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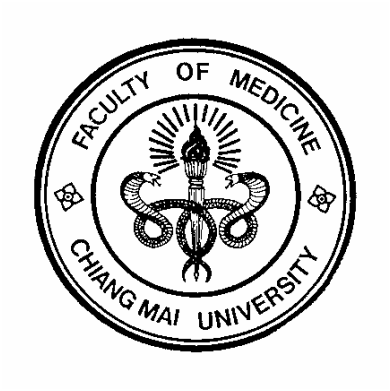

CHIANGMAI CANCER REGISTRY

MAHARAJ NAKORN CHIANG MAI HOSPITAL

FACULTY OF MEDICINE, CHIANG MAI UNIVERSITY

CHIANG MAI, THAILAND

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Note: to the reader

Data in this report may be used in publications, provided that the source is mentioned. For more information and notes on the statistical material in this report contact the Chiang Mai Cancer Registry, Faculty of Medicine, Chiang Mai University, Chiang Mai 50200, Thailand.

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We wish to express our gratitude to all the medical staff of the Faculty of Medicine, and all the medical staff in Chiang Mai Province, for their collaboration and care of cancer patients. The contents of this report are based on records received from all of the hospitals in Chiang Mai province and all pathological laboratories, both government and private. Without the support of these institutions and their staffs, this report would not exist. We also wish to thank the Unit of Data Processing, 5th Region of the Ministry of Interior for their death certificate data.

Introduction

Chiang Mai Cancer Registry is located at the Maharaj Nakorn Chiang Mai Hospital and fully supported by the Faculty of Medicine, Chiang Mai University. The registry covers the population of Chiang Mai province and has reported annually on cancer occurrence since the first volume in 1978, when it was a hospital-based registry. Population-based registration was started in 1986 to report the incidence and mortality of cancer in Chiang Mai since 1983.

This report is the 25th in a series and contains two parts. The first part is population-based registration, which has data on cancer frequency, incidence of new cancer, and mortality in Chiang Mai province in the year 2005. The second part is hospital-based registration, which has data at Maharaj Nakorn Chiang Mai Hospital for the same period.

MATERIALS AND METHODS

Data Sources

Information on newly diagnosed cancer cases is based on data collected by the Chiang Mai Cancer Registry. The data were collected by the Registry's staff from all hospitals in Chiang Mai province: one university hospital (Maharaj Nakorn Chiang Mai Hospital), 9 government hospitals, 1 municipal hospital, 15 private hospitals, and 22 community hospitals, with a total number of 5,983 beds. Sources in hospitals include the medical records sections, pathology laboratory records, and sections of hematology, radiation oncology, and hospital tumor registrations. Data were also collected from medical clinics and pathology clinics in Chiang Mai province. Identify of all patients was checked and matched to exclude multiple registrations. Mortality data were obtained from hospital records and death certificates from the Department of Local Administration, Ministry of Interior. Population data were obtained from the Statistical Data Bank and Information Dissemination Division, National Statistical Office.

Coding, Data Entry, and Processing of Data

The completed data forms were checked manually and entered into the database file in a personal computer at the Chiang Mai Cancer Registry, using CanReg3 software for data entry and edit. Details of each patient were crosschecked with the information collected from different hospitals to ensure completeness of records. Full information on every cancer patient registered at each and every hospital was thus obtained, whether or not the patient was subsequently treated at a particular hospital. Additional information was obtained every time a cancer patient was re-admitted or re-examined. Since the patient can be reported from more than one hospital, care was taken to see that multiple entries were not made for such cases, the medical information from different hospitals for each patient was combined.

Mortality data from death certificates which mention cancer as the cause of death were matched against the registered cases in our files. Every cancer death not traceable to an existing entry in our files was labeled as a "death certificate only (DCO)" and the date of death was taken as the date of diagnosis and was also registered in the data files. In addition, copies of all death certificates mentioning the term "cancer" as a cause of death were individually scrutinized in detail to

confirm the statement on the certificate. Patients for whom cancer had been ruled out or had not yet been diagnosed were not entered in the register.

ICD-O-3 (2000)(1) was used to code registered cancer cases in this volume. The morphology code numbers consist of six digits. The first four identify the histological type of neoplasm, the fifth indicates its behavior, and the sixth indicates grading and differentiation of the neoplasm.

Multiple primary registration followed IARC/IACR criteria. A second or third primary site in a patient was registered only when all primary sites were confirmed by histology. A new registration number was given for each new site as indicated by the three-digit ICD code; thus there was no new registration for a second primary cancer occurring at the same site (first three digits) but a different sub-site.

Follow up used a combination of both active and passive methods. Follow up information collected routinely was the date last seen, status of the patient (living or dead) and cause of death. This follow-up information was collected by registry staff from both out-patient and in-patient records of Maharaj Nakorn Chiang Mai Hospital and all special clinics in hospitals in Chiang Mai. Those who were lost to follow up were traced by mail, home visits by public health service officers, and by casual sources.

Type of Diagnosis and Stage of Disease

Type of diagnosis has been divided into two broad categories, non-microscopic and microscopic, each consisting of four sub categories. These are given below in order of increasing validity.

Non-microscopic

1. Clinical only
2. Clinical investigation (including X-ray, ultrasound, CT scan)
3. Surgery/autopsy without histology
4. Specific immunological and/or biochemical tests

Microscopic Confirmation

5. Cytology or hematology
6. Histology of metastasis
7. Histology of primary
8. Autopsy with concurrent or previous histology

Unknown Method of Diagnosis

9. Unknown
10. Death certificate only

Staging guide in Cancer registration; Principles and Methods (2) were used for the following items: in situ, localized, direct extension/regional nodes, distant metastasis, not applicable, and unknown (or not staged). The stage “in situ” was decided only by histological diagnosis. Lymphoma, leukemia, and brain tumor cases were staged as “not applicable”.

Calculation of Rates and Risks

Before analysis, both the incidence data and mortality data were checked by the IARCcrgTools program (Ferlay J, 2005) (3). Rates were calculated by the computer program CanReg3 (Cooke A, Parkin DM, Ferlay J, 1998) (4). All rates were expressed per 100,000 population and age-adjusted by the direct method to

the world standard population (5). These calculations were used only for population-based registration.

Crude Rates

The crude rate was defined as the number of new cases divided by the population at risk in the specific time period and expressed as an annual rate per 100,000 population.

Age-specific Rates

An age-specific incidence rate (AR) was calculated as the frequency in a given age and sex subgroup divided by the population for that same subgroup and expressed per 100,000 population.

$$AR = Ni/Pi \times 100{,}000$$

where Ni = number of new cancers occuring in the i^{th} age group
Pi = population of the i^{th} age group in the province of Chiang Mai

Age-standardized Rates

Age-standardized rates (ASR) were standardized to the world population (ASR WORLD) by a direct method (Doll & Smith, 1982) (5). The incidence (or mortality) rate observed in a given age-group (ARi) was multiplied by the number of persons in that age-group in the standard population (Pi.std); this value was then divided by the total standard population and the values obtained were the sum of all age-groups.

ASR(WORLD) = sum (ARi × Pi.std)/ total standard population
ARi = age specific rate in the i^{th} age-group
Pi.std = the number in the i^{th} age-group in the standard population.

or ASR(WORLD) = sum (Ni × Pi.std × 100,000 / Pi) / total Pi.std
Ni = number of new cancers occuring in the i^{th} age group
Pi = population of the i^{th} age group in Chiang Mai.

The details of calculation are in Boyle and Parkin, Statistical Methods for Registries, in Jensen and Parkin, Cancer Registration, Principles and Methods. IARC Scientific Publications No. 95, Lyon 1991 (2). These calculations were used only in population-based registration.

Cumulative Rate and Cumulative Risk

The cumulative rate is the summation of the age-specific rates over each year of age from birth to a defined upper age limit (65 or 75 years). As age-specific incidence rates are usually computed for five-year age intervals, the cumulative rate is five times the sum of the age-specific rates calculated over the five-year age groups, assuming the age-specific rates are the same for all ages within the five-year age stratum. This rate was then expressed as a percentage.

The cumulative risk is an estimate of an individual's risk of developing cancer of a particular type, up to the age of 64 or 74 years;

$$\text{Cumulative risk} = 1\text{-}e^{-(\text{cumulative rate})/100}$$

where Cumulative rate $= \Sigma^{n}_{i=1}(Fi \times Ti/Pi)$
n = number of age group which cumulative risk includes
Fi = number of new cancers occurring in the i^{th} age group
Ti = number of years in i^{th} age group
Pi = population of i^{th} age group in the total population

Table 1: Estimated new cancer cases and deaths by sex, Chiang Mai, Thailand, 2005

	Estimated New Cases			Estimated Deaths		
	Both sexes	males	females	Both sexes	males	females
All sites	2679	1275	1404	1992	1130	862
Oral cavity and pharynx	117	74	43	113	76	37
Lip	1	0	1	7	2	5
Tongue	12	8	4	12	9	3
Salivary gland	12	6	6	11	6	5
Mouth	24	11	13	21	10	11
Oropharynx	12	7	5	8	6	2
Nasopharynx	41	27	14	37	27	10
Hypopharynx	13	13	0	14	13	1
Pharynx, unspecified	2	2	0	3	3	0
Digestive system	678	434	244	598	401	197
Oesophagus	12	8	4	14	11	3
Stomach	100	59	41	71	37	34
Small intestine	6	5	1	4	3	1
Colon	137	77	60	72	42	30
Rectum	77	39	38	73	42	31
Liver	282	212	70	303	229	74
Gallbladder	41	22	19	35	21	14
Pancreas	23	12	11	26	16	10
Respiratory system	577	355	222	570	352	218
Nose, sinuses	10	8	2	9	6	3
Larynx	26	20	6	22	16	6
Bronchus, lung	535	326	209	534	327	207
Other Thoracic organs	6	1	5	5	3	2
Bone	7	3	4	3	2	1
Soft tissue	13	8	5	7	5	2
Connective tissue	12	7	5	7	5	2
Mesothelioma	0	0	0	0	0	0
Kaposi's sarcoma	1	1	0	0	0	0
Skin	80	44	36	25	15	10
Melanoma of skin	6	3	3	3	2	1
Non-melanoma of skin	74	41	33	22	13	9
Breast	263	4	259	86	1	85
Genital system	412	79	333	178	47	131
Uterus, unspecified	0		0	1		1
Cervix uteri	234		234	89		89
Placenta	1		1	0		0
Corpus uteri	44		44	13		13
Ovary	49		49	21		21
Other female genital	5		5	7		7
Prostate	58	58		41	41	
Testis	4	4		2	2	
Penis	15	15		4	4	
Other male genital	2	2		0	0	
Urinary system	79	57	22	64	46	18
Bladder	58	42	16	47	35	12
Kidney	21	15	6	17	11	6
Eye	3	3	0	0	0	0
Brain, nervous system	27	16	11	20	13	7
Endocrine system	46	9	37	15	5	10
Thyroid	43	8	35	12	3	9
Other endocrine	3	1	2	3	2	1
Lymphoma	122	63	59	81	47	34
Hodgkin's disease	10	6	4	7	4	3
Non-Hodgkin's lymphoma	112	57	55	74	43	31
Multiple myeloma	11	8	3	10	4	6
Leukaemia	62	34	28	38	16	22
Lymphoid leukaemia	20	11	9	7	2	5
Myeloid leukaemia	39	22	17	27	13	14
Monocytic leukaemia	1	0	1	1	0	1
Other leukaemia	0	0	0	1	0	1
Leukaemia, unspecified	2	1	1	2	1	1
Other & unspecified	182	84	98	184	100	84

Population-based Registration

Overview

In the year 2005, there were an estimated 2,679 new invasive cancer cases and 263 in situ cases in Chiang Mai province. There were 1,275 males, and 1,404 females with a male to female ratio of 1:1.1 . In the same period, 1,130 males and 862 females died from cancer (Table 1). The number of new cancer cases in males increased from 1,255 cases, but in females the number decreased from 1,480 cases compared to the year 2004. The number of cancer death in males also increased from 951 cases and in females decreased from 889 cases in the year 2004.

The data were obtained from the followings: 55.2 percent from Maharaj Nakorn Chiang Mai Hospital, 17.3 percent from Nakornping Hospital (the provincial hospital), 0.4 percent from other government hospitals, 8.0 percent from community hospitals, 8.8 percent from private hospitals, and 10.3 percent from death certificates only.

The standardized incidence rates were 145.5 for males and 142.7 for females. The cumulative rate percents to age 75 were 15.7% for males (Table 12) and 14.5% for females (Table 13). These represented risks of 10 in 63 for men and 10 in 69 for women. In the year 2004, the incidence in males decreased slightly from 146.7 and in females decreased from 155.7 but increased when compared to the year 2000 (Fig. 1).

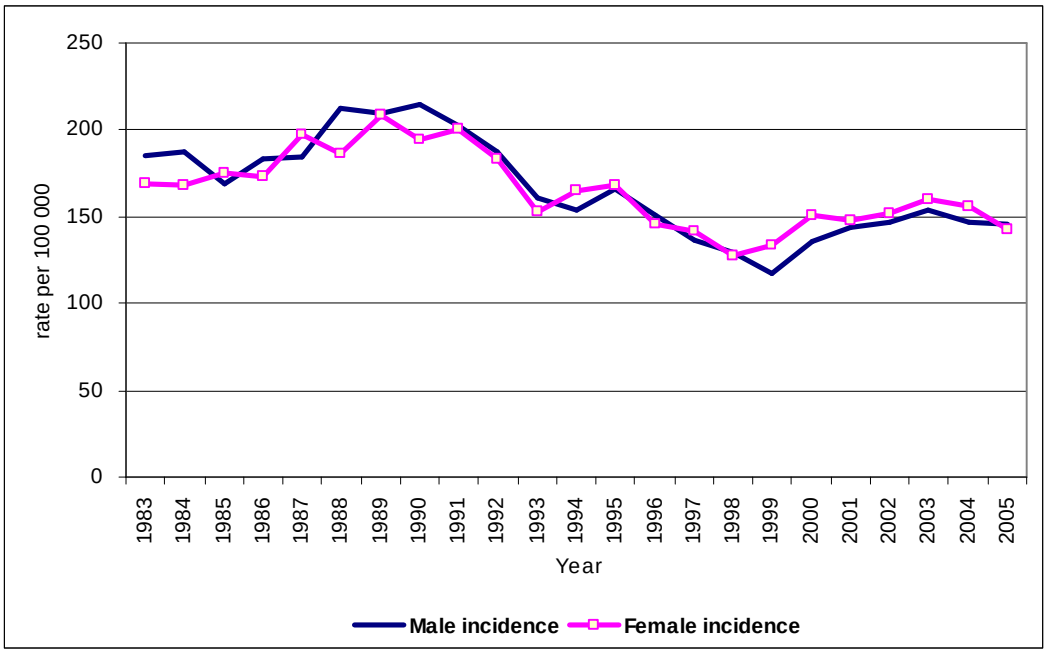

Figure 1: Age-standardized incidence rates (world) of cancer in Chiang Mai, 2005

INCIDENCE

Age and Sex

The age at diagnosis in males ranged from less than 1 year to 96 years, with a mean age of 61.3 years and a median age of 64 years (Fig. 2). In females, the mean age at diagnosis was 56.3 years and a median age of 55 years. Childhood cancers were relatively uncommon in Chiang Mai. Only 1.2% of all cancers occurred before age 15, but 50.6% occurred after age 60.

The male to female ratio was approximately 1:1.1, but 42.2% of the cancers in females occurred in sex-specific sites (ie, breast and reproductive organs) while only 6.2% of the cancers in males occurred at sex-specific sites (ie, prostate, testis, and penis cancers). When sex-specific sites were excluded, the male to female ratio changed to 1.5:1 because of higher incidence of lung cancer and liver cancer in males.

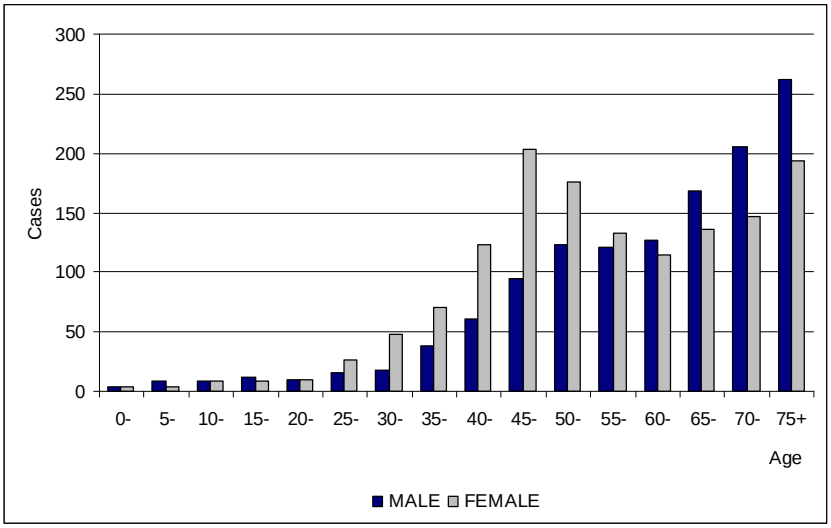

Figure 2: Age group distribution of new cancer cases in Chiang Mai, 2005

In the age group 25-59 years, more women had cancer than men, because of large number of the breast and cervix cancer. For age 60 and over, more men had cancer than women because of the high incidence of lung and liver cancers (Fig. 2). The age-specific incidence rates increased gradually after the age 25 years in both sexes, but in males the rates increased sharply after the age of 50 (Fig. 3).

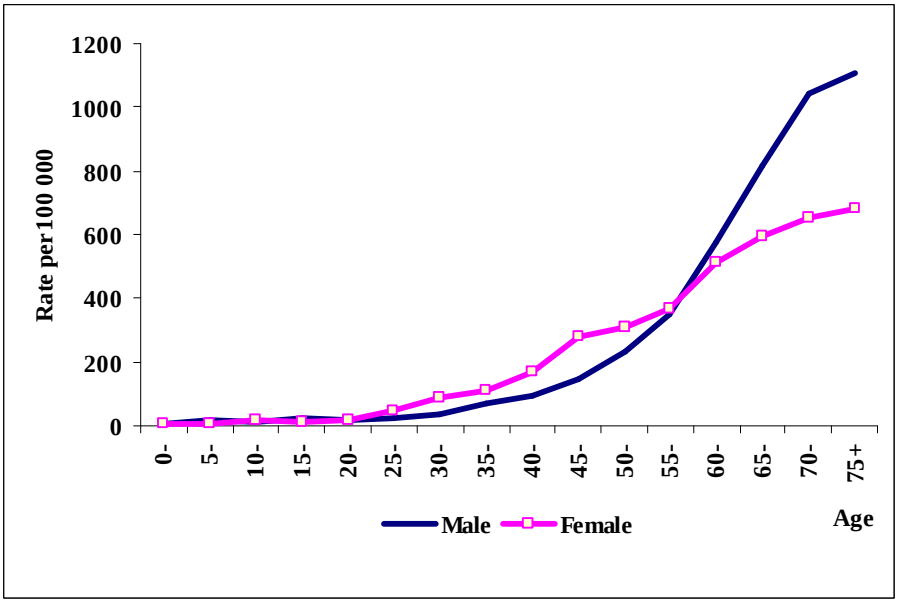

Figure 3: Age-specific incidence rates, Chiang Mai, 2005

Incidence of New Cancer Cases by Districts

High standardized incidence rates for males were found in Wiang Haeng, Hang Dong, Saraphi, Doi Saket, and Mae Rim districts. In Wiang Haeng, the high incidence rate was high even though there were small number of new cases due to a small population. In Hang Dong, Saraphi, Doi Saket, and Mae Rim, the high incidence rates because of high incidences of lung and liver cancer in males. For females high standardized incidence rates were found in Phrao, Hang Dong, Chiang Dao, Doi Saket and San Kamphaeng districts. The high incidence rates in Phrao, Hang Dong and Doi Saket were high due to the high incidence of lung and cervix cancer. The high incidence rate in Chiang Dao was high because of the high incidence of cervix cancer and in San Kamphaeng because of breast and liver cancer. Low incidences of cancer were found in Doi Tao, Mae Chaem, Samoeng, and Omkoi districts (Table 4).

MORTALITY

Age and Sex

In 2005, there were an estimated 1,992 cancer death cases (1,130 males, 862 females, Table 1), accounting for 14.7% for all deaths in Chiang Mai. Cancer has been the most common cause of death since 2002. The age-standardized mortality rates for all cancers were 128.1 per 100,000 males (Table 16) and 89.3 per 100,000 females (Table 17). Cancer death rates for men and women have continued to increase at about 4.8% and 2.0% per year respectively since 1999 (Fig. 4). The age-specific mortality rate increased after the age class 45-49 for both sexes and after the age 60, the rate for men was more greater than that of women (Fig. 5). The cumulative rate percents to age 75 were 14.5% for males (Table 16) and 9.9% for females (Table 17). These represented risks of dying from cancer that were 10 in 69 for males and 10 in 101 for females.

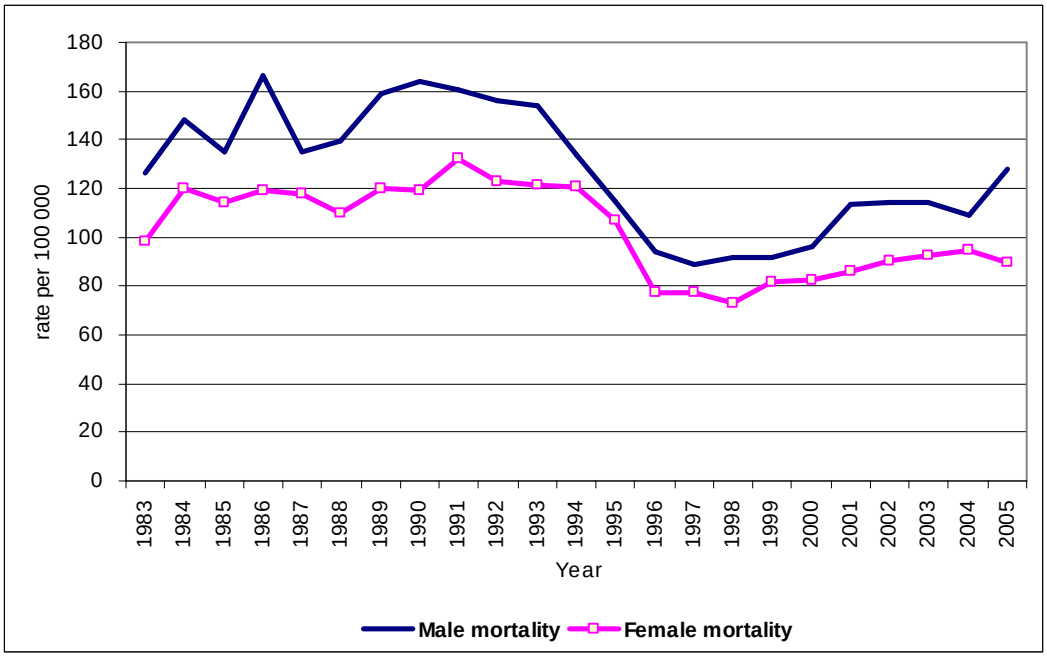

Figure 4: Age-standardized mortality rates (world) of cancer in Chiang Mai, 2005

For all cancer death cases, 1,431 cases (71.8%) survived less than one year, while only 119 cases (6.0%) survived more than 5 years. This indicates the severity of cancer in Chiang Mai.

Mortality of cancer cases by districts

The highest mortality rate for males was in Wiang Haeng district, followed by Hang Dong, San Pa Tong, Fang, and San Kamphaeng districts. These high mortality rates were because of mortality from lung, liver and NHL cancer. For females, the highest mortality rate was in San Pa Tong district, followed by Doi Saket, Hang Dong, Saraphi, and Phrao districts (Table 5). The high mortality rates were because of mortality from lung, cervix and breast cancer.

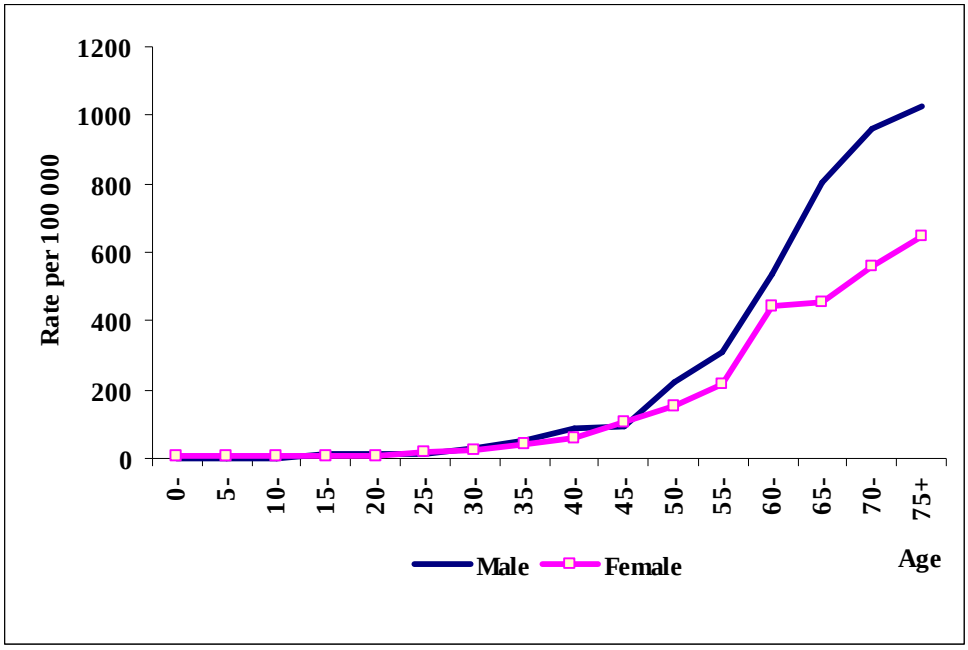

Figure 5: Age-specific mortality rate, Chiang Mai, 2005

DIAGNOSIS AND STAGE OF CANCER

Basis of Diagnosis

1,978 cases (73.8%) were histologically verified, with 61.4% from primary sites and 8.4% from metastasis sites (Table 2). Sixteen percent were clinically diagnosed and 10.3% from death certificates only. By site, the percentages of histologically verified cases were low for cancer of the liver, pancreas, brain and nervous system, placenta, and lung (Table 8 and Table 9).

Stage of Cancer

Fifty percent were diagnosed in localized and locally advanced stages, and only 18.7% had distant metastasis (Table 3). Since 2001, distant metastasis cases at first diagnosis have decreased, and locally advanced cases have increased every year. Localized cancer cases did not increase. All brain tumors, lymphoma, and leukemia were staged as “not applicable”. The “death certificate only” cases were staged as “unknown”. The most common site of distant metastasis was distant lymph nodes (17.8%), followed by lung (15.6%), liver (13.6%), bone (11.8%) and brain (11.0%).

Table 2: Basis of diagnosis

Type of diagnosis	No.	%
Histological verification	**1,978**	**73.8**
Histology of primary	1,644	61.4
Histology of metastasis	225	8.4
Cytology/hematology	109	4.1
Autopsy	0	0.0
No histological verification	**424**	**15.8**
Clinical only	29	1.1
Clinical and investigations	355	13.3
Operation/surgery	34	1.3
Immuno/biochemistry	6	0.2
Death certificate only	**275**	**10.3**
Unknown	*2*	*0.1*
	2679	**100.0**

Table 3: Stages of disease

Stage	No.	%
Localized	467	17.4
Locally advanced	868	32.4
Regional node metastasis	276	10.3
Distant metastasis	500	18.7
Not applicable	214	8.0
Unknown/not staged	354	13.2
	2,679	**100.0**

Leading Sites of Cancer Incidence

Of the invasive cancer in both sexes combined, lung cancer was the most common (535 cases), followed by liver, breast, cervix and colon cancer. Together these five types of cancer accounted for 54.2% of all new cancers. For males, the most common cancer was lung cancer, accounting for 25.6% of all newly diagnosed cases, followed by liver, colon, stomach and prostate cancer (Fig. 6). For females, the most common cancer was breast cancer, accounting for 18.4% of all newly diagnosed cases, followed by cervix, lung, liver, and colon cancer.

As for the most frequent cancers for the under 15-year age group, leukemia, brain and nervous system, eye, and NHL were common in childhood cancers (Table 6). In the age group 15-29 years, leukemia was the most common cancer in males, and ovary and cervix were the most common cancers in females. In the age group 30-44 years, liver was more common than lung cancer in males and cervix was more common than breast cancer in females. Lung cancer was the most common in males after the age of 45 years, and prostate was the second most common after lung cancer in the age group after 75 years. Breast cancer was more common than cervix only in the age group 45-59 years. Lung cancer in females was common after the age 45 and was the most common cancer after age 60.

Leading Sites of Cancer Deaths

Lung cancer (26.8%) was the most common cause of cancer death, followed by liver, cervix, breast cancer, and NHL (Fig. 7). These five types of cancer accounted for 54.5% of all cancer deaths. For males, the lung was the most common site of cancer deaths, accounting for 28.9% of all cancer deaths, followed by the liver, NHL, colon, and rectum. For females, the lung was also the most common site of cancer deaths, accounting for 24.0% of all cancer deaths, followed by the cervix, breast, liver, and stomach.

Leukemia and brain and nervous system cancer were the common causes of death in childhood cancer. For males, liver cancer was the most common cause of death in the age-group 15-59, and after the age of 60, lung cancer was the most common (Table 7). For females, breast cancer was the most common cause in the age-group 30-44, and lung cancer was the most common cause of cancer death in the age-group 45 and over.

