

**CANCER INCIDENCE AND MORTALITY  
IN CHIANG MAI**

**2007**



**CHIANG MAI CANCER REGISTRY  
MAHARAJ NAKORN CHIANG MAI HOSPITAL  
FACULTY OF MEDICINE, CHIANG MAI UNIVERSITY  
CHIANG MAI, THAILAND**

# **CANCER INCIDENCE AND MORTALITY IN CHIANG MAI**

**2007**



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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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## **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 27<sup>th</sup> 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 2007. 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, 14 private hospitals, and 22 community hospitals, with a total of 6,147 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. The identities of all patients were 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 personal computers at the Chiang Mai Cancer Registry, using CanReg4 software for data entry and editing. 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. Instead, 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 who 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 (2). 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

The staging guide in Cancer Registration; Principles and Methods (3) was 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 the mortality data were checked by the IARCcrgTools program (Ferlay J, 2005) (4). Rates were calculated by the computer program CanReg4 (Cooke A, Parkin DM, Ferlay J, 2006) (5). All rates were expressed per 100,000 population and age adjusted by the direct method to

the world standard population (6). 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.

$$AR = N_i/P_i \times 100,000$$

where  $N_i$  = number of new cancers occurring in the  $i^{\text{th}}$  age group

$P_i$  = population of the  $i^{\text{th}}$  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 ( $AR_i$ ) was multiplied by the number of persons in that age group in the standard population ( $P_{i.\text{std}}$ ); this value was then divided by the total standard population and the values obtained were the sum of all age groups.

$$ASR(\text{WORLD}) = \text{sum}(AR_i \times P_{i.\text{std}}) / \text{total standard population}$$

$AR_i$  = age specific rate in the  $i^{\text{th}}$  age group

$P_{i.\text{std}}$  = the number in the  $i^{\text{th}}$  age group in the standard population.

$$\text{or } ASR(\text{WORLD}) = \text{sum}(N_i \times P_{i.\text{std}} \times 100,000 / P_i) / \text{total } P_{i.\text{std}}$$

$N_i$  = number of new cancers occurring in the  $i^{\text{th}}$  age group

$P_i$  = population of the  $i^{\text{th}}$  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;

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

where Cumulative rate =  $\sum_{i=1}^n (F_i \times T_i / P_i)$

$n$  = number of age group which cumulative risk includes

$F_i$  = number of new cancers occurring in the  $i^{\text{th}}$  age group

$T_i$  = number of years in  $i^{\text{th}}$  age group

$P_i$  = population of  $i^{\text{th}}$  age group in the total population

**Table 1: Estimated new cancer cases and deaths by sex, Chiang Mai, Thailand, 2007**

	Estimated New Cases			Estimated Deaths		
	Both sexes	Males	Females	Both sexes	Males	Females
<b>All sites</b>	<b>2956</b>	<b>1340</b>	<b>1616</b>	<b>1907</b>	<b>995</b>	<b>912</b>
<b>Oral cavity and pharynx</b>	<b>117</b>	<b>67</b>	<b>50</b>	<b>87</b>	<b>57</b>	<b>30</b>
Lip	7	3	4	1	0	1
Tongue	21	15	6	16	12	4
Mouth	21	9	12	16	7	9
Salivary glands	8	0	8	7	3	4
Tonsil	6	4	2	7	5	2
Other Oropharynx	4	2	2	3	1	2
Nasopharynx	41	29	12	23	20	3
Hypopharynx	9	5	4	14	9	5
Pharynx unspecified	0	0	0	0	0	0
<b>Digestive system</b>	<b>856</b>	<b>521</b>	<b>335</b>	<b>665</b>	<b>409</b>	<b>256</b>
Esophagus	24	15	9	21	12	9
Stomach	115	66	49	98	62	36
Small intestine	7	4	3	2	1	1
Colon	127	72	55	90	42	48
Rectum	130	73	57	63	39	24
Anus	6	1	5	1	1	0
Liver	364	253	111	330	226	104
Gallbladder	43	19	24	30	12	18
Pancreas	40	18	22	30	14	16
<b>Respiratory system</b>	<b>562</b>	<b>313</b>	<b>249</b>	<b>496</b>	<b>254</b>	<b>242</b>
Nose, sinuses etc.	10	6	4	4	3	1
Larynx	23	15	8	17	10	7
Lung	524	288	236	472	241	231
Other Thoracic organs	5	4	1	3	0	3
<b>Bone</b>	<b>13</b>	<b>8</b>	<b>5</b>	<b>7</b>	<b>7</b>	<b>0</b>
<b>Soft tissue</b>	<b>20</b>	<b>11</b>	<b>9</b>	<b>10</b>	<b>5</b>	<b>5</b>
Connective tissue	18	10	8	10	5	5
Mesothelioma	0	0	0	0	0	0
Kaposi's sarcoma	2	1	1	0	0	0
<b>Skin</b>	<b>123</b>	<b>67</b>	<b>56</b>	<b>35</b>	<b>19</b>	<b>16</b>
Melanoma of skin	16	9	7	9	6	3
Non-melanoma of skin	107	58	49	26	13	13
<b>Breast</b>	<b>297</b>	<b>7</b>	<b>290</b>	<b>82</b>	<b>3</b>	<b>79</b>
<b>Genital system</b>	<b>449</b>	<b>70</b>	<b>379</b>	<b>178</b>	<b>40</b>	<b>138</b>
Vulva	5		5	4		4
Vagina	4		4	1		1
Cervix	250		250	99		99
Corpus	47		47	14		14
Uterus	0		0	0		0
Ovary	69		69	19		19
Other Female Genital	2		2	0		0
Placenta	2		2	1		1
Penis	12	12		10	10	
Prostate	51	51		25	25	
Testis	7	7		4	4	
Other male genital	0	0		1	1	
<b>Urinary system</b>	<b>112</b>	<b>73</b>	<b>39</b>	<b>70</b>	<b>50</b>	<b>20</b>
Kidney	23	14	9	17	14	3
Renal Pelvis	2	1	1	1	1	0
Ureter	1	0	1	2	1	1
Bladder	84	57	27	50	34	16
Other Urinary organs	2	1	1	0	0	0
<b>Eye</b>	<b>7</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Brain, nervous system</b>	<b>21</b>	<b>12</b>	<b>9</b>	<b>21</b>	<b>15</b>	<b>6</b>
<b>Endocrine system</b>	<b>44</b>	<b>7</b>	<b>37</b>	<b>13</b>	<b>3</b>	<b>10</b>
Thyroid	40	5	35	10	2	8
Adrenal gland	2	2	0	1	0	1
Other Endocrine	2	0	2	2	1	1
<b>Lymphoma</b>	<b>121</b>	<b>70</b>	<b>51</b>	<b>55</b>	<b>39</b>	<b>16</b>
Hodgkin disease	10	4	6	2	2	0
Non-Hodgkin lymphoma	111	66	45	53	37	16
Immunoproliferative dis.	0	0	0	0	0	0
<b>Multiple myeloma</b>	<b>14</b>	<b>9</b>	<b>5</b>	<b>15</b>	<b>8</b>	<b>7</b>
<b>Leukaemia</b>	<b>62</b>	<b>30</b>	<b>32</b>	<b>39</b>	<b>17</b>	<b>22</b>
Lymphoid Leukemia	14	8	6	9	6	3
Myeloid Leukemia	44	22	22	25	11	14
Leukemia unspec.	4	0	4	5	0	5
<b>Other &amp; unspecified</b>	<b>138</b>	<b>72</b>	<b>66</b>	<b>134</b>	<b>69</b>	<b>65</b>

## Population-based Registration

### Overview

In the year 2007, there were an estimated 2,956 new invasive cancer cases and 269 in situ cases in Chiang Mai province. There were 1,616 males, and 1,340 females with a male to female ratio of 1.2:1 and in the same period, 995 males and 912 females died from cancer (Table 1). The number of new cancer cases increased from 1,313 cases in males but decreased from 1,471 cases in females compared to the year 2006. The number of cancer death in males decreased from 1030 cases and in females increased from 875 cases in the year 2005.

The data were obtained from the followings: 60.5% from Maharaj Nakorn Chiang Mai Hospital, 18.4% from Nakhonping Hospital (the provincial hospital), 2.7% from other government hospitals, 5.5% from community hospitals, 6.9% from private hospitals, and 6.0% from death certificates.

The standardized incidence rates were 144.6 for males and 156.6 for females. The cumulative rate percentages to age 75 were 15.7% for males (Table 12) and 16.0% for females (Table 13). These represented cumulative risks for developing of cancer of 10 in 64 for men and 10 in 62 for women. In the year 2007, the incidence in both males and females trended to continue increasing from the year 1999 (Fig. 1).

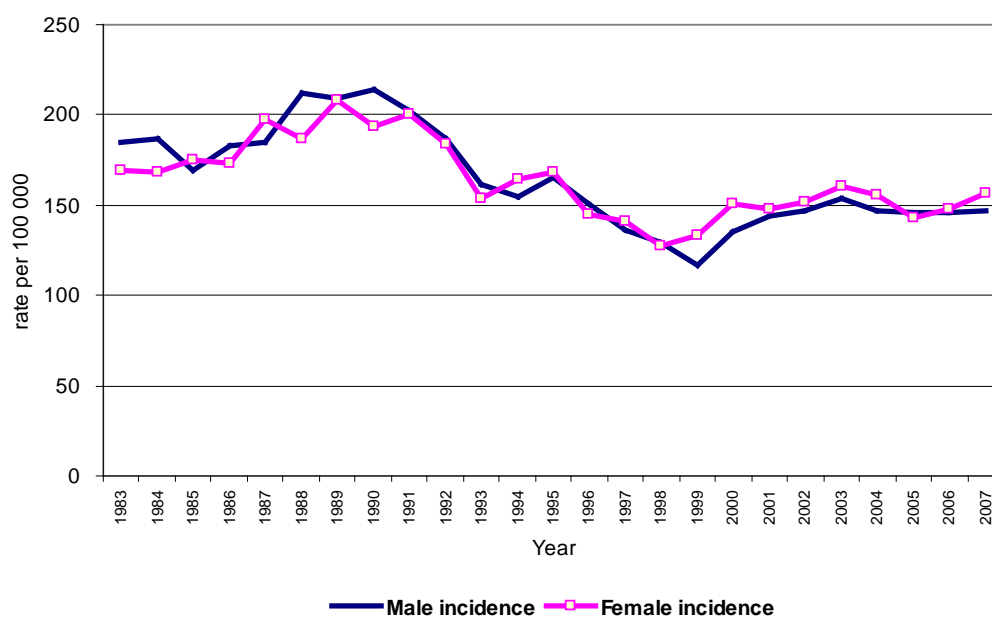


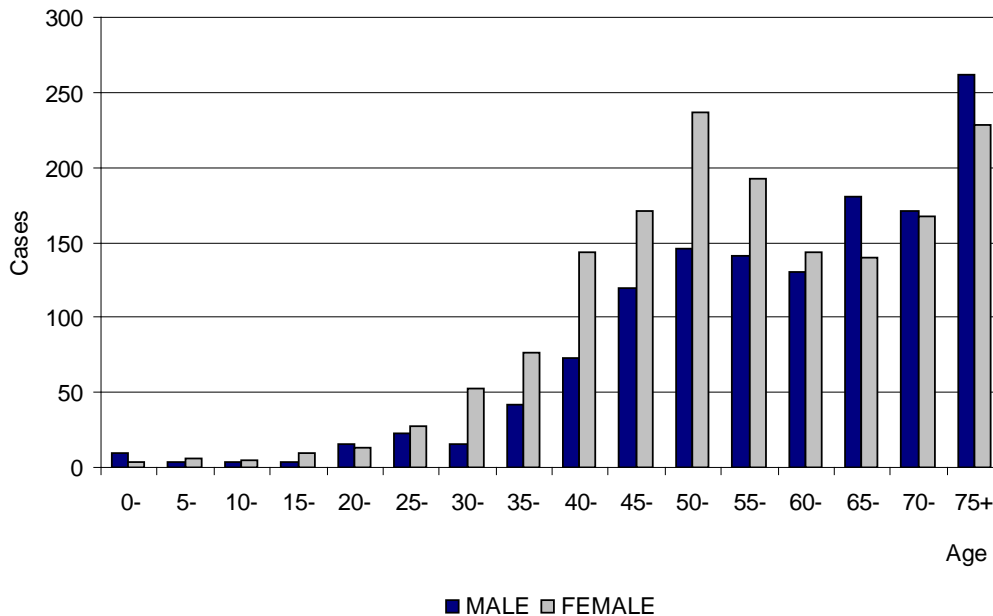
Figure 1: Age-standardized incidence rates (world) of cancer in Chiang Mai, 1983-2007

### INCIDENCE

#### *Age and Sex*

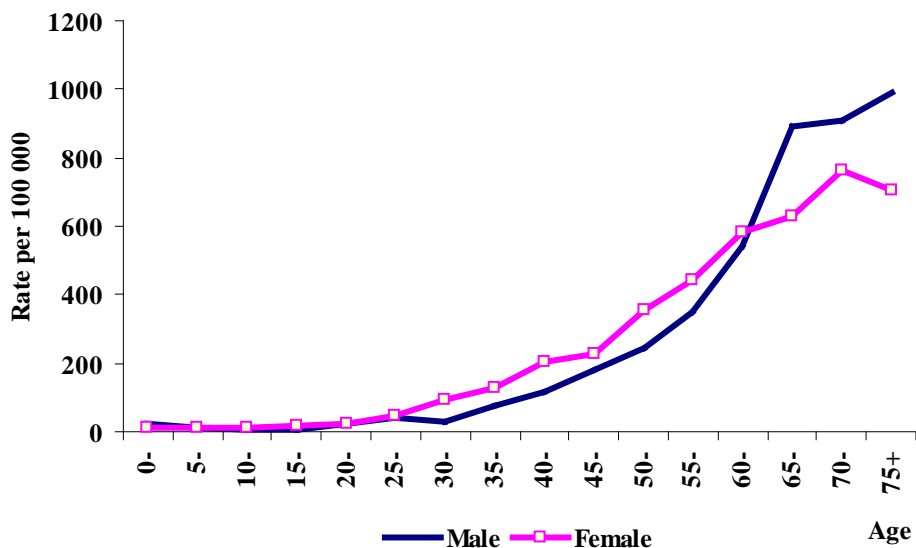
The age at diagnosis in males ranged from less than one year to 94 years, with a mean age of 60.3 years and a median age of 62 years (Fig. 2) and in females ranged from less than one year to 98 years, with the mean age at diagnosis of 56.7 years and a median age of 56 years. Childhood cancers were relatively uncommon in Chiang Mai. Only 33 cases(1.1%) of all cancers occurred before age 15, whereas 51.9% occurred after age 60.

The male to female ratio was approximately 1.2:1, but 41.4% of the cancers in females occurred in sex-specific sites (i.e., breast and reproductive organs) while only 4.9% of the cancers in males occurred in sex-specific sites (i.e., prostate, testis, and penis). When sex-specific sites were excluded, the male to female ratio changed to 1.3:1 because of the higher incidence of lung cancer and liver cancer in males.



**Figure 2: Age group distribution of new cancer cases in Chiang Mai, 2007**

In the age group 30-59 years, more women had cancer than men, because of the large number of the breast and cervix cancers. 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 of 25 years in both sexes, and males outnumbered females after the age of 65 (Fig. 3).



**Figure 3: Age-specific incidence rates, Chiang Mai, 2007**

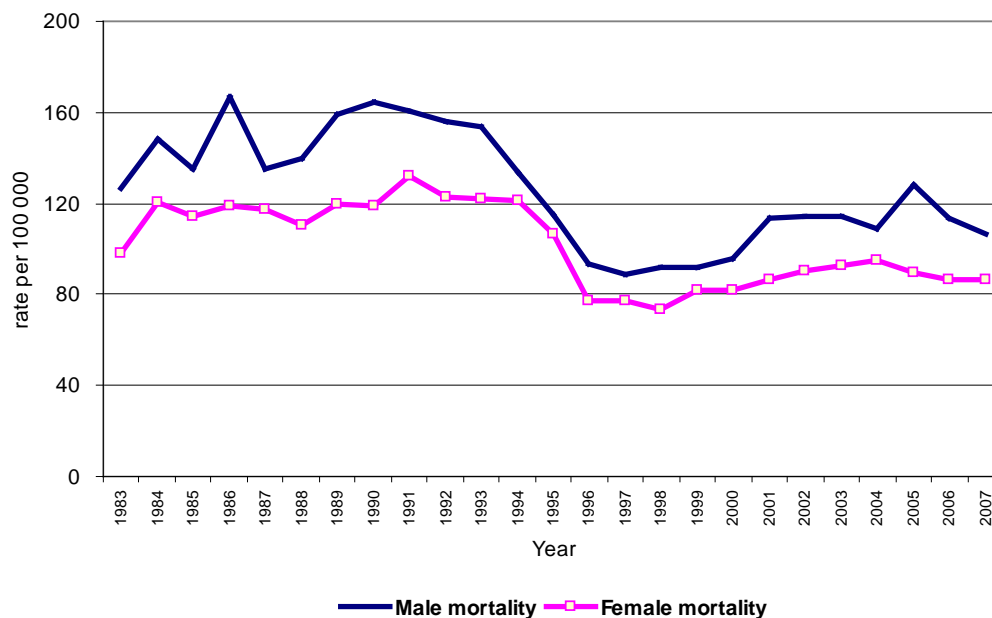
### *Incidence of New Cancer Cases by Districts*

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

## **MORTALITY**

### *Age and Sex*

In 2007, there were an estimated 1,907 cancer death cases (995 males, 912 females, Table 1), accounting for 15.5% of 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 106.4 per 100,000 males (Table 16) and 86.3 per 100,000 females (Table 17). Cancer death rates for men and women have continued to decrease since 2005 (Fig. 4). The age-specific mortality rate increased after the age of 45 years for both sexes and after the age of 65, the rate for men was greater than that of women (Fig. 5). The cumulative rate percentages to age 75 were 11.6% for males (Table 16) and 9.7% for females (Table 17). These represented risks of dying from cancer that were 10 in 86 for males and 10 in 103 for females.



