	Ovary	6.0
Non-Hodgkin lymphoma	8.0	Non-Hodgkin lymphoma	5.6
All sites	315.1	All sites	184.5

*Turkey, İzmir (2003-2007)

S I T E	Male						Female						
	§No.	cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	§No.	cases	Freq.	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	ICD-10
Lip	108	0.4	1.2	1.2	0.06	0.15	24	0.1	0.3	0.2	0.01	0.03	C00
Tongue	88	0.3	1.0	0.9	0.06	0.11	70	0.4	0.8	0.7	0.04	0.08	C01-02
Mouth	103	0.4	1.1	1.0	0.07	0.12	61	0.4	0.7	0.6	0.04	0.07	C03-06
Salivary glands	63	0.2	0.7	0.7	0.04	0.08	47	0.3	0.5	0.4	0.03	0.05	C07-08
Tonsil	45	0.2	0.5	0.5	0.03	0.06	3	0.0	0.0	0.0	0.00	0.00	C09
Other oropharynx	20	0.1	0.2	0.2	0.02	0.03	1	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	144	0.5	1.6	1.5	0.11	0.16	71	0.4	0.8	0.7	0.05	0.07	C11
Hypopharynx	56	0.2	0.6	0.6	0.04	0.06	18	0.1	0.2	0.2	0.02	0.02	C12-13
Pharynx unspecified	6	0.0	0.1	0.1	0.01	0.01	2	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	244	0.9	2.7	2.6	0.14	0.33	165	1.0	1.8	1.5	0.08	0.15	C15
Stomach	1282	4.8	14.1	13.6	0.70	1.72	746	4.4	8.2	6.9	0.37	0.76	C16
Small intestine	61	0.2	0.7	0.6	0.05	0.07	30	0.2	0.3	0.3	0.01	0.03	C17
Colon	1161	4.4	12.8	12.5	0.63	1.54	846	5.0	9.3	7.9	0.44	0.91	C18
Rectum	829	3.1	9.1	8.8	0.49	1.08	517	3.0	5.7	4.8	0.27	0.58	C19-20
Anus	33	0.1	0.4	0.3	0.02	0.03	22	0.1	0.2	0.2	0.01	0.03	C21
Liver	474	1.8	5.2	5.2	0.33	0.65	208	1.2	2.3	1.9	0.09	0.22	C22
Gallbladder etc.	231	0.9	2.5	2.5	0.12	0.31	228	1.3	2.5	2.1	0.11	0.25	C23-24
Pancreas	492	1.9	5.4	5.3	0.29	0.67	344	2.0	3.8	3.2	0.17	0.36	C25
Nose, sinuses etc.	45	0.2	0.5	0.5	0.04	0.06	33	0.2	0.4	0.3	0.02	0.03	C30-31
Larynx	1092	4.1	12.0	11.7	0.80	1.46	77	0.5	0.8	0.7	0.04	0.09	C32
Trachea, bronchus and lung	8331	31.5	91.9	90.1	5.26	11.59	1057	6.2	11.7	10.0	0.59	1.19	C33-34
Other thoracic organs	66	0.2	0.7	0.7	0.04	0.09	33	0.2	0.4	0.3	0.03	0.03	C37-38
Bone	128	0.5	1.4	1.4	0.09	0.12	100	0.6	1.1	1.1	0.07	0.09	C40-41
Melanoma of skin	206	0.8	2.3	2.1	0.13	0.26	171	1.0	1.9	1.6	0.11	0.17	C43
Other skin	2727		30.1	29.2	1.40	3.35	2338		25.8	21.2	1.03	2.35	C44
Mesothelioma	77	0.3	0.8	0.8	0.05	0.11	41	0.2	0.5	0.4	0.03	0.05	C45
Kaposi sarcoma	54	0.2	0.6	0.6	0.03	0.05	20	0.1	0.2	0.2	0.00	0.02	C46
Connective and soft tissue	186	0.7	2.1	2.1	0.12	0.21	179	1.0	2.0	1.8	0.12	0.18	C47+C49