Table 4: Incidence and sites of new cancer cases in districts of Chiang Mai, 2005

Males	Rates	All sites	Lung	Liver	Colon	Stomach	Prostate	NHL	Bladder	Other skin
All	145.5	1275	326	212	77	59	58	57	42	41
Muang	145.8	184	34	30	16	9	9	9	9	6
Chom Thong	157.8	61	14	7	3	4	5	4	5	2
Mae Chaem	149.1	46	10	6	3	3	1	2	2	0
Chiang Dao	127.7	40	13	8	2	4	1	0	2	1
Doi Saket	173.9	70	19	12	1	5	4	4	2	2
Mae Taeng	138.6	65	27	13	2	2	4	3	0	1
Mae Rim	163.9	71	12	14	7	4	4	2	0	0
Samoeng	104.7	14	1	3	0	2	0	2	1	0
Fang	158.7	81	24	14	5	2	2	5	3	1
Mae Ai	84.0	28	9	4	1	1	0	0	0	1
Phrao	126.7	43	12	7	3	2	0	1	1	1
San Pa Tong	156.9	85	26	18	5	3	5	1	3	4
San Kamphaeng	154.3	72	13	14	6	2	5	4	2	3
San Sai	151.4	82	23	14	7	1	3	2	2	5
Hang Dong	195.5	81	23	15	3	5	4	3	1	3
Hot	89.8	19	3	3	1	0	1	1	0	2
Doi Tao	117.7	21	5	1	2	0	1	1	2	1
Omkoi	51.0	12	3	3	0	1	0	0	1	0
Saraphi	180.5	91	29	13	3	4	3	6	5	4
Wiang Haeng	207.4	11	2	1	0	1	1	1	0	0
Chai Prakan	138.1	29	5	0	4	1	2	2	1	2
Mae Wang	136.6	26	8	7	1	2	0	2	0	0
K.A.Mae On	163.2	20	3	3	2	0	2	0	0	1
K.A. Doi Law	122.7	23	8	2	0	1	1	2	0	1

Females	Rates	All sites	Breast	Cervix	Lung	Liver	Colon	NHL	Ovary	Uterus
All	142.7	1404	259	234	209	70	60	55	49	44
Muang	161.8	252	69	33	25	6	14	12	12	11
Chom Thong	105.5	46	10	2	6	2	2	1	2	0
Mae Chaem	75.9	25	7	1	0	1	1	2	1	0
Chiang Dao	173.9	57	4	16	3	2	3	4	1	5
Doi Saket	167.8	79	11	16	13	7	6	5	2	0
Mae Taeng	139.1	71	9	16	9	5	6	4	4	1
Mae Rim	124.4	67	9	14	8	3	2	2	3	3
Samoeng	73.3	9	1	1	4	0	0	2	0	0
Fang	158.0	85	13	16	16	6	2	1	3	2
Mae Ai	155.3	51	7	12	6	3	1	5	0	2
Phrao	190.5	59	6	13	12	3	3	0	2	0
San Pa Tong	147.0	90	18	17	19	4	6	2	2	4
San Kamphaeng	166.1	92	22	12	11	7	1	3	4	2
San Sai	138.4	97	19	11	19	6	2	2	6	3
Hang Dong	184.5	84	12	14	20	6	3	2	2	4
Hot	95.0	24	3	0	4	2	2	1	0	0
Doi Tao	90.7	15	3	1	2	0	0	0	0	0
Omkoi	39.8	10	0	0	1	1	0	1	0	0
Saraphi	134.1	76	15	15	14	1	2	1	4	4
Wiang Haeng	147.6	9	1	3	2	0	0	0	0	0
Chai Prakan	107.8	24	5	7	4	1	0	1	0	1
Mae Wang	162.9	35	7	7	4	1	0	1	1	1
K.A.Mae On	104.3	14	3	1	3	0	1	0	0	0
K.A. Doi Law	164.1	33	5	6	4	3	3	3	0	1

Both sexes	Pop.	All sites	Lung	Liver	Breast	Cervix	Colon	NHL	Stomach	Rectum
All	1,504,796	2679	535	282	263	234	137	112	100	77
Muang	234,172	436	59	36	70	33	30	21	13	16
Chom Thong	64,805	107	20	9	12	2	5	5	8	1
Mae Chaem	65,182	71	10	7	7	1	4	4	5	3
Chiang Dao	59,810	97	16	10	4	16	5	4	5	4
Doi Saket	63,637	149	32	19	11	16	7	9	7	3
Mae Taeng	73,589	136	36	18	9	16	8	7	4	2
Mae Rim	78,028	138	20	17	9	14	9	4	5	4
Samoeng	22,645	23	5	3	1	1	0	4	2	0
Fang	84,483	166	40	20	13	16	7	6	6	5
Mae Ai	58,757	79	15	7	7	12	2	5	1	1
Phrao	51,325	102	24	10	6	13	6	1	3	4
San Pa Tong	76,317	175	45	22	18	17	11	3	6	4
San Kamphaeng	72,784	164	24	21	22	12	7	7	6	9
San Sai	104,906	179	42	20	19	11	9	4	4	3
Hang Dong	71,777	165	43	21	12	14	6	5	7	2
Hot	42,418	43	7	5	3	0	3	2	0	2
Doi Tao	27,210	36	7	1	3	1	2	1	1	1
Omkoi	50,209	22	4	4	0	0	0	1	3	0
Saraphi	73,979	167	43	14	15	15	5	7	5	5
Wiang Haeng	13,054	20	4	1	1	3	0	1	2	1
Chai Prakan	36,095	53	9	1	6	7	4	3	1	1
Mae Wang	30,730	61	12	8	7	7	1	3	5	2
K.A.Mae On	21,445	34	6	3	3	1	3	0	0	3
K.A. Doi Law	27,439	56	12	5	5	6	3	5	1	1

Table 5: Mortality rate and cancer sites in districts of Chiang Mai, 2005

Males	Rates	All sites	Lung	Liver	NHL	Colon	Rectum	Prostate	Stomach	Bladder
All	128.1	1130	327	229	43	42	42	41	37	35
Muang	121.2	150	38	29	5	8	5	8	1	10
Chom Thong	129.7	51	12	9	4	2	0	3	1	1
Mae Chaem	120.2	36	6	7	2	0	1	0	3	1
Chiang Dao	112.8	36	10	8	0	2	0	1	3	0
Doi Saket	143.0	60	15	15	1	3	4	2	3	4
Mae Taeng	125.5	60	24	16	2	1	2	2	0	0
Mae Rim	122.9	54	12	14	2	3	1	2	2	1
Samoeng	67.1	9	0	3	1	0	0	0	1	0
Fang	151.8	76	20	15	6	4	2	3	2	2
Mae Ai	86.6	27	10	4	1	0	2	0	3	1
Phrao	108.4	37	12	7	2	0	1	1	1	1
San Pa Tong	167.2	91	24	19	1	3	6	3	2	2
San Kamphaeng	150.9	71	15	15	2	4	6	2	3	2
San Sai	140.7	80	26	14	1	4	3	5	1	3
Hang Dong	188.3	80	22	16	3	4	2	7	3	1
Hot	68.3	13	4	3	0	0	0	0	2	0
Doi Tao	81.8	15	7	1	0	0	2	0	0	0
Omkoi	46.4	10	4	3	0	0	0	0	1	0
Saraphi	144.9	73	32	14	3	3	1	0	1	5
Wiang Haeng	203.1	11	3	1	2	0	1	0	0	0
Chai Prakan	98.9	21	9	0	0	0	0	1	1	0
Mae Wang	136.2	26	7	9	1	0	2	0	1	0
K.A.Mae On	129.2	16	2	4	2	0	1	1	1	1
K.A. Doi Law	139.0	27	13	3	2	1	0	0	1	0

Females	Rates	All sites	Lung	Cervix	Breast	Liver	Stomach	Rectum	NHL	Colon
All	89.3	862	207	89	85	74	34	31	31	30
Muang	77.3	122	24	7	16	7	4	6	5	7
Chom Thong	72.8	35	7	3	4	3	3	0	2	0
Mae Chaem	48.2	17	0	0	4	0	0	0	1	1
Chiang Dao	103.6	32	6	9	1	2	0	0	1	1
Doi Saket	125.3	56	10	3	8	9	2	1	4	1
Mae Taeng	85.9	39	8	5	3	7	2	0	2	4
Mae Rim	85.9	40	12	8	1	2	1	4	1	1
Samoeng	88.2	11	3	0	1	0	2	1	2	0
Fang	91.1	48	14	5	4	6	1	2	0	1
Mae Ai	89.8	30	8	5	1	2	1	2	1	1
Phrao	110.1	35	10	2	4	4	0	1	1	2
San Pa Tong	134.3	79	15	8	13	5	4	3	2	5
San Kamphaeng	106.4	55	13	6	3	9	3	2	0	2
San Sai	88.3	59	17	4	3	6	3	2	2	1
Hang Dong	113.2	51	18	6	1	6	2	1	4	1
Hot	71.0	17	3	1	2	1	1	2	1	1
Doi Tao	23.1	5	1	0	3	0	0	1	0	0
Omkoi	28.5	8	0	0	1	1	0	0	0	0
Saraphi	111.1	61	20	9	7	1	2	0	0	1
Wiang Haeng	79.4	4	0	1	1	0	0	0	0	0
Chai Prakan	89.1	18	5	3	2	0	0	1	1	0
Mae Wang	69.8	15	4	2	1	1	3	1	1	0
K.A.Mae On	54.3	6	2	2	0	0	0	0	0	0
K.A. Doi Law	102.1	19	7	0	1	2	0	1	0	0

Both sexes	All sites	Lung	Liver	Cervix	Breast	NHL	Rectum	Colon	Stomach
All	1992	534	303	89	86	74	73	72	71
Muang	272	62	36	7	16	10	11	15	5
Chom Thong	86	19	12	3	4	6	0	2	4
Mae Chaem	53	6	7	0	4	3	1	1	3
Chiang Dao	68	16	10	9	2	1	0	3	3
Doi Saket	116	25	24	3	8	5	5	4	5
Mae Taeng	99	32	23	5	3	4	2	5	2
Mae Rim	94	24	16	8	1	3	5	4	3
Samoeng	20	3	3	0	1	3	1	0	3
Fang	124	34	21	5	4	6	4	5	3
Mae Ai	57	18	6	5	1	2	4	1	4
Phrao	72	22	11	2	4	3	2	2	1
San Pa Tong	170	39	24	8	13	3	9	8	6
San Kamphaeng	126	28	24	6	3	2	8	6	6
San Sai	139	43	20	4	3	3	5	5	4
Hang Dong	131	40	22	6	1	7	3	5	5
Hot	30	7	4	1	2	1	2	1	3
Doi Tao	20	8	1	0	3	0	3	0	0
Omkoi	18	4	4	0	1	0	0	0	1
Saraphi	134	52	15	9	7	3	1	4	3
Wiang Haeng	15	3	1	1	1	2	1	0	0
Chai Prakan	39	14	0	3	2	1	1	0	1
Mae Wang	41	11	10	2	1	2	3	0	4
K.A.Mae On	22	4	4	2	0	2	1	0	1
K.A. Doi Law	46	20	5	0	1	2	1	1	1

Estimated New Cases

Males				Females		
Lung	326	25.6 %		Breast	259	18.4 %
Liver	212	16.6 %		Cervix uteri	234	16.7 %
Colon	77	6.0 %		Bronchus, lung	209	14.9 %
Stomach	59	4.6 %		Liver	70	5.0 %
Prostate	58	4.5 %		Colon	60	4.3 %
Non-Hodgkin's lymphoma	57	4.5 %		Non-Hodgkin's lymphoma	55	3.9 %
Bladder	42	3.3 %		Ovary etc.	49	3.5 %
Other skin	41	3.2 %		Corpus uteri	44	3.1 %
Rectum	39	3.1 %		Stomach	41	2.9 %
Nasopharynx	27	2.1 %		Rectum	38	2.7 %
All sites	**1275**	**100.0 %**		**All sites**	**1404**	**100.0 %**

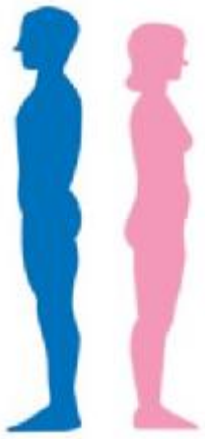

Figure 6: Ten leading cancer sites for the estimated new cases, by sex, Chiang Mai, 2005

Estimated Deaths

Males				Females		
Lung	327	28.9 %		Lung	207	24.0 %
Liver	229	20.3 %		Cervix	89	10.3 %
Non-Hodgkin's lymphoma	43	3.8 %		Breast	85	9.9 %
Colon	42	3.7 %		Liver	74	8.6 %
Rectum	42	3.7 %		Stomach	34	3.9 %
Prostate	41	3.6 %		Rectum	31	3.6 %
Stomach	37	3.3 %		Non-Hodgkin's lymphoma	31	3.6 %
Bladder	35	3.1 %		Colon	30	3.5 %
Nasopharynx	27	2.4 %		Ovary	21	2.4 %
Gallbladder	21	1.9 %		Gallbladder	14	1.6 %
All sites	**1130**	**100.0 %**		**All sites**	**862**	**100.0 %**

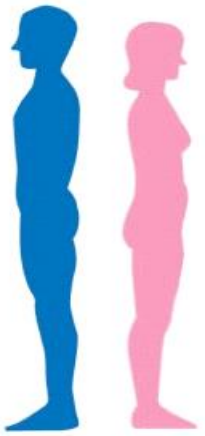

Figure 7: Ten leading cancer sites for the estimated dead cases, by sex, Chiang Mai, 2005

TABLE 6: Most common cancers by 15-year age groups in Chiang Mai, 200

males

Incidence Age group	0-14		15-29		30-44		45-59		60-74		75+	
CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases
Leukemia	10	Leukaemia	8	Liver	32	Lung	87	Lung	162	Lung	59
Brain, nervous system	3	Colon	4	Lung	14	Liver	78	Liver	71	Prostate	30
Eye	2	Lung	4	NHL	9	Nasopharynx	20	Colon	34	Liver	27
Testis	1	Liver	3	Skin,non-melanoma	6	Stomach	20	Prostate	26	Bladder	19
Liver	1	Skin,non-melanoma	3	Rectum	5	Colon	17	Stomach	25	Colon	18
All sites	19	All sites	36	All sites	117	All sites	339	All sites	501	All sites	262

females

Incidence Age group	0-14		15-29		30-44		45-59		60-74		75+	
CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases
Leukaemia	8	Ovary	7	Cervix	75	Breast	141	Lung	92	Lung	51
NHL	2	Cervix	7	Breast	65	Cervix	100	Cervix	39	Liver	17
Lung	1	Thyroid	4	Ovary	12	Lung	55	Breast	37	Colon	14
Bone	1	NHL	4	Thyroid	11	Liver	26	Liver	23	non-melanoma	13
Thyroid	1	Lung	3	NHL	10	Corpus uteri	24	Colon	21	Breast	13
All sites	14	All sites	44	All sites	242	All sites	512	All sites	398	All sites	194

males

Incidence Age group	0-14		15-29		30-44		45-59		60-74		75+	
CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR
Leukemia	1.9	Leukaemia	1.2	Liver	3.2	Lung	8.8	Lung	22.3	Lung	249.1
Brain, nervous system	0.6	Colon	0.6	Lung	1.4	Liver	7.9	Liver	10.2	Prostate	126.7
Eye	0.6	Lung	0.5	NHL	0.9	Nasopharynx	2.0	Colon	4.6	Liver	114.0
Testis	0.3	Liver	0.5	Skin,non-melanoma	0.6	Stomach	2.0	Prostate	3.4	Bladder	80.2
Liver	0.2	Skin, non-melanoma	0.4	Rectum	0.5	Colon	1.8	Stomach	3.3	Colon	76.0
All sites	3.8	All sites	5.1	All sites	11.7	All sites	34.4	All sites	68.3	All sites	1106.0

females

Incidence Age group	0-14		15-29		30-44		45-59		60-74		75+	
CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR
Leukaemia	1.8	Ovary	1.0	Cervix	6.6	Breast	12.5	Lung	11.6	Lung	179.4
NHL	0.3	Cervix	0.9	Breast	5.8	Cervix	8.9	Cervix	5.3	Liver	59.8
Lung	0.2	Thyroid	0.6	Ovary	1.1	Lung	5.3	Breast	4.8	Colon	49.2
Bone	0.2	NHL	0.6	Thyroid	1.0	Liver	2.5	Colon	2.9	non-melanoma	45.7
Thyroid	0.2	Lung	0.4	NHL	1.0	Corpus uteri	2.2	Liver	2.8	Breast	45.7
All sites	2.9	All sites	6.2	All sites	22.0	All sites	46.7	All sites	51.2	All sites	682.0

TABLE 7: Most common cancer deaths by 15-year age groups in Chiang Mai, 2005

males

Mortality Age group	0-14		15-29		30-44		45-59		60-74		75+
CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases
Brain, nervous system	2	Lung	4	Liver	36	Liver	86	Lung	167	Lung	58
		Colon	3	Lung	16	Lung	74	Liver	75	Liver	29
		Liver	3	NHL	7	Nasopharynx	11	Stomach	19	Prostate	22
		Brain, nervous system	3	Rectum	6	Stomach	10	Colon	18	Rectum	17
		Tongue	1	Nasopharynx	3	Colon	9	Rectum	14	Bladder	17
All sites	2	All sites	22	All sites	102	All sites	279	All sites	468	All sites	239

females

Mortality Age group	0-14		15-29		30-44		45-59		60-74		75+
CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases
Leukemia	5	Stomach	2	Breast	15	Lung	55	Lung	89	Lung	52
Lung	1	NHL	2	Cervix	13	Breast	31	Cervix	35	Liver	15
Brain, nervous system	1	Myeloid leukaemia	2	Stomach	9	Liver	27	Breast	29	Cervix	14
		Nasopharynx	1	Lung	7	Cervix	26	Liver	25	Colon	10
		Lung	1	Liver	7	Stomach	15	Rectum	13	Breast	9
All sites	8	All sites	15	All sites	83	All sites	242	All sites	327	All sites	181

males

Mortality Age group	0-14		15-29		30-44		45-59		60-74		75+
CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR
Brain, nervous system	0.4	Lung	0.5	Liver	3.6	Liver	8.8	Lung	23	Lung	4.9
		Colon	0.4	Lung	1.5	Lung	7.6	Liver	10.9	Liver	2.4
		Liver	0.4	NHL	0.7	Nasopharynx	1.1	Stomach	2.5	Prostate	1.9
		Brain, nervous system	0.4	Rectum	0.6	Stomach	1	Colon	2.4	Rectum	1.4
		Tongue	0.2	Nasopharynx	0.3	Colon	0.9	Rectum	2.1	Bladder	1.4
All sites	0.4	All sites	3.1	All sites	10.2	All sites	28.4	All sites	63.9	All sites	20.2

females

Mortality Age group	0-14		15-29		30-44		45-59		60-74		75+
CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR
Leukemia	1.2	Stomach	0.3	Breast	1.3	Lung	5.2	Lung	11.9	Lung	3.7
Lung	0.2	NHL	0.3	Cervix	1.1	Breast	2.8	Cervix	4.7	Liver	1.1
Brain, nervous system	0.2	Myeloid leukaemia	0.3	Stomach	0.8	Liver	2.6	Breast	3.6	Cervix	1.0
		Ovary	0.2	Lung	0.7	Cervix	2.3	Liver	3.2	Colon	0.7
		Nasopharynx	0.1	Liver	0.6	Stomach	1.4	Colon	1.7	Breast	0.6
All sites	1.7	All sites	2.1	All sites	7.5	All sites	22.5	All sites	42.1	All sites	12.7

COMMON CANCERS IN CHIANG MAI, 2005

Lung cancer (ICD-10 *C33-C34*)

There were 535 new cases of lung cancer diagnosed in 2005 (326 males, 209 females). This was 25.6% of all cancers in males and 14.9% of those in females. The age-standardized incidence rates were 38.0 for males and 21.7 for females. Lung cancer has ranked first for new male cancers in Chiang Mai since the first population-base registration in 1983. For females, lung cancer ranked third in 2005 after breast and cervix cancers. The incidence rates increased with age in both sexes. Rates in males increased sharply after the age of 45 and exceeded those of females (Fig 10). The cumulative rate percents to age 75 were 4.9% for males and 2.7% for females. These represented risks of 10 in 205 for men and 10 in 376 for women of developing lung cancer by age 75.

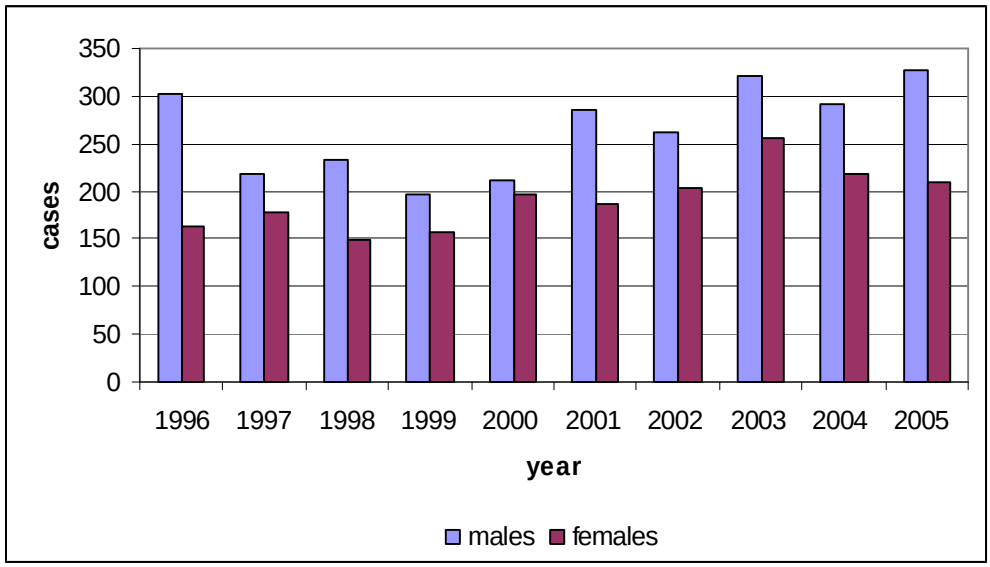

Figure 8: Number of new cases of lung cancer by sex, 1996-2005

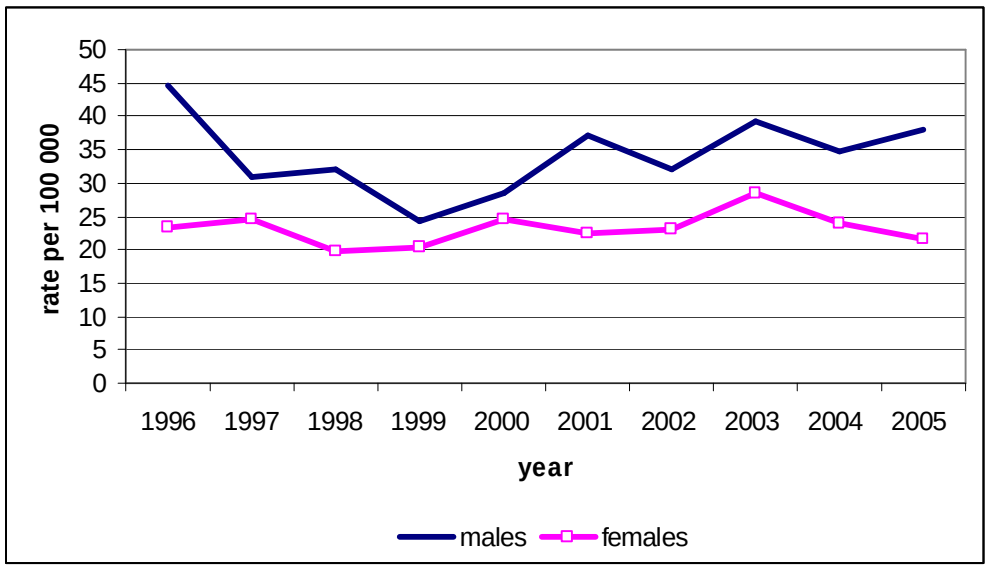

Figure 9: Incidence rates of new cases of lung cancer by sex, 1996-2005

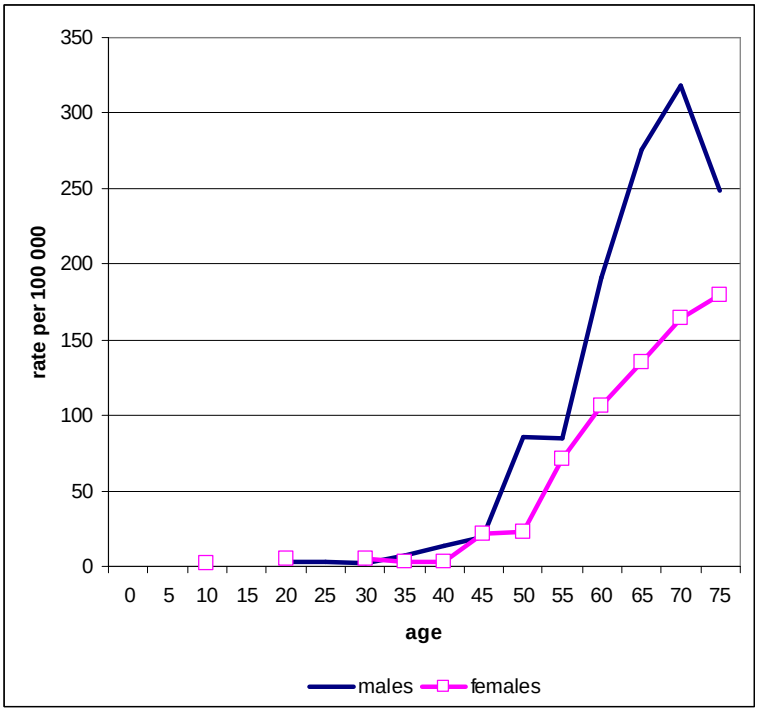

Figure 10: Age-specific incidence rate of lung cancer, Chiang Mai, 2005

Of the 534 deaths from lung cancer, 327 were males (28.9% of all male cancer deaths) and 207 were females (24.0% of all female cancer deaths). In 2005, the mortality rates were 38.5 for males and 21.9 for females, and these rates have increased for both sexes (Fig. 11). The mortality rates increased with age for both sexes, rates in males increasing sharply after the age of 45 years and exceeding those in females (Fig 12).

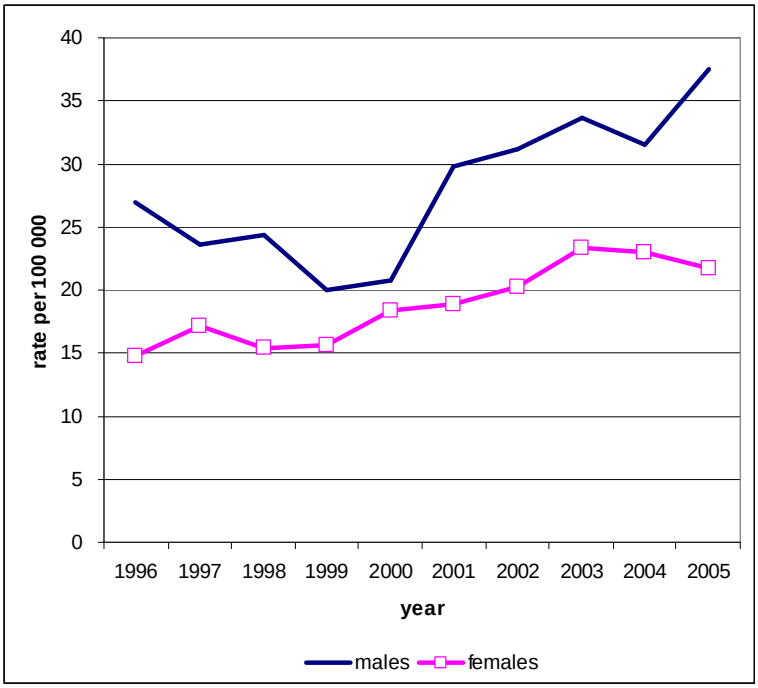

Figure 11: Mortality rate of lung cancer by sex, Chiang Mai, 1996-2005

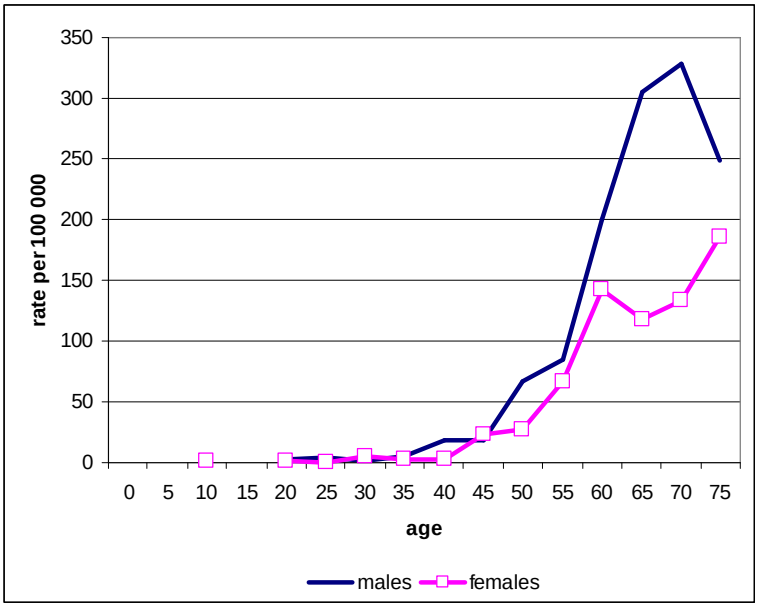

Figure 12: Age-specific mortality rate of lung cancer, Chiang Mai, 2005

For lung cancer deaths, 375 cases (70.2%) died within one year after diagnosis and 116 cases (21.7%) died in the second year.