**Figure 4: Age-standardized mortality rates (world) of cancer in Chiang Mai, 1983-2007**

For all cancer death cases, 1,390 cases (72.2%) survived less than one year, while only 103 cases (5.4%) 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 Chom Thong district, followed by Samoeng, San Sai, Mae On, and Saraphi districts. These high mortality rates were because of mortality from lung and liver cancer. For females, the highest mortality rate was in Hang Dong district, followed by Chom Thong, Hot, San Sai and San Kamphaeng districts (Table 5). The high mortality rates were because of mortality from lung, cervix, liver, and breast cancer.

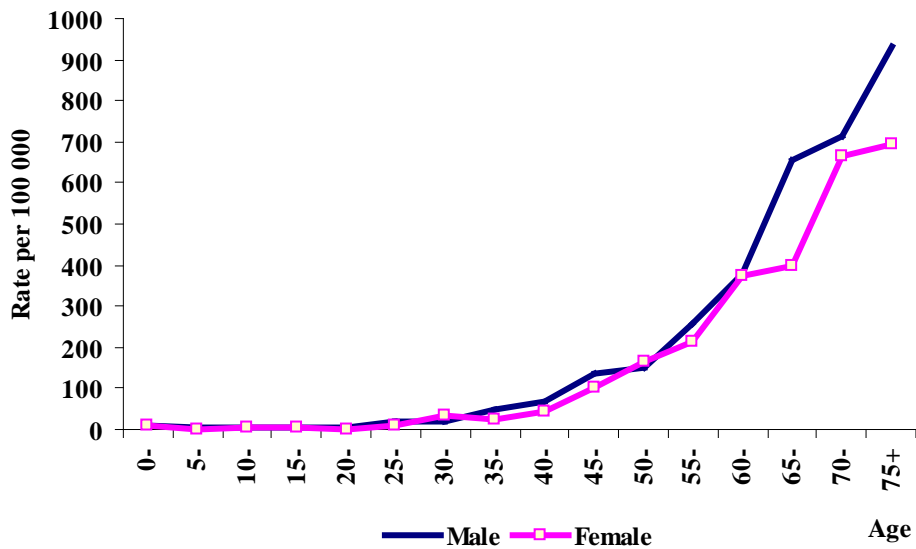


Figure 5: Age-specific mortality rate, Chiang Mai, 2007

## **DIAGNOSIS AND STAGE OF CANCER**

### ***Basis of Diagnosis***

2,169 cases (73.4%) were histologically verified, with 60.3% from primary sites and 7.0% from metastasis sites (Table 2). Nineteen percent were clinically diagnosed and 6.1% were determined from death certificates only. By site, the percentages of histologically verified cases were low for cancer of the pancreas, liver, brain and lung (Table 8 and Table 9).

### ***Stage of Cancer***

Forty-nine percent were diagnosed in localized and locally advanced stages, and 21.7% had distant metastasis (Table 3). Since 2001, distant metastasis cases at first diagnosis have decreased, and locally advanced cases have increased every year, which indicates that cancer is being diagnosed earlier. 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 lung (21.9%), followed by distant lymph nodes (17.3%), liver (13.1%), bone (11.3%) and brain (10.3%).

**Table 2: Basis of diagnosis**

Type of diagnosis	No.	%
<b>Histological verification</b>	<b>2,169</b>	<b>74.7</b>
Histology of primary	1,783	60.3
Histology of metastasis	208	7.0
Cytology/hematology	178	6.0
Autopsy	0	0.0
<b>No histological verification</b>	<b>608</b>	<b>20.6</b>
Clinical only	44	1.5
Clinical and investigations	524	17.7
Operation/surgery	33	1.1
Immuno/biochemistry	7	0.2
<b>Death certificate only</b>	<b>179</b>	<b>6.1</b>
<i>Unknown</i>	<i>0</i>	<i>0.0</i>
	<b>2,956</b>	<b>100.0</b>

**Table 3: Stage of disease**

Stage	No.	%
Localized	405	13.7
Locally advanced	1062	35.9
Regional node metastasis	358	12.1
Distant metastasis	640	21.7
Not applicable	224	7.6
Unknown/not staged	267	9.0
	<b>2,956</b>	<b>100.0</b>

### Leading Sites of Cancer Incidence

Of invasive cancer in both sexes combined, lung cancer was the most common (524 cases), followed by liver, breast, cervix and rectal cancer. Together these five types of cancer accounted for 52.9% of all new cancers. For males, the most common cancer was lung cancer, accounting for 21.5% of all newly diagnosed cases, followed by liver, rectum, colon and stomach cancer (Fig. 6). For females, the most common cancer was breast cancer, accounting for 17.9% of all newly diagnosed cases, followed by cervical, lung, liver, and ovarian cancer.

The most frequent cancers for the under 15-year age group were leukemia, brain and nervous system, and bone cancers (Table 6). In the age group 15-29 years, common cancers in males were liver, NHL, colon, and rectum, and common cancers in females were ovary, thyroid, NHL, and breast. In the age group 30-59 years, liver cancer was more common than lung cancer in males and breast cancer was more common than cervical cancer in females. Lung cancer was the most common cancer in males after the age of 60 years, and liver cancer was the second most common cancer. 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 (24.2%) was the most common cause of cancer death, followed by liver, cervix, stomach and colon cancer (Fig. 7). Lung and liver cancer accounted for 57.2% of all cancer deaths. For males, the lung was the most common site of fatal cancers, accounting for 24.2%, followed by the liver, stomach, colon, and rectum. For females, the lung was also the most common site of fatal cancers, accounting for 25.3%, followed by liver, cervix, breast, and colon.

Leukemia was the most common cause of death in childhood cancer. For males, liver cancer was the most common cause of death in the age group 30-59, and second after lung cancer in the age group of 60 and more (Table 7). For females, cervical cancer was the most common cause in the age group 30-44, and lung cancer was the most common cause of fatal cancer in the age group 45 and over.



**Table 4: Incidence and common sites of new cancer cases in districts of Chiang Mai, 2007**

	Districts	Rates	All sites	Males							Females		
				Lung	Liver	Rectum	Colon	NHL	Stomach	Skin*	Bladder	Prostate	
Males	Muang	171.6	234	34	47	13	19	7	15	10	20	16	
	Chom Thong	161.9	67	14	11	5	3	7	3	2	2	2	
	Mae Chaem	89.2	26	2	5	1	0	5	1	2	0	2	
	Chiang Dao	171.2	60	16	12	3	0	3	5	3	2	0	
	Doi Saket	137.4	59	16	15	5	2	3	4	1	0	1	
	Mae Taeng	155.7	75	16	19	4	4	1	5	4	5	2	
	Mae Rim	134.4	67	12	13	2	3	3	3	2	3	4	
	Samoeng	97.4	15	2	3	1	1	0	0	1	0	1	
	Fang	119.7	63	14	11	3	3	3	4	5	2	1	
	Mae Ai	122.5	40	7	7	2	4	1	3	1	2	1	
	Phrao	133.2	46	8	12	2	2	0	0	6	1	0	
	San Pa Tong	155.4	86	28	10	7	3	0	5	4	4	3	
	San Kamphaeng	135.4	68	16	12	3	7	4	4	3	2	1	
	San Sai	170.3	105	17	24	6	4	4	6	3	3	7	
	Hang Dong	154.3	66	21	9	2	3	2	1	0	4	3	
	Hot	119.7	28	9	3	2	0	2	0	3	1	0	
	Doi Tao	127.7	21	5	1	0	3	0	0	0	0	1	
	Omroi	63.0	14	1	2	0	1	1	2	0	0	0	
	Saraphi	192.5	87	18	15	6	7	8	0	6	2	3	
	Wiang Haeng	259.9	16	5	3	0	0	2	1	1	0	0	
	Chai Prakan	116.7	24	6	6	0	1	2	1	1	2	1	
	Mae Wang	121.7	21	3	5	1	1	3	2	0	0	1	
	Mae On	204.1	24	11	5	0	0	3	0	0	1	0	
	Doi Law	136.6	28	7	3	5	1	2	1	0	1	1	
Females	Muang	188.3	312	73	45	30	19	21	12	5	8	10	
	Chom Thong	129.8	59	6	7	12	6	3	2	2	4	3	
	Mae Chaem	113.0	34	5	4	2	0	0	4	1	1	1	
	Chiang Dao	177.0	66	10	11	5	8	4	1	1	1	2	
	Doi Saket	141.9	65	9	13	13	6	1	3	3	3	1	
	Mae Taeng	161.0	80	11	15	15	4	4	4	1	1	1	
	Mae Rim	151.0	84	17	17	14	6	1	1	7	1	3	
	Samoeng	165.9	21	2	5	1	2	1	2	0	1	3	
	Fang	171.6	94	18	22	12	5	3	3	3	3	0	
	Mae Ai	126.0	44	8	10	4	3	1	1	3	1	0	
	Phrao	112.0	38	3	6	10	5	3	0	0	1	2	
	San Pa Tong	147.1	98	19	8	16	4	2	1	6	3	3	
	San Kamphaeng	182.9	100	15	9	14	4	5	5	7	3	6	
	San Sai	171.8	129	23	21	22	11	2	2	2	6	5	
	Hang Dong	176.2	94	14	20	23	7	2	6	2	1	2	
	Hot	125.5	32	6	3	9	1	1	2	1	2	1	
	Doi Tao	92.3	17	6	3	1	0	1	0	0	0	0	
	Omroi	89.7	22	2	1	0	2	2	1	0	4	0	
	Saraphi	143.9	85	10	13	16	5	7	5	5	2	2	
	Wiang Haeng	228.6	15	3	4	1	0	2	0	1	0	0	
	Chai Prakan	143.2	33	10	4	2	3	1	2	1	1	2	
	Mae Wang	147.9	34	8	3	3	4	1	0	2	1	0	
	Mae On	174.3	28	7	5	6	2	0	0	0	1	0	
	Doi Law	135.9	32	5	1	5	4	1	0	2	0	2	
Both sexes	Muang		546	64	66	74	45	25	24	15	26	20	
	Chom Thong		126	26	17	6	7	7	5	11	3	5	
	Mae Chaem		60	4	5	6	4	5	1	6	2	3	
	Chiang Dao		126	21	20	10	11	4	1	4	7	5	
	Doi Saket		124	29	21	9	13	8	5	6	6	2	
	Mae Taeng		155	31	23	11	15	8	5	2	6	5	
	Mae Rim		151	26	19	17	17	3	10	4	4	5	
	Samoeng		36	3	5	3	5	3	1	1	1	4	
	Fang		157	26	16	18	22	6	6	6	5	5	
	Mae Ai		84	11	10	8	10	3	7	2	4	1	
	Phrao		84	18	17	3	6	2	2	1	0	8	
	San Pa Tong		184	44	14	19	8	8	9	3	10	7	
	San Kamphaeng		168	30	16	16	9	8	14	7	8	9	
	San Sai		234	39	35	24	21	8	6	10	9	8	
	Hang Dong		160	44	16	15	20	8	5	3	3	2	
	Hot		60	18	4	6	3	4	1	4	1	4	
	Doi Tao		38	6	1	6	3	0	3	0	1	0	
	Omroi		36	1	4	2	1	1	1	5	3	0	
	Saraphi		172	34	20	11	13	11	12	10	1	8	
	Wiang Haeng		31	6	3	3	4	0	1	2	3	1	
	Chai Prakan		57	8	9	10	4	2	2	3	2	3	
	Mae Wang		55	6	9	8	3	1	3	4	3	0	
	Mae On		52	17	7	7	5	0	0	4	1	0	
	Doi Law		60	12	7	5	1	5	3	2	2	2	

Skin\* - non-melanoma skin cancer

Table 5: Mortality rate and common cancer sites in districts of Chiang Mai, 2007

	Districts	Rates	All sites	Lung	Liver	Stomach	Colon	Rectum	NHL	Bladder	Prostate	Nasophar.
Males	Muang	105.9	145	30	39	7	8	8	3	8	9	1
	Chom Thong	150.9	65	14	11	7	4	3	1	1	4	1
	Mae Chaem	98.4	27	3	4	4	2	1	0	1	1	0
	Chiang Dao	117.9	41	13	9	3	0	1	3	2	0	0
	Doi Saket	116.8	48	15	12	1	1	2	1	0	0	1
	Mae Taeng	110.8	56	10	18	1	0	2	2	2	0	3
	Mae Rim	86.3	42	7	13	2	1	1	2	0	1	0
	Samoeng	145.2	20	3	4	1	2	1	1	0	1	0
	Fang	90.6	49	8	8	5	3	3	4	1	0	2
	Mae Ai	81.8	29	5	7	2	1	2	0	3	0	0
	Phrao	106.7	39	10	12	2	1	0	0	0	1	1
	San Pa Tong	109.5	67	22	10	1	3	5	5	2	3	0
	San Kamphaeng	84.7	47	9	11	4	3	1	4	1	2	2
	San Sai	127.5	79	20	18	2	5	3	5	3	2	2
	Hang Dong	102.2	42	17	8	0	0	4	1	2	0	0
	Hot	95.5	23	9	3	3	0	0	1	1	0	0
	Doi Tao	108.0	18	4	3	1	1	0	0	0	0	0
	Omkoï	52.0	11	2	1	2	1	0	0	1	0	2
	Saraphi	123.7	68	20	17	5	2	2	1	4	0	1
	Wiang Haeng	105.5	7	1	2	1	1	0	0	0	0	0
	Chai Prakan	99.3	20	5	5	1	2	0	1	1	0	1
	Mae Wang	103.0	18	5	6	2	1	0	1	0	0	0
	Mae On	126.2	16	4	2	3	0	0	0	1	1	2
	Doi Law	85.9	18	5	3	2	0	0	1	0	0	1
Females	Districts	Rates	All sites	Lung	Liver	Cervix	Breast	Colon	Stomach	Rectum	Ovary	Gallbladder
	Muang	67.2	121	23	11	10	10	8	8	2	5	2
	Chom Thong	107.9	51	17	4	3	4	2	1	4	3	1
	Mae Chaem	63.7	20	3	0	3	2	0	3	1	1	0
	Chiang Dao	92.0	35	4	5	6	4	3	1	3	0	1
	Doi Saket	82.2	41	13	7	5	3	4	1	0	0	0
	Mae Taeng	79.8	43	14	4	5	5	2	0	2	2	0
	Mae Rim	95.1	48	12	7	5	4	4	1	1	0	1
	Samoeng	64.7	10	2	2	1	0	0	1	0	0	0
	Fang	89.5	51	15	5	7	8	4	0	0	0	2
	Mae Ai	96.4	31	3	6	4	1	3	1	0	0	0
	Phrao	90.1	30	9	7	1	4	0	1	0	1	0
	San Pa Tong	93.9	59	18	5	8	6	2	3	0	0	2
	San Kamphaeng	101.0	56	17	3	5	5	4	0	2	1	0
	San Sai	105.3	80	19	13	8	6	2	3	4	1	5
	Hang Dong	117.1	59	20	6	6	3	2	1	2	1	2
	Hot	107.6	27	9	3	3	1	1	3	1	1	0
	Doi Tao	39.2	7	1	0	0	2	0	0	0	0	0
	Omkoï	55.6	15	0	3	1	0	0	2	0	1	0
	Saraphi	82.0	51	15	3	8	3	3	3	1	2	0
	Wiang Haeng	93.7	5	2	0	0	0	0	0	0	0	0
	Chai Prakan	54.0	13	1	3	1	3	0	1	0	0	1
	Mae Wang	99.9	23	3	2	5	2	1	1	0	0	0
	Mae On	75.5	13	5	3	1	0	0	1	1	0	0
Doi Law	99.5	23	6	2	3	3	3	0	0	0	1	
Both sexes	Districts		All sites	Lung	Liver	Cervix	Stomach	Colon	Breast	Rectum	NHL	Bladder
	Muang		266	53	50	10	15	16	10	10	8	14
	Chom Thong		116	31	15	3	8	6	4	7	1	1
	Mae Chaem		47	6	4	3	7	2	2	2	0	1
	Chiang Dao		76	17	14	6	4	3	4	4	3	2
	Doi Saket		89	28	19	5	2	5	3	2	1	1
	Mae Taeng		99	24	22	5	1	2	5	4	3	2
	Mae Rim		90	19	20	5	3	5	4	2	4	0
	Samoeng		30	5	6	1	2	2	1	1	1	0
	Fang		100	23	13	7	5	7	8	3	4	2
	Mae Ai		60	8	13	4	3	4	1	2	2	3
	Phrao		69	19	19	1	3	1	4	0	0	0
	San Pa Tong		126	40	15	8	4	5	6	5	6	3
	San Kamphaeng		103	26	14	5	4	7	5	3	5	1
	San Sai		159	39	31	8	5	7	6	7	5	3
	Hang Dong		101	37	14	6	1	2	3	6	1	3
	Hot		50	18	6	3	6	1	1	1	1	2
	Doi Tao		25	5	3	0	1	1	3	0	1	0
	Omkoï		26	2	4	1	4	1	0	0	0	1
	Saraphi		119	35	20	8	8	5	4	3	1	6
	Wiang Haeng		12	3	2	0	1	1	0	0	2	0
	Chai Prakan		33	6	8	1	2	2	3	0	1	2
	Mae Wang		41	8	8	5	3	2	2	0	1	2
	Mae On		29	9	5	1	4	0	0	1	1	1
Doi Law		41	11	5	3	2	3	3	0	1	0	