Breast	75	0.3	0.8	0.8	0.04	0.09	4511	26.4	49.8	42.8	3.25	4.63	C50
Vulva							66	0.4	0.7	0.6	0.03	0.06	C51
Vagina							16	0.1	0.2	0.1	0.01	0.02	C52
Cervix uteri							565	3.3	6.2	5.4	0.41	0.59	C53
Corpus uteri							1017	6.0	11.2	10.0	0.78	1.21	C54
Uterus unspecified							32	0.2	0.4	0.3	0.02	0.03	C55
Ovary							630	3.7	7.0	6.0	0.43	0.67	C56
Other female genital organs							28	0.2	0.3	0.3	0.02	0.03	C57
Placenta							3	0.0	0.0	0.0	0.00	0.00	C58
Penis	8	0.0	0.1	0.1	0.00	0.01							C60
Prostate	3256	12.3	35.9	36.3	1.35	4.59							C61
Testis	359	1.4	4.0	3.4	0.24	0.25							C62
Other male genital organs	8	0.0	0.1	0.1	0.00	0.01							C63
Kidney	523	2.0	5.8	5.7	0.38	0.68	322	1.9	3.6	3.3	0.21	0.36	C64
Renal pelvis	39	0.1	0.4	0.4	0.02	0.06	19	0.1	0.2	0.2	0.01	0.02	C65
Ureter	20	0.1	0.2	0.2	0.01	0.03	2	0.0	0.0	0.0	0.00	0.00	C66
Bladder	2438	9.2	26.9	26.4	1.36	3.26	353	2.1	3.9	3.3	0.18	0.36	C67
Other urinary organs	17	0.1	0.2	0.2	0.01	0.02	3	0.0	0.0	0.0	0.00	0.00	C68
Eye	33	0.1	0.4	0.4	0.02	0.04	25	0.1	0.3	0.2	0.01	0.02	C69
Brain, nervous system	552	2.1	6.1	5.9	0.40	0.59	457	2.7	5.0	4.7	0.31	0.48	C70-72
Thyroid	343	1.3	3.8	3.4	0.25	0.35	1517	8.9	16.7	14.3	1.18	1.38	C73
Adrenal gland	27	0.1	0.3	0.4	0.02	0.04	21	0.1	0.2	0.3	0.02	0.02	C74
Other endocrine	9	0.0	0.1	0.1	0.01	0.01	10	0.1	0.1	0.1	0.01	0.01	C75
Hodgkin lymphoma	220	0.8	2.4	2.3	0.16	0.21	143	0.8	1.6	1.5	0.10	0.13	C81
Non-Hodgkin lymphoma	756	2.9	8.3	8.0	0.50	0.88	584	3.4	6.4	5.6	0.33	0.63	C82-85,C96
Immunoproliferative diseases	3	0.0	0.0	0.0	0.00	0.00	4	0.0	0.0	0.0	0.00	0.00	C88
Multiple myeloma	235	0.9	2.6	2.5	0.15	0.31	217	1.3	2.4	2.1	0.13	0.26	C90
Lymphoid leukaemia	336	1.3	3.7	4.2	0.22	0.36	232	1.4	2.6	2.8	0.15	0.24	C91
Myeloid leukaemia	318	1.2	3.5	3.4	0.18	0.37	264	1.5	2.9	2.6	0.18	0.28	C92-94
Leukaemia unspecified	55	0.2	0.6	0.6	0.03	0.07	42	0.2	0.5	0.4	0.02	0.04	C95
Myeloproliferative disorders	89	0.3	1.0	1.0	0.05	0.11	71	0.4	0.8	0.7	0.04	0.09	MPD
Myelodysplastic syndromes	92	0.3	1.0	1.0	0.04	0.12	79	0.5	0.9	0.7	0.02	0.07	MDS
Other and unspecified	1025	3.9	11.3	11.0	0.56	1.29	740	4.3	8.2	6.8	0.31	0.80	O&U
All sites	29188		321.9	315.1	17.16	38.26	19425		214.3	184.5	11.98	20.25	C00-96
All sites except C44	26461	100.0	291.9	286.0	15.76	34.91	17087	100.0	188.5	163.2	10.95	17.90	C00-96 exc. C44