Diagnosis and stages of cancer

Fifty percent of cases were diagnosed in advanced stage (36.6% had distant metastasis, 13.1% had regional nodes metastasis). The most common metastasis site was distant lymph nodes, and followed by brain. One hundred and thirty cases (40.7%) were diagnosed by clinical diagnosis and 85 cases were diagnosed by death certificate only. The common cell types were adenocarcinoma (30.1%) and squamous cell carcinoma (15.7%).

Cell type

	males	females	both	%
Adenocarcinoma	96	65	161	30.1
Squamous cell	55	29	84	15.7
Small cell	21	7	28	5.2
Large cell	8	15	23	4.3
Others	16	5	21	3.9
Clinical diagnosis	130	88	218	40.7
All	326	209	535	

Stage

	cases	%
Localized	23	4.3
Locally advanced	148	27.7
Regional node metastasis	70	13.1
Distant metastasis	196	36.6
Unknown/not staged	98	18.3
All	535	

Liver cancer (ICD-10 *C22*)

There were 282 new cases of liver cancer diagnosed in 2005 (212 males, 70 females). This was 16.6% of all cancers in males and 5.0% of those in females. The age-standardized incidence rates were 24.2 for males and 6.8 for females. Liver cancer ranked second for new male cancers in Chiang Mai since the first population-base registration in 1983. For females, liver cancer ranked fourth in 2005 after breast, cervix and lung cancers. The incidence rates increased with age for both sexes, rates for males increasing sharply after the age of 50 years and exceeding those for females (Fig 15). The cumulative rate percents to age 75 were 2.8% for males and 0.8% for females. These represented risks of 1 in 36 for men and 1 in 125 for women of developing liver cancer by age 75.

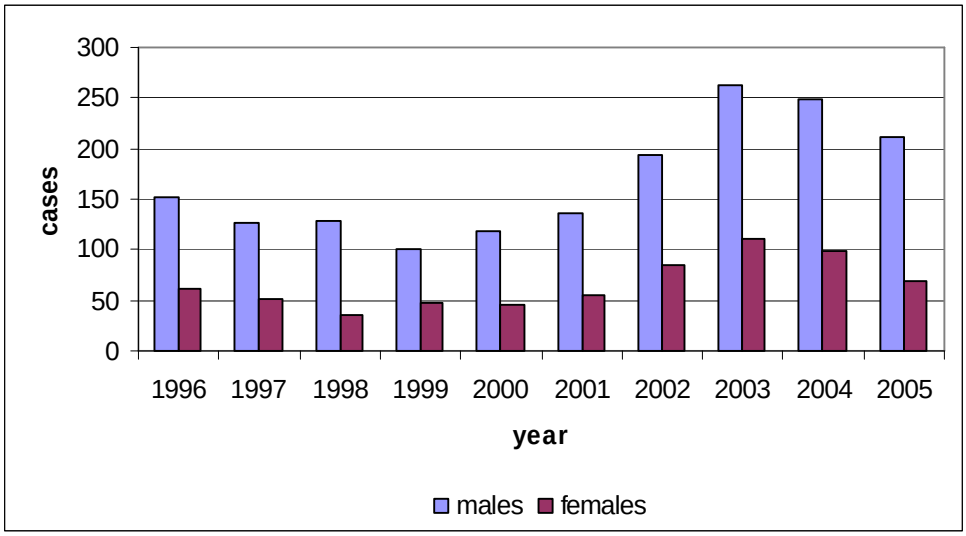

Figure 13: Number of new cases of liver cancer by sex, 1996-2005

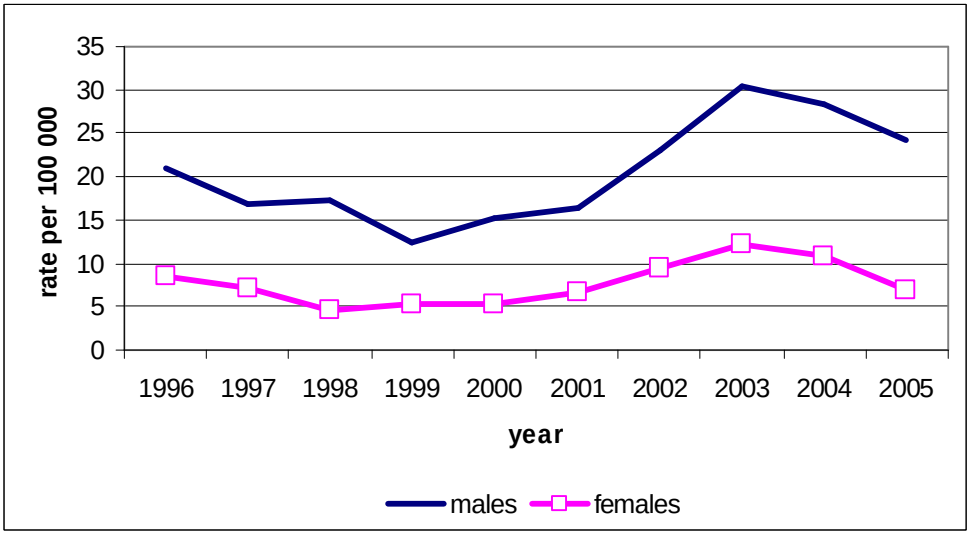

Figure 14: Incidence rates of new cases of liver cancer by sex, 1996-2005

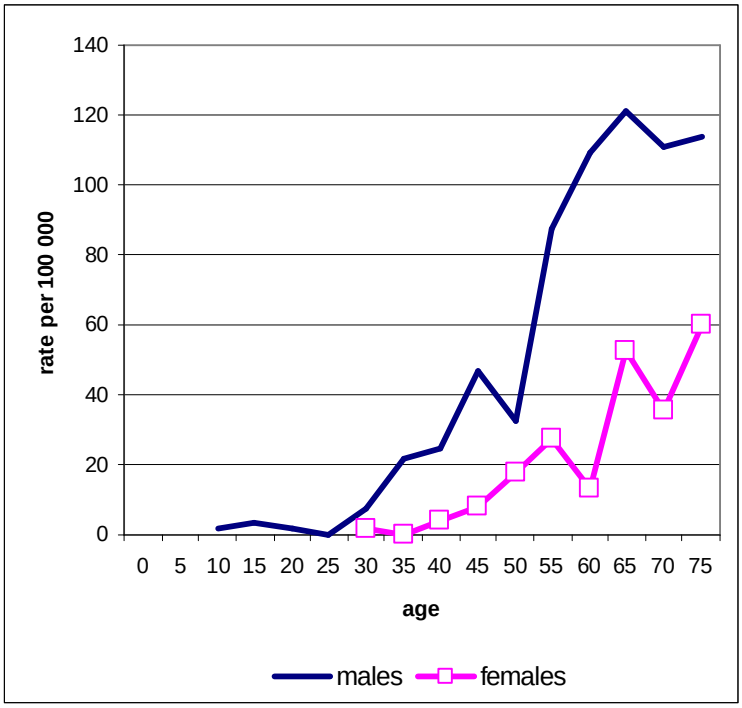

Figure 15: Age-specific incidence rate of liver cancer, Chiang Mai, 2005

Of the 303 deaths from liver cancer, 229 were males (20.3% of all male cancer deaths) and 74 were females (8.6% of all female cancer deaths). The mortality rates were 26.1 for males and 7.4 for females, and tended to increase in both sexes (Fig. 16). The mortality rates increased with age in both sexes, rates in males increasing sharply after the age of 45 years and exceeding those in females (Fig 17).

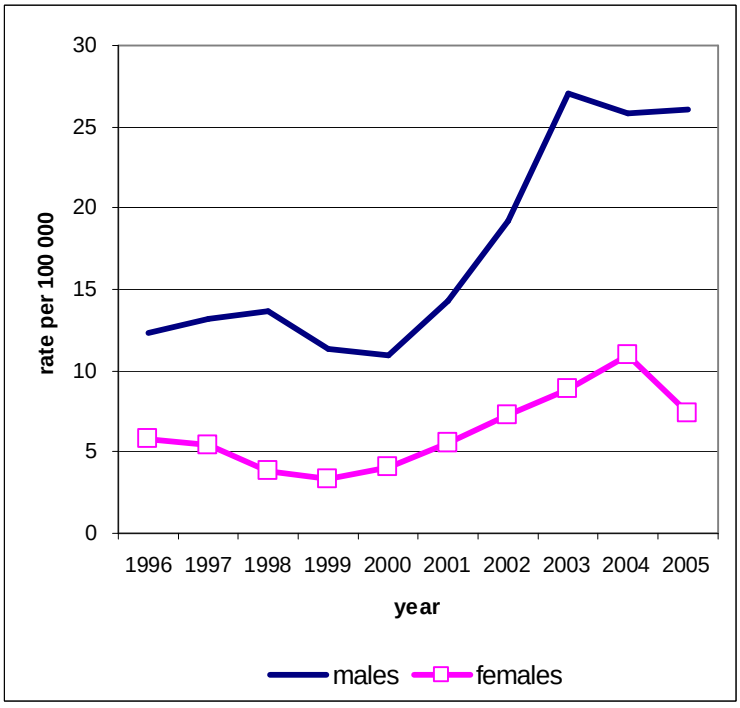

Figure 16: Mortality rate of liver cancer by sex, Chiang Mai, 1996-2005

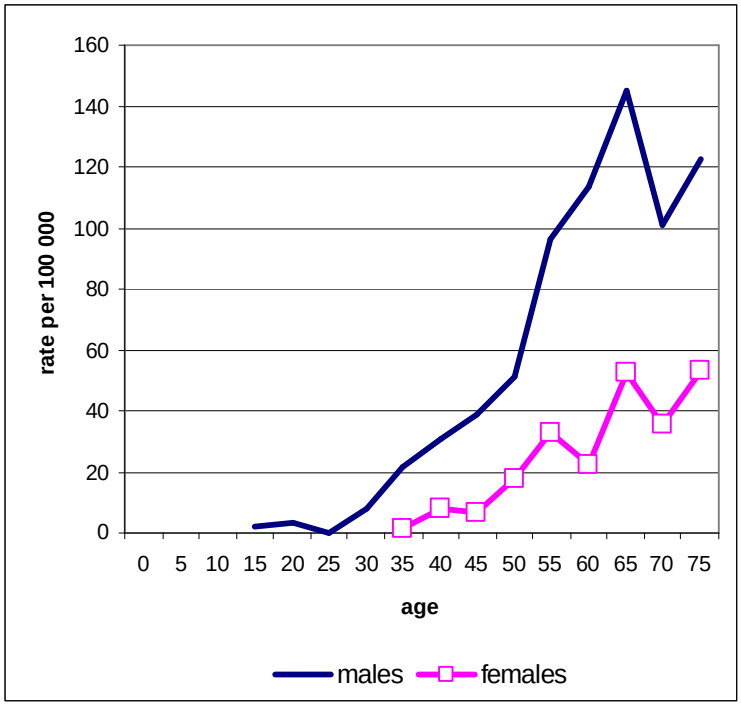

Figure 17: Age-specific mortality rate of liver cancer, Chiang Mai, 2005

For liver cancer deaths, 279 cases (92.1%) died within the first year after diagnosis and 18 cases (21.7%) died in the second year. These reflect the severity of this type of cancer.

Diagnosis and stages of cancer

Thirty-eight percent of cases were diagnosed in advanced stage (14.9% had distant metastasis, 23.8% had regional nodes metastasis). The most common metastasis site was lung, followed by distant lymph nodes. Only 20% were diagnosed by histology or cytology, while 54% were diagnosed by imaging studies. The common cell types for histological diagnosis groups were cholangiocarcinoma (57.1%) and hepatocellular carcinoma (37.5%). Eighty-eight percent of hepatocellular carcinomas and 64.9% of cholangiocarcinomas were diagnosed by clinical diagnosis.

Cell type

	males	females	both	%
Hepatocellular	17	4	21	7.5
Cholangiocarcinoma	22	10	32	11.3
Others	3	0	3	1.1
Clinical diagnosis	170	56	226	80.1
All	212	70	282	

Stage

	cases	%
Localized	22	7.8
Locally advanced	81	28.7
Regional node metastasis	67	23.8
Distant metastasis	42	14.9
Unknown/not staged	70	24.8
All	282	100.0

Stomach cancer (ICD-10 *C16*)

There were 100 new cases of stomach cancer diagnosed in 2005 (59 males, 41 females). This was 4.6% of all cancers in males and 2.9% of those in females. The age-standardized incidence rates were 6.7 for males and 4.4 for females. In 2005, stomach cancer ranked fourth for new male cancers and ninth for females. The incidence rates increased with age in both sexes after the age of 40 years, rates in males increasing sharply after the age of 60 years and exceeding those in females (Fig 20). The cumulative rate percent to age 75 were 0.8% for males and 0.5% for females. These represented risks of 1 in 116 for men and 1 in 189 for women of developing stomach cancer by age 75.

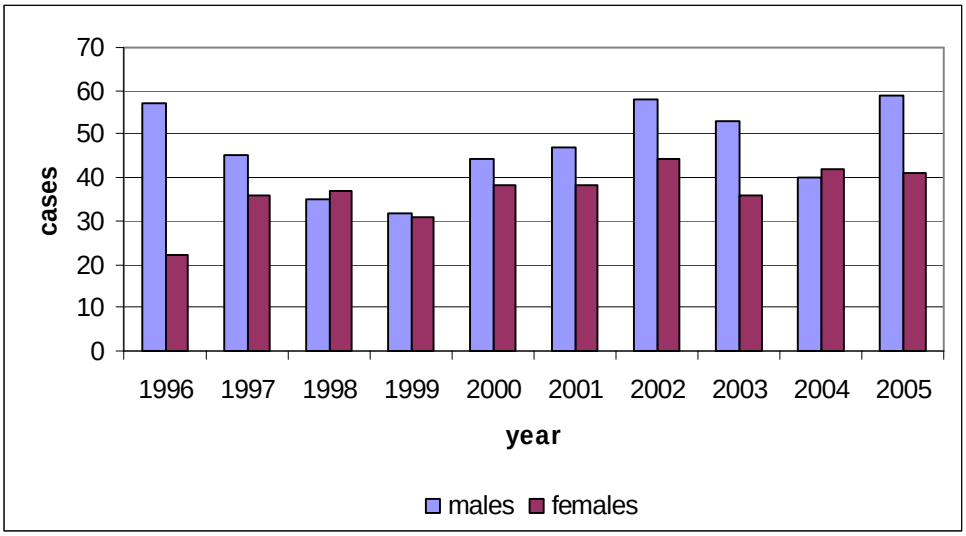

Figure 18: Number of new cases of stomach cancer by sex, 1996-2005

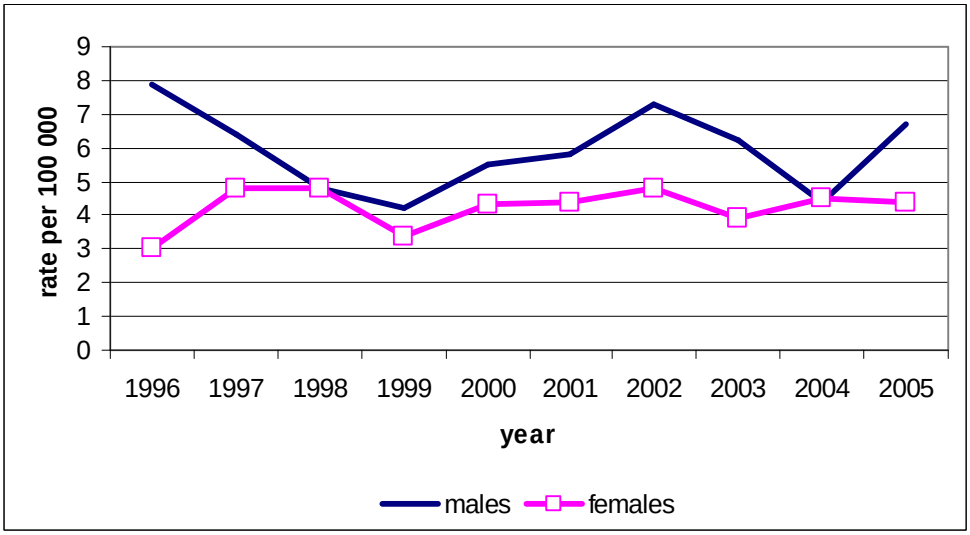

Figure 19: Incidence rates of new cases of stomach cancer by sex, 1996-2005

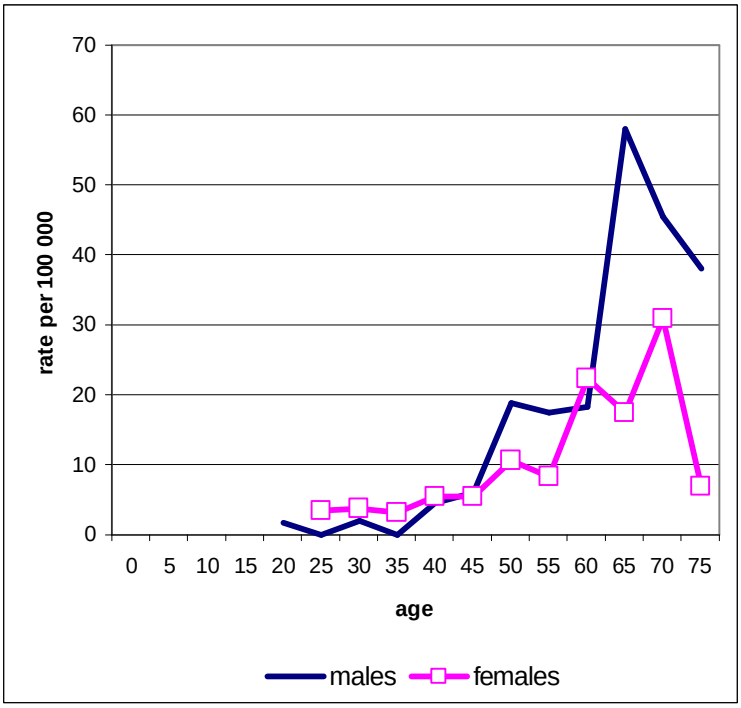

Figure 20: Age-specific incidence rate of stomach cancer, Chiang Mai, 2005

Of the 71 deaths from stomach cancer, 37 were males (3.3% of all male cancer deaths) and 34 were females (3.9% of all female cancer deaths). The mortality rates were 4.3 for males and 3.4 for females, and tended to increase in both sexes (Fig. 21). The mortality rates increased with age in both sexes, rates in males increasing sharply after the age of 60 years and exceeding those in females (Fig 22).

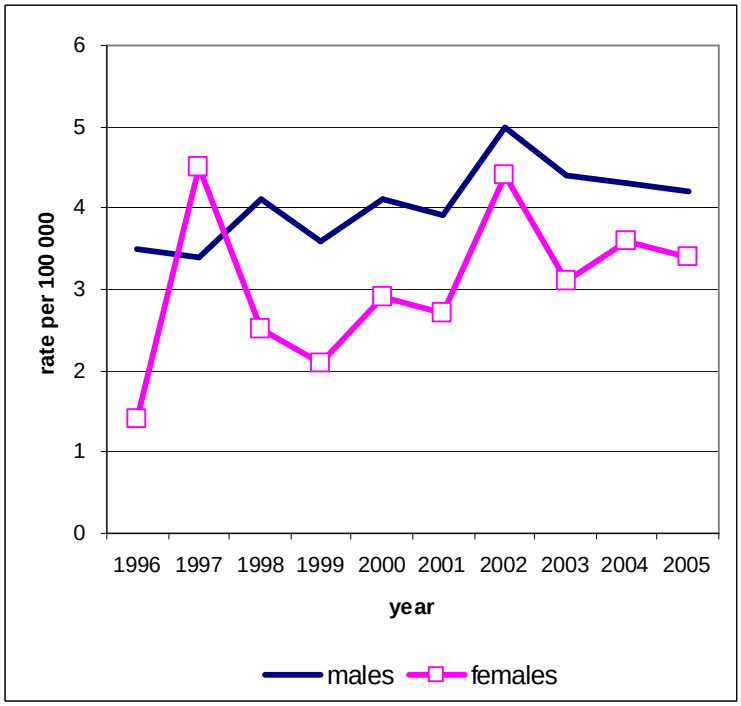

Figure 21: Mortality rate of stomach cancer by sex, Chiang Mai, 1996-2005

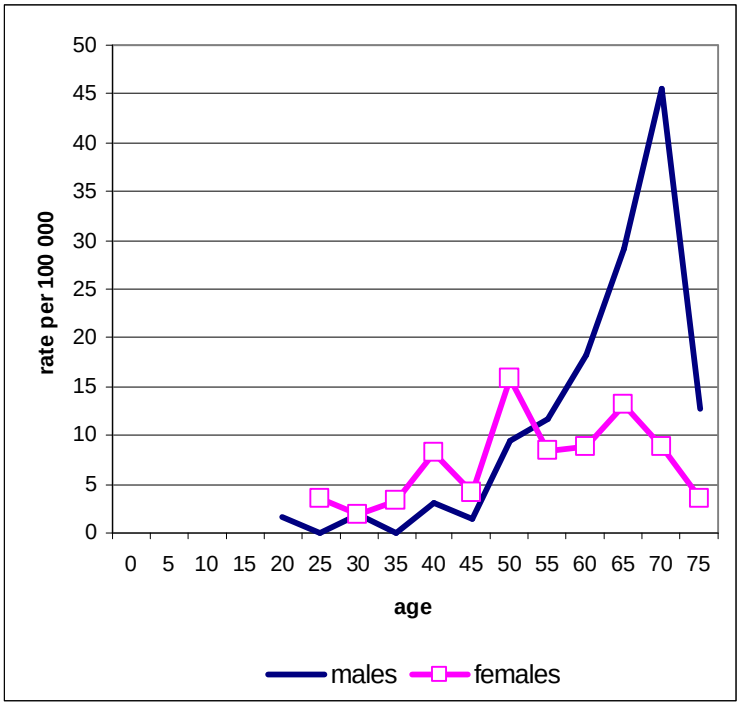

Figure 22: Age-specific mortality rate of stomach cancer, Chiang Mai, 2005

Diagnosis and stage of cancer

Fifty-two percent of cases were diagnosed in locally advanced stage (38.0% had locally advanced, 14.0% had regional nodes metastasis). The most common metastasis site was peritoneum, followed by lung metastasis. Eighty-five percent were diagnosed by histology. The common cell types for histological diagnosis groups were adenocarcinoma (54.0%) and signet ring cell carcinoma (29.0%).

Cell type

	males	females	both	%
Adenocarcinoma	41	14	54	54.0
Signet ring cell	9	20	29	29.0
Sarcoma	1	0	1	1.0
Clinical diagnosis	8	7	15	15.0
All	100	59	41	100.0

Stage

	cases	%
Localized	13	13.0
Locally advanced	38	38.0
Regional node metastasis	14	14.0
Distant metastasis	25	25.0
Unknown/not staged	10	10.0
All	100	100.0

Colon cancer (ICD-10 *C18*)

There were 137 new cases of colon cancer diagnosed in 2005 (77 males, 60 females). This was 6.0% of all cancers in males and 4.3% of those in females. Colon cancer was the most common cancer of the gastrointestinal tract in both sexes. The age-standardized incidence rates were 6.7 for males and 4.4 for females. In 2005, colon cancer ranked third for new male cancers and fifth for females. The incidence rates increased with age in both sexes after the age of 45 years, rates in males exceeding those in females after the age of 60 years (Fig 25). The cumulative rate percents to age 75 were 1.1% for males and 0.7% for females. These represented risks of 1 in 95 for men and 1 in 143 for women of developing colon cancer by age 75.

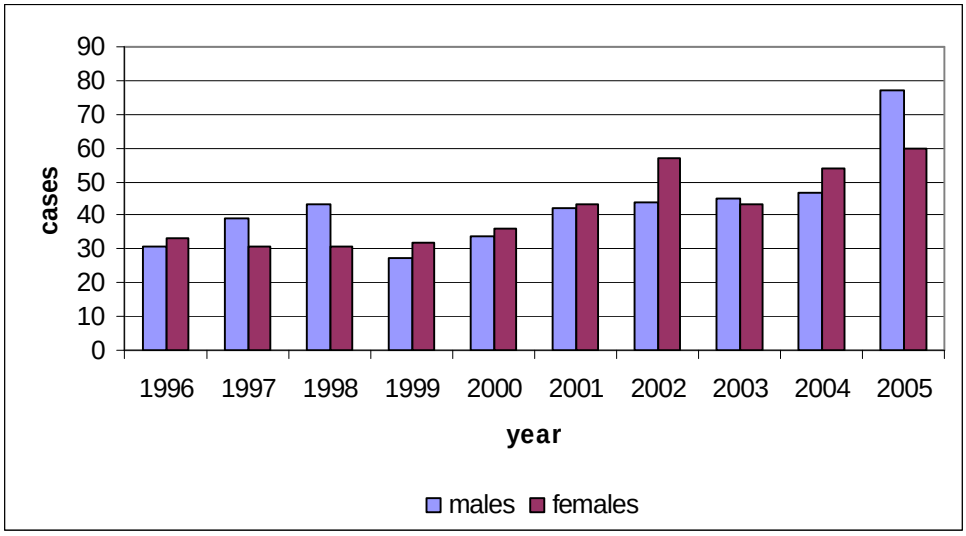

Figure 23: Number of new cases of colon cancer by sex, 1996-2005

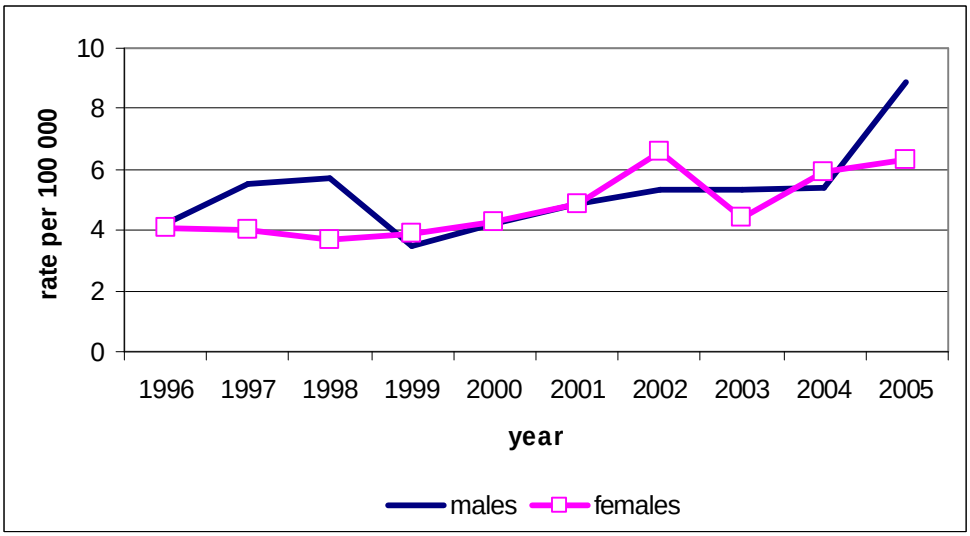

Figure 24: Incidence rates of new cases of colon cancer by sex, 1996-2005

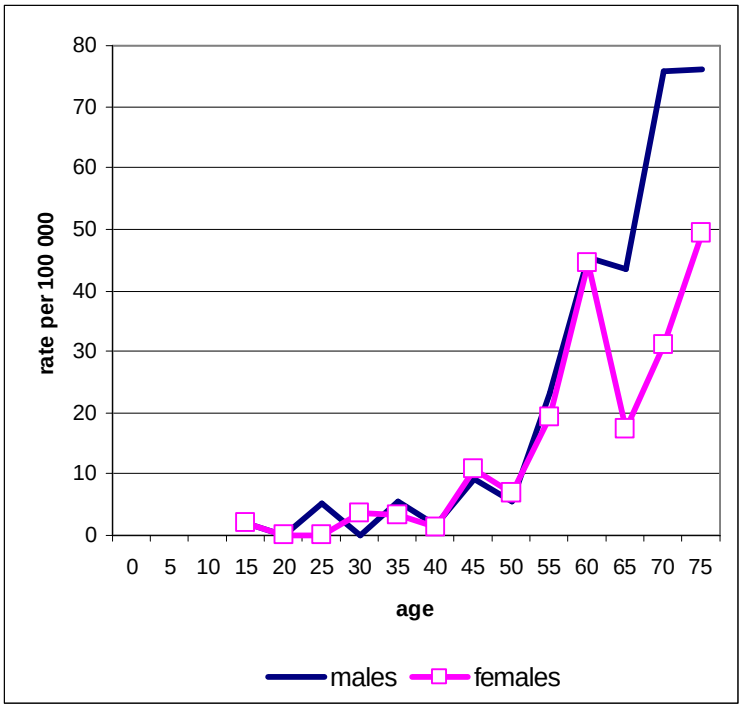

Figure 25: Age-specific incidence rate of colon cancer, Chiang Mai, 2005

Of the 72 deaths from colon cancer, 42 were males (3.7% of all male cancer deaths) and 30 were females (3.5% of all female cancer deaths). The age-standardized mortality rates were 4.8 for males and 3.3 for females and tended to increase in both sexes (Fig. 26). The mortality rates increased with age in both sexes, and increasing sharply after age 50 (Fig 27).