## Estimated New Cases

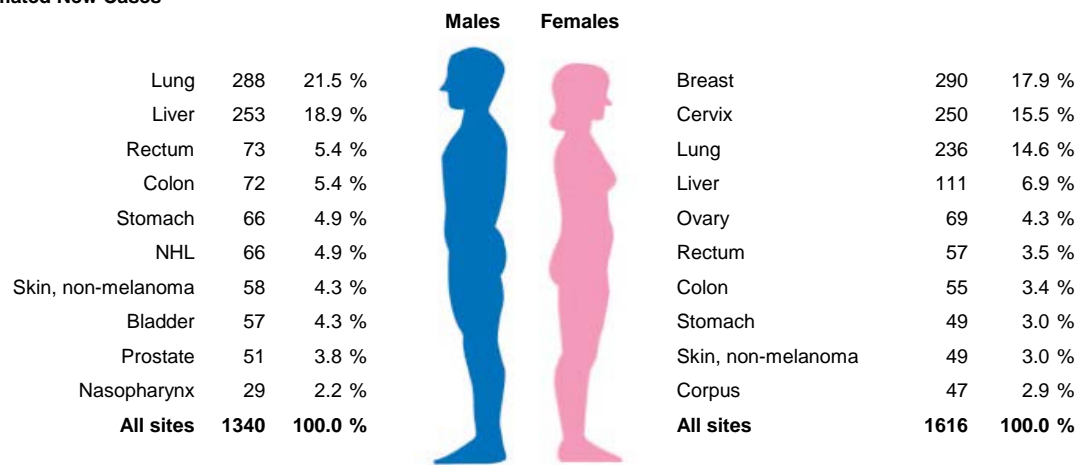


Figure 6: Ten leading cancer sites for the estimated new cases, by sex, 2007

## Estimated Deaths

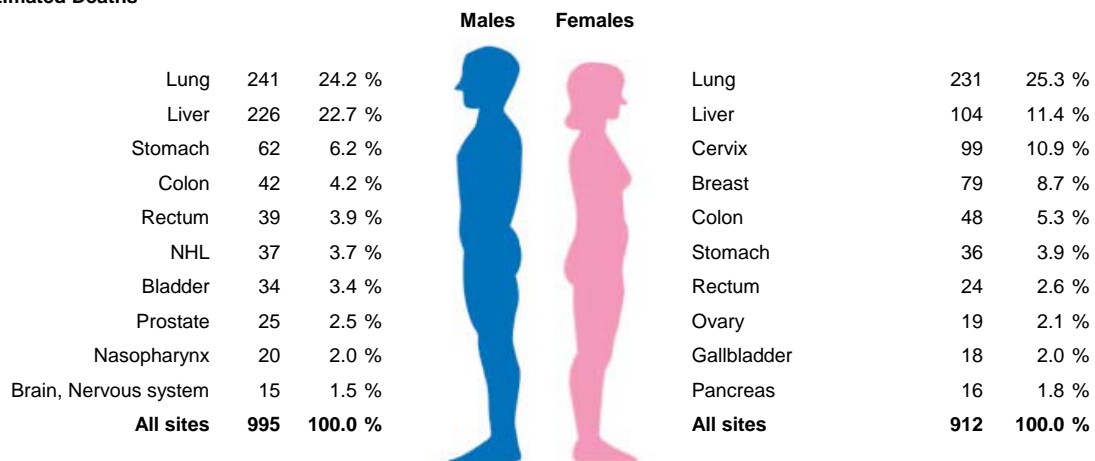


Figure 7: Ten leading cancer sites for the estimated dead cases, by sex, 2007

Table 6 : Top 5 cancers in Chiang Mai by 15-year age groups, 2007

Males		0-14		15-29		30-44		45-59		60-74		75+	
Incidence	Age group	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases	CANCER / SITE	cases
Myeloid Leukaemia	4	Liver	5	Liver	40	Liver	100	Lung	129	Lung	67	Lung	67
Kidney	2	NHL	4	Lung	15	Lung	75	Liver	75	Liver	33	Liver	33
Lymphoid Leukaemia	2	Colon	3	NHL	9	Colon	21	Stomach	36	Stomach	20	Skin,non-melanoma	20
Tongue	1	Rectum	3	Rectum	8	NHL	18	Rectum	31	Rectum	20	Bladder	20
Liver	1	Myeloid Leukaemia	3	Colon	7	Rectum	15	Prostate	26	Prostate	18	Prostate	18
All sites	18	All sites	42	All sites	130	All sites	406	All sites	482	All sites	262	All sites	262
<b>Females</b>													
Incidence	Age group	CANCER / SITE	cases <td>CANCER / SITE</td> <td>cases <td>CANCER / SITE</td> <td>cases <td>CANCER / SITE</td> <td>cases <td>CANCER / SITE</td> <td>cases <td>CANCER / SITE</td> <td>cases </td></td></td></td></td>	CANCER / SITE	cases <td>CANCER / SITE</td> <td>cases <td>CANCER / SITE</td> <td>cases <td>CANCER / SITE</td> <td>cases <td>CANCER / SITE</td> <td>cases </td></td></td></td>	CANCER / SITE	cases <td>CANCER / SITE</td> <td>cases <td>CANCER / SITE</td> <td>cases <td>CANCER / SITE</td> <td>cases </td></td></td>	CANCER / SITE	cases <td>CANCER / SITE</td> <td>cases <td>CANCER / SITE</td> <td>cases </td></td>	CANCER / SITE	cases <td>CANCER / SITE</td> <td>cases </td>	CANCER / SITE	cases
Myeloid Leukaemia	4	Ovary	6	Breast	78	Breast	128	Breast	107	Lung	47	Lung	47
Kidney	2	Thyroid	6	Cervix	69	Cervix	115	Cervix	59	Cervix	22	Cervix	22
Lymphoid Leukaemia	2	NHL	6	Ovary	19	Lung	68	Lung	41	Breast	20	Breast	20
Connective,Soft tissue	1	Breast	5	Thyroid	15	Liver	44	Liver	40	Liver	18	Liver	18
Vagina	1	Myeloid Leukaemia	5	Lung	14	Ovary	33	Colon	21	Rectum	16	Rectum	16
All sites	15	All sites	50	All sites	273	All sites	600	All sites	600	All sites	228	All sites	228
<b>Males</b>													
Incidence	Age group	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR
Myeloid Leukaemia	1.1	Liver	0.7	Liver	4.1	Liver	9.0	Liver	17.5	Lung	5.1	Lung	5.1
Kidney	0.8	NHL	0.6	Lung	1.6	Lung	7.0	Lung	10.9	Liver	2.5	Liver	2.5
Lymphoid Leukaemia	0.6	Colon	0.4	NHL	0.9	Colon	1.9	Stomach	4.7	Stomach	1.5	Skin,non-melanoma	1.5
Tongue	0.5	Rectum	0.4	Rectum	0.8	NHL	1.6	Rectum	4.4	Rectum	1.5	Bladder	1.5
Liver	0.4	Myeloid Leukaemia	0.4	Colon	0.7	Rectum	1.3	Prostate	3.6	Prostate	1.4	Prostate	1.4
All sites	4.3	All sites	5.6	All sites	13.3	All sites	36.9	All sites	66.6	All sites	19.8	All sites	19.8
<b>Females</b>													
Incidence	Age group	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR	CANCER / SITE	ASR
Myeloid Leukaemia	0.9	Ovary	0.8	Breast	7.2	Breast	10.5	Breast	13.2	Lung	2.9	Lung	2.9
Kidney	0.5	Thyroid	0.8	Cervix	6.4	Cervix	9.5	Cervix	8.3	Cervix	1.4	Cervix	1.4
Lymphoid Leukaemia	0.5	NHL	0.8	Ovary	1.8	Lung	5.6	Breast	5.6	Breast	1.2	Breast	1.2
Connective,Soft tissue	0.3	Breast	0.7	Thyroid	1.4	Liver	3.7	Liver	5.0	Liver	1.1	Liver	1.1
Vagina	0.3	Myeloid Leukaemia	0.7	Lung	1.3	Ovary	2.6	Colon	2.8	Rectum	1.0	Rectum	1.0
All sites	3.5	All sites	6.8	All sites	25.4	All sites	49.3	All sites	57.5	All sites	14.1	All sites	14.1

Table 7 : Top 5 cancer deaths in Chiang Mai by 15-year age groups, 2007

Mortality - Age group		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
<b>Males</b>											
Brain, Nervous system	4	Liver	3	Liver	33	Liver	99	Lung	110	Lung	64
Lymphoid Leukaemia	2	Colon	2	Lung	10	Lung	57	Liver	62	Liver	29
Bone	1	Bone	2	Rectum	6	Stomach	13	Stomach	25	Stomach	18
Testis	1	Brain, Nervous system	2	Stomach	5	Nasopharynx	9	Rectum	18	Colon	18
Other endocrine	1	Myeloid Leukaemia	2	Colon	4	NHL	9	NHL	17	Bladder	17
All sites	10	All sites	17	All sites	77	All sites	285	All sites	359	All sites	247
<b>Females</b>											
Brain, Nervous system	3	Stomach	1	Cervix	12	Lung	54	Lung	113	Lung	54
Lymphoid Leukaemia	2	Ovary	1	Lung	10	Liver	42	Cervix	33	Liver	20
Other endocrine	1	Brain, Nervous system	1	Liver	7	Breast	41	Liver	34	Cervix Uteri	17
		Myeloid Leukaemia	1	Breast	5	Cervix	37	Breast	21	Colon	16
		Colon	1	Stomach	3	Colon	15	Colon	13	Breast	12
All sites	6	All sites	12	All sites	63	All sites	281	All sites	325	All sites	225
<b>Males</b>											
Brain, Nervous system	1.0	Liver	0.4	Liver	3.4	Liver	9.0	Lung	14.7	Lung	4.8
Lymphoid Leukaemia	0.5	Colon	0.3	Lung	1.0	Lung	5.2	Liver	8.9	Liver	2.2
Bone	0.3	Bone	0.3	Rectum	0.6	Stomach	1.2	Stomach	3.5	Stomach	1.4
Testis	0.3	Brain, Nervous system	0.3	Stomach	0.5	Nasopharynx	0.8	Rectum	2.4	Colon	1.4
Myeloid Leukaemia	0.2	Myeloid Leukaemia	0.3	Colon	0.4	NHL	0.8	NHL	2.4	Bladder	1.3
All sites	2.3	All sites	2.3	All sites	7.9	All sites	26.0	All sites	49.2	All sites	18.7
<b>Females</b>											
Brain, Nervous system	0.9	Stomach	0.2	Cervix	1.1	Lung	4.6	Lung	13.8	Lung	3.3
Lymphoid Leukaemia	0.3	Ovary	0.2	Lung	1.0	Liver	3.5	Cervix	4.2	Liver	1.2
Other endocrine	0.3	Brain, Nervous system	0.2	Brain	0.7	Breast	3.3	Liver	4.1	Cervix Uteri	1.1
		Myeloid Leukaemia	0.2	Breast	0.4	Cervix	3.0	Breast	2.9	Colon	1.0
		Colon	0.1	Stomach	0.3	Colon	1.2	Colon	1.6	Breast	0.7
All sites	1.5	All sites	1.7	All sites	6.0	All sites	23.1	All sites	40.1	All sites	13.9

## COMMON CANCERS IN CHIANG MAI, 2007

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

There were 524 new cases of lung cancer diagnosed in 2007 (288 males, 236 females). This was 21.5% of all cancers in males and 14.6% of those in females. The age-standardized incidence rates were 31.3 for males and 22.9 for females. Lung cancer has ranked first for new male cancers in Chiang Mai since the first population-based registration in 1983. For females, lung cancer ranked third in 2005 after breast and cervical cancers. The incidence rates increased with age in both sexes. Rates in both sexes increased sharply after the age of 45 and male rates exceeded female rates after the age of 60 (Fig 10). The cumulative rate percentages to age 75 were 4.0% for males and 3.0% for females. These represented risks of 1 in 25 for men and 1 in 33 for women of developing lung cancer by age 75.