*Includes 160 cases of unknown age

\$Includes 124 cases of unknown age

*See note following population pyramid

Turkey, Trabzon

REGISTRATION AREA

The Trabzon Cancer Registry covers Trabzon Province in north-eastern Turkey. The province has an area of 4685 km² and in 2005 had a population of 721 000 (58.9% living in urban areas). The provincial capital (the city of Trabzon) is a port city on the Black Sea coast.

CANCER CARE FACILITIES

Cancer cases are diagnosed in six provincial centres, eight district hospitals, two private hospitals, and three private pathology centres.

REGISTRY STRUCTURE AND METHODS

The registry has recorded incident cancer cases in Trabzon Province and neighbouring provinces since 1995. It is staffed by four full-time health workers, and an additional 14 staff members are based in hospitals. Two staff members visit the university hospital. The registry uses active registration; it collects data from all hospitals and some clinics that provide cancer diagnostic and treatment services in the province. The registry uses ICD-O-3 for topography and histology coding and CanReg software for database management and data processing.

INTERPRETING THE RESULTS

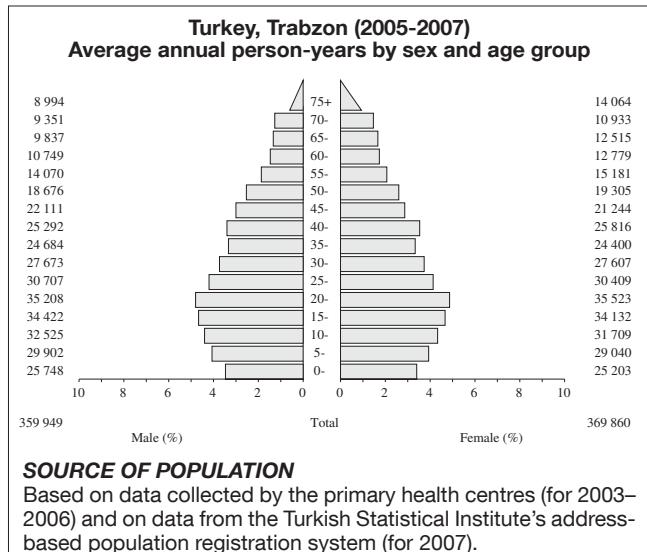
The number of undiagnosed cancer cases is unknown, but the proportion is probably higher among elderly residents in rural areas.

USE OF THE DATA

The registry publishes an annual report on cancer incidence, highlighting trends and changes.

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NOTES ON THE DATA

*No official mortality data.

10 MAJOR CANCERS, ASR (WORLD) PER 100 000

Male		Female	
Trachea, bronchus and lung	58.0	Breast	33.3
Non-melanoma skin cancer	30.9	Non-melanoma skin cancer	20.8
Prostate	27.3	Thyroid	17.2
Bladder	24.9	Stomach	14.0
Stomach	23.4	Colon	6.7
Colon	11.5	Ovary	5.6
Larynx	10.2	Corpus uteri	5.5
Non-Hodgkin lymphoma	8.2	Trachea, bronchus and lung	5.2
Rectum	7.6	Non-Hodgkin lymphoma	4.6
Pancreas	6.2	Brain, nervous system	4.2
All sites	263.9	All sites	156.9

*Turkey, Trabzon (2005-2007)