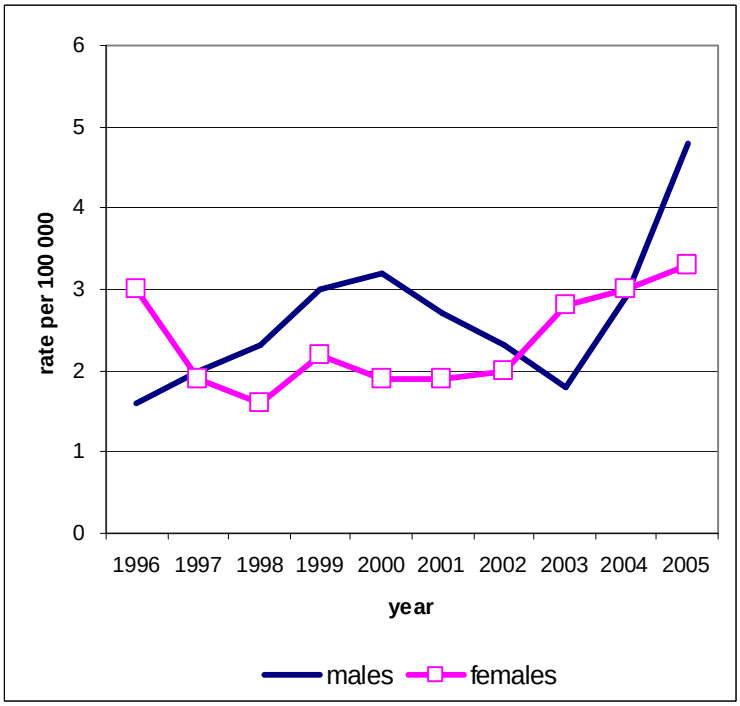

Figure 26: Mortality rate of colon cancer by sex, Chiang Mai, 1996-2005

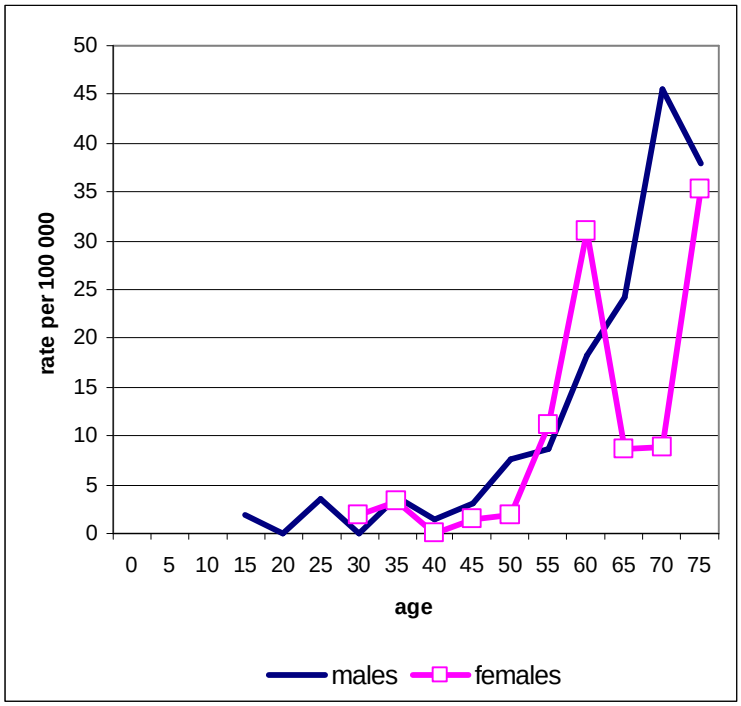

Figure 27: Age-specific mortality rate of colon cancer, Chiang Mai, 2005

Diagnosis and stage of cancer

Fifty-four percent of cases were diagnosed in locally advanced stage (44.5% had locally advanced, 9.5% had regional nodes metastasis). The most common metastasis site was peritoneum, followed by liver metastasis. Eighty percent were diagnosed by histology. The common cell types in histological diagnosis groups were adenocarcinoma (74.5%) and mucinous carcinoma (5.1%).

Cell type

	males	females	both	%
Adenocarcinoma	55	47	102	74.5
Mucinous carcinoma	4	3	7	5.1
Clinical diagnosis	18	10	28	20.4
	77	60	137	100.0

Stage

	cases	%
Localized	19	13.9
Locally advanced	61	44.5
Regional node metastasis	13	9.5
Distant metastasis	28	20.4
Unknown/not staged	16	11.7
All	137	100.0

Bladder cancer (ICD-10 *C67*)

There were 58 new cases of bladder cancer diagnosed in 2005 (42 males, 16 females). This was 3.3% of all cancers in males and 1.1% of those in females. The age-standardized incidence rates were 4.1 for males and 1.6 for females. In 2005, bladder cancer ranked seventh for new male cancers and fifteenth for females. The incidence in females tended to increase during 1996-2005 (Fig 29). The incidence rates increased with age in both sexes after the age of 55 years, rates in males increasing sharply after age 65 and exceeding those in females (Fig 30). The cumulative rate percents to age 75 were 0.4% for males and 0.2% for females. These represented risks of 1 in 222 for men and 1 in 454 for women of developing bladder cancer by age 75.

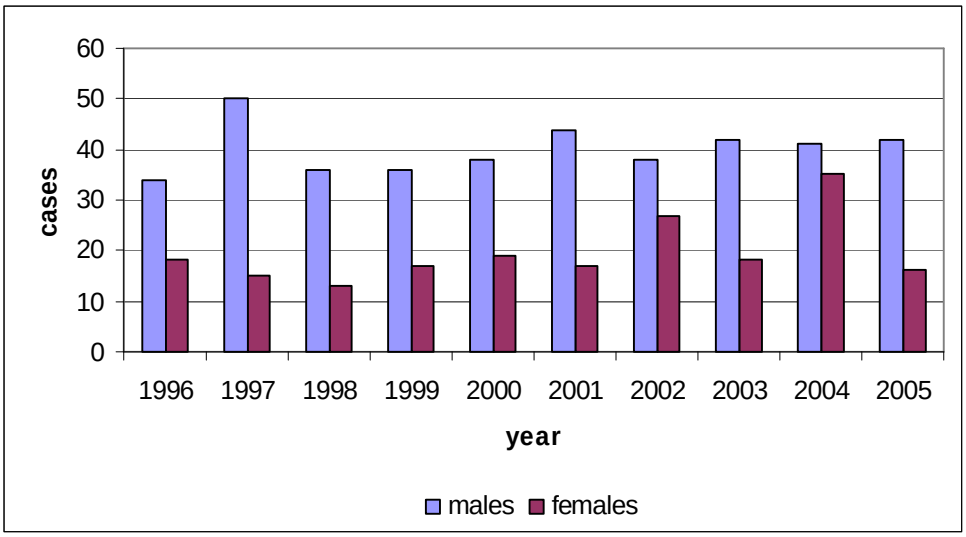

Figure 28: Number of new cases of bladder cancer by sex, 1996-2005

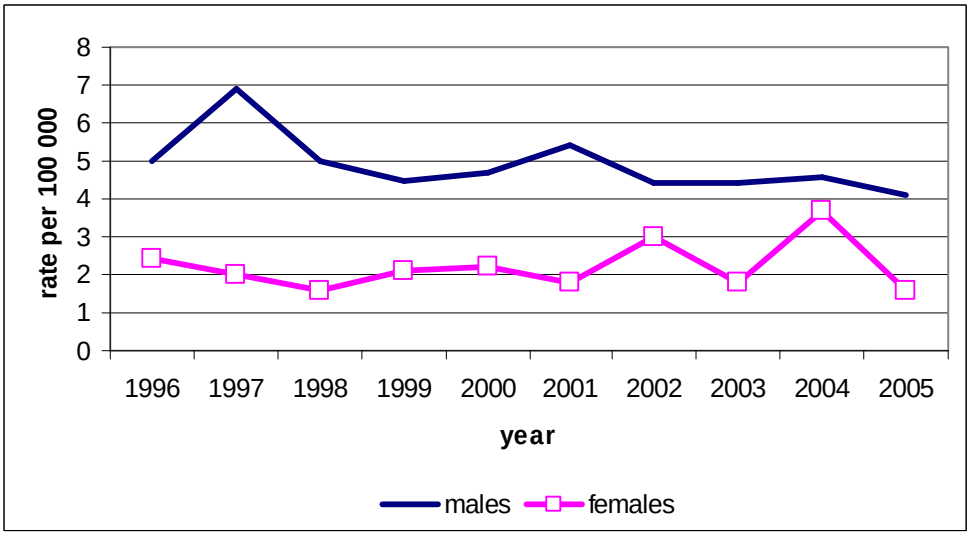

Figure 29: Incidence rates of new cases of bladder cancer by sex, 1996-2005

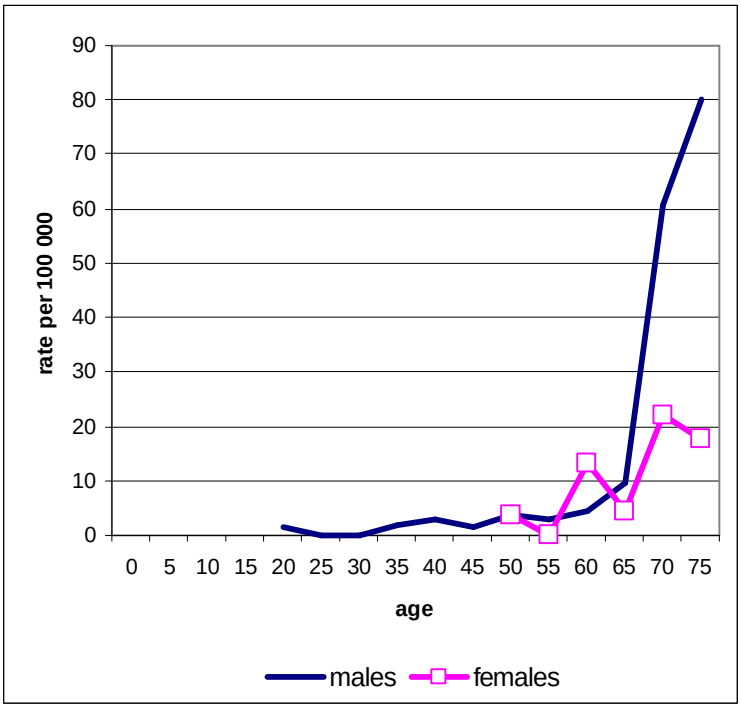

Figure 30: Age-specific incidence rate of bladder cancer, Chiang Mai, 2005

Of the 47 deaths from bladder cancer, 35 were males (3.1% of all male cancer deaths) and 12 were females (1.4% of all female cancer deaths). The age-standardized mortality rates were 3.6 for males and 1.0 for females and tended to be stable in both sexes (Fig. 31). The mortality rates increased with age in both sexes, increasing sharply after age 65 (Fig 32).

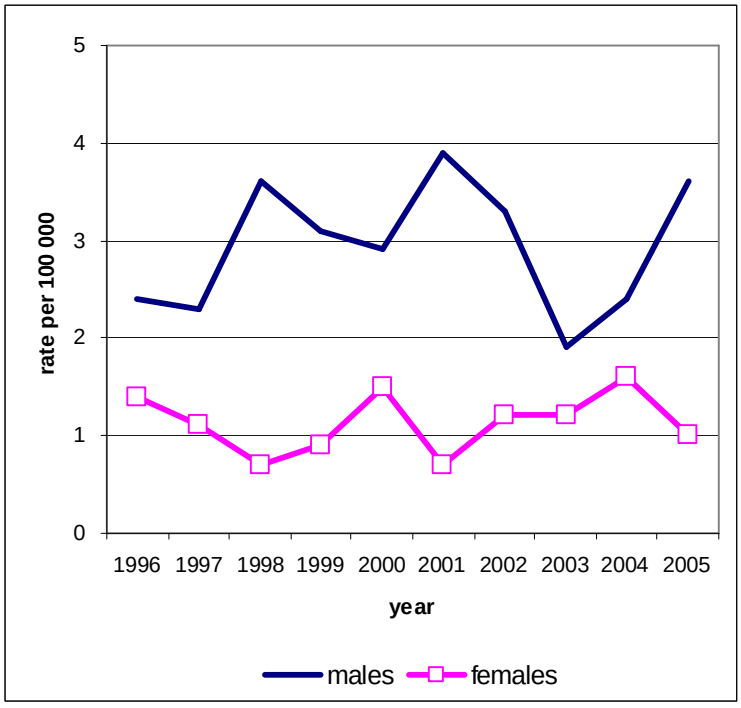

Figure 31: Mortality rate of bladder cancer by sex, Chiang Mai, 1996-2005

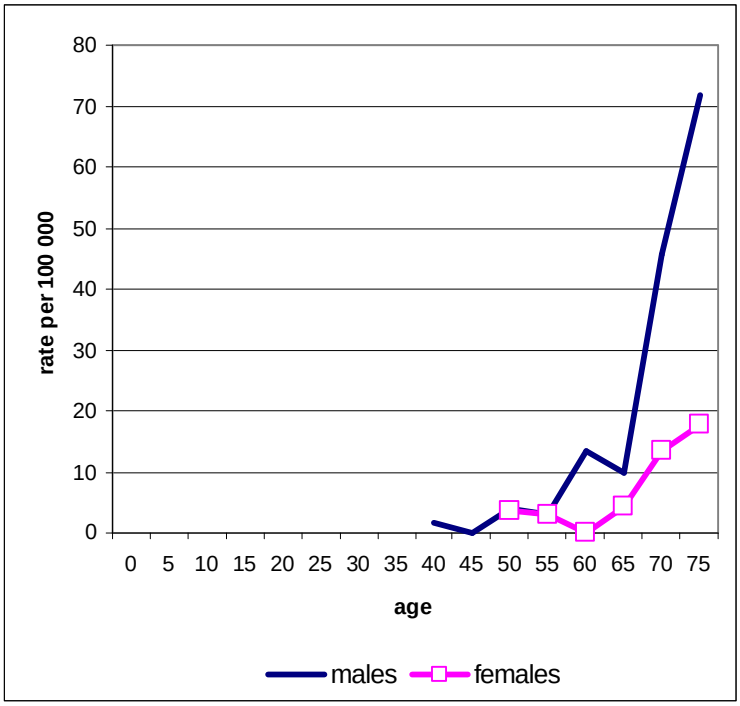

Figure 32: Age-specific mortality rate of bladder cancer, Chiang Mai, 2005

Diagnosis and stages of cancer

Thirty-three cases (55.2%) were diagnosed in locally advanced stage and 2 cases had distant metastases. The metastasis sites were peritoneum and liver. Eighty-eight percent were diagnosed by histology; the most common cell type was transitional cell carcinoma (87.9%).

Cell type

	males	females	both	%
Transitional cell ca.	35	16	51	87.9
Adenocarcinoma	2	0	2	3.4
others	4	0	4	6.9
Clinical diagnosis	1	0	1	1.7
All	42	16	58	100.0

Stage

	cases	%
Localized	16	27.6
Locally advanced	32	55.2
Regional node metastasis	5	8.6
Distant metastasis	2	3.4
Unknown/not staged	3	5.2
All	58	100.0

Non-Hodgkin's Lymphoma (ICD-10 *C82-C85; C96*)

There were 112 new cases of non-Hodgkin's lymphoma (NHL) diagnosed in 2005 (57 males, 55 females). This was 4.5% of all cancers in males and 3.9% of those in females. The age-standardized incidence rates were 6.1 for males and 5.4 for females. In 2005, NHL ranked sixth for both new male and female cancers. The incidence in females tended to slightly increase in 1996-2005 (Fig 34). The incidence rates increased with age in both sexes. The incidence in females was more common than males in the age group 25-34 years, rates in males increasing sharply after the age of 55 years and exceeding those in females (Fig 35). The cumulative rate percents to age 75 were 0.6% for males and 0.5% for females. These represented risks of 1 in 164 for men and 1 in 185 for women of developing NHL by age 75.

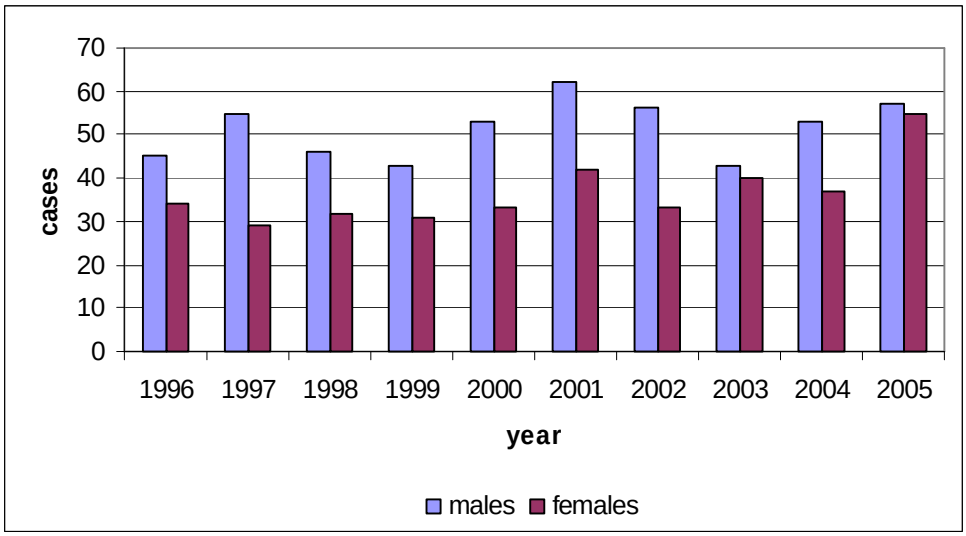

Figure 33: Number of new cases of NHL by sex, 1996-2005

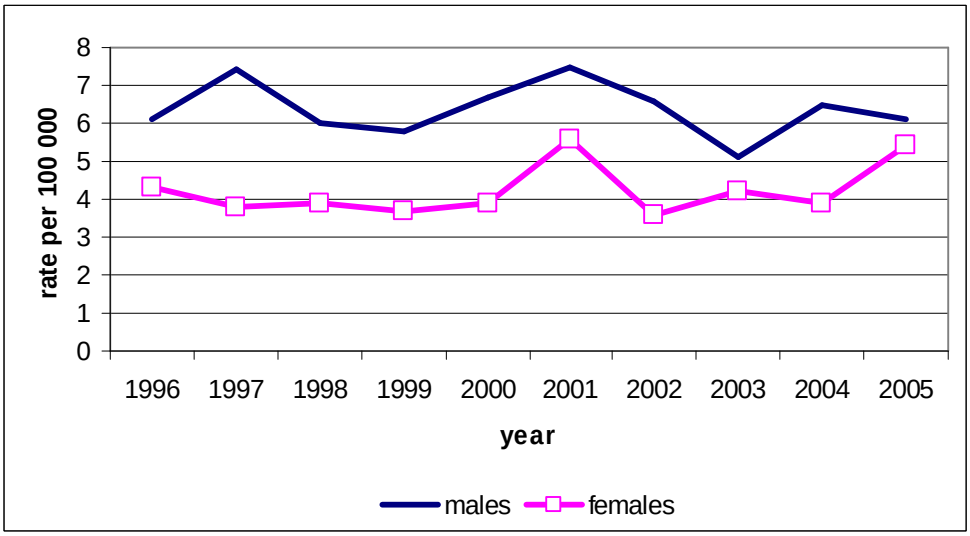

Figure 34: Incidence rates of new cases of NHL by sex, 1996-2005

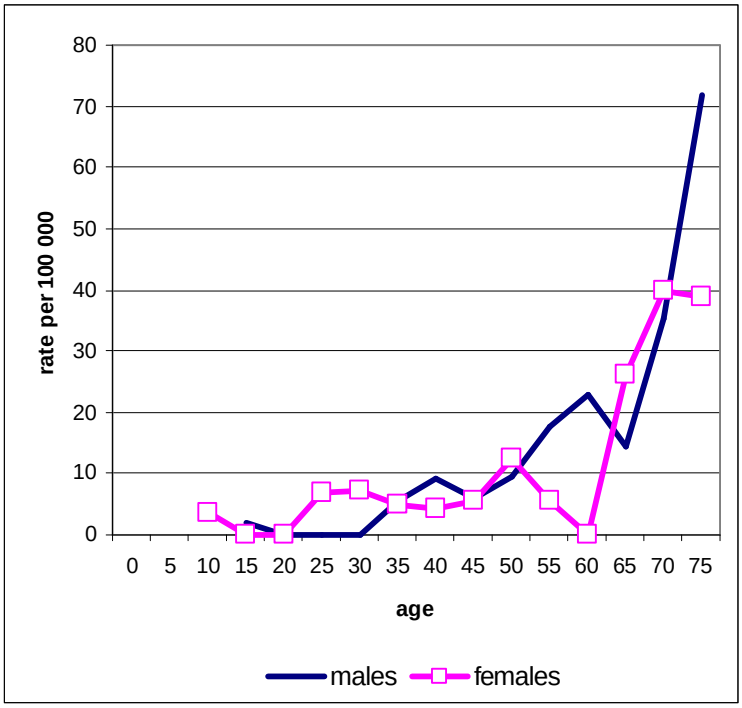

Figure 35: Age-specific incidence rate of NHL, Chiang Mai, 2005

Of the 74 deaths from NHL, 43 were males (3.8% of all male cancer deaths) and 31 were females (3.6% of all female cancer deaths). The age-standardized mortality rates were 4.6 for males and 2.9 for females and tended to increase in both sexes, especially in males (Fig. 36). The mortality rates increased with age in both sexes, increasing sharply after age 60 (Fig 37).

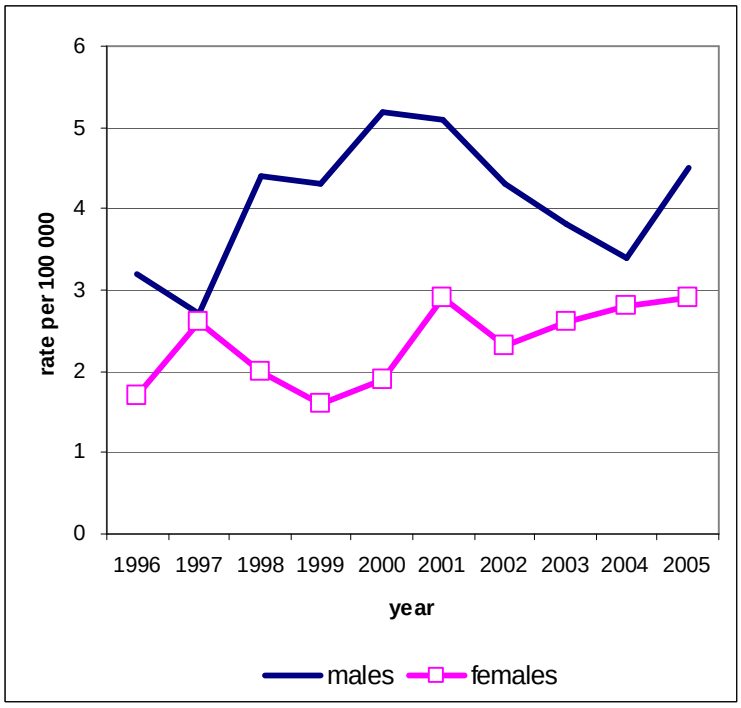

Figure 36: Mortality rate of NHL by sex, Chiang Mai, 1996-2005

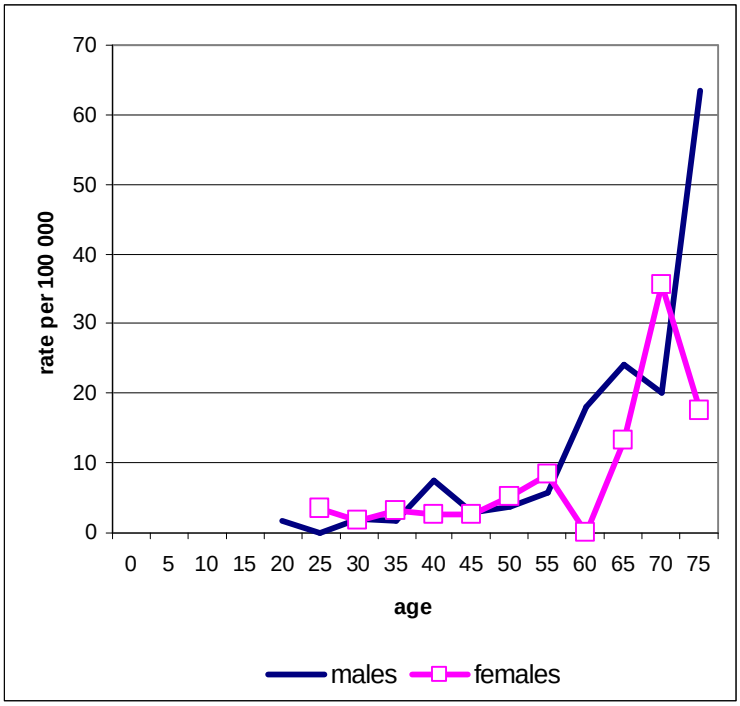

Figure 37: Age-specific mortality rate of NHL, Chiang Mai, 2005

Diagnosis and stage of cancer

The stage of NHL in the Chiang Mai Cancer Registry was noted as "*not applicable*" because of insufficient information for staging. All cases were histologically verified. The most common cell types were malignant lymphoma, large B-cell, diffuse, NOS (*M9680/3*), malignant lymphoma, NOS (*M9590/3*), malignant lymphoma, non-Hodgkin's, NOS (*M9591/3*), and Mature T-cell lymphoma, NOS (*M902/3*) accounting for 90.2% of all cases.

Cell type

	males	females	both	%
large B-cell, diffuse	38	41	79	70.5
Malig.lymphoma,nos	9	2	11	9.8
Non-Hodgkin,nos	3	3	6	5.4
Mature T-cell	2	3	5	4.5
Others	5	7	12	10.7
All	57	55	112	100.0

Cervix cancer (ICD-10 *C53*)

There were 234 new cases of cervix cancer diagnosed in 2005. This was 10.3% of all cancers in females. The age-standardized incidence rates were 22.7 and tended to decrease slightly (Fig 39). Cervix cancer was one of the three most common cancers in females, ranking second in 2005 after breast cancer. The incidence rates increased sharply after age 25 and were more common than breast and lung cancers in the age group 15-44 years. The mean age at diagnosis was 50.4 years, and the median age at diagnosis was 48 years. The cumulative rate percent to age 75 was 2.3%, representing a risk of 1 in 44 for women of developing cervix cancer by age 75.

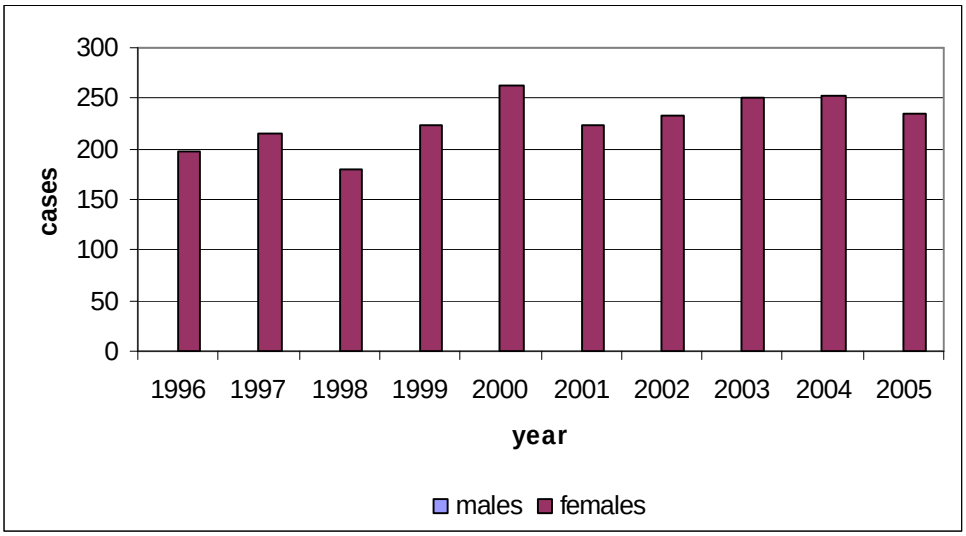

Figure 38: Number of new cases of cervix cancer by sex, 1996-2005

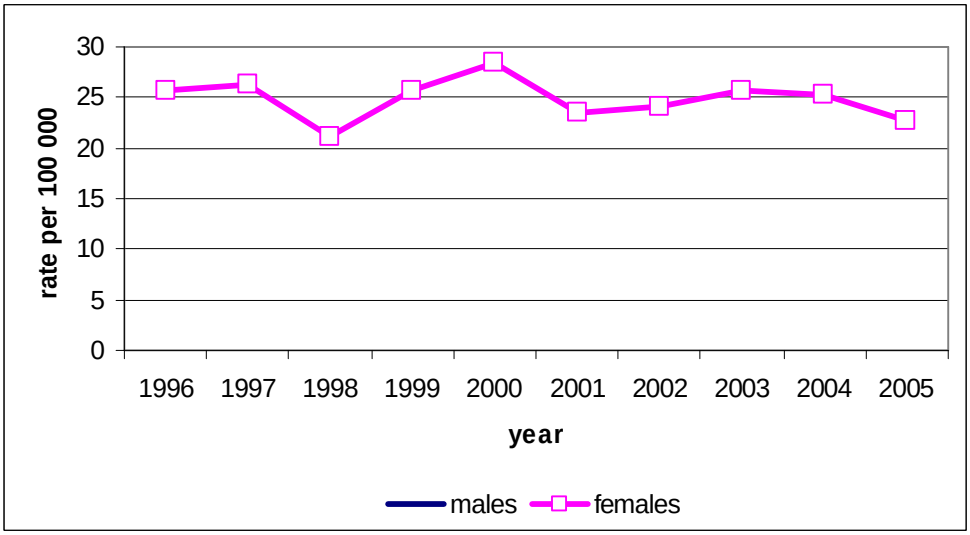

Figure 39: Incidence rates of new cases of cervix cancer by sex, 1996-2005

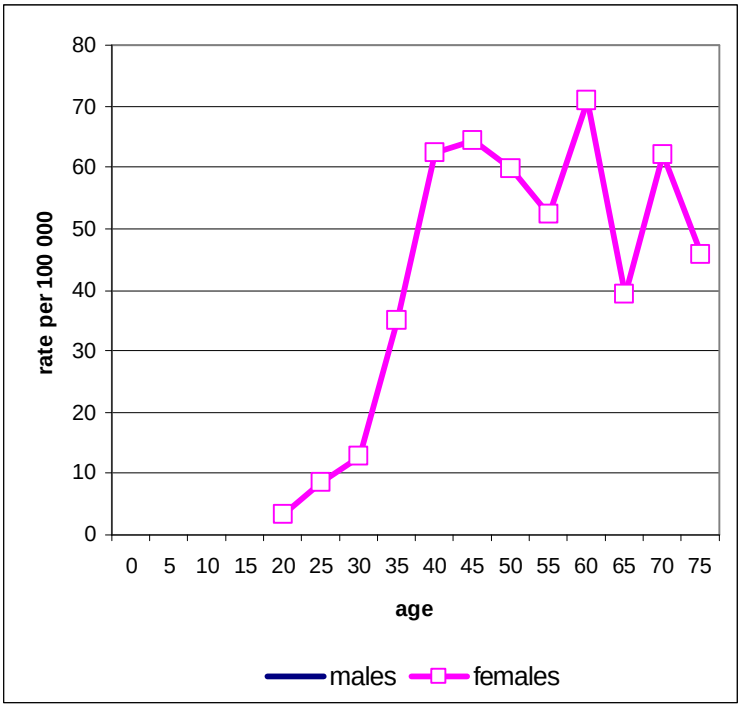

Figure 40: Age-specific incidence rate of cervix cancer, Chiang Mai, 2005

There were 89 deaths from cervix cancer, accounting for 10.3% of all female cancer deaths. The age-standardized mortality rate was 9.3 and tended to decrease after 1998 (Fig. 41). The mortality rates increased with age, increasing sharply after age 55 (Fig 42).