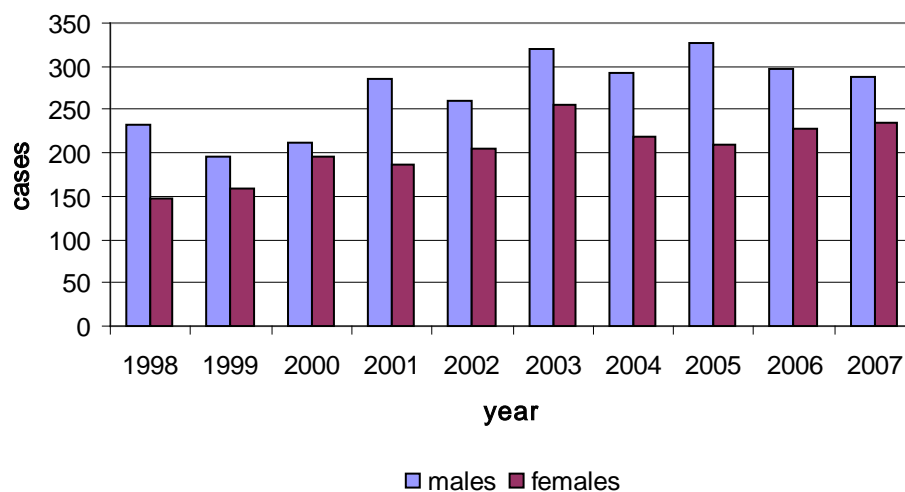


Figure 8: Number of new cases of lung cancer by sex, 1998-2007

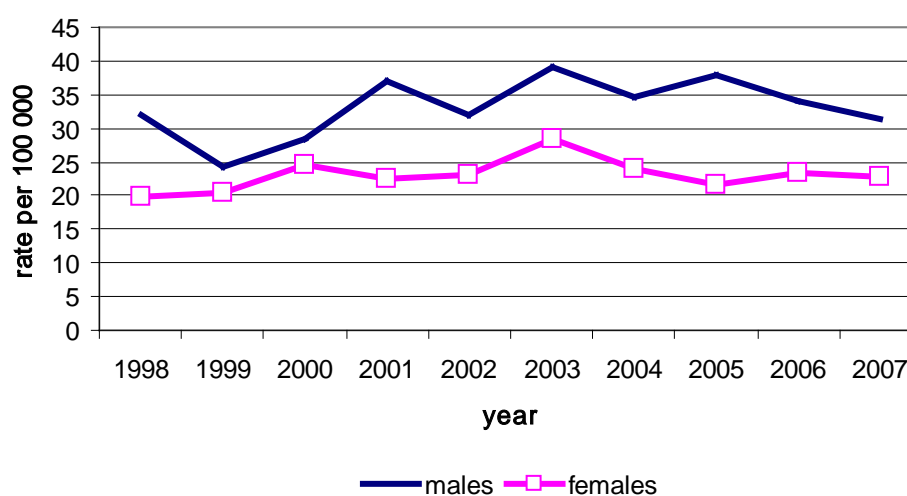
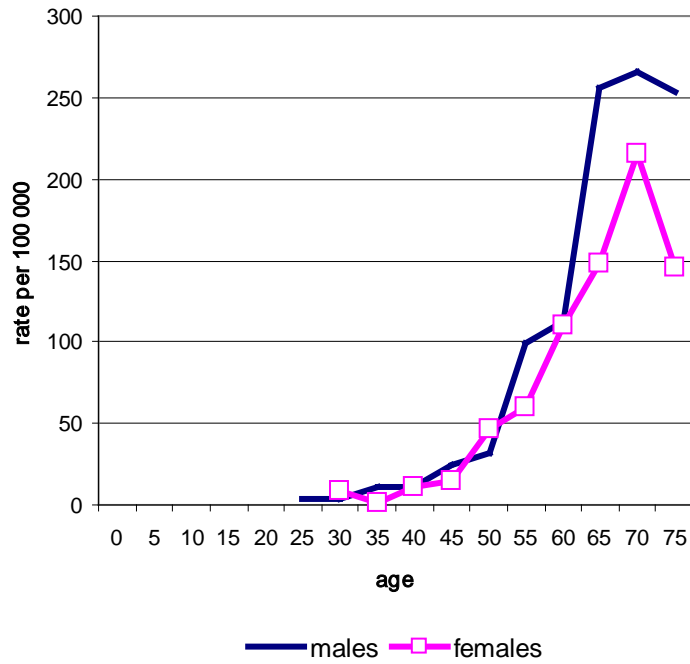
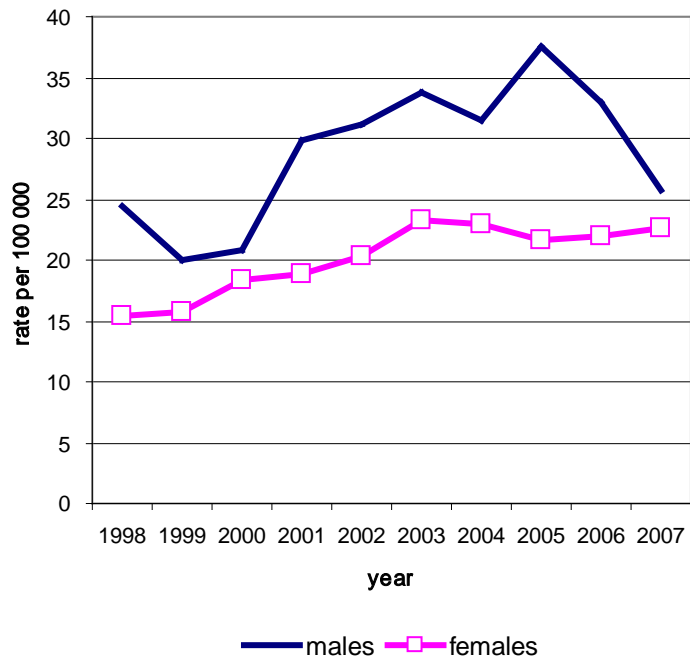


Figure 9: Incidence rates of new cases of lung cancer by sex, 1998-2007



**Figure 10: Age-specific incidence rate of lung cancer, Chiang Mai, 2007**

Of the 472 deaths from lung cancer, 241 were males (24.2% of all male cancer deaths) and 231 were females (25.3% of all female cancer deaths). In 2007, the mortality rates were 25.8 for males and 22.7 for females; these rates tended to decrease especially for males (Fig. 11). The mortality rates increased with age and increased sharply after the age of 50 years in both sexes (Fig. 12).



**Figure 11: Mortality rate of lung cancer by sex, Chiang Mai, 1998-2007**

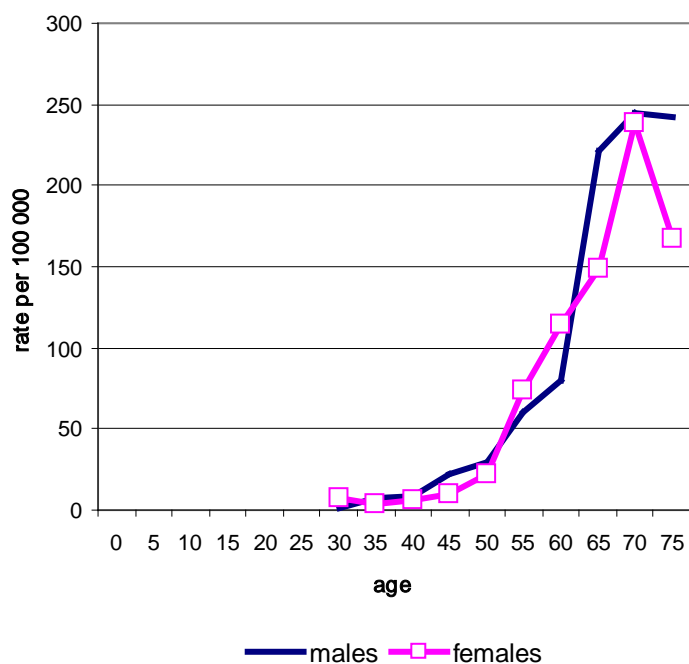


Figure 12: Age-specific mortality rate of lung cancer, Chiang Mai, 2007

For lung cancer deaths, 413 cases (87.5%) died within one year of diagnosis and 45 cases (9.5%) died in the second year.

#### Diagnosis and stages of cancer

Fifty-seven percent of cases were diagnosed in advanced stage (42.2% had distant metastasis, 15.6% had regional nodes metastasis). The most common metastasis site was lung-to-lung, followed by brain. One hundred and sixty-three cases (34.5%) were diagnosed by clinical diagnosis, and 49 cases were diagnosed by death certificate only. The common cell types were adenocarcinoma (28.2%) and squamous cell carcinoma (15.6%).

Cell type	Males	Females	Total	%	Stage	Cases	%
Adenocarcinoma	80	68	148	28.2	Localized	6	1.1
Squamous cell CA	56	26	82	15.6	Locally advanced	148	28.2
Small cell	19	12	31	5.9	Regional node metastasis	82	15.6
Large cell	17	9	26	5.0	Distant metastasis	221	42.2
Others	8	6	14	2.7	Unknown/not staged	67	12.8
Clinical diagnosis	108	115	223	42.6	All	524	100.0
<b>TOTAL</b>	<b>288</b>	<b>236</b>	<b>524</b>	<b>100.0</b>			



### Liver cancer (ICD-10 C22)

There were 364 new cases of liver cancer diagnosed in 2007 (253 males, 111 females). This was 18.9% of all cancers in males and 6.9% of those in females. The age-standardized incidence rates were 26.5 for males and 10.9 for females. Liver cancer has ranked second for new male cancers in Chiang Mai since the first population-based registration in 1983. For females, liver cancer ranked fourth in 2005 after breast, cervical and lung cancers. The incidence rates increased with age for both sexes; rates for males were higher than females in all age groups (Fig. 15). The cumulative rate percentages to age 75 were 3.0% for males and 1.3% for females. These represented risks of 10 in 333 for men and 10 in 741 for women of developing liver cancer by age 75.

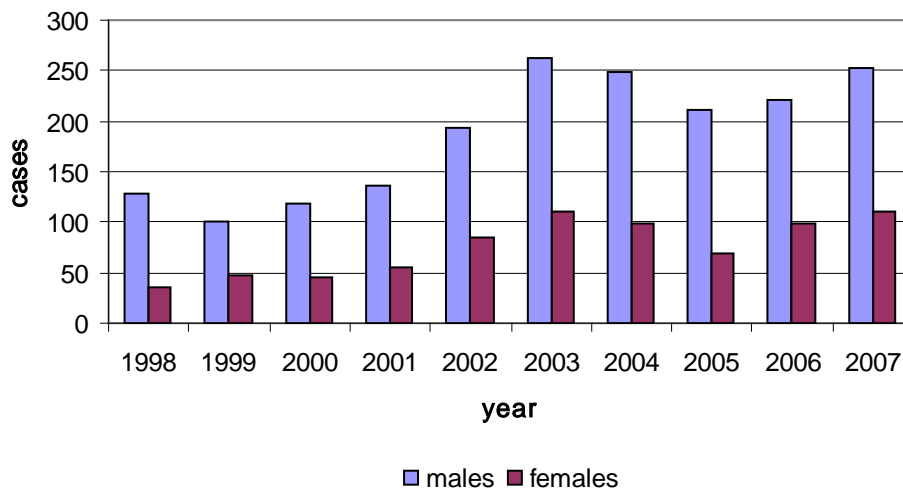


Figure 13: Number of new cases of liver cancer by sex, 1998-2007

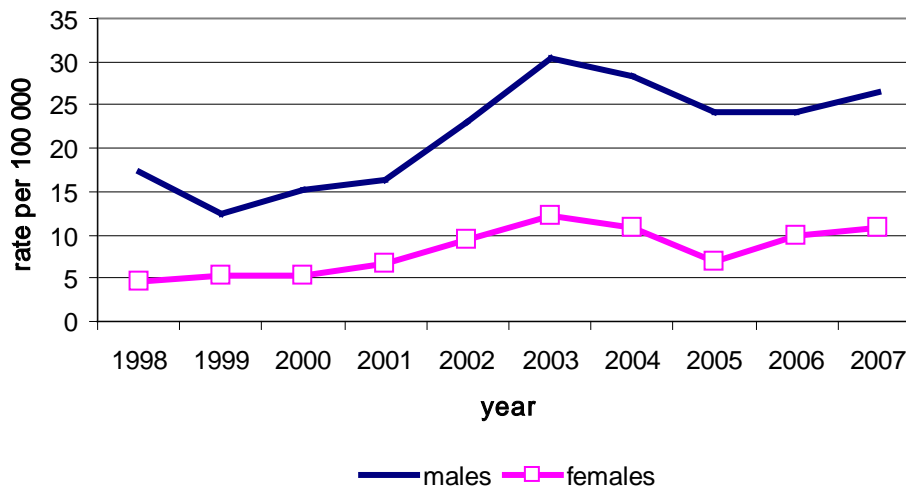
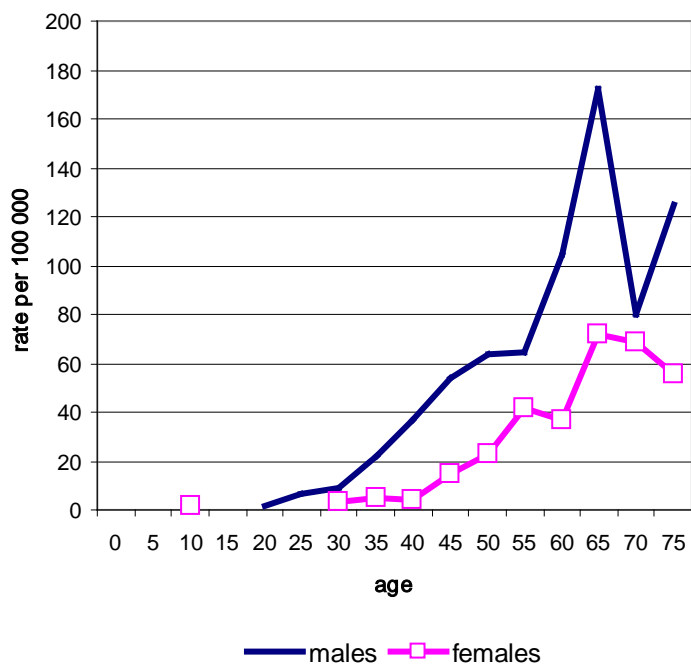
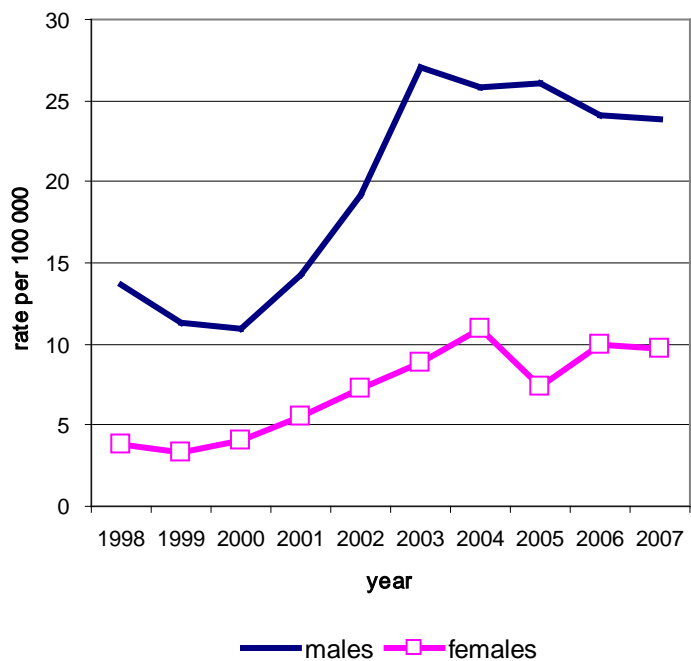


Figure 14: Incidence rates of new cases of liver cancer by sex, 1998-2007



**Figure 15: Age-specific incidence rate of liver cancer, Chiang Mai, 2007**

Of the 330 deaths from liver cancer, 226 were males (22.7% of all male cancer deaths) and 104 were females (11.4% of all female cancer deaths). The mortality rates were 23.9 for males and 9.7 for females and have tended to slightly decrease from the year 2003 in both sexes (Fig. 16). The mortality rates increased with age in both sexes, with rates in males increasing sharply after the age of 35 years and exceeding those in females (Fig. 17).



**Figure 16: Mortality rate of liver cancer by sex, Chiang Mai, 1998-2007**

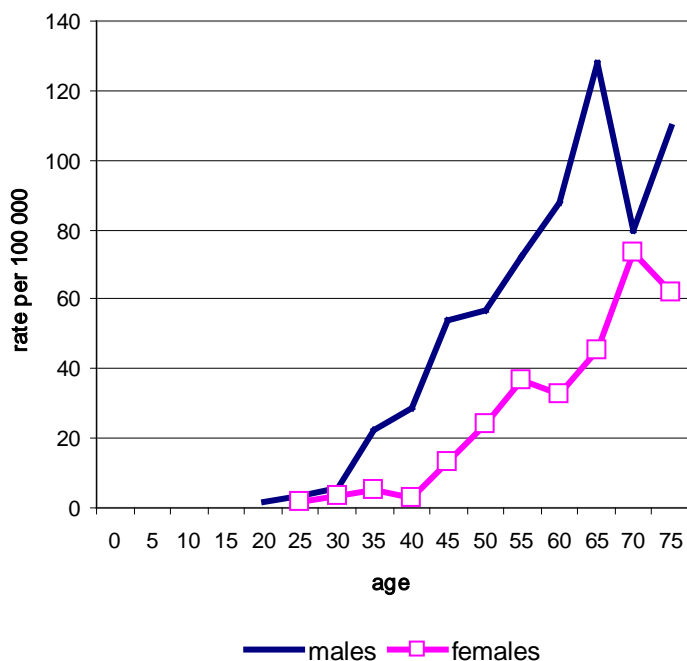


Figure 17: Age-specific mortality rate of liver cancer, Chiang Mai, 2007

For liver cancer deaths, 308 cases (93.3%) died within one year of diagnosis, and 12 cases (3.6%) died in the second year. These figures reflect the severity of this type of cancer.

#### Diagnosis and stages of cancer

Forty-one percent of cases were diagnosed at an advanced stage (26.9% had distant metastasis, 13.2% had regional nodes metastasis). The most common metastasis site was lung, followed by distant lymph nodes. Only 17.9% were diagnosed by histology or cytology, while 62.9% were diagnosed by imaging studies. The common cell types for histological diagnosis groups were cholangiocarcinoma (62.5%) and hepatocellular carcinoma (32.8%). Sixty-one percent of hepatocellular carcinomas and 66.2% of cholangiocarcinomas were diagnosed by clinical diagnosis.

Cell type	Males	Females	Total	%
Hepatocellular	16	5	21	5.8
Cholangiocarcinoma	23	17	40	11.0
Other	3	0	3	0.8
Clinical diagnosis	211	89	300	82.4
All	253	111	364	100.0

Stage	Cases	%
Localized	5	1.4
Locally advanced	145	39.8
Regional node metastasis	48	13.2
Distant metastasis	98	26.9
Unknown/not staged	68	18.7
All	364	100.0

### Stomach cancer (ICD-10 C16)

There were 115 new cases of stomach cancer diagnosed in 2007 (66 males, 49 females) accounting for 4.9% of all cancers in males and 3.0% of those in females. The age-standardized incidence rates were 7.3 for males and 4.5 for females (Fig. 19). In 2007, stomach cancer ranked fifth for new male cancers and eight for females. The incidence rates increased with age in both sexes after the age of 40 years, with rates in males increasing sharply after the age of 60 years and exceeding those in females (Fig. 20). The cumulative rate percentages to age 75 were 1.1% for males and 0.6% for females. These represented risks of 1 in 93 for men and 1 in 166 for women of developing stomach cancer by age 75.