SITE	Male						Female						ICD-10
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (%)	0-74 (%)	
Lip	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C00
Tongue	6	0.2	0.6	0.5	0.02	0.06	7	0.4	0.6	0.4	0.02	0.06	C01-02
Mouth	4	0.2	0.4	0.4	0.04	0.04	9	0.5	0.8	0.6	0.04	0.05	C03-06
Salivary glands	5	0.2	0.5	0.4	0.02	0.05	2	0.1	0.2	0.2	0.02	0.02	C07-08
Tonsil	3	0.1	0.3	0.3	0.03	0.03	1	0.1	0.1	0.1	0.01	0.01	C09
Other oropharynx	1	0.0	0.1	0.1	0.00	0.02	0	0.0	0.0	0.0	0.00	0.00	C10
Nasopharynx	19	0.7	1.8	1.6	0.12	0.17	7	0.4	0.6	0.6	0.05	0.06	C11
Hypopharynx	1	0.0	0.1	0.1	0.00	0.00	1	0.1	0.1	0.1	0.01	0.01	C12-13
Pharynx unspecified	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C14
Oesophagus	22	0.9	2.0	2.1	0.16	0.28	13	0.7	1.2	0.9	0.06	0.08	C15
Stomach	259	10.0	24.0	23.4	1.34	2.86	194	11.1	17.5	14.0	0.79	1.56	C16
Small intestine	7	0.3	0.6	0.7	0.05	0.08	4	0.2	0.4	0.3	0.02	0.04	C17
Colon	128	5.0	11.9	11.5	0.72	1.32	91	5.2	8.2	6.7	0.40	0.68	C18
Rectum	83	3.2	7.7	7.6	0.47	0.97	60	3.4	5.4	4.1	0.20	0.45	C19-20
Anus	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C21
Liver	41	1.6	3.8	3.8	0.21	0.50	14	0.8	1.3	0.9	0.06	0.07	C22
Gallbladder etc.	5	0.2	0.5	0.4	0.02	0.03	10	0.6	0.9	0.7	0.03	0.07	C23-24
Pancreas	69	2.7	6.4	6.2	0.29	0.89	39	2.2	3.5	2.7	0.13	0.30	C25
Nose, sinuses etc.	5	0.2	0.5	0.5	0.04	0.06	3	0.2	0.3	0.2	0.02	0.02	C30-31
Larynx	112	4.3	10.4	10.2	0.66	1.30	2	0.1	0.2	0.2	0.01	0.01	C32
Trachea, bronchus and lung	628	24.3	58.2	58.0	3.73	7.51	69	3.9	6.2	5.2	0.31	0.57	C33-34
Other thoracic organs	2	0.1	0.2	0.2	0.01	0.03	1	0.1	0.1	0.1	0.00	0.02	C37-38
Bone	9	0.3	0.8	0.8	0.05	0.05	14	0.8	1.3	1.2	0.09	0.09	C40-41
Melanoma of skin	19	0.7	1.8	1.7	0.13	0.23	25	1.4	2.3	1.9	0.09	0.21	C43
Other skin	360		33.3	30.9	1.46	3.73	300		27.0	20.8	1.04	2.23	C44
Mesothelioma	9	0.3	0.8	0.7	0.01	0.08	6	0.3	0.5	0.4	0.02	0.04	C45
Kaposi sarcoma	10	0.4	0.9	0.8	0.01	0.11	5	0.3	0.5	0.3	0.01	0.04	C46
Connective and soft tissue	25	1.0	2.3	2.4	0.20	0.24	21	1.2	1.9	1.9	0.12	0.17	C47+C49
Breast	2	0.1	0.2	0.2	0.02	0.03	410	23.4	37.0	33.3	2.63	3.53	C50
Vulva							4	0.2	0.4	0.2	0.00	0.01	C51
Vagina							2	0.1	0.2	0.1	0.01	0.01	C52
Cervix uteri							46	2.6	4.1	3.6	0.25	0.38	C53
Corpus uteri							68	3.9	6.1	5.5	0.50	0.61	C54
Uterus unspecified							11	0.6	1.0	1.0	0.09	0.09	C55
Ovary							69	3.9	6.2	5.6	0.42	0.61	C56
Other female genital organs							4	0.2	0.4	0.4	0.04	0.04	C57
Placenta							0	0.0	0.0	0.0	0.00	0.00	C58
Penis	0	0.0	0.0	0.0	0.00	0.00							C60
Prostate	311	12.0	28.8	27.3	1.04	3.41							C61
Testis	39	1.5	3.6	3.2	0.24	0.25							C62
Other male genital organs	0	0.0	0.0	0.0	0.00	0.00							C63
Kidney	41	1.6	3.8	3.9	0.30	0.44	20	1.1	1.8	1.5	0.09	0.15	C64
Renal pelvis	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C65
Ureter	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C66
Bladder	282	10.9	26.1	24.9	1.19	3.44	30	1.7	2.7	1.8	0.03	0.20	C67
Other urinary organs	2	0.1	0.2	0.2	0.01	0.01	1	0.1	0.1	0.1	0.00	0.01	C68
Eye	3	0.1	0.3	0.3	0.03	0.03	1	0.1	0.1	0.0	0.00	0.00	C69
Brain, nervous system	41	1.6	3.8	3.8	0.28	0.38	49	2.8	4.4	4.2	0.31	0.41	C70-72
Thyroid	33	1.3	3.1	2.8	0.21	0.31	206	11.8	18.6	17.2	1.46	1.62	C73
Adrenal gland	0	0.0	0.0	0.0	0.00	0.00	2	0.1	0.2	0.3	0.01	0.01	C74
Other endocrine	0	0.0	0.0	0.0	0.00	0.00	0	0.0	0.0	0.0	0.00	0.00	C75
Hodgkin lymphoma	32	1.2	3.0	2.7	0.20	0.22	23	1.3	2.1	1.8	0.09	0.15	C81
Non-Hodgkin lymphoma	92	3.6	8.5	8.2	0.48	0.95	60	3.4	5.4	4.6	0.32	0.48	C82-85,C96
Immunoproliferative diseases	1	0.0	0.1	0.1	0.00	0.02	1	0.1	0.1	0.0	0.00	0.00	C88
Multiple myeloma	36	1.4	3.3	3.3	0.21	0.42	24	1.4	2.2	1.7	0.10	0.17	C90
Lymphoid leukaemia	47	1.8	4.4	4.8	0.29	0.45	20	1.1	1.8	1.8	0.12	0.18	C91
Myeloid leukaemia	44	1.7	4.1	3.8	0.23	0.40	29	1.7	2.6	2.2	0.16	0.19	C92-94
Leukaemia unspecified	5	0.2	0.5	0.4	0.02	0.02	4	0.2	0.4	0.2	0.00	0.00	C95
Myeloproliferative disorders	31	1.2	2.9	2.7	0.23	0.27	17	1.0	1.5	1.2	0.08	0.13	MPD
Myelodysplastic syndromes	11	0.4	1.0	1.0	0.03	0.17	14	0.8	1.3	1.0	0.06	0.09	MDS
Other and unspecified	57	2.2	5.3	5.1	0.29	0.60	40	2.3	3.6	2.9	0.15	0.29	O&U
All sites	2942		272.4	263.9	15.08	32.51	2053		185.0	156.9	10.46	16.23	C00-96
All sites except C44	2582	100.0	239.1	233.0	13.61	28.79	1753	100.0	158.0	136.1	9.42	14.00	C00-96 exc. C44

*See note following population pyramid