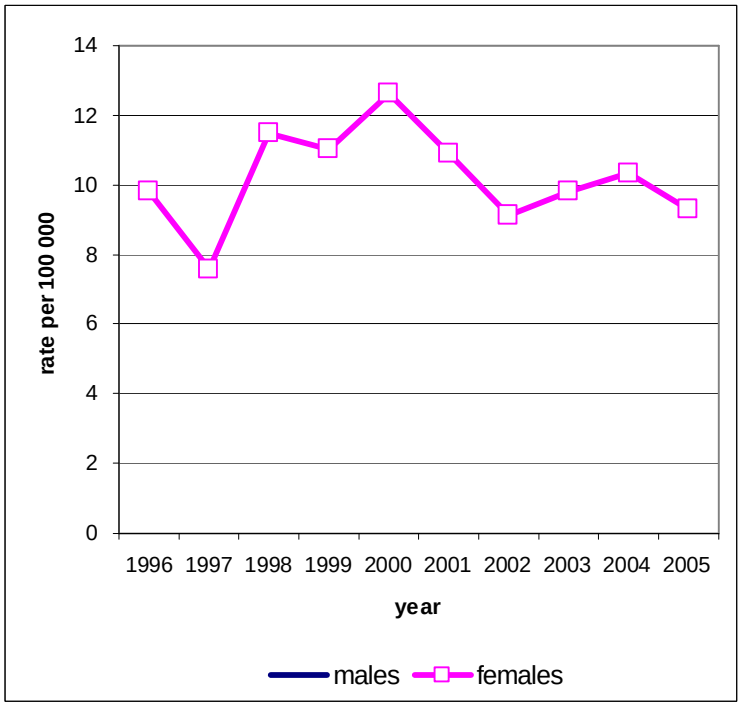

Figure 41: Mortality rate of cervix cancer by sex, Chiang Mai, 1996-2005

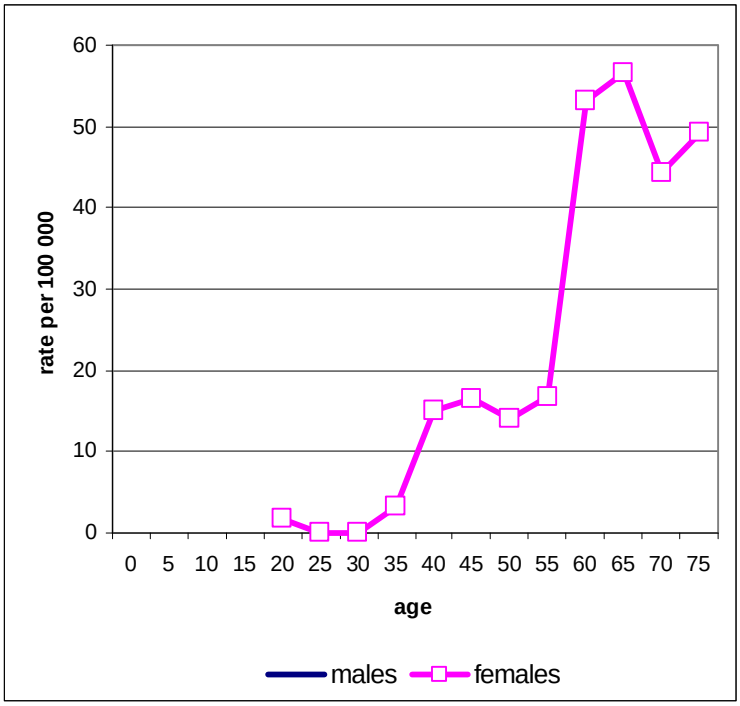

Figure 42: Age-specific mortality rate of cervix cancer, Chiang Mai, 2005

For cervix cancer deaths, 24 cases (27.0%) survived more than five years, 34 cases (38.2%) survived more than three years, and 15 cases (16.9%) survived less than one year.

Diagnosis and stages of cancer

There were 223 cases of carcinoma in situ of the cervix thay were not included in this analysis. For invasive cancer, 112 cases (47.9%) were diagnosed in localized stage and 6 cases had distant metastases. The most common metastasis site was intra-peritoneum seedling. Ninety-eight percent had histological diagnosis; the common cell types were squamous cell carcinoma (79.1%) and adenocarcinoma (17.1%).

Cell type

	males	females	both	%
Squmous cell ca.		185	185	79.1
Adenocarcinoma		40	40	17.1
Others		6	6	2.6
Clinical diagnosis		3	3	1.3
All		234	234	100.0

Stage

	cases	%
Localized	112	47.9
Locally advanced	104	44.4
Regional node metastasis	6	2.6
Distant metastasis	6	2.6
Unknown/not staged	6	2.6
All	234	100.0

Female breast cancer (ICD-10 *C50*)

There were 259 new cases of female breast cancer diagnosed in 2005. This was 18.4% of all cancers in females and the most common cancer in 2005. The age-standardized incidence rate was 24.5 and tended to increase every year (Fig 44). The incidence rate increased sharply from the age of 35 years to maximum in the age group 50-54 years. Breast cancer was more common than cervix and lung cancer in the age group 45-59 years. The mean age at diagnosis was 51.2 years and the median age at diagnosis was 49 years. The cumulative rate percent to age 75 was 2.5%, representing a risk of 1 in 40 for women of developing breast cancer by age 75.

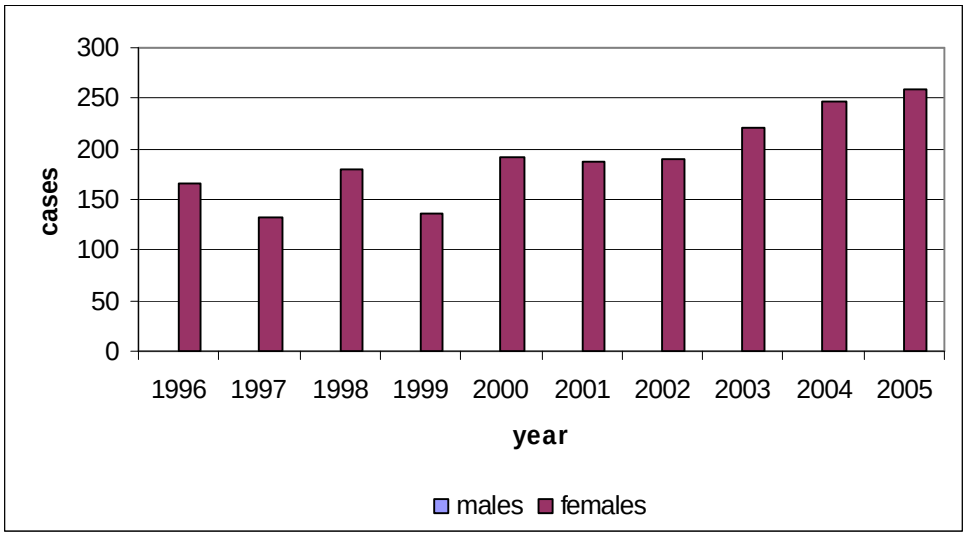

Figure 43: Number of new cases of breast cancer by sex, 1996-2005

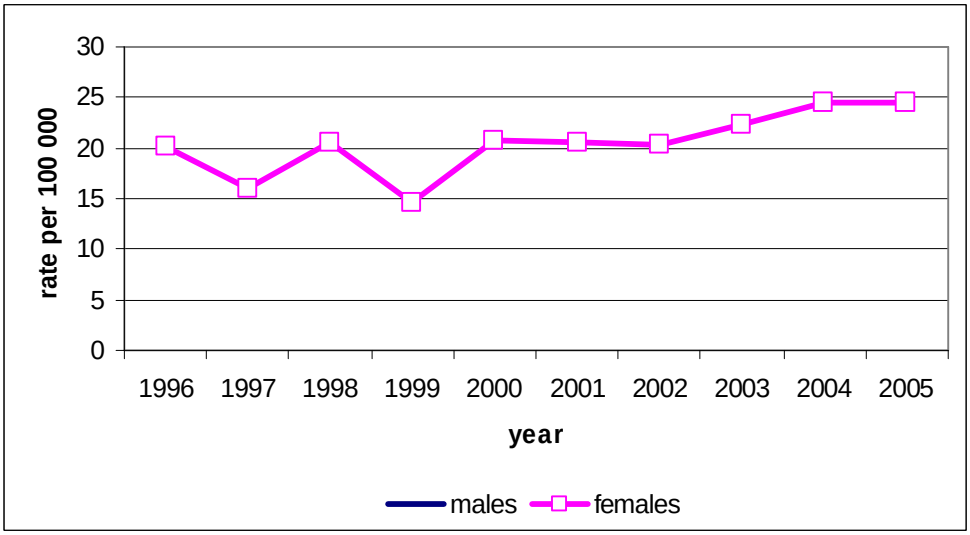

Figure 44: Incidence rates of new cases of breast cancer by sex, 1996-2005

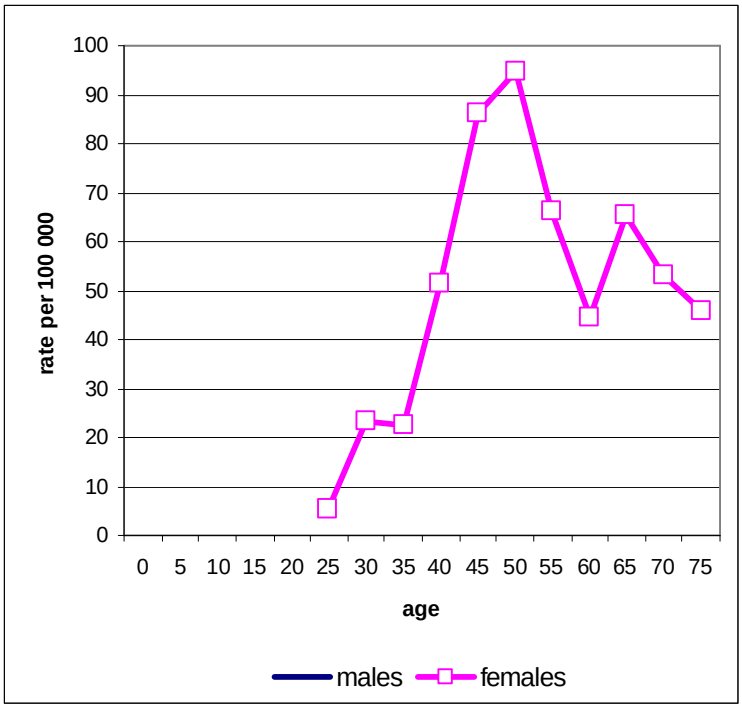

Figure 45: Age-specific incidence rate of breast cancer, Chiang Mai, 2005

There were 85 deaths from breast cancer, accounting for 9.9% of all female cancer deaths. The age-standardized mortality rate was 8.5 and tended to increase in the last ten years (Fig. 46). The mortality rate increased with age, increasing sharply after age 55 (Fig 47).

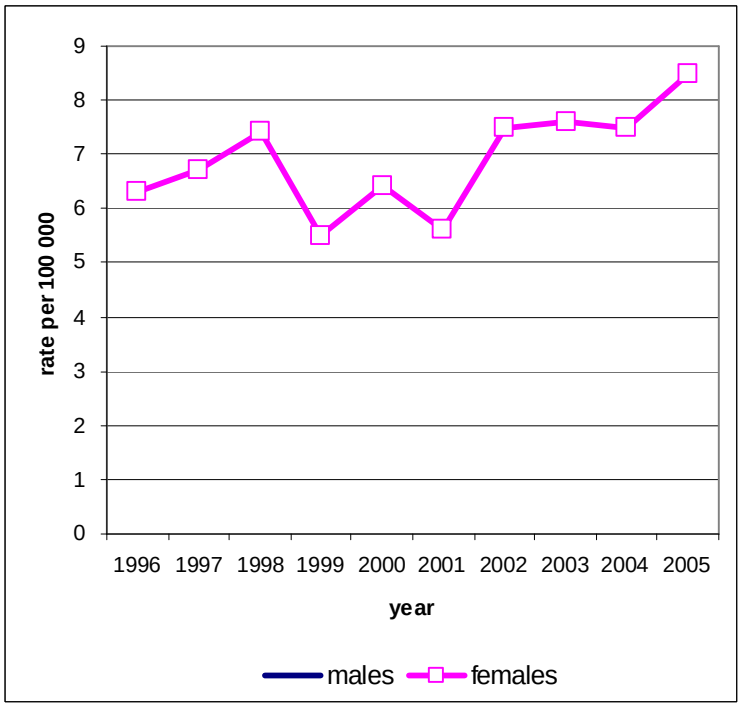

Figure 46: Mortality rate of breast cancer by sex, Chiang Mai, 1996-2005

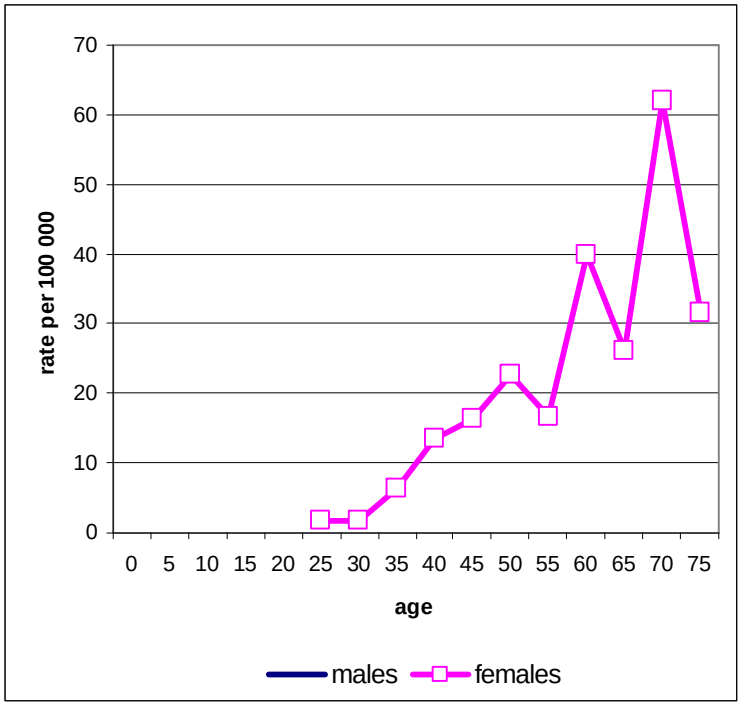

Figure 47: Age-specific mortality rate of breast cancer, Chiang Mai, 2005

For breast cancer deaths, 19 cases (22.4%) survived more than five years, 33 cases (38.8%) survived more than three years and 24 cases (28.2%) survived less than one year.

Diagnosis and stages of cancer

Sixty-two percent were diagnosed in locally advanced stage and 14 cases had distant metastases. The most common metastasis sites were bone (5 cases), lung (4 cases) and liver (3 cases). Ninety-six percent had histological diagnosis; the major cell type was invasive ductal carcinoma (85.6%).

Cell type

	males	females	both	%
Invasive ductal ca.	4	221	225	85.6
Medullary ca.	0	5	5	1.9
Phyllodes, malig.	0	5	5	1.9
Mucinous ca.	0	4	4	1.5
Lobular ca.	0	4	4	1.5
Others	0	11	11	4.2
Clinical diagnosis	0	9	9	3.4
All	4	259	263	100.0

Stage

	cases	%
Localized	54	20.8
Locally advanced	161	62.2
Regional node metastasis	21	8.1
Distant metastasis	14	5.4
Unknown/not staged	9	3.5
All	259	100.0

Nasopharynx cancer (ICD-10 *C11*)

There were 41 new cases of nasopharyngeal cancer diagnosed in 2005 (27 males, 14 females). This was 2.1% of all cancers in males and 1.0% of those in females. The age-standardized incidence rates were 2.9 for males and 1.5 for females. In 2005, nasopharyngeal cancer ranked tenth for new male cancers and sixteenth for females. Nasopharyngeal cancer was the most common pharyngeal cancer. It was more common in males than females in all age groups. The incidence tended to stable in both sexes in 1996-2005 (Fig 49). The incidence rates increased with age in both sexes. In males, the rate was high after age 45 , and after age 60 in females (Fig 50). The cumulative rate percents to age 75 were 0.3% for males and 0.2% for females. These represented risks of 1 in 278 for men and 1 in 500 for women of developing nasopharyngeal cancer by age 75.

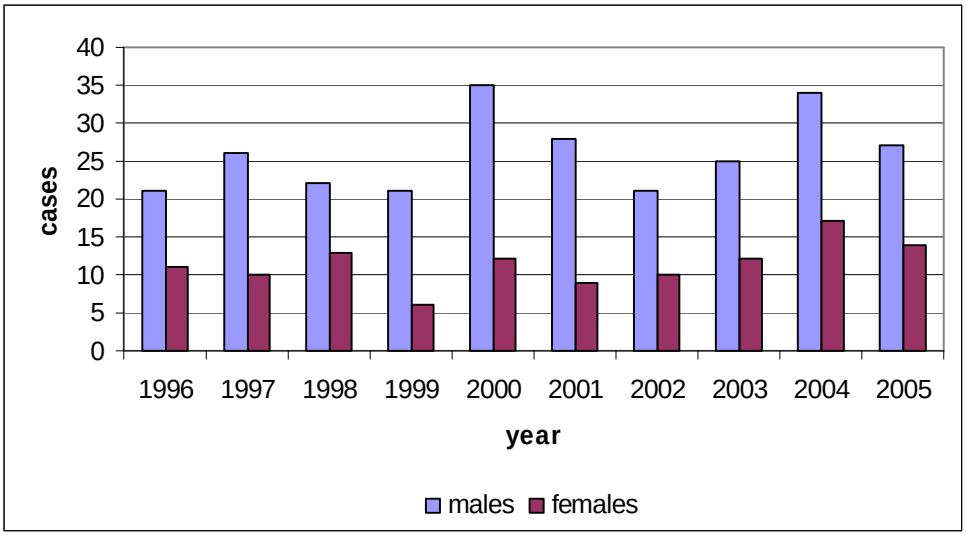

Figure 48: Number of new cases of nasopharyngeal cancer by sex, 1996-2005

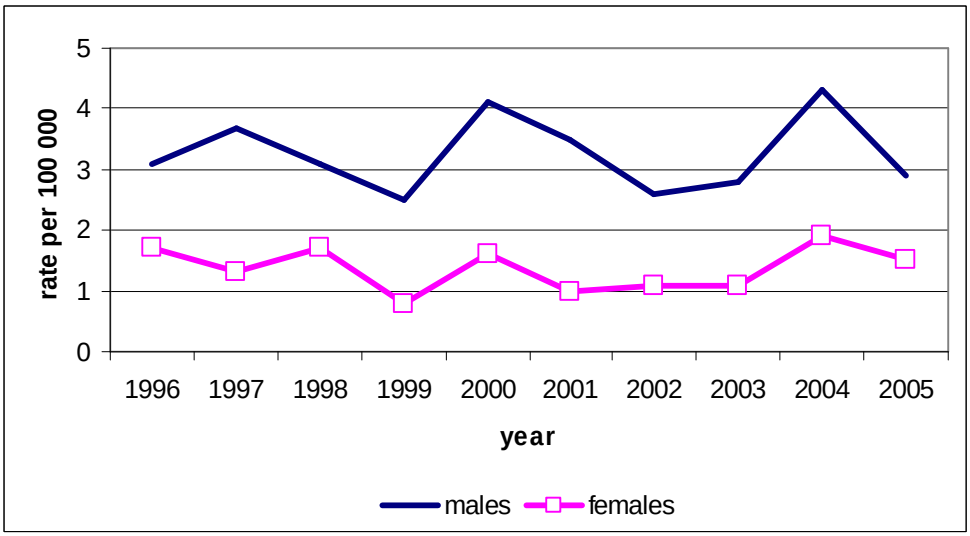

Figure 49: Incidence rates of new cases of nasopharyngeal cancer by sex, 1996-2005

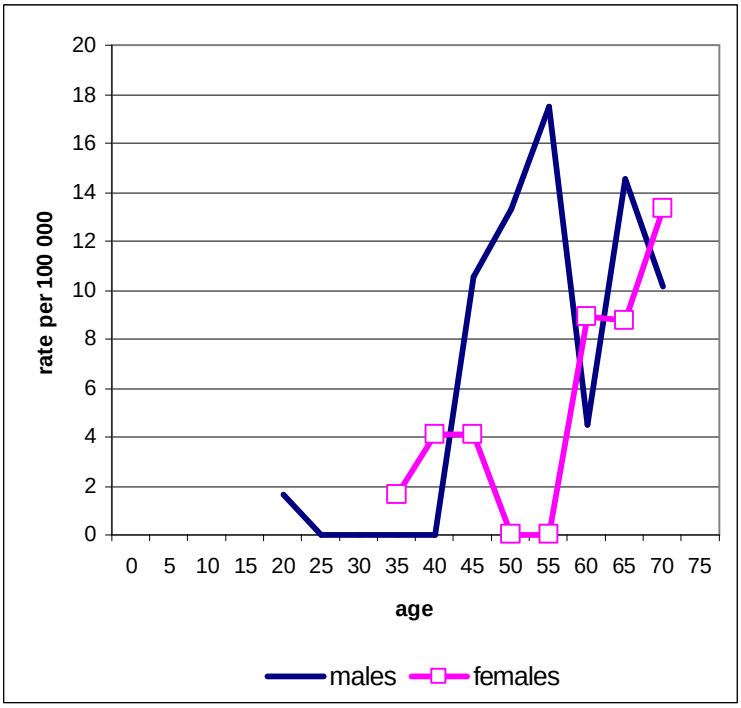

Figure 50: Age-specific incidence rate of nasopharyngeal cancer, Chiang Mai, 2005

Of the 37 deaths from nasopharyngeal cancer, 27 were males (2.4% of all male cancer deaths) and 10 were females (1.2% of all female cancer deaths). The age-standardized mortality rates were 3.3 for males and 1.3 for females and tended to increase in males (Fig. 51). The mortality rates increased with age in both sexes, increasing sharply after age 50 (Fig 52).

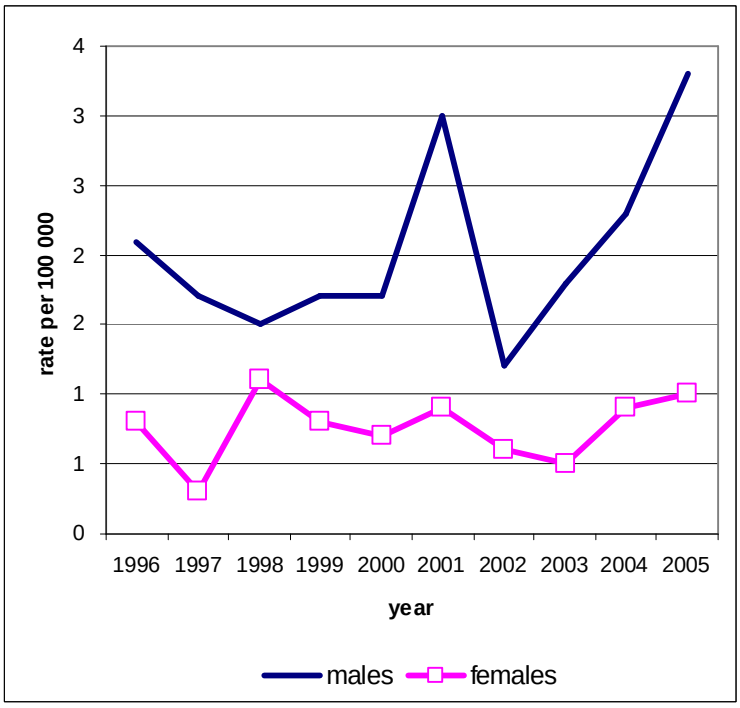

Figure 51: Mortality rate of nasopharyngeal cancer by sex, Chiang Mai, 1996-2005

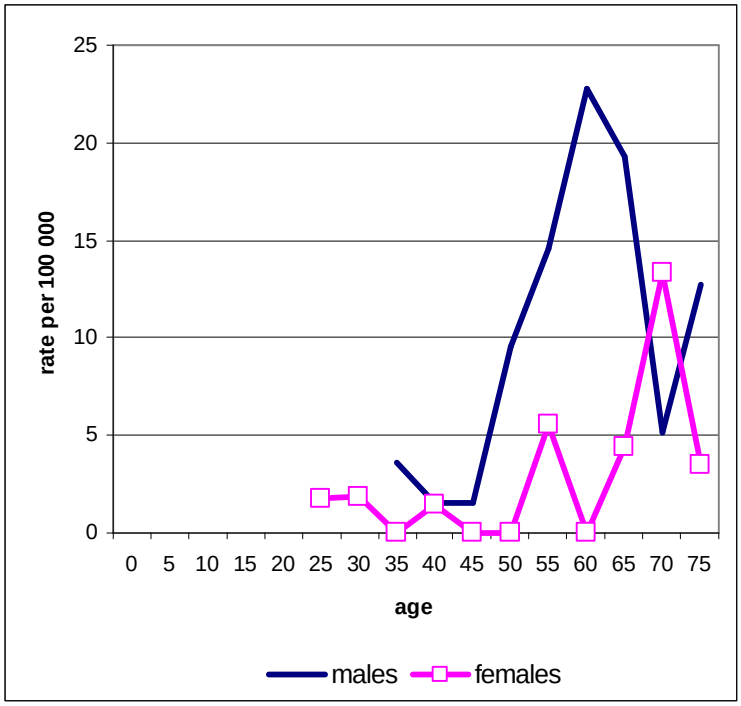

Figure 52: Age-specific mortality rate of nasopharyngeal cancer, Chiang Mai, 2005

Diagnosis and stages of cancer

Seventeen cases (41.5%) were diagnosed in regional node metastasis and 10 cases had distant metastases. The metastasis sites were distant lymph node (3 cases) and lung (1 case). Ninety-two percent had histological diagnosis; the common cell types were undifferentiated carcinoma (56.1%) and squamous cell carcinoma (34.2%).

Cell type

	males	females	both	%
Undiff. Carcinoma	13	10	23	56.1
Squamous cell ca.	11	3	14	34.2
Others	0	1	1	2.4
Clinical diagnosis	3	0	3	7.3
All	27	14	41	100.0

Stage

	cases	%
Localized	3	7.3
Locally advanced	10	24.4
Regional node metastasis	17	41.5
Distant metastasis	10	24.4
Unknown/not staged	1	2.4
All	41	100.0

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COMPLETENESS AND QUALITY OF DATA

Completeness is the proportion of all cancer cases in the registry population that have been included in the registry database. Completeness should be as close to 100% as possible. It is the aim of the Chiang Mai Cancer Registry to register all cancer cases in Chiang Mai province. Completeness of registration can only be measured indirectly. It is monitored routinely as part of quality control procedures of the registry. The following indices of completeness are used at the Chiang Mai cancer registry and are shown in Table 8 and Table 9.

(1) Histologically verified cases
(2) Mortality/Incidence (M/I) ratio
(3) Death certificate only cases

Histologically verified cases

Histologically verified (HV) cases are those with pathological verification of diagnosis. This is generally taken to indicate the validity of the data. Histology verified 61.3% cases for males, and 77.4% cases for females. Lower HV percentages were found in cases of cancer of the liver, pancreas, and nervous system.

Mortality/Incidence (M/I) ratio

The M/I ratio is an index of survival of patients with cancer. When the quality of the mortality data is good, the M/I ratio is related to case fatality (1-survival). However, when mortality statistics are of poorer quality (incomplete certification, inaccurate cause of death statements) the relationship will be less close. The distribution of M/I ratios for the various sites are shown in Table 8 and Table 9.

Death certificate only cases

A death certificate only (DCO) case is one without cancer information available other than that stated in the death certificate. It indirectly indicates how many cancer cases are missed in registration because of no information during the lifetime of the patient. In 2005, two hundred and seventy nine cases (10.3%) were diagnosed by death certificate only. The age of DCO cases ranged from 13 to 94 years; the median age at death was 65 years. The common cancer sites were unknown, lung, liver, and colon cancer.