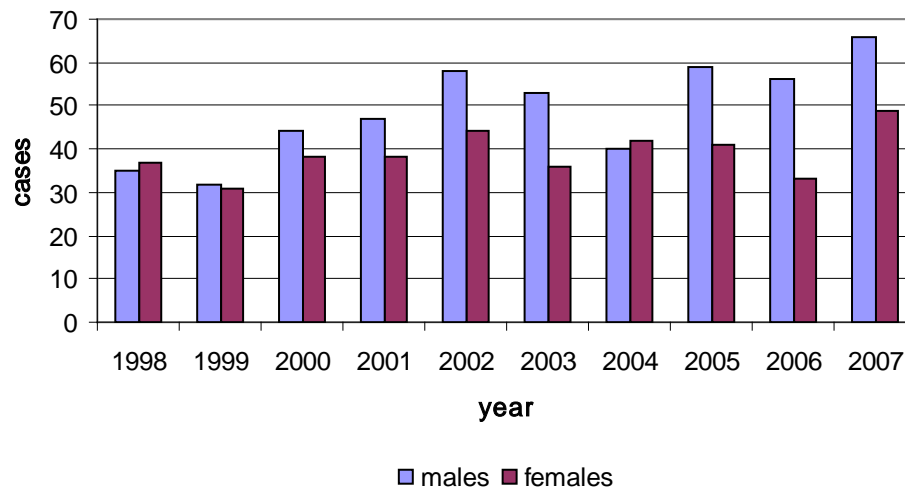


Figure 18: Number of new cases of stomach cancer by sex, 1998-2007

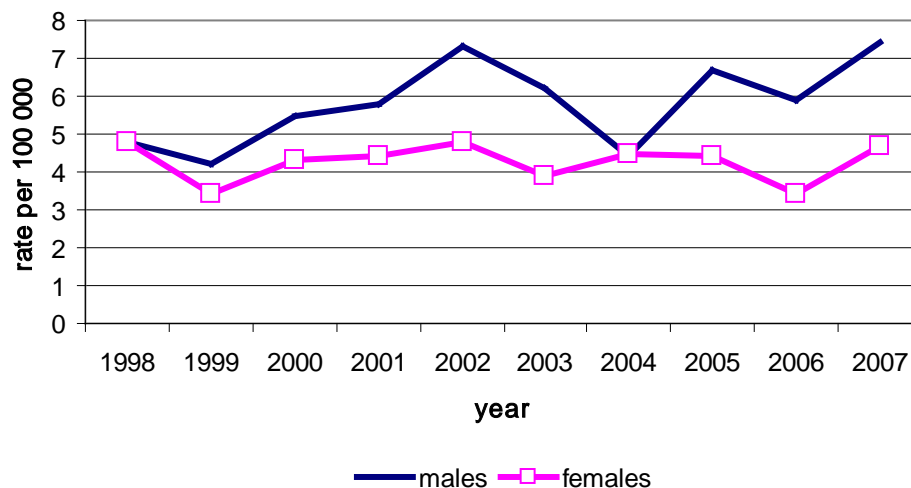
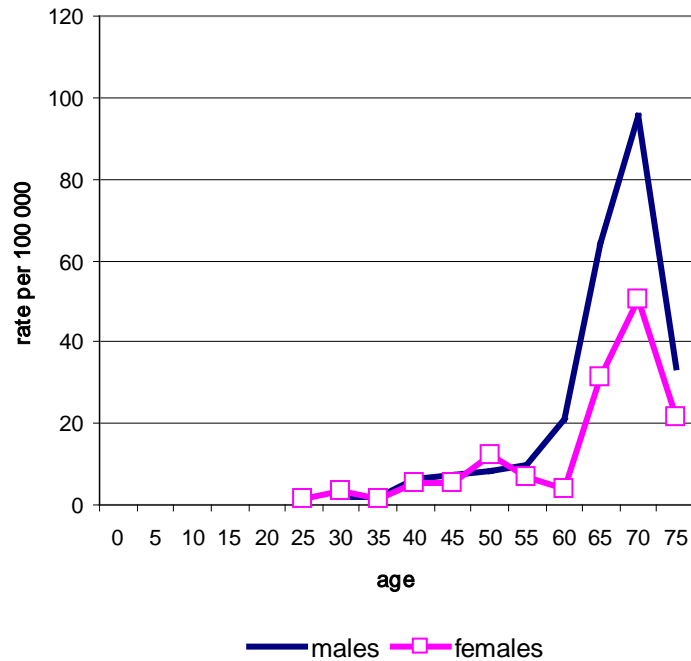
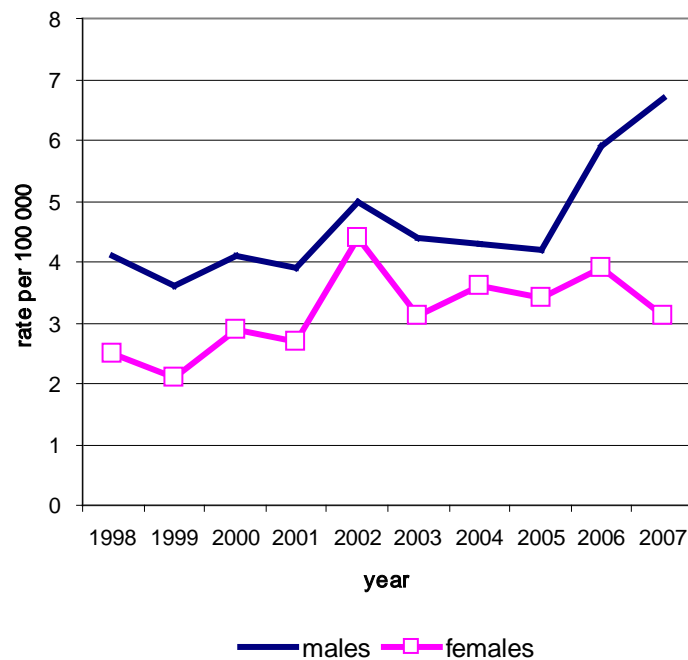


Figure 19: Incidence rates of new cases of stomach cancer by sex, 1998-2007



**Figure 20: Age-specific incidence rate of stomach cancer, Chiang Mai, 2007**

Of the 98 deaths from stomach cancer, 62 were males (6.2% of all male cancer deaths) and 36 were females (3.9% of all female cancer deaths). The mortality rates were 6.7 for males and 3.1 for females which increased in males but decreased in females (Fig. 21). The mortality rates increased with age in both sexes, with rates in males exceeding those in females after the age of 55 years (Fig. 22).



**Figure 21: Mortality rate of stomach cancer by sex, Chiang Mai, 1998-2007**

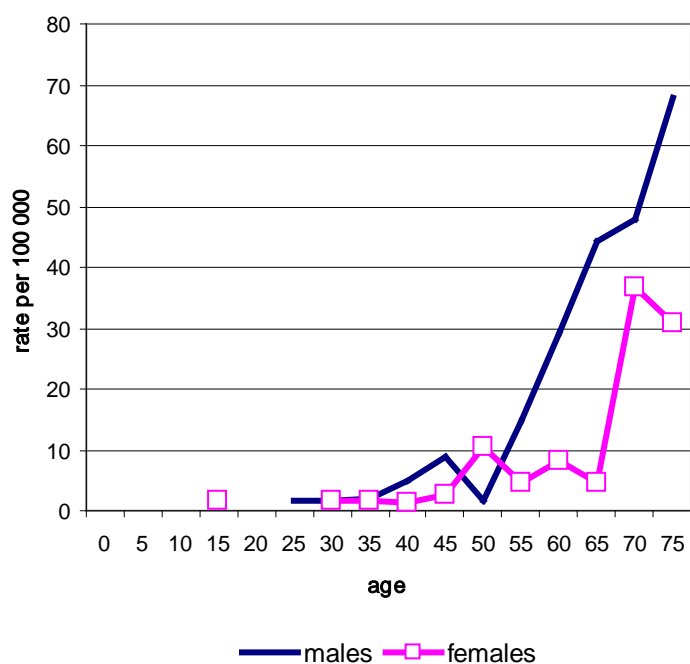


Figure 22: Age-specific mortality rate of stomach cancer, Chiang Mai, 2007

#### Diagnosis and stage of cancer

Sixty-two percent of cases were diagnosed at a locally advanced stage (40.0% had locally advanced, 22.6% had regional nodes metastasis). The most common metastasis site was peritoneum, followed by distant lymph nodes. Eighty-nine percent were diagnosed by histology and the common cell types were adenocarcinoma (49.6%) and signet ring cell carcinoma (37.4%).

Cell type	Males	Females	Total	%
Adenocarcinoma	36	21	57	49.6
Signet ring cell	24	19	43	37.4
Others	2	0	2	1.7
Clinical diagnosis	4	9	13	11.3
Total	66	49	115	100.0

Stage	Cases	%
Localized	2	1.7
Locally advanced	46	40.0
Regional node metastasis	26	22.6
Distant metastasis	35	30.4
Unknown/not staged	6	5.2
All	115	100.0

### Colon cancer (ICD-10 C18)

There were 127 new cases of colon cancer diagnosed in 2007 (72 males, 55 females). This was 5.4% of all cancers in males and 3.4% of those in females. Colon cancer was the most common cancer of the gastrointestinal tract in both sexes. The age-standardized incidence rates were 7.7 for males and 5.3 for females. In 2007, colon cancer ranked fourth for new male cancers and seventh for females. The incidence rates increased with age in both sexes after the age of 40 years, with rates in males exceeding those in females after the age of 65 years (Fig. 25). The cumulative rate percentages to age 75 were 0.9% for males and 0.6% for females. These represented risks of 1 in 115 for men and 1 in 156 for women of developing colon cancer by age 75.

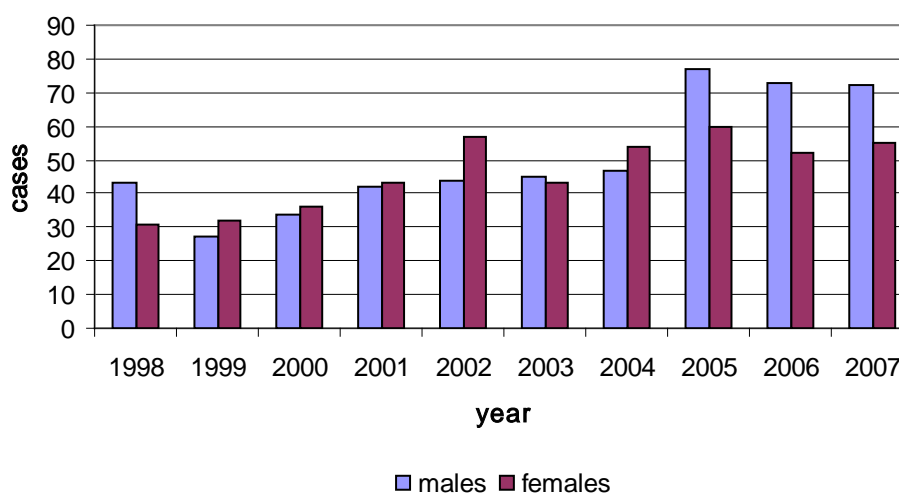


Figure 23: Number of new cases of colon cancer by sex, 1998-2007

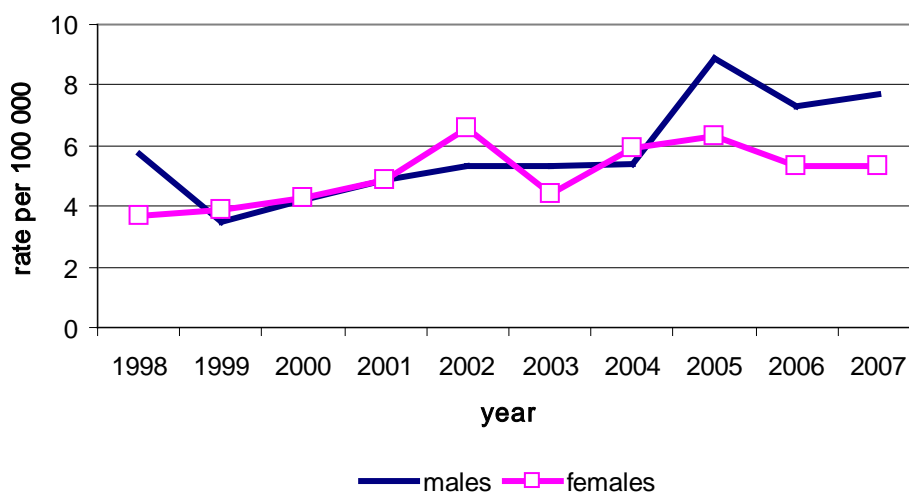
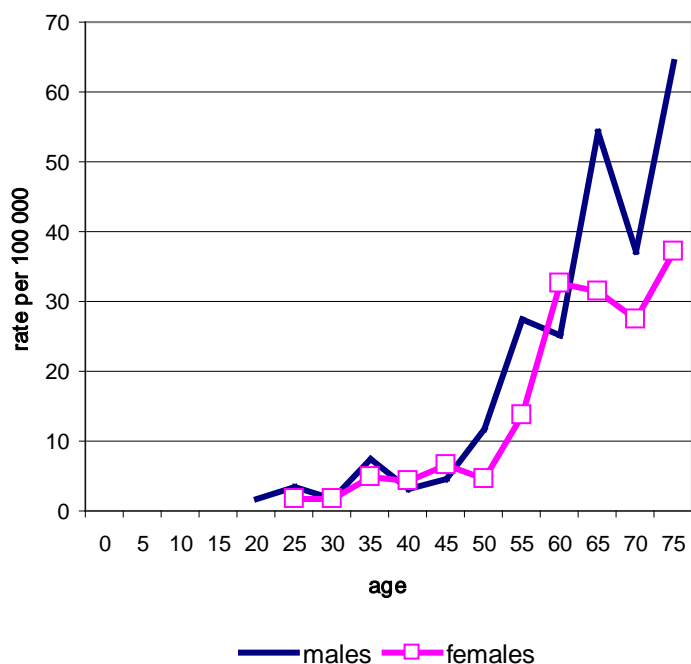
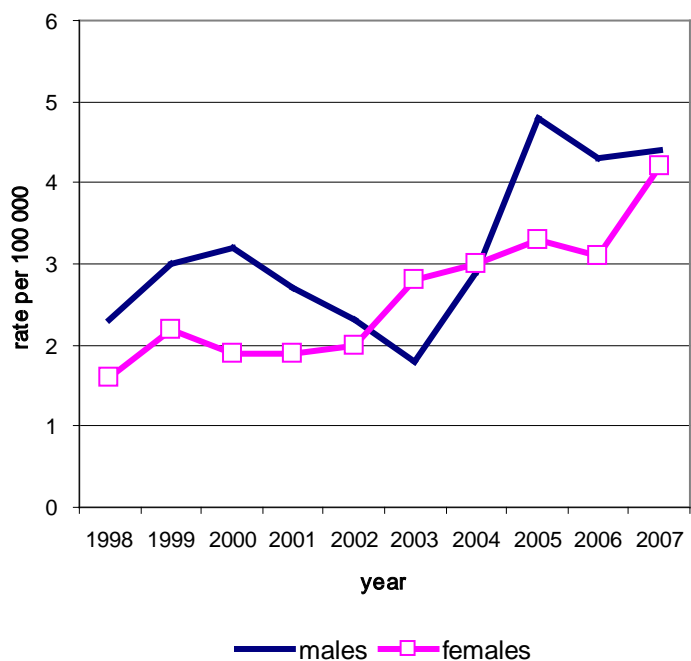


Figure 24: Incidence rates of new cases of colon cancer by sex, 1998-2007



**Figure 25: Age-specific incidence rate of colon cancer, Chiang Mai, 2007**

Of the 90 deaths from colon cancer, 42 were males (4.2% of all male cancer deaths) and 48 were females (5.3% of all female cancer deaths). The age-standardized mortality rates were 4.4 for males and 4.2 for females and tended to increase in both sexes (Fig. 26). The mortality rates increased with age in both sexes, and increased sharply after age 55 (Fig. 27).



**Figure 26: Mortality rate of colon cancer by sex, Chiang Mai, 1998-2007**



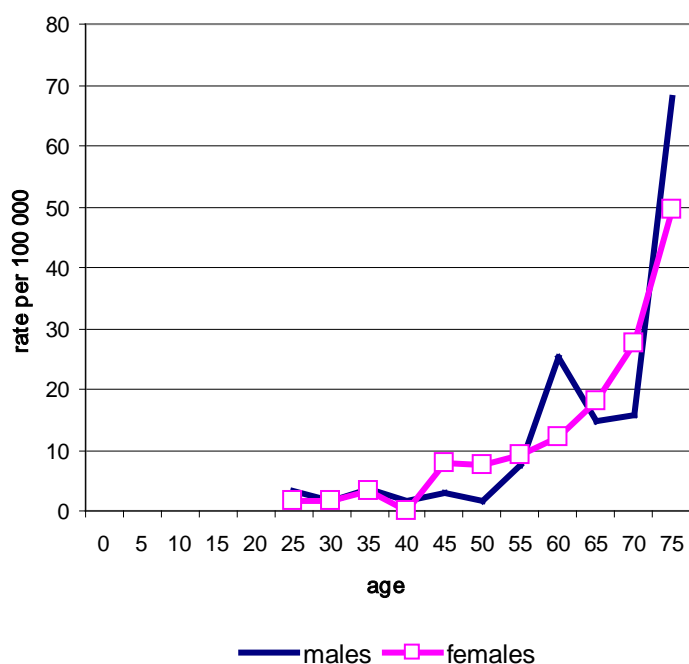


Figure 27: Age-specific mortality rate of colon cancer, Chiang Mai, 2007

#### Diagnosis and stage of cancer

Sixty-four percent of cases were diagnosed at a locally advanced stage (48.8% had locally advanced, 15.7% had regional node metastasis). The most common metastasis site was liver, followed by peritoneum. Eighty-one percent were diagnosed by histology. The common cell types in histological diagnosis groups were adenocarcinoma (69.3%) and mucinous carcinoma (5.5%).

Cell type	Males	Females	Total	%
Adenocarcinoma	50	38	88	69.3
Mucinous carcinoma	4	3	7	5.5
Signet ring cell	4	0	4	3.1
Others	2	2	4	3.1
Clinical diagnosis	12	12	24	18.9
	72	55	127	100.0

Stage	Cases	%
Localized	2	1.6
Locally advanced	62	48.8
Regional node metastasis	20	15.7
Distant metastasis	26	20.5
Unknown/not staged	17	13.4
All	127	100.0

### Bladder cancer (ICD-10 C67)

There were 84 new cases of bladder cancer diagnosed in 2007 (57 males, 27 females). This was 4.3% of all cancers in males and 1.7% of those in females. The age-standardized incidence rates were 5.8 for males and 2.5 for females. In 2007, bladder cancer ranked eighth for new male cancers and thirteenth for females. The incidence tended to increase in both sexes from the year 2005 (Fig. 29). The incidence rates increased with age in both sexes; rates in males exceeded those in females after the age of 60 years (Fig. 30). The cumulative rate percentages to age 75 were 0.7% for males and 0.3% for females. These represented risks of 1 in 147 for men and 1 in 322 for women of developing bladder cancer by age 75.

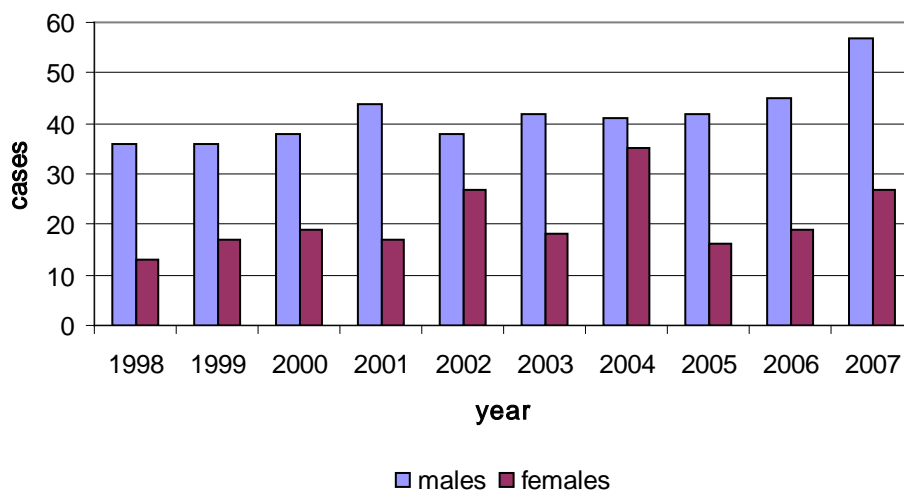


Figure 28: Number of new cases of bladder cancer by sex, 1998-2007

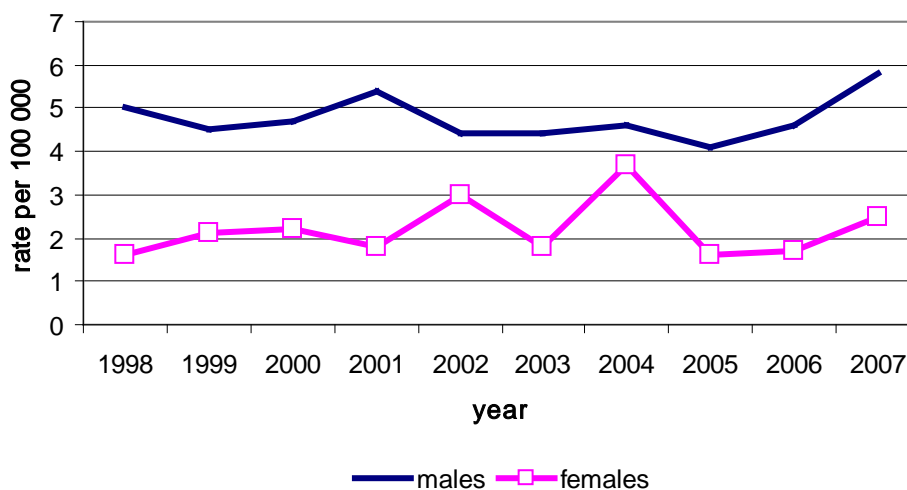
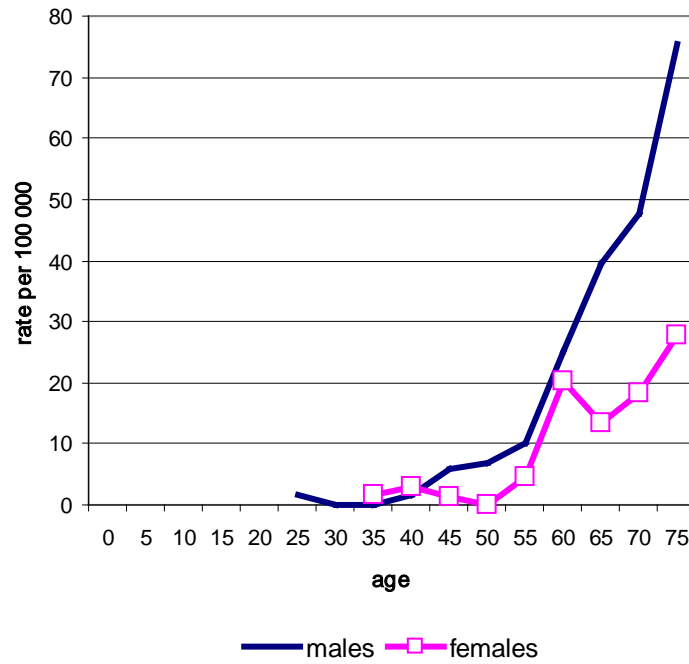
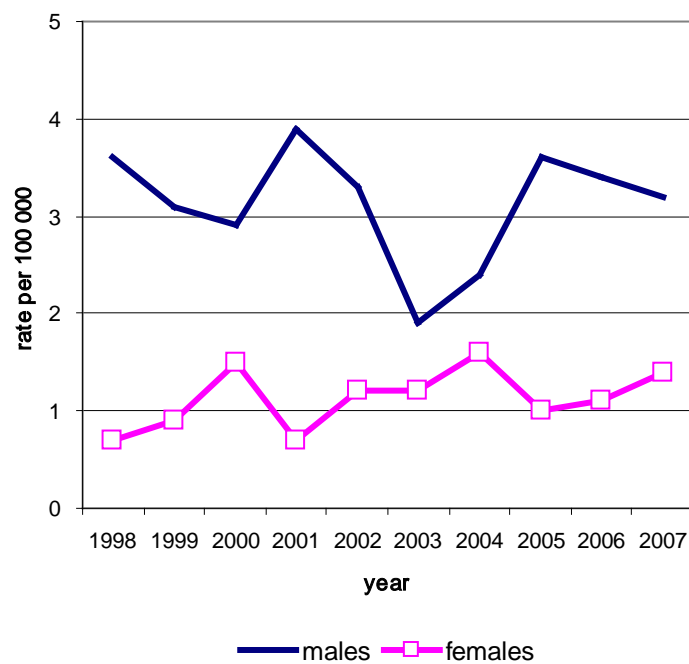


Figure 29: Incidence rates of new cases of bladder cancer by sex, 1997-2006



**Figure 30: Age-specific incidence rate of bladder cancer, Chiang Mai, 2007**

Of the 50 deaths from bladder cancer, 34 were males (3.4% of all male cancer deaths) and 16 were females (1.8% of all female cancer deaths). The age-standardized mortality rates were 3.2 for males and 1.4 for females (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, 1998-2007**

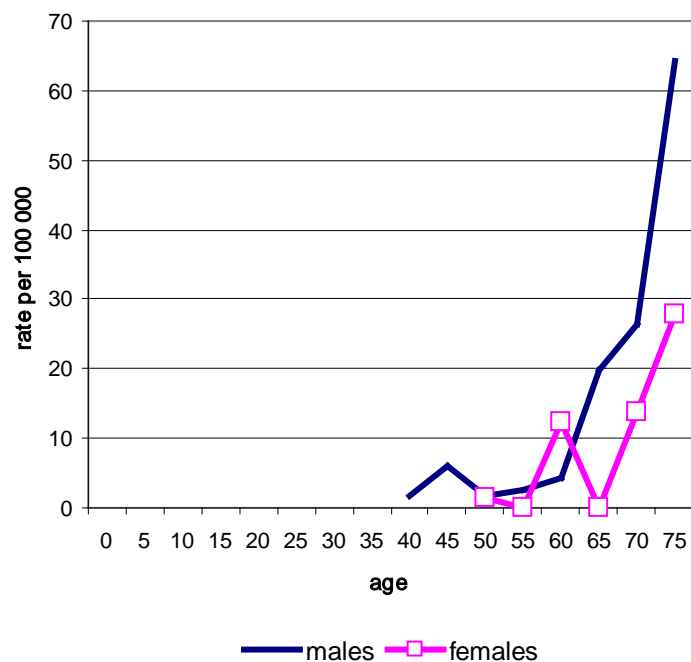


Figure 32: Age-specific mortality rate of bladder cancer, Chiang Mai, 2007

#### Diagnosis and stages of cancer

Forty-nine cases (58.3%) were diagnosed at a locally advanced stage and 7 cases had distant metastases. The most common metastatic site was lung. Eighty-eight percent were diagnosed by histology; the most common cell type was transitional cell carcinoma (82.1%).

Cell type	Males	Females	Total	%
Transitional cell ca.	47	22	69	82.1
Adenocarcinoma	1	1	2	2.4
Other	3	0	3	3.6
Clinical diagnosis	6	4	10	11.9
All	57	27	84	100.0

Stage	Cases	%
Localized	18	21.4
Locally advanced	49	58.3
Regional node metastasis	7	8.3
Distant metastasis	7	8.3
Unknown/not staged	3	3.6
All	84	100.0

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

There were 111 new cases of non-Hodgkin's lymphoma (NHL) diagnosed in 2007 (66 males, 45 females). This was 4.9% of all cancers in males and 2.8% of those in females. The age-standardized incidence rates were 7.3 for males and 4.4 for females. In 2007, NHL ranked sixth for male and eleventh for female cancers. The incidence rates in both sexes tended to increase from the year 2003 (Fig. 34). NHL was found after the age of 15 and the incidence increased with age in both sexes, especially in males. The incidence was high after the age of 60 years (Fig. 35). The cumulative rate percentages to age 75 were 0.8% for males and 0.4% for females. These represented risks of 1 in 117 for men and 1 in 232 for women of developing NHL by age 75.

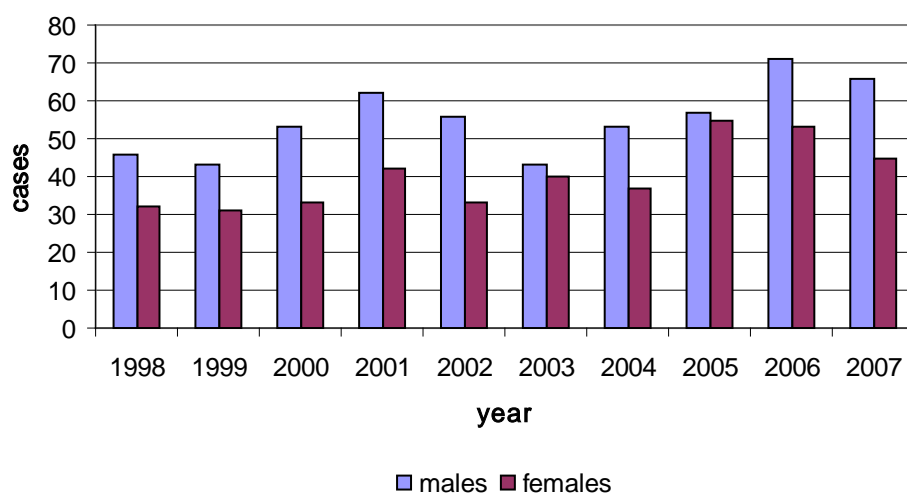


Figure 33: Number of new cases of NHL by sex, 1998-2007

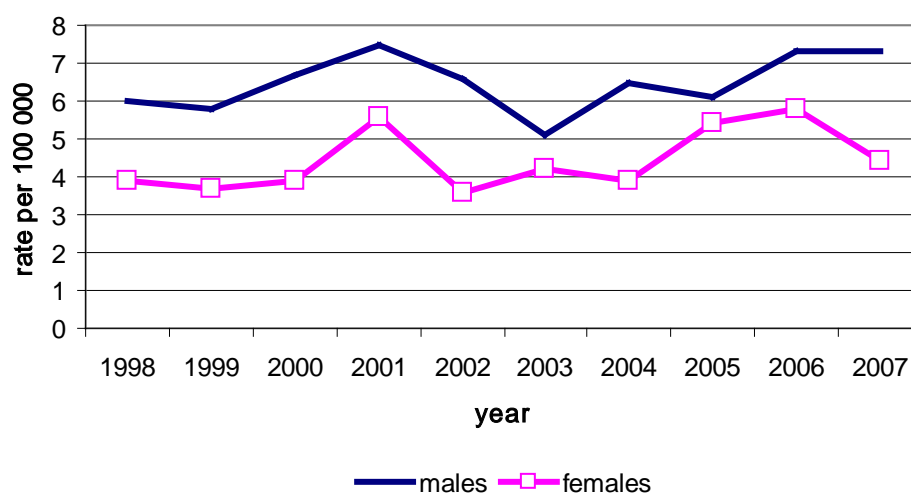
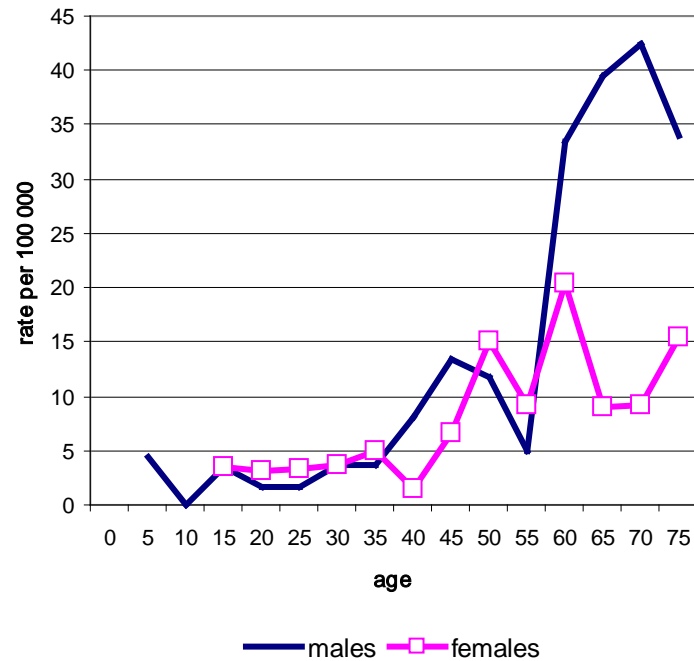
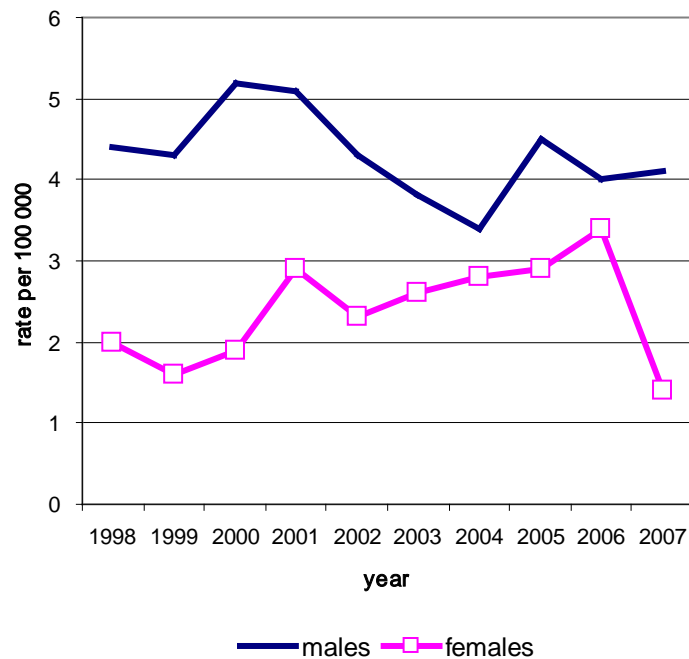


Figure 34: Incidence rates of new cases of NHL by sex, 1998-2007



**Figure 35: Age-specific incidence rate of NHL, Chiang Mai, 2007**

Of the 53 deaths from NHL, 37 were males (3.7% of all male cancer deaths) and 16 were females (1.8% of all female cancer deaths). The age-standardized mortality rates were 4.1 for males and 1.4 for females and tended to increase in males but decrease in females (Fig. 36). The mortality rates increased with age in both sexes, especially in males increasing sharply after age 60 (Fig. 37).