Table 8: Indices of quality control of cancer data in Chiang Mai, 2005, males

CANCER / SITE	Cases	%DCO	%HV	M/I ratio	ICD (10th)
Lip	0	-	-	-	C00
Tongue	8	12.5	75.0	112.5	C01-C02
Salivary gland	6	16.7	66.7	100.0	C07-C08
Mouth	11	-	100.0	90.9	C03-C06
Oropharynx	7	-	100.0	85.7	C09-C10
Nasopharynx	27	3.7	88.9	100.0	C11
Hypopharynx	13	-	100.0	100.0	C12-C13
Pharynx unspec.	2	50.0	50.0	150.0	C14
Oesophagus	8	25.0	62.5	137.5	C15
Stomach	59	5.1	86.4	61.0	C16
Small intestine	5	-	100.0	60.0	C17
Colon	77	7.8	76.6	54.5	C18
Rectum	39	-	92.3	107.7	C19-C21
Liver	212	20.3	19.8	108.0	C22
Gallbladder	22	18.2	31.8	95.5	C23-C24
Pancreas	12	-	33.3	133.3	C25
Nose, sinuses	8	-	100.0	75.0	C30-C31
Larynx	20	-	95.0	80.0	C32
Bronchus, lung	326	15.6	55.2	97.9	C33-C34
Other Thoracic organs	1	-	100.0	300.0	C37-C38
Bone	3	33.3	66.7	66.7	C40-C41
Connective tissue	7	-	100.0	71.4	C47;C49
Mesothelioma	0	-	-	-	C45
Kaposi's sarcoma	1	-	100.0	0.0	C46
Melanoma of skin	3	-	100.0	66.7	C43
Other skin	41	2.4	97.6	31.7	C44
Breast	4	-	100.0	25.0	C50
Prostate	58	-	89.7	70.7	C61
Testis	4	-	100.0	50.0	C62
Penis	15	-	100.0	26.7	C60
Other male genital	2	-	100.0	0.0	C63
Bladder	42	2.4	97.6	83.3	C67
Kidney	15	20.0	60.0	73.3	C64-C66;C68
Eye	3	-	33.3	0.0	C69
Brain, nervous system	16	25.0	43.8	81.3	C70-C72
Thyroid	8	-	87.5	37.5	C73
Other endocrine	1	-	0.0	200.0	C74-C75
Hodgkin's disease	6	-	100.0	66.7	C81
Non-Hodgkin's lymphoma	57	-	98.2	73.7	C82-C85;C96
Multiple myeloma	8	-	25.0	50.0	C88;C90
Lymphoid leukaemia	11	-	18.2	9.1	C91
Myeloid leukaemia	22	-	31.8	36.4	C92
Monocytic leukaemia	0	-	-	-	C93
Other leukaemia	0	-	-	-	C94
Leukaemia unspec.	1	-	100.0	100.0	C95
Other & unspecified	84	48.8	35.7	117.9	
All sites	1275	12.9	61.3	87.3	

%DCO *Percentage of cases with diagnosis based on death certificate only*
%HV *Percentage of cases with histological verification of diagnosis*
M/I ratio *The ratio of deaths to cases registered (percent)*

Table 9: Indices of quality control of cancer data in Chiang Mai, 2005, females

CANCER / SITE	Cases	%DCO	%HV	M/I ratio	ICD (10th)
Lip	1	0.0	100.0	500.0	C00
Tongue	4	0.0	100.0	75.0	C01-C02
Salivary gland	6	16.7	83.3	83.3	C07-C08
Mouth	13	0.0	92.3	84.6	C03-C06
Oropharynx	5	0.0	100.0	40.0	C09-C10
Nasopharynx	14	0.0	100.0	71.4	C11
Hypopharynx		-	-	-	C12-C13
Pharynx unspec.		-	-	-	C14
Oesophagus	4	25.0	50.0	75.0	C15
Stomach	41	7.3	82.9	82.9	C16
Small intestine	1	0.0	100.0	100.0	C17
Colon	60	10.0	83.3	50.0	C18
Rectum	38	0.0	92.1	81.6	C19-C21
Liver	70	17.1	18.6	105.7	C22
Gallbladder	19	15.8	57.9	73.7	C23-C24
Pancreas	11	0.0	18.2	90.9	C25
Nose, sinuses	2	0.0	100.0	150.0	C30-C31
Larynx	6	0.0	83.3	100.0	C32
Bronchus, lung	209	16.3	51.2	98.1	C33-C34
Other Thoracic organs	5	0.0	60.0	20.0	C37-C38
Bone	4	0.0	100.0	25.0	C40-C41
Connective tissue	5	20.0	80.0	40.0	C47;C49
Mesothelioma		-	-	-	C45
Kaposi's sarcoma		-	-	-	C46
Melanoma of skin	3	0.0	100.0	33.3	C43
Other skin	33	0.0	100.0	27.3	C44
Breast	259	1.9	94.2	32.8	C50
Uterus unspec.		-	-	-	C55
Cervix uteri	234	0.0	99.1	38.0	C53
Placenta	1	0.0	0.0	0.0	C58
Corpus uteri	44	0.0	95.5	29.5	C54
Ovary	49	2.0	91.8	42.9	C56
Other female genital	5	0.0	100.0	140.0	C51-C52;C57
Bladder	16	0.0	100.0	75.0	C67
Kidney	6	0.0	100.0	100.0	C64-C66;C68
Eye		-	-	-	C69
Brain, nervous system	11	36.4	45.5	63.6	C70-C72
Thyroid	35	0.0	85.7	25.7	C73
Other endocrine	2	0.0	100.0	50.0	C74-C75
Hodgkin's disease	4	0.0	100.0	75.0	C81
Non-Hodgkin lymphoma	55	0.0	98.2	56.4	C82-C85;C96
Multiple myeloma	3	0.0	0.0	200.0	C88;C90
Lymphoid leukaemia	9	0.0	22.2	44.4	C91
Myeloid leukaemia	17	0.0	23.5	70.6	C92
Monocytic leukaemia	1	0.0	0.0	100.0	C93
Other leukaemia	0	-	-	-	C94
Leukaemia unspec.	1	0.0	0.0	100.0	C95
Other & unspecified	98	40.8	46.9	85.7	
All sites	1404	7.9	77.4	61.0	

Table 10: NUMBER OF NEW CANCER CASES IN CHIANGMAI 2005, MALES

Number of cases by Age Group (years)

SITE	All Ages	Age Unk.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	%	*ICD (10th)*
Lip	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C00*
Tongue	8	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	1	2	0.6	*C01-C02*
Salivary gland	6	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	2	0.5	*C07-C08*
Mouth	11	0	0	0	0	0	0	0	0	0	1	0	2	0	1	1	2	4	0.9	*C03-C06*
Oropharynx	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3	1	1	0.5	*C09-C10*
Nasopharynx	27	0	0	0	0	0	1	0	0	0	0	7	7	6	1	3	2	0	2.1	*C11*
Hypopharynx	13	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	1	8	1.0	*C12-C13*
Pharynx unspec	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	*C14*
Oesophagus	8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	2	1	0.6	*C15*
Stomach	59	0	0	0	0	0	1	0	1	0	3	4	10	6	4	12	9	9	4.6	*C16*
Small intestine	5	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	2	0.4	*C17*
Colon	77	0	0	0	0	1	0	3	0	3	1	6	3	8	10	9	15	18	6.0	*C18*
Rectum	39	0	0	0	0	1	0	0	0	3	2	4	2	6	4	2	6	9	3.1	*C19-C21*
Liver	212	0	0	0	1	2	1	0	4	12	16	31	17	30	24	25	22	27	16.6	*C22*
Gallbladder etc.	22	0	0	0	0	0	0	0	0	1	2	1	4	0	5	0	6	3	1.7	*C23-C24*
Pancreas	12	0	0	0	0	0	0	0	0	0	1	1	1	2	0	4	2	1	0.9	*C25*
Nose, sinuses etc.	8	0	0	0	0	0	0	1	0	0	1	1	0	2	0	1	0	2	0.6	*C30-C31*
Larynx	20	0	0	0	0	0	0	0	0	0	1	0	2	2	3	0	4	8	1.6	*C32*
Bronchus, lung	326	0	0	0	0	0	2	2	1	4	9	13	45	29	42	57	63	59	25.6	*C33-C34*
Other Thoracic organs	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.1	*C37-C38*
Bone	3	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0.2	*C40-C41*
Connective tissue	7	0	0	0	0	0	0	1	0	0	0	1	0	1	0	3	0	1	0.5	*C47;C49*
Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C45*
Kaposi's sarcoma	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.1	*C46*
Melanoma of skin	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0.2	*C43*
Other skin	41	0	0	0	0	0	1	2	2	1	3	1	4	3	4	3	6	11	3.2	*C44*
Breast	4	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	1	0	0.3	*C50*
Prostate	58	0	0	0	0	0	0	0	0	0	0	0	0	2	2	11	13	30	4.5	*C61*
Testis	4	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0.3	*C62*
Penis	15	0	0	0	0	0	0	0	2	1	0	0	3	0	2	1	3	3	1.2	*C60*
Other male genital	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.2	*C63*
Bladder	42	0	0	0	0	0	1	0	0	1	2	1	2	1	1	2	12	19	3.3	*C67*
Kidney etc.	15	0	0	0	0	0	0	0	0	0	0	3	1	1	1	3	1	5	1.2	*C64-C66;C68*
Eye	3	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.2	*C69*
Brain, nervous system	16	0	0	2	1	1	1	0	1	0	1	2	2	0	0	3	1	1	1.3	*C70-C72*
Thyroid	8	0	0	0	0	0	0	0	2	1	1	1	0	0	1	0	1	1	0.6	*C73*
Other endocrine	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.1	*C74-C75*
Hodgkin's disease	6	0	0	0	1	0	0	1	1	0	0	0	1	0	1	0	1	0	0.5	*C81*
Non-Hodgkin lymphoma	57	0	0	0	0	1	0	0	0	3	6	4	5	6	5	3	7	17	4.5	*C82-C85;C96*
Multiple myeloma	8	0	0	0	0	0	0	0	0	0	0	1	0	3	1	2	1	0	0.6	*C88;C90*
Lymphoid leukaemia	11	0	0	4	1	2	0	0	0	2	1	0	1	0	0	0	0	0	0.9	*C91*
Myeloid leukaemia	22	0	0	2	2	2	1	3	1	1	0	1	1	1	1	1	2	3	1.7	*C92*
Monocytic leukaemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C93*
Other leukaemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C94*
Leukaemia unspec.	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	*C95*
Other & unspecified	84	1	0	0	0	1	0	1	1	3	8	7	5	10	8	11	17	11	6.6	
All sites	**1275**	**1**	**3**	**8**	**8**	**12**	**9**	**15**	**18**	**38**	**61**	**95**	**123**	**121**	**127**	**168**	**206**	**262**	**100.0**	

Table 11: NUMBER OF NEW CANCER CASES IN CHIANGMAI 2005, FEMALES

Number of cases by Age Group (years)

SITE	All Ages	Age Unk.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	%	*ICD (10th)*
Lip	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.1	*C00*
Tongue	4	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	1	0.3	*C01-C02*
Salivary gland	6	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	2	0	0.4	*C07-C08*
Mouth	13	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	3	7	0.9	*C03-C06*
Oropharynx	5	0	0	0	0	1	0	0	0	0	1	1	0	1	0	0	0	1	0.4	*C09-C10*
Nasopharynx	14	0	0	0	0	0	0	0	0	1	3	3	0	0	2	2	3	0	1.0	*C11*
Hypopharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C12-C13*
Pharynx unspec.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C14*
Oesophagus	4	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	0.3	*C15*
Stomach	41	0	0	0	0	0	0	2	2	2	4	4	6	3	5	4	7	2	2.9	*C16*
Small intestine	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.1	*C17*
Colon	60	0	0	0	0	1	0	0	2	2	1	8	4	7	10	4	7	14	4.3	*C18*
Rectum	38	0	0	0	0	0	0	0	1	0	3	9	4	2	5	3	6	5	2.7	*C19-C21*
Liver	70	0	0	0	0	0	0	0	1	0	3	6	10	10	3	12	8	17	5.0	*C22*
Gallbladder etc.	19	0	0	0	0	0	0	0	0	0	0	1	1	3	2	3	4	5	1.4	*C23-C24*
Pancreas	11	0	0	0	0	0	0	0	0	0	0	3	3	0	0	3	1	1	0.8	*C25*
Nose, sinuses etc.	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0.1	*C30-C31*
Larynx	6	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	0.4	*C32*
Bronchus, lung	209	0	0	0	1	0	3	0	3	2	2	16	13	26	24	31	37	51	14.9	*C33-C34*
Other Thoracic organs	5	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	1	0.4	*C37-C38*
Bone	4	0	0	1	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0.3	*C40-C41*
Connective tissue	5	0	0	0	0	0	0	1	1	0	1	0	0	1	0	0	0	1	0.4	*C47;C49*
Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C45*
Kaposi's sarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C46*
Melanoma of skin	3	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0.2	*C43*
Other skin	33	0	0	0	0	0	0	1	0	0	0	1	2	5	1	6	4	13	2.4	*C44*
Breast	259	0	0	0	0	0	0	3	13	14	38	63	54	24	10	15	12	13	18.4	*C50*
Uterus unspec.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C55*
Cervix uteri	234	0	0	0	0	0	2	5	7	22	46	47	34	19	16	9	14	13	16.7	*C53*
Placenta	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	*C58*
Corpus uteri	44	0	0	0	0	0	0	0	0	3	2	6	11	7	7	3	4	1	3.1	*C54*
Ovary etc.	49	0	0	0	0	2	2	3	3	5	4	9	9	3	3	2	1	3	3.5	*C56*
Other female genital	5	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	1	0.4	*C51-C52;C57*
Bladder	16	0	0	0	0	0	0	0	0	0	0	0	2	0	3	1	5	5	1.1	*C67*
Kidney etc.	6	0	0	0	0	0	0	1	0	0	0	0	0	0	3	1	0	1	0.4	*C64-C66;C68*
Eye	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C69*
Brain, nervous system	11	0	0	0	0	2	0	0	0	1	1	1	0	1	2	2	0	1	0.8	*C70-C72*
Thyroid	35	0	0	0	1	1	2	1	3	3	5	4	3	1	0	8	0	3	2.5	*C73*
Other endocrine	2	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.1	*C74-C75*
Hodgkin's disease	4	0	0	0	0	0	0	0	2	1	0	0	0	0	1	0	0	0	0.3	*C81*
Non-Hodgkin lymphoma	55	0	0	0	2	0	0	4	4	3	3	4	7	2	0	6	9	11	3.9	*C82-C85;C96*
Multiple myeloma	3	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0.2	*C88;C90*
Lymphoid leukaemia	9	0	2	2	1	0	0	2	0	0	0	0	0	0	1	0	1	0	0.6	*C91*
Myeloid leukaemia	17	0	1	0	2	0	0	0	1	0	1	1	1	1	2	2	1	4	1.2	*C92*
Monocytic leukaemia	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.1	*C93*
Other leukaemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C94*
Leukaemia unspec.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	*C95*
Other & unspecified	98	0	0	0	1	0	0	3	3	8	4	8	8	10	11	13	15	14	7.0	
All sites	**1404**	**0**	**3**	**3**	**8**	**8**	**10**	**26**	**48**	**71**	**123**	**203**	**176**	**133**	**115**	**136**	**147**	**194**	**100.0**	

Table 12: CANCER INCIDENCE, CHIANGMAI 2005

Incidence per 100,000 by Age Group (years) - MALES

SITE	All Ages	Age Unk.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	Crude rate	%	CR 64	CR 74	ASR (W)	ICD (10th)
Lip	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	0.00	0.00	**0.0**	*C00*
Tongue	8	0	-	-	-	-	-	-	-	-	-	1.5	1.9	-	9.1	4.8	5.1	8.4	1.1	0.63	0.06	0.11	**1.0**	*C01-C02*
Salivary gland	6	0	-	-	-	-	-	-	-	-	1.5	1.5	-	-	-	-	10.1	8.4	0.8	0.47	0.01	0.07	**0.6**	*C07-C08*
Mouth	11	0	-	-	-	-	-	-	-	-	1.5	-	3.8	-	4.5	4.8	10.1	16.9	1.5	0.86	0.05	0.12	**1.1**	*C03-C06*
Oropharynx	7	0	-	-	-	-	-	-	-	-	-	1.5	-	-	4.5	14.5	5.1	4.2	1	0.55	0.03	0.13	**0.9**	*C09-C10*
Nasopharynx	27	0	-	-	-	-	1.6	-	-	-	-	10.5	13.3	17.5	4.5	14.5	10.1	-	3.7	2.12	0.23	0.36	**2.9**	*C11*
Hypopharynx	13	0	-	-	-	-	-	-	-	-	-	1.5	5.7	-	-	-	5.1	33.8	1.8	1.02	0.04	0.06	**1.2**	*C12-C13*
Pharynx unspec	2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.1	4.2	0.3	0.16	0.00	0.03	**0.2**	*C14*
Oesophagus	8	0	-	-	-	-	-	-	-	-	-	1.5	-	-	-	19.3	10.1	4.2	1.1	0.63	0.01	0.15	**1.0**	*C15*
Stomach	59	0	-	-	-	-	1.6	-	1.9	-	4.6	6	19	17.5	18.2	58	45.5	38	8	4.63	0.34	0.86	**6.7**	*C16*
Small intestine	5	0	-	-	1.8	-	-	-	-	-	-	-	1.9	-	-	4.8	-	8.4	0.7	0.39	0.02	0.04	**0.6**	*C17*
Colon	77	0	-	-	-	1.8	-	5.1	-	5.4	1.5	9	5.7	23.3	45.5	43.5	75.8	76	10.5	6.04	0.49	1.05	**8.9**	*C18*
Rectum	39	0	-	-	-	1.8	-	-	-	5.4	3.1	6	3.8	17.5	18.2	9.7	30.3	38	5.3	3.06	0.28	0.48	**4.3**	*C19-C21*
Liver	212	0	-	-	1.8	3.6	1.6	-	7.6	21.6	24.4	46.6	32.3	87.4	109.1	120.9	111.1	114	28.8	16.63	1.66	2.80	**24.2**	*C22*
Gallbladder etc	22	0	-	-	-	-	-	-	-	1.8	3.1	1.5	7.6	-	22.7	-	30.3	12.7	3	1.73	0.18	0.33	**2.5**	*C23-C24*
Pancreas	12	0	-	-	-	-	-	-	-	-	1.5	1.5	1.9	5.8	-	19.3	10.1	4.2	1.6	0.94	0.05	0.20	**1.4**	*C25*
Nose, sinuses etc.	8	0	-	-	-	-	-	1.7	-	-	1.5	1.5	-	5.8	-	4.8	-	8.4	1.1	0.63	0.05	0.07	**0.9**	*C30-C31*
Larynx	20	0	-	-	-	-	-	-	-	-	1.5	-	3.8	5.8	13.6	-	20.2	33.8	2.7	1.57	0.12	0.22	**2.1**	*C32*
Bronchus, lung	326	0	-	-	-	-	3.2	3.4	1.9	7.2	13.7	19.5	85.6	84.5	190.9	275.7	318.2	249.1	44.4	25.57	2.01	4.88	**38.0**	*C33-C34*
Other Thoracic organs	1	0	-	-	-	-	-	-	-	-	-	-	-	-	4.5	-	-	-	0.1	0.08	0.02	0.02	**0.2**	*C37-C38*
Bone	3	0	-	-	-	1.8	-	-	1.9	-	-	-	-	-	-	-	5.1	-	0.4	0.24	0.02	0.04	**0.4**	*C40-C41*
Connective tissue	7	0	-	-	-	-	-	1.7	-	-	-	1.5	-	2.9	-	14.5	-	4.2	1	0.55	0.03	0.09	**0.9**	*C47;C49*
Mesothelioma	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	0.00	0.00	**0.0**	*C45*
Kaposi's sarcoma	1	0	-	-	-	-	-	-	-	-	-	-	-	2.9	-	-	-	-	0.1	0.08	0.01	0.01	**0.1**	*C46*
Melanoma of skin	3	0	-	-	-	-	-	-	-	-	-	-	-	2.9	-	-	-	8.4	0.4	0.24	0.01	0.01	**0.3**	*C43*
Other skin	41	0	-	-	-	-	1.6	3.4	3.8	1.8	4.6	1.5	7.6	8.7	18.2	14.5	30.3	46.4	5.6	3.22	0.25	0.46	**4.5**	*C44*
Breast	4	0	-	-	-	-	-	-	-	1.8	1.5	-	-	-	4.5	-	5.1	-	0.5	0.31	0.04	0.06	**0.5**	*C50*
Prostate	58	0	-	-	-	-	-	-	-	-	-	-	-	5.8	9.1	53.2	65.7	126.7	7.9	4.55	0.07	0.67	**6.0**	*C61*
Testis	4	0	2.4	-	-	-	-	1.7	1.9	1.8	-	-	-	-	-	-	-	-	0.5	0.31	0.04	0.03	**0.6**	*C62*
Penis	15	0	-	-	-	-	-	-	3.8	1.8	-	-	5.7	-	9.1	4.8	15.2	12.7	2	1.18	0.10	0.20	**1.7**	*C60*
Other male genita	2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	4.8	-	4.2	0.3	0.16	0.00	0.02	**0.2**	*C63*
Bladder	42	0	-	-	-	-	1.6	-	-	1.8	3.1	1.5	3.8	2.9	4.5	9.7	60.6	80.2	5.7	3.29	0.09	0.45	**4.1**	*C67*
Kidney etc.	15	0	-	-	-	-	-	-	-	-	-	4.5	1.9	2.9	4.5	14.5	5.1	21.1	2	1.18	0.07	0.17	**1.6**	*C64-C66;C68*
Eye	3	0	4.8	-	-	-	-	-	-	-	-	-	-	-	4.5	-	-	-	0.4	0.24	0.05	0.05	**0.8**	*C69*
Brain, nervous system	16	0	-	4.2	1.8	1.8	1.6	-	1.9	-	1.5	3	3.8	-	-	14.5	5.1	4.2	2.2	1.25	0.09	0.20	**2.1**	*C70-C72*
Thyroid	8	0	-	-	-	-	-	-	3.8	1.8	1.5	1.5	-	-	4.5	-	5.1	4.2	1.1	0.63	0.07	0.09	**0.9**	*C73*
Other endocrine	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	4.8	-	-	0.1	0.08	0.00	0.02	**0.1**	*C74-C75*
Hodgkin's disease	6	0	-	-	1.8	-	-	1.7	1.9	-	-	-	1.9	-	4.5	-	5.1	-	0.8	0.47	0.06	0.08	**0.8**	*C81*
Non-Hodgkin lymphoma	57	0	-	-	-	1.8	-	-	-	5.4	9.2	6	9.5	17.5	22.7	14.5	35.4	71.8	7.8	4.47	0.36	0.61	**6.1**	*C82-C85;C96*
Multiple myeloma	8	0	-	-	-	-	-	-	-	-	-	1.5	-	8.7	4.5	9.7	5.1	-	1.1	0.63	0.07	0.15	**1.0**	*C88;C90*
Lymphoid leukaemia	11	0	-	8.4	1.8	3.6	-	-	-	3.6	1.5	-	1.9	-	-	-	-	-	1.5	0.86	0.10	0.10	**1.7**	*C91*
Myeloid leukaemia	22	0	-	4.2	3.6	3.6	1.6	5.1	1.9	1.8	-	1.5	1.9	2.9	4.5	4.8	10.1	12.7	3	1.73	0.15	0.21	**2.9**	*C92*
Monocytic leukaemia	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	0.00	0.00	**0.0**	*C93*
Other leukaemia	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0.00	0.00	0.00	**0.0**	*C94*
Leukaemia unspec	1	0	-	-	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.08	0.01	0.01	**0.2**	*C95*
Other & unspecified	84	1	-	-	-	1.8	-	1.7	1.9	5.4	12.2	10.5	9.5	29.1	36.4	53.2	85.9	46.4	11.4	6.59	0.54	1.22	**9.4**	
All sites	**1275**	**1**	**7.2**	**16.8**	**14.4**	**21.6**	**14.4**	**25.5**	**34.2**	**68.4**	**93.0**	**142.6**	**233.8**	**352.3**	**576.8**	**812.1**	**1041.2**	**1105.9**	**173.5**	**100.0**	**7.62**	**15.75**	**145.5**	

Table 13: CANCER INCIDENCE, CHIANGMAI 2005

Incidence per 100,000 by Age Group (years) - FEMALES

SITE	All Ages	Age Unk.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	Crude rate	%	CR 64	CR 74	ASR (W)	ICD (10th)
Lip	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	4.4	-	-	0.1	0.07	0.00	0.02	**0.1**	*C00*
Tongue	4	0	-	-	-	-	-	-	-	1.6	-	2.7	-	-	-	-	-	3.5	0.5	0.28	0.02	0.02	**0.3**	*C01-C02*
Salivary gland	6	0	-	-	-	-	-	-	1.8	1.6	1.4	-	1.8	-	-	-	8.9	-	0.8	0.43	0.03	0.08	**0.6**	*C07-C08*
Mouth	13	0	-	-	-	-	-	-	-	-	-	1.4	-	2.8	-	4.4	13.3	24.6	1.7	0.93	0.02	0.11	**1.1**	*C03-C06*
Oropharynx	5	0	-	-	-	1.8	-	-	-	-	1.4	1.4	-	2.8	-	-	-	3.5	0.7	0.36	0.04	0.04	**0.5**	*C09-C10*
Nasopharynx	14	0	-	-	-	-	-	-	-	1.6	4.1	4.1	-	-	8.9	8.7	13.3	-	1.8	1.00	0.09	0.20	**1.5**	*C11*
Hypopharynx	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	**0.0**	*C12-C13*
Pharynx unspec	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	**0.0**	*C14*
Oesophagus	4	0	-	-	-	-	-	-	-	-	-	1.4	-	2.8	-	-	4.4	3.5	0.5	0.28	0.02	0.04	**0.4**	*C15*
Stomach	41	0	-	-	-	-	-	3.4	3.6	3.2	5.4	5.5	10.5	8.3	22.2	17.4	31	7	5.3	2.92	0.31	0.53	**4.4**	*C16*
Small intestine	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	4.4	-	-	0.1	0.07	0.00	0.02	**0.1**	*C17*
Colon	60	0	-	-	-	1.8	-	-	3.6	3.2	1.4	10.9	7	19.3	44.3	17.4	31	49.2	7.8	4.27	0.46	0.70	**6.3**	*C18*
Rectum	38	0	-	-	-	-	-	-	1.8	-	4.1	12.3	7	5.5	22.2	13.1	26.6	17.6	4.9	2.71	0.26	0.46	**3.8**	*C19-C21*
Liver	70	0	-	-	-	-	-	-	1.8	-	4.1	8.2	17.5	27.6	13.3	52.3	35.5	59.8	9.1	4.99	0.36	0.80	**6.8**	*C22*
Gallbladder etc	19	0	-	-	-	-	-	-	-	-	-	1.4	1.8	8.3	8.9	13.1	17.7	17.6	2.5	1.35	0.10	0.26	**2.0**	*C23-C24*
Pancreas	11	0	-	-	-	-	-	-	-	-	-	4.1	5.3	-	-	13.1	4.4	3.5	1.4	0.78	0.05	0.13	**1.1**	*C25*
Nose, sinuses etc.	2	0	-	-	-	-	-	-	-	1.6	-	-	1.8	-	-	-	-	-	0.3	0.14	0.02	0.02	**0.2**	*C30-C31*
Larynx	6	0	-	-	-	-	-	-	-	-	-	-	-	2.8	4.4	4.4	4.4	7	0.8	0.43	0.04	0.08	**0.6**	*C32*
Bronchus, lung	209	0	-	-	1.9	-	4.8	-	5.4	3.2	2.7	21.8	22.8	71.7	106.4	135	164	179.4	27.2	14.89	1.17	2.66	**21.7**	*C33-C34*
Other Thoracic organs	5	0	-	-	-	-	-	-	-	1.6	-	-	-	2.8	4.4	-	4.4	3.5	0.7	0.36	0.04	0.07	**0.5**	*C37-C38*
Bone	4	0	-	2.2	-	-	-	-	1.8	-	-	1.4	1.8	-	-	-	-	-	0.5	0.28	0.04	0.04	**0.5**	*C40-C41*
Connective tissue	5	0	-	-	-	-	-	1.7	1.8	-	1.4	-	-	2.8	-	-	-	3.5	0.7	0.36	0.04	0.03	**0.5**	*C47;C49*
Mesothelioma	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	**0.0**	*C45*
Kaposi's sarcoma	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	**0.0**	*C46*
Melanoma of skin	3	0	-	-	-	-	-	-	-	-	-	1.4	-	2.8	-	-	-	3.5	0.4	0.21	0.02	0.02	**0.3**	*C43*
Other skin	33	0	-	-	-	-	-	1.7	-	-	-	1.4	3.5	13.8	4.4	26.1	17.7	45.7	4.3	2.35	0.12	0.33	**3.2**	*C44*
Breast	259	0	-	-	-	-	-	5.2	23.4	22.4	51.6	86	94.8	66.2	44.3	65.3	53.2	45.7	33.7	18.45	1.95	2.50	**24.5**	*C50*
Uterus unspec.	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	**0.0**	*C55*
Cervix uteri	234	0	-	-	-	-	3.2	8.6	12.6	35.1	62.5	64.2	59.7	52.4	70.9	39.2	62.1	45.7	30.4	16.67	1.81	2.28	**22.7**	*C53*
Placenta	1	0	-	-	-	1.8	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.07	0.01	0.01	**0.2**	*C58*
Corpus uteri	44	0	-	-	-	-	-	-	-	4.8	2.7	8.2	19.3	19.3	31	13.1	17.7	3.5	5.7	3.13	0.43	0.58	**4.7**	*C54*
Ovary etc.	49	0	-	-	-	3.6	3.2	5.2	5.4	8	5.4	12.3	15.8	8.3	13.3	8.7	4.4	10.6	6.4	3.49	0.39	0.44	**5.1**	*C56*
Other female genita	5	0	-	-	-	-	-	-	-	-	-	-	-	2.8	8.9	4.4	-	3.5	0.7	0.36	0.06	0.08	**0.7**	*C51-C52;C57*
Bladder	16	0	-	-	-	-	-	-	-	-	-	-	3.5	-	13.3	4.4	22.2	17.6	2.1	1.14	0.08	0.22	**1.6**	*C67*
Kidney etc.	6	0	-	-	-	-	-	1.7	-	-	-	-	-	-	13.3	4.4	-	3.5	0.8	0.43	0.07	0.09	**0.9**	*C64-C66;C68*
Eye	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	**0.0**	*C69*
Brain, nervous system	11	0	-	-	-	3.6	-	-	-	1.6	1.4	1.4	-	2.8	8.9	8.7	-	3.5	1.4	0.78	0.10	0.14	**1.4**	*C70-C72*
Thyroid	35	0	-	-	1.9	1.8	3.2	1.7	5.4	4.8	6.8	5.5	5.3	2.8	-	34.9	-	10.6	4.6	2.49	0.18	0.36	**3.7**	*C73*
Other endocrine	2	0	-	-	-	-	-	-	-	-	-	1.4	1.8	-	-	-	-	-	0.3	0.14	0.02	0.02	**0.2**	*C74-C75*
Hodgkin's disease	4	0	-	-	-	-	-	-	3.6	1.6	-	-	-	-	4.4	-	-	-	0.5	0.28	0.05	0.05	**0.5**	*C81*
Non-Hodgkin lymphoma	55	0	-	-	3.7	-	-	6.9	7.2	4.8	4.1	5.5	12.3	5.5	-	26.1	39.9	38.7	7.2	3.92	0.25	0.54	**5.4**	*C82-C85;C96*
Multiple myeloma	3	0	-	-	-	-	-	-	-	-	-	1.4	-	2.8	-	4.4	-	-	0.4	0.21	0.02	0.04	**0.3**	*C88;C90*
Lymphoid leukaemia	9	0	5.1	4.4	1.9	-	-	3.4	-	-	-	-	-	-	4.4	-	4.4	-	1.2	0.64	0.10	0.10	**1.8**	*C91*
Myeloid leukaemia	17	0	2.5	-	3.7	-	-	-	1.8	-	1.4	1.4	1.8	2.8	8.9	8.7	4.4	14.1	2.2	1.21	0.12	0.19	**2.1**	*C92*
Monocytic leukaemia	1	0	-	-	-	-	1.6	-	-	-	-	-	-	-	-	-	-	-	0.1	0.07	0.00	0.01	**0.1**	*C93*
Other leukaemia	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	**0.0**	*C94*
Leukaemia unspec	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.5	0.1	0.07	0.00	0.00	**0.1**	*C95*
Other & unspecified	98	0	-	-	1.9	-	-	5.2	5.4	12.8	5.4	10.9	14	27.6	48.8	56.6	66.5	49.2	12.7	6.98	0.66	1.24	**10.4**	
All sites	**1404**	**0**	**7.6**	**6.6**	**15.0**	**14.4**	**16.0**	**44.7**	**86.4**	**113.5**	**167.3**	**277.6**	**309.1**	**367.4**	**509.8**	**592.7**	**651.4**	**682.1**	**182.7**	**100.0**	**9.14**	**14.50**	**142.7**	