**Figure 36: Mortality rate of NHL by sex, Chiang Mai, 1998-2007**

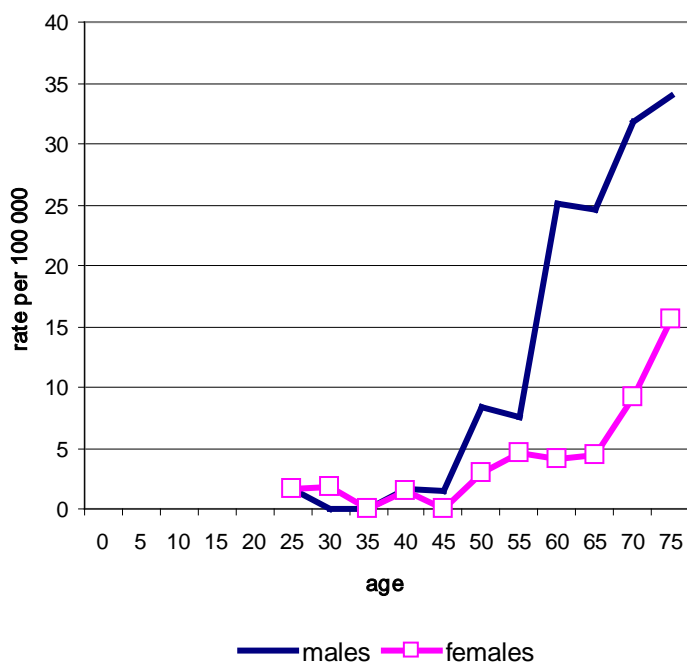


Figure 37: Age-specific mortality rate of NHL, Chiang Mai, 2006

### Diagnosis and stage of cancer

The stage of NHL in the Chiang Mai Cancer Registry was noted as “not applicable” because of insufficient information about 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); mature T-cell lymphoma (M9702); and malignant lymphoma, non-Hodgkin’s, NOS (M9591/3) accounting for 82.0% of all cases.

Cell type	Males	Females	Total	%
Large B-cell, diffuse	39	21	60	54.1
Malig.lymphoma,nos	6	6	12	10.8
Mature T-cell	5	6	11	9.9
Non-Hodgkin,nos	5	3	8	7.2
Other	11	9	20	18.0
All	66	45	111	100.0

### Cervical cancer (ICD-10 C53)

There were 250 new cases of invasive cervical cancer diagnosed in 2007. This was 15.5% of all cancers in females. The age-standardized incidence rates were 23.4 and tended to continue to decrease (Fig. 39). Cervical cancer was one of the three most common cancers in females, ranking second in 2007 after breast cancer. The incidence rates increased sharply after age 30 and were more common than lung cancer in the age group 30-59 years. The age at diagnosis ranged from 28 to 84 years with a mean age of 52.5 years and a median age of 50.5 years. The cumulative rate percentage to age 75 was 2.3%, representing a risk of 1 in 42 for women of developing cervical cancer by age 75.

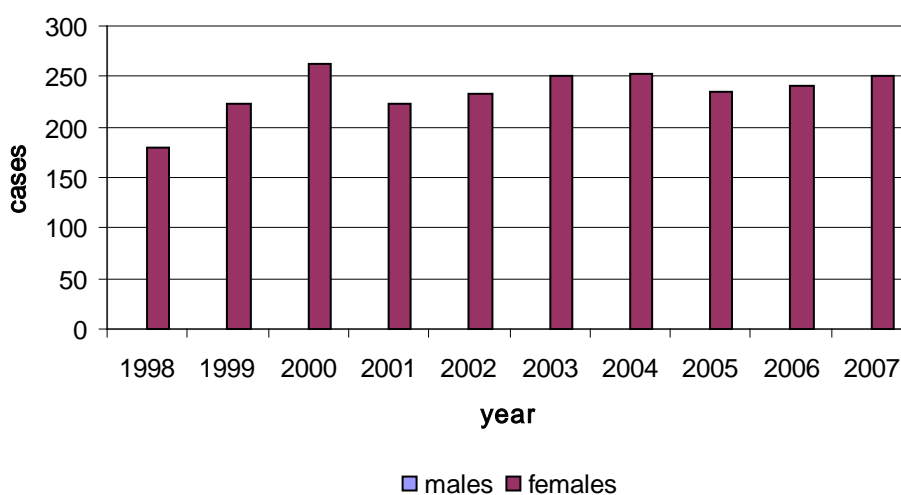


Figure 38: Number of new cases of cervical cancer by sex, 1998-2007

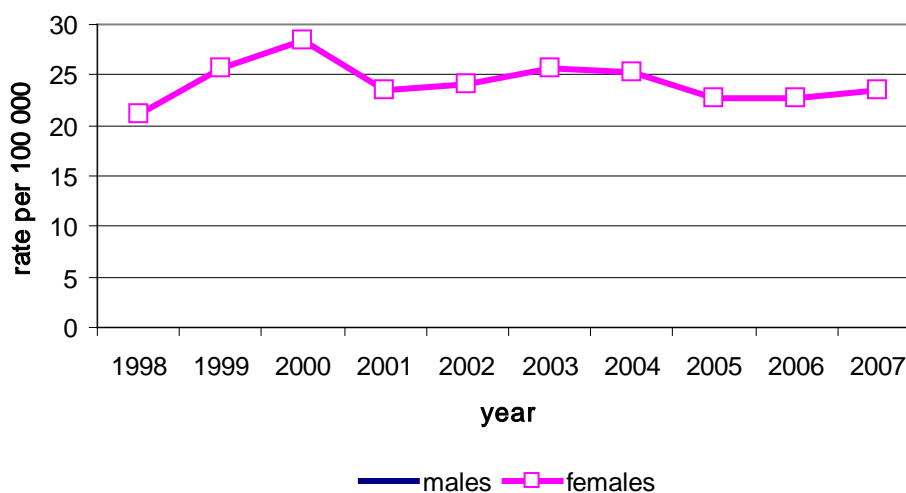
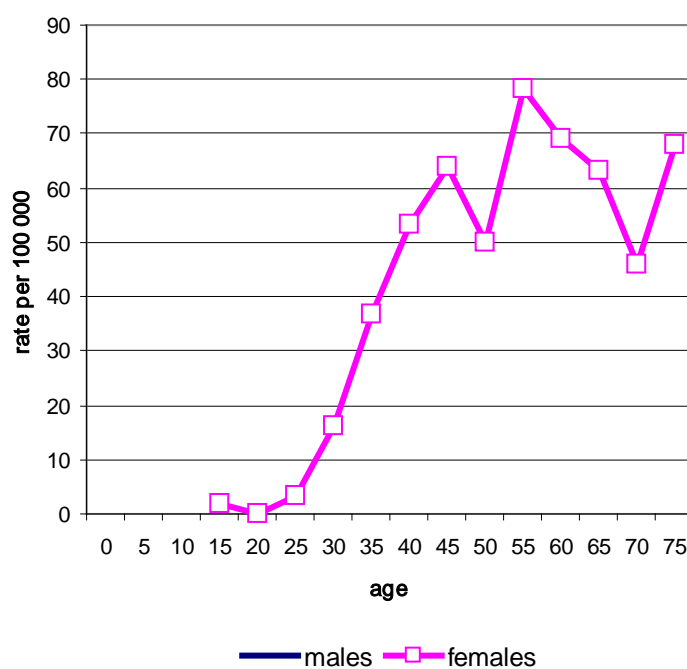


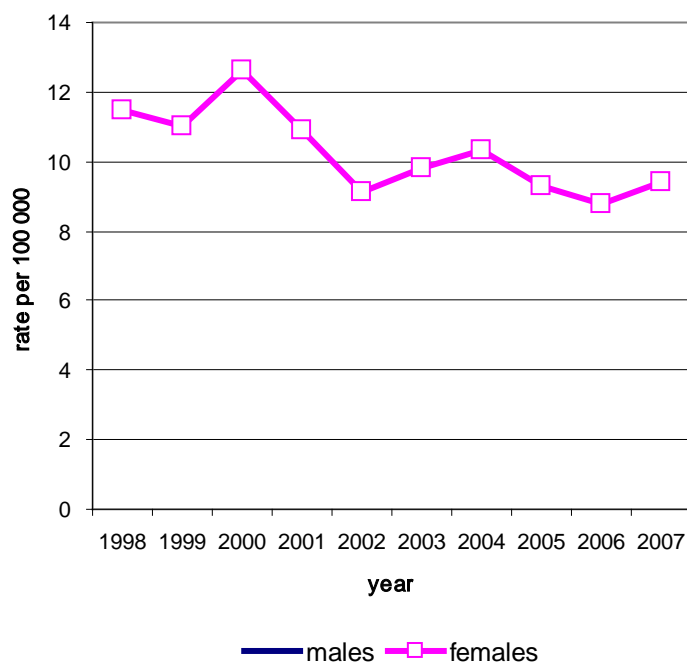
Figure 39: Incidence rates of new cases of cervical cancer by sex, 1998-2007



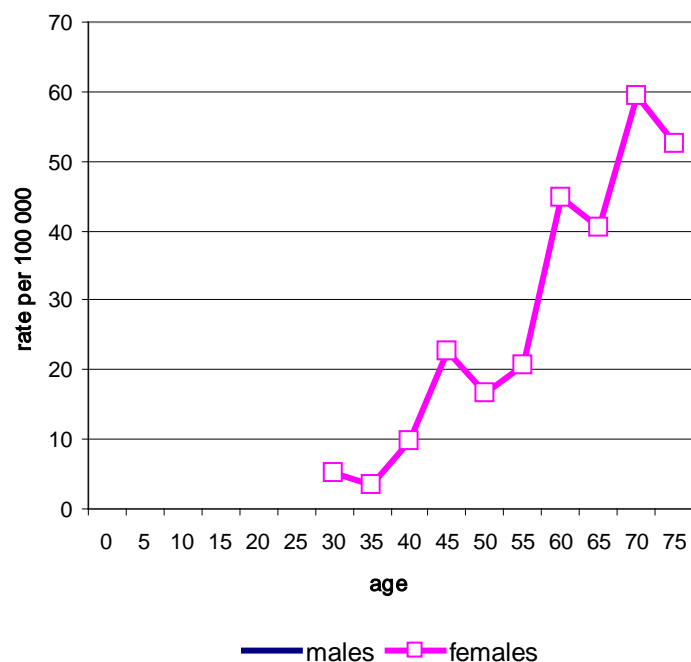


**Figure 40: Age-specific incidence rate of cervical cancer, Chiang Mai, 2007**

There were 99 deaths from cervical cancer, accounting for 10.9% of all female cancer deaths. The age-standardized mortality rate was 9.4 and tended to continue decreasing after 1998 (Fig. 41). The mortality rate increased with age, increasing sharply after age 60 (Fig. 42).



**Figure 41: Mortality rate of cervical cancer by sex, Chiang Mai, 1998-2007**



**Figure 42: Age-specific mortality rate of cervical cancer, Chiang Mai, 2007**

For cervical cancer deaths, 19 cases (19.2%) survived more than two years, and 43 cases (43.4%) survived less than one year.

### Diagnosis and stages of cancer

There were 220 cases of carcinoma in situ of the cervix that were not included in this analysis. For invasive cancer, 106 cases (42.4%) were diagnosed in localized stage and 16 cases had distant metastases. The most common metastasis site was distant lymph nodes. Ninety-five percent had histological diagnosis; the common cell types were squamous cell carcinoma (81.6%) and adenocarcinoma (12.8%).

Cell type	Females	Total	%
Squamous cell	204	204	81.6
Adenocarcinoma	32	32	12.8
Other	3	3	1.2
Clinical diagnosis	11	11	4.4
All	250	250	100.0

Stage	Cases	%
Localized	106	42.4
Locally advanced	118	47.2
Regional node metastasis	2	0.8
Distant metastasis	16	6.4
Unknown/not staged	8	3.2
All	250	100

### Female breast cancer (ICD-10 C50)

There were 290 new cases of female breast cancer diagnosed in 2007. This was 17.9% of all cancers in females and the most common cancer in 2007. The age-standardized incidence rate was 27.9 and tended to increase every year (Fig. 44). The incidence rate increased sharply from the age of 35 years to a maximum in the age group 60-64 years. Breast cancer was more common than cervical and lung cancer in the age group 30-59 years. The mean age at diagnosis was 52.7 years; the median age at diagnosis was 52 years. The cumulative rate percentage to age 75 was 2.9%, representing a risk of 10 in 344 for women of developing breast cancer by age 75.