Table 14: NUMBER OF CANCER DEATHS IN CHIANGMAI 2005, MALES

		Number of cases by Age Group (years)																			
SITE	**All Ages**	**Age Unk.**	**0-**	**5-**	**10-**	**15-**	**20-**	**25-**	**30-**	**35-**	**40-**	**45-**	**50-**	**55-**	**60-**	**65-**	**70-**	**75+**	**%**	***ICD (10th)***
Lip	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.2	*C00*
Tongue	9	0	0	0	0	1	0	0	0	0	2	0	2	0	0	0	2	2	0.8	*C01-C02*
Salivary gland	6	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	3	0.5	*C07-C08*
Mouth	10	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	7	0.9	*C03-C06*
Oropharynx	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0.5	*C09-C10*
Nasopharynx	27	0	0	0	0	0	0	0	0	2	1	1	5	5	5	4	1	3	2.4	*C11*
Hypopharynx	13	0	0	0	0	0	0	0	0	0	0	2	1	0	0	2	3	5	1.2	*C12-C13*
Pharynx unspec	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0.3	*C14*
Oesophagus	11	0	0	0	0	0	0	0	0	0	0	1	2	0	0	2	4	2	1.0	*C15*
Stomach	37	0	0	0	0	0	1	0	1	0	2	1	5	5	4	6	9	3	3.3	*C16*
Small intestine	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0.3	*C17*
Colon	42	0	0	0	0	1	0	2	0	2	1	2	4	3	4	5	9	9	3.7	*C18*
Rectum	42	0	0	0	0	0	0	0	0	3	3	1	3	1	6	5	3	17	3.7	*C19-C21*
Liver	229	0	0	0	0	1	2	0	4	12	20	26	27	33	25	30	20	29	20.3	*C22*
Gallbladder etc.	21	0	0	0	0	0	0	0	0	0	2	1	4	1	5	0	6	2	1.9	*C23-C24*
Pancreas	16	0	0	0	0	0	0	0	0	0	1	0	5	2	1	3	3	1	1.4	*C25*
Nose, sinuses etc.	6	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	3	0.5	*C30-C31*
Larynx	16	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	6	7	1.4	*C32*
Bronchus, lung	327	0	0	0	0	0	2	2	1	3	12	12	35	29	44	63	65	59	28.9	*C33-C34*
Other Thoracic organs	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0.3	*C37-C38*
Bone	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0.2	*C40-C41*
Connective tissue	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	2	0.4	*C47;C49*
Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C45*
Kaposi's sarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C46*
Melanoma of skin	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0.2	*C43*
Other skin	13	0	0	0	0	0	0	0	1	0	0	0	0	0	2	3	1	6	1.2	*C44*
Breast	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.1	*C50*
Prostate	41	0	0	0	0	0	0	0	0	0	0	0	1	4	2	4	8	22	3.6	*C61*
Testis	2	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0.2	*C62*
Penis	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	1	0.4	*C60*
Other male genital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C63*
Bladder	35	0	0	0	0	0	0	0	0	0	1	0	2	1	3	2	9	17	3.1	*C67*
Kidney etc.	11	0	0	0	0	0	0	0	0	0	0	1	0	1	1	4	2	2	1.0	*C64-C66;C68*
Eye	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C69*
Brain, nervous system	13	0	0	1	1	1	1	1	2	0	0	1	0	0	0	1	2	2	1.2	*C70-C72*
Thyroid	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0.3	*C73*
Other endocrine	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0.2	*C74-C75*
Hodgkin's disease	4	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	1	0	0.4	*C81*
Non-Hodgkin's lymphom	43	0	0	0	0	0	1	0	1	1	5	2	2	2	4	5	4	16	3.8	*C82-C85;C96*
Multiple myeloma	4	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	0	0.4	*C88;C90*
Lymphoid leukaemia	2	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0.2	*C91*
Myeloid leukaemia	13	0	0	0	0	1	0	1	1	0	1	0	0	2	1	1	2	3	1.2	*C92*
Monocytic leukaemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C93*
Other leukaemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C94*
Leukaemia unspec.	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	*C95*
Other & unspecified	100	1	0	0	0	1	0	1	1	4	6	9	9	11	9	17	19	12	8.8	
All sites	**1130**	**1**	**0**	**1**	**1**	**8**	**7**	**8**	**15**	**29**	**59**	**63**	**116**	**105**	**118**	**166**	**190**	**243**	**100.0**	

Table 15: NUMBER OF CANCER DEATHS IN CHIANGMAI 2005, FEMALES

			Number of cases by Age Group (years)																	
SITE	**All Ages**	**Age Unk.**	**0-**	**5-**	**10-**	**15-**	**20-**	**25-**	**30-**	**35-**	**40-**	**45-**	**50-**	**55-**	**60-**	**65-**	**70-**	**75+**	**%**	***ICD (10th)***
Lip	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	0.6	*C00*
Tongue	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0.3	*C01-C02*
Salivary gland	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	3	0.6	*C07-C08*
Mouth	11	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	8	1.3	*C03-C06*
Oropharynx	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.2	*C09-C10*
Nasopharynx	10	0	0	0	0	0	0	1	1	0	1	0	0	2	0	1	3	1	1.2	*C11*
Hypopharynx	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.1	*C12-C13*
Pharynx unspec.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C14*
Oesophagus	3	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0.3	*C15*
Stomach	34	0	0	0	0	0	0	2	1	2	6	3	9	3	2	3	2	1	3.9	*C16*
Small intestine	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.1	*C17*
Colon	30	0	0	0	0	0	0	0	1	2	0	1	1	4	7	2	2	10	3.5	*C18*
Rectum	31	0	0	0	0	0	0	0	1	0	1	2	4	2	4	2	7	8	3.6	*C19-C21*
Liver	74	0	0	0	0	0	0	0	0	1	6	5	10	12	5	12	8	15	8.6	*C22*
Gallbladder etc.	14	0	0	0	0	0	0	0	0	0	0	1	1	0	1	2	4	5	1.6	*C23-C24*
Pancreas	10	0	0	0	0	0	0	0	0	0	0	3	3	0	0	3	1	0	1.2	*C25*
Nose, sinuses etc.	3	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0.3	*C30-C31*
Larynx	6	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	1	0.7	*C32*
Bronchus, lung	207	0	0	0	1	0	1	0	3	2	2	17	15	24	32	27	30	53	24.0	*C33-C34*
Other Thoracic organs	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0.2	*C37-C38*
Bone	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.1	*C40-C41*
Connective tissue	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	*C47;C49*
Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C45*
Kaposi's sarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C46*
Melanoma of skin	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.1	*C43*
Other skin	9	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	8	1.0	*C44*
Breast	85	0	0	0	0	0	0	1	1	4	10	12	13	6	9	6	14	9	9.9	*C50*
Uterus unspec.	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.1	*C55*
Cervix uteri	89	0	0	0	0	0	1	0	0	2	11	12	8	6	12	13	10	14	10.3	*C53*
Placenta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C58*
Corpus uteri	13	0	0	0	0	0	0	0	0	0	0	1	0	1	3	3	1	4	1.5	*C54*
Ovary etc.	21	0	0	0	0	1	0	0	1	2	1	6	4	1	2	1	1	1	2.4	*C56*
Other female genital	7	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	3	0.8	*C51-C52;C57*
Bladder	12	0	0	0	0	0	0	0	0	0	0	0	2	1	0	1	3	5	1.4	*C67*
Kidney etc.	6	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0.7	*C64-C66;C68*
Eye	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C69*
Brain, nervous system	7	0	0	1	0	0	0	0	0	0	0	1	0	1	2	1	0	1	0.8	*C70-C72*
Thyroid	9	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5	0	3	1.0	*C73*
Other endocrine	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	*C74-C75*
Hodgkin's disease	3	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0.3	*C81*
Non-Hodgkin lymphoma	31	0	0	0	0	0	0	2	1	2	2	2	3	3	0	3	8	5	3.6	*C82-C85;C96*
Multiple myeloma	6	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	2	0	0.7	*C88;C90*
Lymphoid leukaemia	5	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0.6	*C91*
Myeloid leukaemia	14	0	1	0	1	1	0	1	0	0	1	1	0	0	2	0	2	4	1.6	*C92*
Monocytic leukaemia	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.1	*C93*
Other leukaemia	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	*C94*
Leukaemia unspec.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	*C95*
Other & unspecified	84	0	0	0	1	0	0	2	3	6	2	7	9	9	8	11	14	12	9.7	
All sites	**862**	**0**	**2**	**2**	**4**	**2**	**4**	**9**	**14**	**25**	**44**	**77**	**87**	**79**	**100**	**104**	**126**	**183**	**100.0**	

Table 16: CANCER DEATHS, CHIANGMAI 2005

Incidence per 100,000 by Age Group (years) - MALES

SITE	All Ages	Age Unk.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	Crude rate	%	CR 64	CR 74	ASR (W)	*ICD (10th)*
Lip	2	0	-	-	-	-	-	-	-	-	-	-	-	-	4.5	-	-	4.2	0.3	0.18	0.02	0.02	0.3	*C00*
Tongue	9	0	-	-	-	1.8	-	-	-	-	3.1	-	3.8	-	-	-	10.1	8.4	1.2	0.80	0.04	0.09	0.9	*C01-C02*
Salivary gland	6	0	-	-	-	-	-	-	-	-	-	1.5	1.9	-	-	-	5.1	12.7	0.8	0.53	0.02	0.04	0.5	*C07-C08*
Mouth	10	0	-	-	-	-	-	-	-	-	1.5	-	-	-	-	-	10.1	29.6	1.4	0.88	0.01	0.06	0.9	*C03-C06*
Oropharynx	6	0	-	-	-	-	-	-	-	-	-	-	-	-	-	9.7	10.1	8.4	0.8	0.53	0.00	0.10	0.7	*C09-C10*
Nasopharynx	27	0	-	-	-	-	-	-	-	3.6	1.5	1.5	9.5	14.6	22.7	19.3	5.1	12.7	3.7	2.39	0.27	0.39	3.3	*C11*
Hypopharynx	13	0	-	-	-	-	-	-	-	-	-	3	1.9	-	-	9.7	15.2	21.1	1.8	1.15	0.02	0.15	1.3	*C12-C13*
Pharynx unspec	3	0	-	-	-	-	-	-	-	-	-	-	1.9	-	-	-	5.1	4.2	0.4	0.27	0.01	0.03	0.3	*C14*
Oesophagus	11	0	-	-	-	-	-	-	-	-	-	1.5	3.8	-	-	9.7	20.2	8.4	1.5	0.97	0.03	0.18	1.1	*C15*
Stomach	37	0	-	-	-	-	1.6	-	1.9	-	3.1	1.5	9.5	14.6	18.2	29	45.5	12.7	5.0	3.27	0.24	0.62	4.3	*C16*
Small intestine	3	0	-	-	-	-	-	-	-	-	-	-	-	-	4.5	4.8	-	4.2	0.4	0.27	0.02	0.05	0.4	*C17*
Colon	42	0	-	-	-	1.8	-	3.4	-	3.6	1.5	3	7.6	8.7	18.2	24.2	45.5	38	5.7	3.72	0.24	0.57	4.8	*C18*
Rectum	42	0	-	-	-	-	-	-	-	5.4	4.6	1.5	5.7	2.9	27.3	24.2	15.2	71.8	5.7	3.72	0.24	0.43	4.6	*C19-C21*
Liver	229	0	-	-	-	1.8	3.2	-	7.6	21.6	30.5	39	51.3	96.1	113.6	145.1	101	122.5	31.2	20.27	1.79	3.01	26.1	*C22*
Gallbladder etc	21	0	-	-	-	-	-	-	-	-	3.1	1.5	7.6	2.9	22.7	-	30.3	8.4	2.9	1.86	0.19	0.34	2.5	*C23-C24*
Pancreas	16	0	-	-	-	-	-	-	-	-	1.5	-	9.5	5.8	4.5	14.5	15.2	4.2	2.2	1.42	0.11	0.25	1.8	*C25*
Nose, sinuses etc.	6	0	-	-	-	-	-	-	1.9	1.8	-	-	1.9	-	-	-	-	12.7	0.8	0.53	0.03	0.03	0.6	*C30-C31*
Larynx	16	0	-	-	-	-	-	-	-	-	-	-	3.8	2.9	-	-	30.3	29.6	2.2	1.42	0.03	0.18	1.5	*C32*
Bronchus, lung	327	0	-	-	-	-	3.2	3.4	1.9	5.4	18.3	18	66.6	84.5	200	304.7	328.3	249.1	44.5	28.94	1.97	5.02	38.5	*C33-C34*
Other Thoracic organs	3	0	-	-	-	-	-	-	1.9	-	-	-	-	-	-	-	-	8.4	0.4	0.27	0.01	0.01	0.3	*C37-C38*
Bone	2	0	-	-	-	-	-	1.7	-	-	-	-	-	-	-	-	5.1	-	0.3	0.18	0.01	0.03	0.2	*C40-C41*
Connective tissue	5	0	-	-	-	-	-	-	-	-	-	-	-	2.9	-	9.7	-	8.4	0.7	0.44	0.01	0.06	0.6	*C47;C49*
Mesothelioma	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	0.0	*C45*
Kaposi's sarcoma	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	0.0	*C46*
Melanoma of skin	2	0	-	-	-	-	-	-	-	-	-	-	1.9	-	-	-	5.1	-	0.3	0.18	0.01	0.03	0.2	*C43*
Other skin	13	0	-	-	-	-	-	-	1.9	-	-	-	-	-	9.1	14.5	5.1	25.3	1.8	1.15	0.05	0.15	1.5	*C44*
Breast	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	4.8	-	-	0.1	0.09	0.00	0.02	0.1	*C50*
Prostate	41	0	-	-	-	-	-	-	-	-	-	-	1.9	11.6	9.1	19.3	40.4	92.9	5.6	3.63	0.11	0.41	4.2	*C61*
Testis	2	0	-	-	-	1.8	-	-	-	-	-	-	1.9	-	-	-	-	-	0.3	0.18	0.02	0.02	0.3	*C62*
Penis	4	0	-	-	-	-	-	-	-	-	-	-	-	2.9	-	9.7	-	4.2	0.5	0.35	0.01	0.06	0.5	*C60*
Other male genita	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	0.0	*C63*
Bladder	35	0	-	-	-	-	-	-	-	-	1.5	-	3.8	2.9	13.6	9.7	45.5	71.8	4.8	3.10	0.11	0.38	3.6	*C67*
Kidney etc.	11	0	-	-	-	-	-	-	-	-	-	1.5	-	2.9	4.5	19.3	10.1	8.4	1.5	0.97	0.04	0.19	1.3	*C64-C66;C68*
Eye	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	0.0	*C69*
Brain, nervous system	13	0	-	2.1	1.8	1.8	1.6	1.7	3.8	-	-	1.5	-	-	-	4.8	10.1	8.4	1.8	1.15	0.06	0.14	1.6	*C70-C72*
Thyroid	3	0	-	-	-	-	-	-	-	-	-	1.5	-	-	-	-	5.1	4.2	0.4	0.27	0.01	0.03	0.3	*C73*
Other endocrine	2	0	-	-	-	-	-	-	1.9	-	-	-	-	-	-	4.8	-	-	0.3	0.18	0.01	0.03	0.3	*C74-C75*
Hodgkin's disease	4	0	-	-	-	-	-	-	-	-	-	-	3.8	2.9	-	-	5.1	-	0.5	0.35	0.03	0.06	0.4	*C81*
Non-Hodgkin lymphoma	43	0	-	-	-	-	1.6	-	1.9	1.8	7.6	3	3.8	5.8	18.2	24.2	20.2	67.6	5.9	3.81	0.21	0.44	4.6	*C82-C85;C96*
Multiple myeloma	4	0	-	-	-	-	-	-	-	-	-	1.5	-	2.9	-	-	10.1	-	0.5	0.35	0.02	0.07	0.4	*C88;C90*
Lymphoid leukaemia	2	0	-	-	-	1.8	-	-	-	-	1.5	-	-	-	-	-	-	-	0.3	0.18	0.02	0.02	0.3	*C91*
Myeloid leukaemia	13	0	-	-	-	1.8	-	1.7	1.9	-	1.5	-	-	5.8	4.5	4.8	10.1	12.7	1.8	1.15	0.09	0.15	1.5	*C92*
Monocytic leukaemia	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	0.0	*C93*
Other leukaemia	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	0.0	*C94*
Leukaemia unspec	1	0	-	-	-	-	-	-	-	1.8	-	-	-	-	-	-	-	-	0.1	0.09	0.01	0.01	0.1	*C95*
Other & unspecified	100	1	-	-	-	1.8	-	1.7	1.9	7.2	9.2	13.5	17.1	32	40.9	82.2	96	50.7	13.6	8.85	0.62	1.50	11.4	
All sites	**1130**	**1**	**0**	**2**	**2**	**14**	**11**	**14**	**29**	**52**	**90**	**95**	**221**	**306**	**536**	**803**	**960**	**1026**	**153.8**	**100.0**	**6.58**	**14.45**	**128.1**	

Table 17: CANCER DEATHS, CHIANGMAI 2005

Incidence per 100,000 by Age Group (years) - FEMALES

SITE	All Ages	Age Unk.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	Crude rate	%	CR 64	CR 74	ASR (W)	ICD (10th)
Lip	5	0	-	-	-	-	-	-	-	-	-	-	-	-	-	4.4	8.9	7	0.7	0.58	0.00	0.07	**0.4**	*C00*
Tongue	3	0	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	7	0.4	0.35	0.01	0.01	**0.2**	*C01-C02*
Salivary gland	5	0	-	-	-	-	-	-	-	1.6	-	-	-	-	-	-	4.4	10.6	0.7	0.58	0.01	0.03	**0.4**	*C07-C08*
Mouth	11	0	-	-	-	-	-	-	-	-	-	-	1.8	2.8	-	-	4.4	28.1	1.4	1.28	0.02	0.04	**0.8**	*C03-C06*
Oropharynx	2	0	-	-	-	-	-	-	-	-	-	-	-	2.8	-	-	-	3.5	0.3	0.23	0.01	0.01	**0.2**	*C09-C10*
Nasopharynx	10	0	-	-	-	-	-	1.7	1.8	-	1.4	-	-	5.5	-	4.4	13.3	3.5	1.3	1.16	0.05	0.13	**1.0**	*C11*
Hypopharynx	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.4	-	0.1	0.12	0.00	0.02	**0.1**	*C12-C13*
Pharynx unspec	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	**0.0**	*C14*
Oesophagus	3	0	-	-	-	-	-	-	-	-	-	1.4	-	2.8	-	-	4.4	-	0.4	0.35	0.02	0.04	**0.3**	*C15*
Stomach	34	0	-	-	-	-	-	3.4	1.8	3.2	8.1	4.1	15.8	8.3	8.9	13.1	8.9	3.5	4.4	3.94	0.27	0.36	**3.4**	*C16*
Small intestine	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	4.4	-	-	0.1	0.12	0.00	0.02	**0.1**	*C17*
Colon	30	0	-	-	-	-	-	-	1.8	3.2	-	1.4	1.8	11	31	8.7	8.9	35.2	3.9	3.48	0.25	0.34	**3.3**	*C18*
Rectum	31	0	-	-	-	-	-	-	1.8	-	1.4	2.7	7	5.5	17.7	8.7	31	28.1	4.0	3.60	0.18	0.38	**3.1**	*C19-C21*
Liver	74	0	-	-	-	-	-	-	-	1.6	8.1	6.8	17.5	33.1	22.2	52.3	35.5	52.8	9.6	8.58	0.45	0.88	**7.4**	*C22*
Gallbladder etc	14	0	-	-	-	-	-	-	-	-	-	1.4	1.8	-	4.4	8.7	17.7	17.6	1.8	1.62	0.04	0.17	**1.3**	*C23-C24*
Pancreas	10	0	-	-	-	-	-	-	-	-	-	4.1	5.3	-	-	13.1	4.4	-	1.3	1.16	0.05	0.13	**1.0**	*C25*
Nose, sinuses etc.	3	0	-	-	-	-	-	-	-	-	-	-	1.8	-	4.4	-	-	3.5	0.4	0.35	0.03	0.03	**0.3**	*C30-C31*
Larynx	6	0	-	-	-	-	-	-	-	-	-	-	-	-	4.4	13.1	4.4	3.5	0.8	0.70	0.02	0.11	**0.7**	*C32*
Bronchus, lung	207	0	-	-	1.9	-	1.6	-	5.4	3.2	2.7	23.2	26.3	66.2	141.9	117.6	133	186.4	26.9	24.01	1.34	2.58	**21.9**	*C33-C34*
Other Thoracic organs	2	0	-	-	-	-	-	-	-	-	-	-	-	-	4.4	-	4.4	-	0.3	0.23	0.02	0.04	**0.3**	*C37-C38*
Bone	1	0	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	0.1	0.12	0.01	0.01	**0.1**	*C40-C41*
Connective tissue	2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.4	3.5	0.3	0.23	0.00	0.02	**0.2**	*C47;C49*
Mesothelioma	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	**0.0**	*C45*
Kaposi's sarcoma	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	**0.0**	*C46*
Melanoma of skin	1	0	-	-	-	-	-	-	-	-	-	-	-	-	4.4	-	-	-	0.1	0.12	0.02	0.02	**0.2**	*C43*
Other skin	9	0	-	-	-	-	-	-	-	-	-	-	-	-	4.4	-	-	28.1	1.2	1.04	0.02	0.02	**0.7**	*C44*
Breast	85	0	-	-	-	-	-	1.7	1.8	6.4	13.6	16.4	22.8	16.6	39.9	26.1	62.1	31.7	11.1	9.86	0.59	1.02	**8.5**	*C50*
Uterus unspec.	1	0	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	0.1	0.12	0.01	0.01	**0.1**	*C55*
Cervix uteri	89	0	-	-	-	-	1.6	-	-	3.2	14.9	16.4	14	16.6	53.2	56.6	44.3	49.2	11.6	10.32	0.59	1.10	**9.3**	*C53*
Placenta	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	**0.0**	*C58*
Corpus uteri	13	0	-	-	-	-	-	-	-	-	-	1.4	-	2.8	13.3	13.1	4.4	14.1	1.7	1.51	0.09	0.17	**1.5**	*C54*
Ovary etc.	21	0	-	-	-	1.8	-	-	1.8	3.2	1.4	8.2	7	2.8	8.9	4.4	4.4	3.5	2.7	2.44	0.18	0.22	**2.1**	*C56*
Other female genita	7	0	-	-	-	-	-	-	-	-	-	-	-	2.8	4.4	4.4	4.4	10.6	0.9	0.81	0.04	0.08	**0.7**	*C51-C52;C57*
Bladder	12	0	-	-	-	-	-	-	-	-	-	-	3.5	2.8	-	4.4	13.3	17.6	1.6	1.39	0.03	0.12	**1.0**	*C67*
Kidney etc.	6	0	-	-	-	-	-	-	-	-	-	-	-	-	13.3	-	13.3	-	0.8	0.70	0.07	0.13	**0.8**	*C64-C66;C68*
Eye	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.00	**0.0**	*C69*
Brain, nervous system	7	0	-	2.2	-	-	-	-	-	-	-	1.4	-	2.8	8.9	4.4	-	3.5	0.9	0.81	0.08	0.10	**1.0**	*C70-C72*
Thyroid	9	0	-	-	-	-	-	-	-	-	-	-	1.8	-	-	21.8	-	10.6	1.2	1.04	0.01	0.12	**1.0**	*C73*
Other endocrine	1	0	-	-	-	-	-	-	-	1.6	-	-	-	-	-	-	-	-	0.1	0.12	0.01	0.01	**0.1**	*C74-C75*
Hodgkin's disease	3	0	-	-	-	-	-	-	1.8	-	-	-	1.8	-	4.4	-	-	-	0.4	0.35	0.04	0.04	**0.4**	*C81*
Non-Hodgkin lymphoma	31	0	-	-	-	-	-	3.4	1.8	3.2	2.7	2.7	5.3	8.3	-	13.1	35.5	17.6	4.0	3.60	0.14	0.36	**2.9**	*C82-C85;C96*
Multiple myeloma	6	0	-	-	-	-	-	-	-	-	-	-	1.8	-	4.4	8.7	8.9	-	0.8	0.70	0.03	0.12	**0.7**	*C88;C90*
Lymphoid leukaemia	5	0	2.5	2.2	1.9	-	1.6	-	-	-	-	-	-	-	-	-	4.4	-	0.7	0.58	0.03	0.06	**0.9**	*C91*
Myeloid leukaemia	14	0	2.5	-	1.9	1.8	-	1.7	-	-	1.4	1.4	-	-	8.9	-	8.9	14.1	1.8	1.62	0.10	0.13	**1.7**	*C92*
Monocytic leukaemia	1	0	-	-	-	-	1.6	-	-	-	-	-	-	-	-	-	-	-	0.1	0.12	0.00	0.01	**0.1**	*C93*
Other leukaemia	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.5	0.1	0.12	0.00	0.00	**0.1**	*C94*
Leukaemia unspec	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.5	0.1	0.12	0.00	0.00	**0.1**	*C95*
Other & unspecified	84	0	-	-	1.9	-	-	3.4	5.4	9.6	2.7	9.6	15.8	24.8	35.5	47.9	62.1	42.2	10.9	9.74	0.54	1.07	**8.8**	
All sites	**862**	**0**	**5**	**4**	**7**	**4**	**6**	**15**	**25**	**40**	**60**	**105**	**153**	**218**	**443**	**453**	**558**	**644**	**112.1**	**100.0**	**5.25**	**9.88**	**89.3**	

CHIANG MAI POPULATION AND ADMINISTRATIVE DIVISIONS

In 2005, Chiang Mai province was composed of 22 districts (amphoes) and 2 minor districts (king-amphoes) (Fig. 53). Local administration consisted of one municipality and 29 subdistrict municipality. Total population in Chiang Mai in 2005 was 1,650,009 persons, consisting of 811,990 males and 838,019 females. The population density averaged 82.1 people per km^2. The highest population density was in Muang District (1,460.3 per km^2), followed by Saraphi, Sanpatong, Sansai, and Sankamphaeng districts. The lowest population density was in Mae Chaem District (19.8 per km^2). Eighty percent of the population was born in the province, and the remainder was made up of Thai, Chinese, Laos, and hilltribe people. Buddhism was the professed religion of 91.8% of the people in the province. For the remainder, most were either Christians or Muslims.

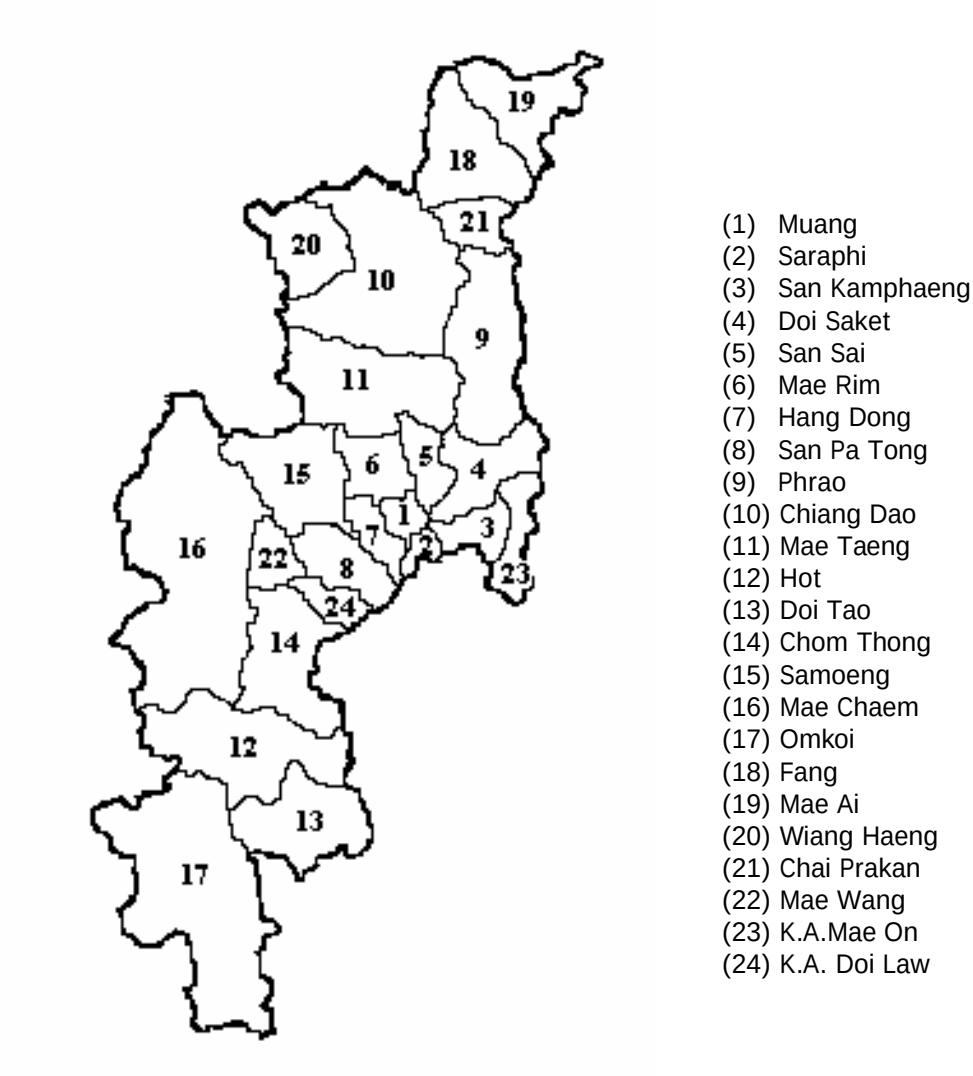

Figure 53: Districts of Chiang Mai

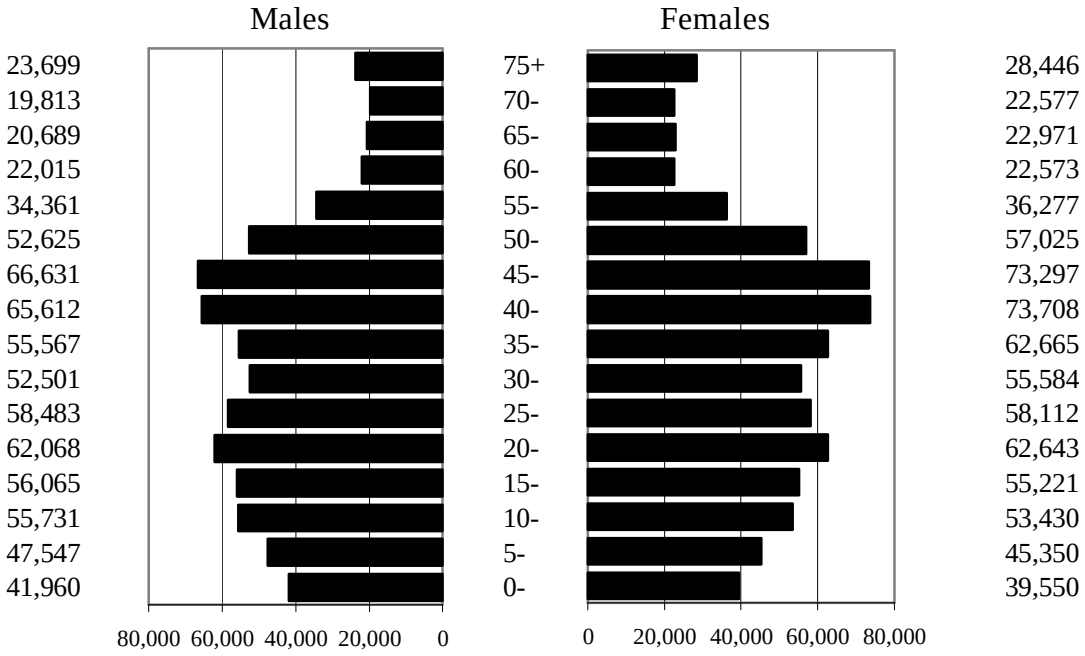

Figure 54: Population pyramid, Chiang Mai, 2005

Age and Sex

The age-sex distribution in 2005 is illustrated by population pyramids (Figure 54). In 2005, 18.8% of the total population was under age 15 and 12.1% over age 60.

HOSPITAL-BASED REGISTRATION

Maharaj Nakorn Chiang Mai Hospital

Maharaj Nakorn Chiang Mai Hospital is the teaching hospital of the Faculty of Medicine, Chiang Mai University. The hospital was built in 1939 in order to expand the services of the Chiang Mai Municipality Hospital to the public. Known locally as Suan Dok Hospital, it was officially named Nakorn Chiang Mai Hospital in 1941 and became the teaching hospital for the Faculty of Medicine in 1959. There have been phases of expansion and development since then. The name was changed to Maharaj Nakorn Chiang Mai Hospital in 1983 by royal permission. The hospital has 1,800 beds and serves about 415,000 out-patients and 49,200 in-patients each year. Many joint programs have been set up with other hospitals and health centers both inside and outside the Chiang Mai area to provide medical and educational support for physicians and medical students. In cooperation with the Ministry of Public Health, physicians from the Faculty of Medicine provide medical services at rural health centers or give special lectures for doctors and other health personnel at provincial hospitals.

Overview

In 2005, there were 4,108 cases of new invasive cancer at Maharaj Nakorn Chiang Mai Hospital. Thirty-six percent were Chiang Mai residents, 42.0% came from nearby provinces (Lampoon, Lampang, Phayao and Chiang Rai), 20.4% came from the other provinces in the northern region, and only 1.2% resided outside the northern region (Table 18).

Age and sex

There were 1,810 male and 2,298 female cancer cases in the year 2005, with a male to female ratio of 1:1.3, but 1,135 (49.4%) of the cancers in females occurred in sex-specific sites (i.e. breast and reproductive organs) while only 80 cases (4.4%) of cancers of males (i.e. prostate, testis, and penis cancers) occurred in sex-specific sites. When sex-specific sites were excluded, the male to female ratio increased to 1.5:1.

Ages ranged from less than one year to 98 years. The mean age at diagnosis was 54.9, and the median age was 55 years. For males, the mean age was 57.3 and the median age 59 years. For females, the mean age was 53.0 and the median age 52 years. In the age group 25 to 59, female cancer cases were much more common than male, but male cancer cases were more common than female after age 60 (Fig. 55). There were 100 cases of cancer in children (age less than 15), accounting for only 2.4% of all cases, but there were 1,618 cases in the old-age group (age 60 and over), accounting for 39.4% of all cases.

There were 214 in situ cases that were not included in this analysis. Cervix cancer in situ was the most common, accounting for 63.6% of cases.

Table 18: Locations of the invasive cancer cases

Location	cases	%
NORTHERN REGION	4042	98.4
Chiang Mai	1479	36.0
Chiang Rai	648	15.8
Lampoon	503	12.2
Phayao	375	9.1
Lampang	198	4.8
Nan	197	4.8
Phrae	175	4.3
Mae Hong Son	160	3.9
Tak	108	2.6
Sukhothai	77	1.9
Uttaradit	57	1.4
Kamphaingphet	19	0.5
Phitsanuloak	16	0.4
Phichit	11	0.3
Phetchabun	10	0.2
Nakhon Sawan	6	0.1
Uthai Thani	3	0.1
CENTRAL REGION	36	0.9
NORTHEASTERN REGION	8	0.2
SOUTHERN REGION	4	0.1
FOREIGNERS	19	0.5
TOTAL	4108	100.0

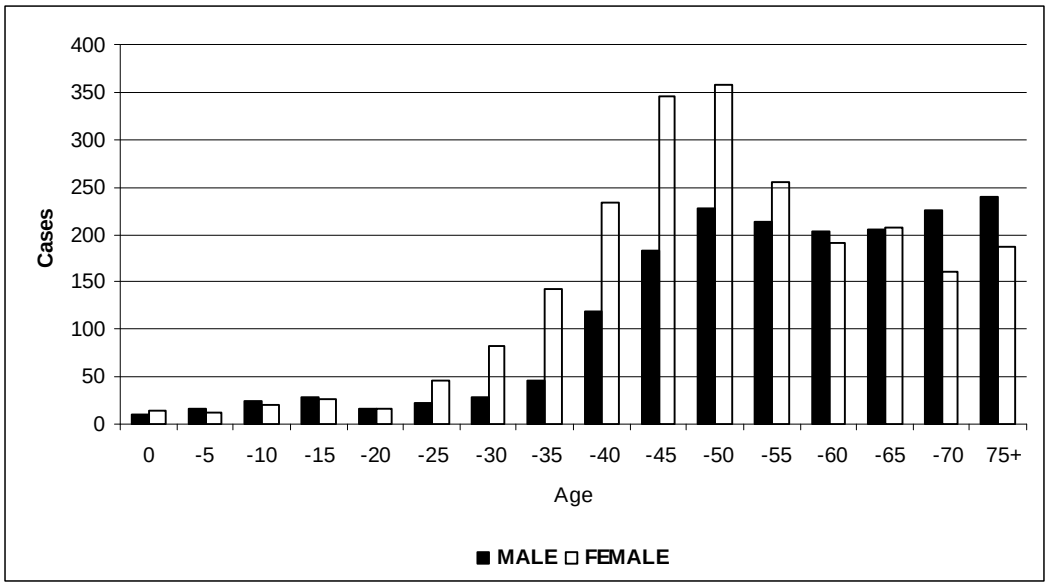

Figure 55: Age distribution of new cancer cases at Maharaj Nakorn Chiang Mai Hospital, 2005

Basis of diagnosis

There were 3,439 histologically verified cases (83.7%). Sixty nine percent had primary sites and 9.3% had metastasis sites (Table 20). By site, for both males and females, the incidence of cases clinically diagnosed was high for the liver (Table 22).

Table 19: Type of diagnosis

Type of diagnosis	No.	%
Histological verification	3439	83.7
Histology of primary	2839	69.1
Histology of metastasis	382	9.3
Cytology/hematology	218	5.3
No histological verification	669	16.3
Clinical only	36	0.9
Clinical and Investigations	545	13.3
Operation/surgery	81	2.0
Immuno/Biochemistry	7	0.2
	4108	100.0

Table 20: Stages of diseases

Stage	No.	%
Localized	887	21.6
Locally advanced	1409	34.3
Regional node metastasis	343	8.3
Distant metastasis	835	20.3
Not applicable	472	11.5
Unknown/Not staged	162	3.9
	4108	100.0

Stage of disease

Twenty-eight percent of cases were diagnosed at an advanced stage (20.3% distant metastasis and 8.3% regional node metastasis), and 55.9% were diagnosed at a localized stage and locally advanced (Table 20). Eleven percent were staged as*not applicable;* most of this group were lymphoma, leukemia, and brain tumor cases.

In 835 cases of distant metastasis, 13.2% had multiple sites of metastasis. The most common site of distant metastasis was lung (21.7%), followed by distant lymph nodes (21.4%), liver (16.5%), bone (14.0%), and brain (12.6%).

Leading sites of cancer cases

For invasive cancer in both sexes combined, lung cancer was the most common (14.1%), followed by cervix, liver, breast, and non-Hodgkin's lymphoma (Table 21). Together these five types of cancer accounted for 51.2% of all new cancers. For males, the most common cancer was lung cancer, accounting for 19.8% of all new cases, followed by liver cancer, non-Hodgkin's lymphoma, nasopharyngeal cancer, and rectal cancer. For females, the most common cancers were cervix cancer, accounting for 23.7% of all new cases, followed by breast, lung, ovary, and liver cancer.

Table 21: Ten leading cancers at Maharaj Nakorn Chiang Mai Hospital, 2005

	Males	cases	%	Females	cases	%	Both sexes	cases	%
1	Lung	359	19.8	Cervix	544	23.7	Lung	578	14.1
2	Liver	319	17.6	Breast	324	14.1	Cervix	544	13.2
3	NHL	114	6.3	Lung	219	9.5	Liver	433	10.5
4	Nasopharynx	77	4.0	Ovary	143	6.2	Breast	333	8.1
5	Bladder	72	4.0	Liver	115	5.0	NHL	217	5.3
6	Rectum	61	3.4	NHL	103	4.5	Ovary	143	3.5
7	Colon	60	3.3	Corpus	94	4.1	Colon	119	2.9
8	Stomach	57	3.1	Thyroid	74	3.2	Rectum	115	2.8
9	M.leukaemia	52	2.9	Colon	59	2.6	Nasopharynx	107	2.6
10	Prostate	48	2.7	Rectum	54	2.3	Thyroid	100	2.4

Childhood cancer

There were 100 cases of childhood cancer (ages less than 1 to 14), accounting for 2.4% of all cancer cases. The most common childhood cancer was leukemia, accounting for 49.0% of childhood cancer, followed by brain and nervous system (13.0%), NHL (6.0%), bone (5.0%), and eye (5.0%).

Table 22: Percentage of data verification by sites, 2005

	Males			Females			
	cases	%MV	%HV	cases	%MV	%HV	ICD-10th
Lip	4	100.0	100.0	2	100.0	100.0	C00
Tongue	23	91.3	91.3	16	93.8	93.8	C01-C02
Salivary gland	9	88.9	88.9	10	100.0	80.0	C07-C08
Mouth	30	93.3	93.3	31	96.8	96.8	C03-C06
Oropharynx	16	93.8	93.8	8	100.0	100.0	C09-C10
Nasopharynx	77	93.5	93.5	30	100.0	100.0	C11
Hypopharynx	24	100.0	100.0	1	100.0	100.0	C12-C13
Pharynx unspec.	2	50.0	50.0				C14
Oesophagus	22	72.7	72.7	9	77.8	77.8	C15
Stomach	57	87.7	87.7	38	94.7	94.7	C16
Small intestine	3	100.0	100.0	5	80.0	80.0	C17
Colon	60	81.7	81.7	59	86.4	86.4	C18
Rectum	61	93.4	93.4	54	94.4	94.4	C19-C21
Liver	318	33.3	33.0	115	43.5	40.9	C22
Gallbladder	30	56.7	56.7	28	85.7	85.7	C23-C24
Pancreas	20	40.0	40.0	23	39.1	34.8	C25
Nose, sinuses	18	88.9	88.9	7	85.7	85.7	C30-C31
Larynx	44	93.2	93.2	13	92.3	92.3	C32
Bronchus, lung	359	77.2	68.0	219	69.9	60.3	C33-C34
Other thoracic organs	5	100.0	100.0	8	87.5	62.5	C37-C38
Bone	14	85.7	85.7	10	100.0	100.0	C40-C41
Connective tissue	19	100.0	100.0	13	84.6	84.6	C47;C49
Mesothelioma							C45
Kaposi's sarcoma	2	100.0	100.0	1	100.0	100.0	C46
Melanoma of skin	11	100.0	100.0	6	100.0	100.0	C43
Other skin	50	100.0	100.0	46	100.0	100.0	C44
Breast	9	100.0	100.0	324	96.9	93.8	C50
Uterus unspec.							C55
Cervix uteri				544	98.3	98.3	C53
Placenta				5	40.0	40.0	C58
Corpus uteri				94	96.8	96.8	C54
Ovary				143	93.7	90.9	C56
Other female genital				23	95.7	95.7	C51-C52;C57
Prostate	47	74.5	72.3				C61
Testis	10	90.0	90.0				C62
Penis	23	100.0	100.0				C60
Other male genital							C63
Bladder	72	97.2	95.8	21	100.0	100.0	C67
Kidney	14	78.6	78.6	12	75.0	75.0	C64-C66;C68
Eye	6	50.0	50.0	4	75.0	75.0	C69
Brain, nervous system	34	61.8	61.8	30	50.0	50.0	C70-C72
Thyroid	26	100.0	92.3	74	100.0	94.6	C73
Other endocrine	7	57.1	57.1	3	100.0	100.0	C74-C75
Hodgkin's disease	10	100.0	100.0	7	100.0	100.0	C81
Non-Hodgkin lymphoma	114	100.0	100.0	104	100.0	97.1	C82-C85;C96
Multiple myeloma	14	100.0	21.4	10	100.0	40.0	C88;C90
Lymphoid leukaemia	27	100.0	14.8	27	100.0	25.9	C91
Myeloid leukaemia	52	100.0	38.5	39	100.0	28.2	C92
Monocytic leukaemia				1	100.0	0.0	C93
Other leukaemia				1	100.0	100.0	C94
Leukaemia unspec.	3	100.0	33.3	4	100.0	25.0	C95
Other & unspecified	64	64.1	62.5	76	77.6	73.7	
All sites	1810	76.5	70.6	2298	89.4	84.6	

%MV Percentage of cases with morphological verification (cytology and morphology)
%HV Percentage of cases with histological verification
ICD-10th ICD-10 code

Table 23: NUMBER OF NEW CANCER CASES IN MAHARAJ NAKORN CHIANGMAI HOSPTAL 2005, MALES

Number of cases by Age Group (years)

SITE	All Ages	Age Unk.	0-	5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75+	%	*ICD (10th)*
Lip	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0.2	*C00*
Tongue	23	0	0	0	0	0	0	0	2	0	3	4	1	2	1	4	3	3	1.3	*C01-C02*
Salivary gland	9	0	0	0	0	0	0	1	1	0	0	0	1	0	1	1	1	3	0.5	*C07-C08*
Mouth	30	0	1	0	0	0	0	0	0	0	2	1	5	0	5	5	4	7	1.7	*C03-C06*
Oropharynx	16	0	0	0	0	0	0	0	0	0	3	2	2	0	2	2	1	4	0.9	*C09-C10*
Nasopharynx	77	0	0	0	0	1	2	0	2	1	4	20	13	15	4	7	6	2	4.3	*C11*
Hypopharynx	24	0	0	0	0	0	0	0	0	0	1	2	4	0	1	5	4	7	1.3	*C12-C13*
Pharynx unspec.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.1	*C14*
Oesophagus	22	0	0	0	0	0	0	0	0	0	0	1	5	0	5	7	3	1	1.2	*C15*
Stomach	57	0	0	0	0	0	1	1	1	1	4	6	9	5	6	7	7	9	3.1	*C16*
Small intestine	3	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0.2	*C17*
Colon	60	0	0	0	0	1	0	1	1	2	5	5	1	7	7	9	12	9	3.3	*C18*
Rectum	61	0	0	0	0	1	0	0	0	2	5	6	8	9	6	5	10	9	3.4	*C19-C21*
Liver	318	0	1	1	1	2	0	0	1	12	35	47	51	53	35	27	30	22	17.6	*C22*
Gallbladder etc.	30	0	0	0	0	0	0	1	0	1	2	4	5	4	6	0	5	2	1.7	*C23-C24*
Pancreas	20	0	0	0	0	0	0	0	1	0	2	3	2	4	1	3	4	0	1.1	*C25*
Nose, sinuses etc	18	0	0	0	1	0	1	1	0	1	1	1	3	4	1	1	0	3	1.0	*C30-C31*
Larynx	44	0	0	0	0	0	0	0	0	0	2	5	4	3	9	2	10	9	2.4	*C32*
Bronchus, lung	359	0	0	0	0	0	1	0	2	5	10	25	55	51	58	63	54	35	19.8	*C33-C34*
Other Thoracic organs	5	0	0	0	0	2	0	0	0	0	1	0	0	0	1	0	1	0	0.3	*C37-C38*
Bone	14	0	1	0	1	6	1	2	2	0	0	0	1	0	0	0	0	0	0.8	*C40-C41*
Connective tissue	19	0	0	0	2	0	2	1	0	0	1	0	4	1	3	2	0	3	1.0	*C47;C49*
Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C45*
Kaposi's sarcoma	2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.1	*C46*
Melanoma of skin	13	0	0	0	0	0	0	0	0	1	2	2	1	1	0	1	1	4	0.7	*C43*
Other skin	48	0	0	0	0	0	0	2	2	0	1	4	1	6	6	4	5	17	2.7	*C44*
Breast	9	0	0	0	0	1	0	0	1	1	1	1	0	0	1	0	2	1	0.5	*C50*
Prostate	47	0	0	0	0	0	0	0	0	0	0	0	2	1	3	10	10	21	2.6	*C61*
Testis	10	0	1	0	0	0	1	1	2	3	0	1	0	0	1	0	0	0	0.6	*C62*
Penis	23	0	0	0	0	0	0	0	1	1	5	2	2	1	3	2	1	5	1.3	*C60*
Other male genital	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C63*
Bladder	72	0	0	0	0	0	0	1	0	1	2	2	3	4	9	7	7	16	20	4.0	*C67*
Kidney etc.	14	0	0	0	0	0	0	0	0	0	0	2	0	2	2	2	1	0	5	0.8	*C64-C66;C68*
Eye	6	0	3	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0.3	*C69*
Brain, nervous system	34	0	0	4	4	2	0	2	2	2	3	5	6	1	1	1	0	1	1.9	*C70-C72*
Thyroid	26	0	0	0	1	0	0	0	3	1	1	1	1	5	4	3	4	2	1.4	*C73*
Other endocrine	7	0	0	0	0	3	0	0	0	0	0	1	0	0	0	2	1	0	0.4	*C74-C75*
Hodgkin's disease	10	0	1	0	1	0	1	1	1	1	0	0	0	0	2	0	1	1	0.6	*C81*
Non-Hodgkin's lymphoma	114	0	1	1	2	2	0	2	1	3	12	13	17	13	8	10	10	19	6.3	*C82-C85;C96*
Multiple myeloma	14	0	0	0	0	0	0	0	0	0	0	1	1	4	1	3	2	2	0.8	*C88;C90*
Lymphoid leukaemia	27	0	1	8	6	2	0	0	0	2	2	1	1	2	0	0	1	1	1.5	*C91*
Myeloid leukaemia	52	0	1	2	3	4	4	4	1	3	2	8	4	2	3	2	4	5	2.9	*C92*
Monocytic leukaemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C93*
Other leukaemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C94*
Leukaemia unspec.	3	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	*C95*
Other & unspecified	64	0	0	0	0	1	0	0	0	2	4	7	10	9	9	7	9	6	3.5	
All sites	**1810**	**0**	**11**	**17**	**25**	**28**	**16**	**22**	**28**	**47**	**118**	**182**	**228**	**214**	**204**	**205**	**225**	**240**	**100.0**	

Table 24: NUMBER OF NEW CANCER CASES IN MAHARAJ NAKORN CHIANGMAI HOSPTAL 2005, FEMALES

			Number of cases by Age Group (years)																		
SITE	**All Ages**	**Age Unk.**	**0-**	**5-**	**10-**	**15-**	**20-**	**25-**	**30-**	**35-**	**40-**	**45-**	**50-**	**55-**	**60-**	**65-**	**70-**	**75+**	**%**	***ICD (10th)***
Lip	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.1	*C00*
Tongue	16	0	0	0	0	0	0	0	0	1	1	5	2	3	2	0	0	2	0.7	*C01-C02*
Salivary gland	10	0	0	0	0	1	0	0	1	2	1	0	1	2	0	0	1	1	0.4	*C07-C08*
Mouth	31	0	0	0	0	0	0	0	0	0	0	0	3	2	4	3	4	15	1.3	*C03-C06*
Oropharynx	8	0	0	0	0	1	0	0	0	0	1	1	0	3	1	0	0	1	0.3	*C09-C10*
Nasopharynx	30	0	0	0	0	0	0	1	1	1	8	4	5	3	1	2	3	1	1.3	*C11*
Hypopharynx	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.0	*C12-C13*
Pharynx unspec.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C14*
Oesophagus	9	0	0	0	0	0	0	0	0	0	1	0	1	2	1	1	1	2	0.4	*C15*
Stomach	38	0	0	0	0	1	0	2	3	2	3	2	8	2	3	2	7	3	1.7	*C16*
Small intestine	5	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	1	1	0.2	*C17*
Colon	59	0	0	0	0	1	0	0	2	3	4	7	8	5	6	5	5	13	2.6	*C18*
Rectum	54	0	0	0	0	0	0	1	4	2	4	12	6	2	8	10	3	2	2.3	*C19-C21*
Liver	115	0	0	0	0	0	0	0	1	5	11	18	15	18	7	17	14	9	5.0	*C22*
Gallbladder etc.	28	0	0	0	0	1	0	0	0	0	1	2	3	4	4	7	3	3	1.2	*C23-C24*
Pancreas	23	0	0	0	0	0	0	0	0	0	1	5	4	3	1	3	1	5	1.0	*C25*
Nose, sinuses etc	7	0	0	0	0	0	0	0	0	1	3	0	1	0	0	2	0	0	0.3	*C30-C31*
Larynx	13	0	0	0	0	0	0	0	0	0	1	0	1	1	2	1	4	3	0.6	*C32*
Bronchus, lung	219	0	0	0	1	0	2	0	3	2	6	24	28	34	27	40	23	29	9.5	*C33-C34*
Other Thoracic organs	8	0	0	0	0	1	0	0	0	1	0	0	0	3	1	0	1	1	0.3	*C37-C38*
Bone	10	0	0	1	2	0	0	1	1	0	1	1	2	0	0	0	0	1	0.4	*C40-C41*
Connective tissue	13	0	0	0	2	0	0	2	2	0	2	1	1	2	0	1	0	0	0.6	*C47;C49*
Mesothelioma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C45*
Kaposi's sarcoma	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.0	*C46*
Melanoma of skin	7	0	0	0	0	0	0	1	0	0	0	0	0	3	0	1	1	1	0.3	*C43*
Other skin	45	0	0	0	0	1	0	0	0	1	4	3	3	7	1	7	7	11	2.0	*C44*
Breast	324	0	0	0	0	0	2	5	14	18	52	71	73	30	18	20	10	11	14.1	*C50*
Uterus unspec.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.1	*C55*
Cervix uteri	544	0	0	0	0	0	1	7	22	62	82	117	85	56	43	28	18	23	23.7	*C53*
Placenta	5	0	0	0	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0.2	*C58*
Corpus uteri	94	0	0	0	0	0	0	0	3	3	2	7	26	15	17	10	8	3	4.1	*C54*
Ovary etc.	143	0	1	1	0	4	4	6	8	6	11	26	32	16	11	8	3	6	6.2	*C56*
Other female genital	23	0	0	0	0	0	0	0	0	2	0	4	4	3	3	3	1	3	1.0	*C51-C52;C57*
Bladder	21	0	0	0	0	0	0	0	0	0	1	0	4	2	4	3	4	3	0.9	*C67*
Kidney etc.	12	0	0	0	1	0	0	0	0	1	0	0	1	2	3	2	2	0	0.5	*C64-C66;C68*
Eye	4	0	1	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0.2	*C69*
Brain, nervous system	30	0	0	2	3	5	1	2	1	4	4	1	3	2	0	0	1	1	1.3	*C70-C72*
Thyroid	74	0	0	0	2	3	3	4	3	7	10	9	10	3	5	8	0	7	3.2	*C73*
Other endocrine	3	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0.1	*C74-C75*
Hodgkin's disease	7	0	0	0	1	0	1	0	1	1	0	0	0	0	1	1	0	1	0.3	*C81*
Non-Hodgkin's lymphoma	103	0	0	0	2	3	0	6	6	5	8	10	14	11	1	9	17	11	4.5	*C82-C85;C96*
Multiple myeloma	10	0	0	0	0	0	1	0	0	1	1	2	0	2	1	2	0	0	0.4	*C88;C90*
Lymphoid leukaemia	27	0	8	5	4	1	0	3	1	0	1	0	0	2	1	0	1	0	1.2	*C91*
Myeloid leukaemia	40	0	2	1	3	2	0	2	3	3	4	3	1	2	5	2	2	5	1.7	*C92*
Monocytic leukaemia	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.0	*C93*
Other leukaemia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	*C94*
Leukaemia unspec.	4	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.2	*C95*
Other & unspecified	75	0	1	0	0	0	0	1	1	8	3	8	9	11	7	7	13	6	3.3	
All sites	**2298**	**0**	**14**	**12**	**21**	**26**	**17**	**46**	**83**	**143**	**233**	**345**	**358**	**256**	**190**	**207**	**160**	**187**	**100.0**	

References

1. Fritz A, Percy C, Jack A, Shanmugaratnam K, Sobin L, Parkin DM, and Whelan S. International Classification of Diseases for Oncology. 3rd Ed. World Health Organization, 2000.
2. Jensen OM, Parkin DM, MacLennan R, Muir CS and Skeet RG. Cancer Registration; Principles and Methods. IARC Scientific Publication No. 95. IARC, Lyon, France, 1991.
3. Ferlay J. IARCcrg Tools Program. Version 2.03. Descriptive Epidemiology Group. IARC, Lyon, France, 2005.
4. Parkin DM, Ferley J, Cooke A. CanReg3 Software. Version 3.09. Descriptive Epidemiology Group. IARC, Lyon, France.
5. Doll R, Payne P and Waterhouse J. Cancer Incidence in Five Continents: A Technical Report, Berlin, Springer-Verlag (for UICC), 1966.