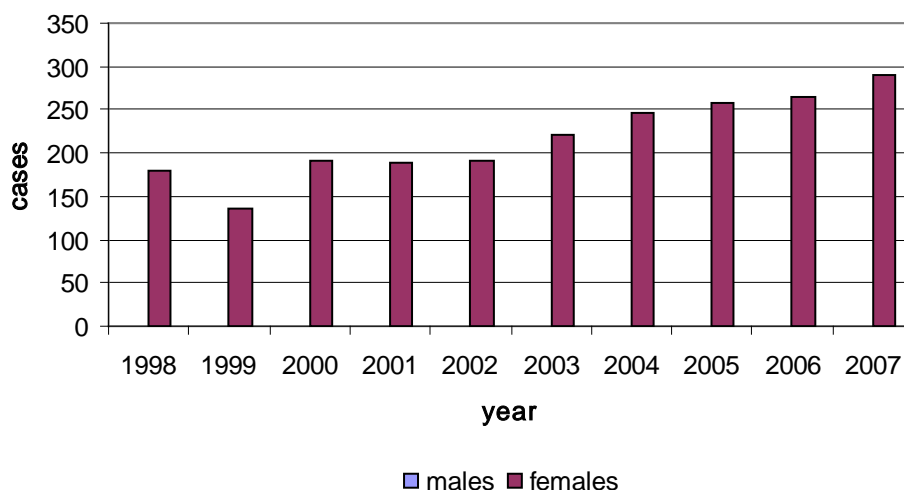


Figure 43: Number of new cases of female breast cancer by sex, 1998-2007

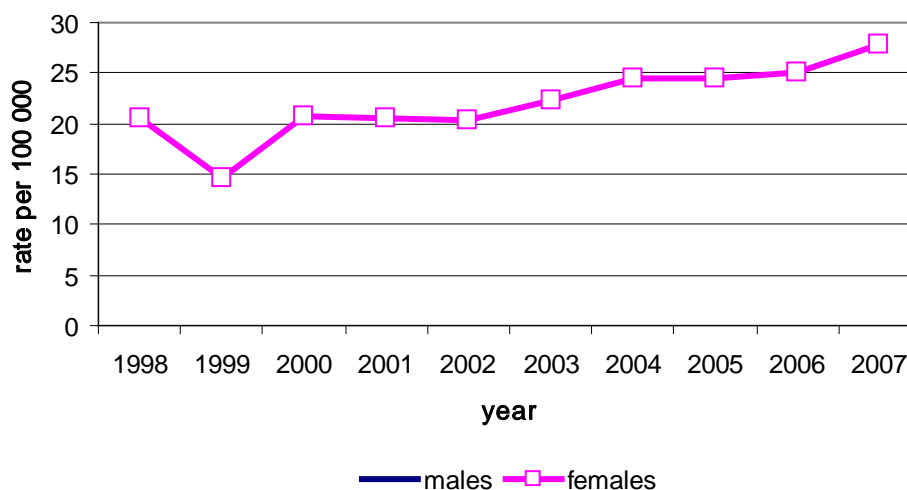
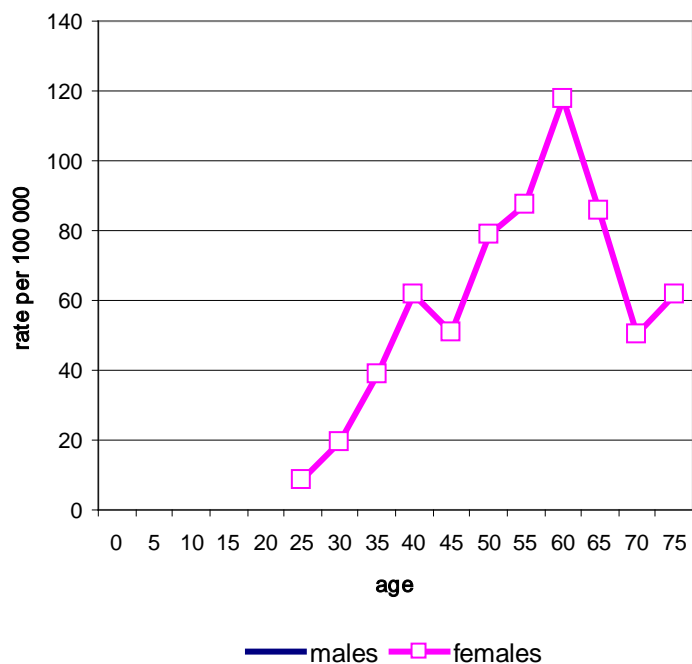
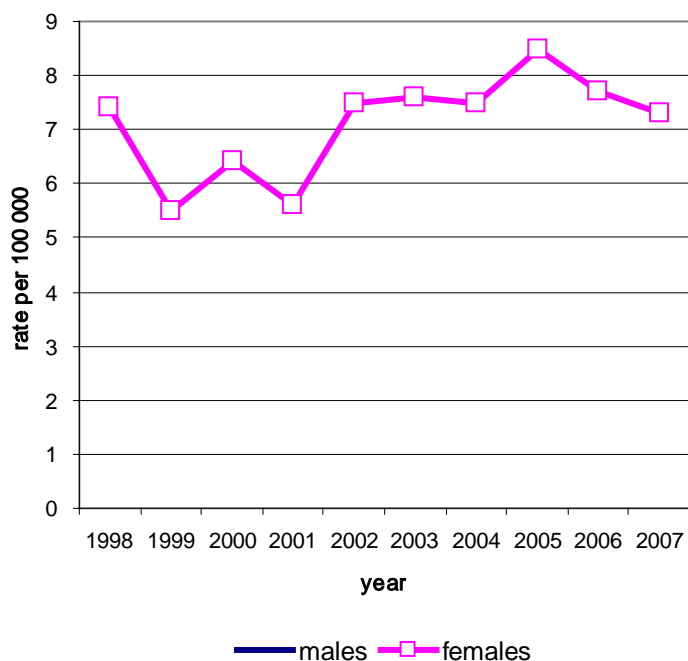


Figure 44: Incidence rates of new cases of female breast cancer by sex, 1998-2007

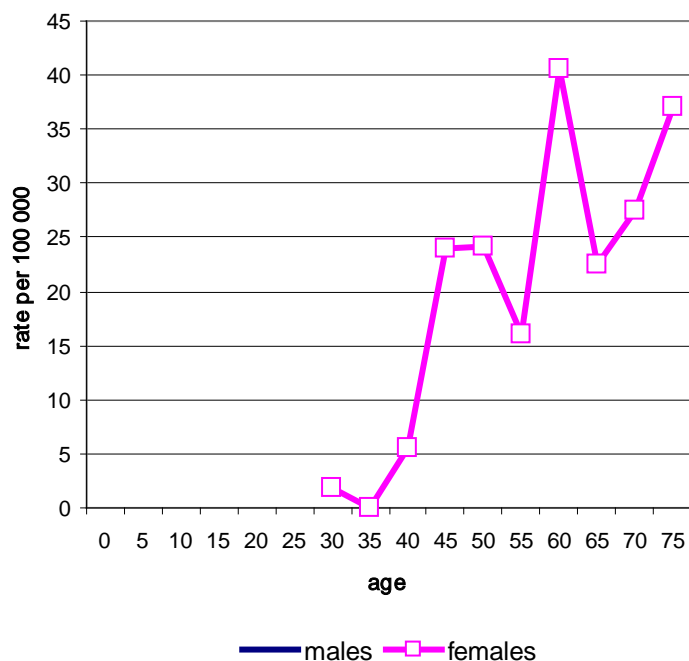


**Figure 45: Age-specific incidence rate of female breast cancer, Chiang Mai, 2007**

There were 79 deaths from breast cancer, accounting for 8.7% of all female cancer deaths. The age-standardized mortality rate was 7.3 and tended to increase in the last ten years (Fig. 46). The mortality rate increased with age, increasing sharply after age 60 (Fig. 47).



**Figure 46: Mortality rate of female breast cancer by sex, Chiang Mai, 1998-2007**



**Figure 47: Age-specific mortality rate of female breast cancer, Chiang Mai, 2007**

For breast cancer deaths, 14 cases (17.7%) survived more than five years, 27 cases (34.2%) survived more than three years and 24 cases (30.4%) survived less than one year.

#### Diagnosis and stages of cancer

Fifty-three percent were diagnosed in locally advanced stage and 22 cases had distant metastases at first diagnosis. The common metastasis sites were bone (10 cases) and lung (4 cases). Ninety-six percent had histological diagnosis; the major cell type was invasive ductal carcinoma (84.2%).

Cell type	Males	Females	Total	%
Invasive ductal ca.	7	243	250	84.2
Lobular carcinoma	0	6	6	2.0
Mucinous ca.	0	5	5	1.7
Papillary ca.	0	8	8	2.7
Others	0	17	17	5.7
Clinical diagnosis	0	11	11	3.7
All	7	290	297	100.0

Stage	Cases	%
Localized	67	22.6
Locally advanced	159	53.5
Regional node metastasis	41	13.8
Distant metastasis	22	7.4
Unknown/not staged	8	2.7
All	297	100.0

### Nasopharynx cancer (ICD-10 C11)

There were 41 new cases of nasopharyngeal cancer diagnosed in 2007 (29 males, 12 females). This was 2.2% of all cancers in males and 0.7% of those in females. The age-standardized incidence rates were 3.2 for males and 1.1 for females. In 2006, nasopharyngeal cancer ranked tenth for new male cancers and eighteenth for females. Nasopharyngeal cancer was the most common pharyngeal cancer. It was more common in males than in females in all age groups. The incidence rates tended to decrease from the year 2004 in both sexes (Fig. 49). The rates in males was higher than in females after age 40 (Fig. 50). The cumulative rate percentages to age 75 were 0.4% for males and 0.1% for females. These represented risks of 1 in 270 for men and 1 in 1000 for women of developing nasopharyngeal cancer by age 75.

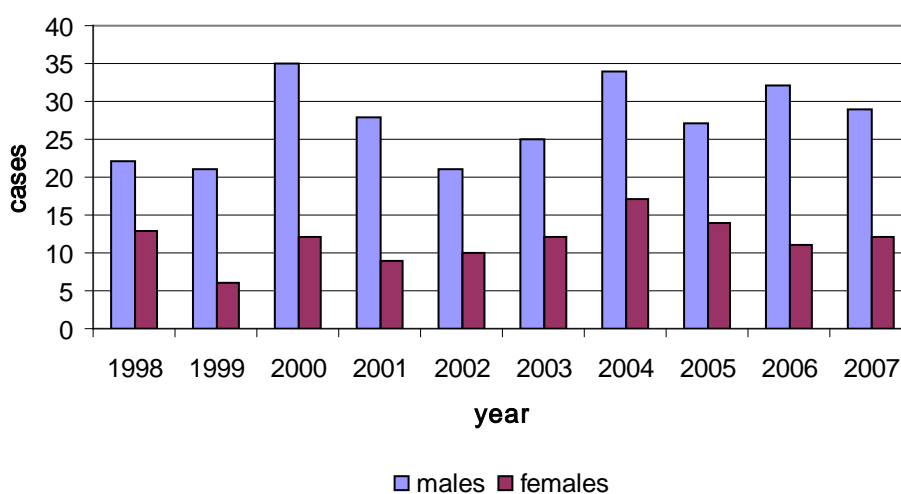


Figure 48: Number of new cases of nasopharyngeal cancer by sex, 1998-2007

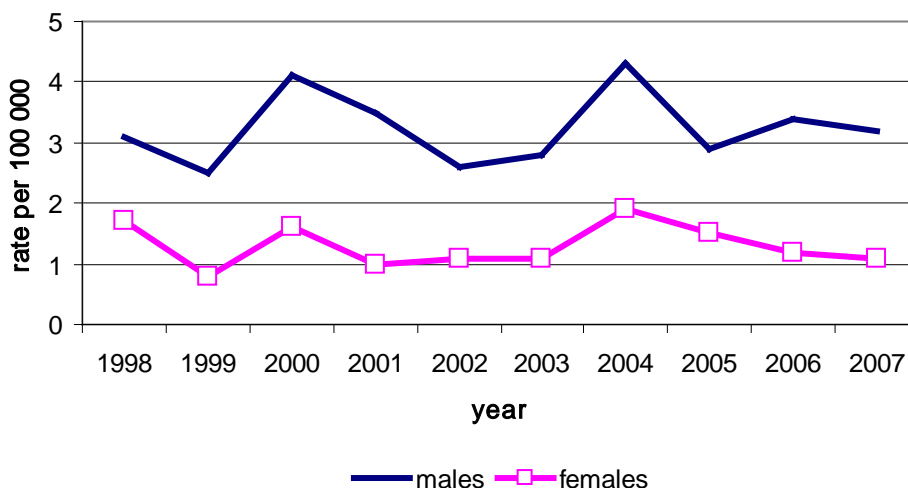
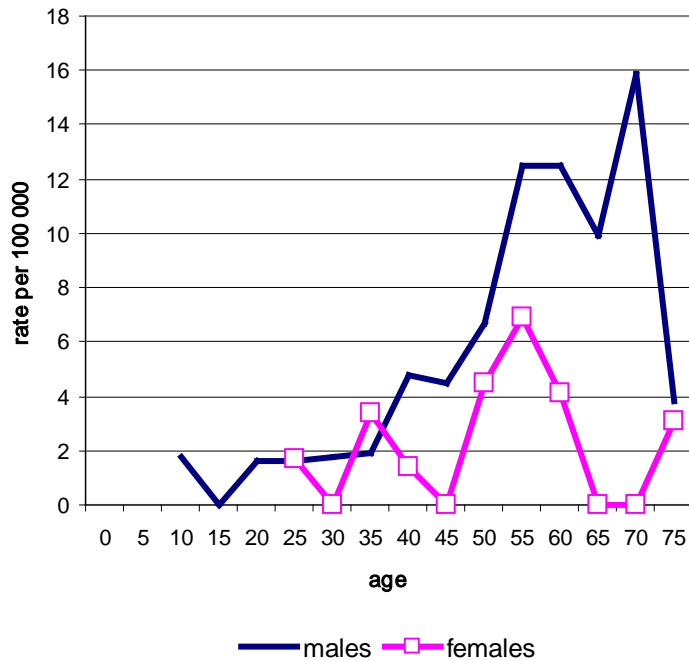
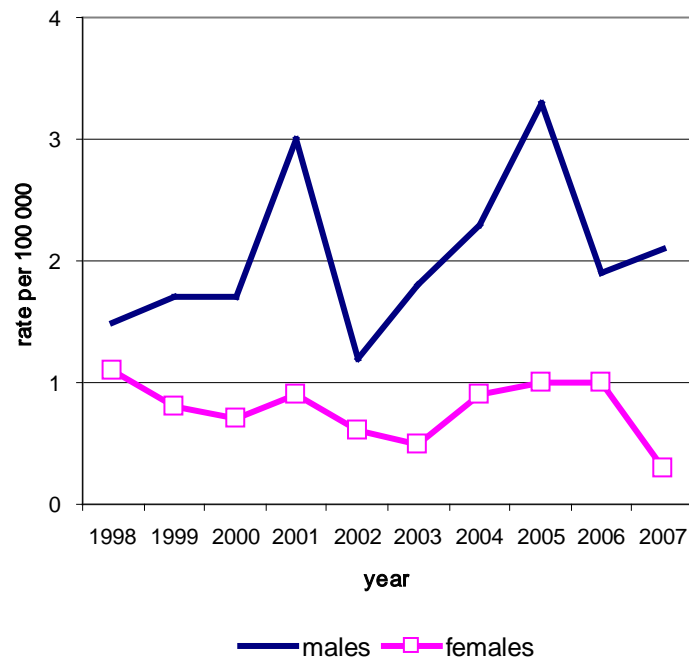


Figure 49: Incidence rates of new cases of nasopharyngeal cancer by sex, 1998-2007



**Figure 50: Age-specific incidence rate of nasopharyngeal cancer, Chiang Mai, 2007**

Of the 23 deaths from nasopharyngeal cancer, 20 were males (2.0% of all male cancer deaths) and 3 were females (0.3% of all female cancer deaths). The age-standardized mortality rates were 2.1 for males and 0.3 for females (Fig. 51). The mortality rates increased with age in both sexes, and males had higher rates than females in all age groups (Fig. 52).



**Figure 51: Mortality rate of nasopharyngeal cancer by sex, Chiang Mai, 1997-2006**

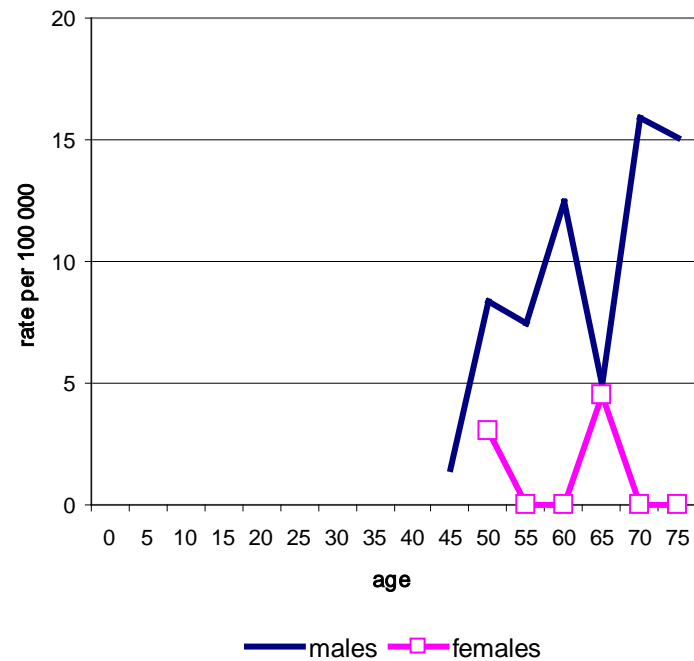


Figure 52: Age-specific mortality rate of nasopharyngeal cancer, Chiang Mai, 2006

### Diagnosis and stages of cancer

Twenty-four cases (58.5%) were diagnosed in regional node metastasis and 5 cases had distant metastases. Ninety-seven percent had histological diagnosis; the common cell types were squamous cell carcinoma (51.2%) and undifferentiated carcinoma (41.5%).

Cell type	Males	Females	Total	%
Squamous cell ca.	16	5	21	51.2
Undiff. Carcinoma	11	6	17	41.5
Other	1	1	2	4.9
Clinical diagnosis	1	0	1	2.4
All	29	12	41	100.0

Stage	Cases	%
Localized	3	7.3
Locally advanced	7	17.1
Regional node metastasis	24	58.5
Distant metastasis	5	12.2
Unknown/not staged	2	4.9
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 used at the Chiang Mai Cancer Registry are shown in Table 8 and 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 cases were 66.5% for males, and 79.1% 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 clear. The distribution of the M/I ratios for the various sites are shown in Table 8 and 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 indicates indirectly how many cancer cases are missed in registration because of no information during the lifetime of the patient. In 2007, 179 cases (6.1%) were diagnosed by death certificate only. The age of DCO cases ranged from 27 to 92 years; the median age at death was 65 years. The common cancer sites were unknown, lung, liver, and colon.

**Table 8: Indices of quality control of cancer data in Chiang Mai, 2007, males**

<b>Cancer/site</b>	<b>Cases</b>	<b>%DCO</b>	<b>%HV</b>	<b>M/I ratio</b>	<b>ICD (10th)</b>
Lip	3	-	100.0	0.0	C00
Tongue	15	-	93.3	80.0	C01-C02
Mouth	9	-	100.0	77.8	C03-C06
Salivary glands	0	-	-	-	C07-C08
Tonsil	4	-	100.0	125.0	C09
Other Oropharynx	2	-	100.0	50.0	C10
Nasopharynx	29	-	96.6	69.0	C11
Hypopharynx	5	-	80.0	180.0	C12-C13
Pharynx unspecified	0	-	-	-	C14
Esophagus	15	-	80.0	80.0	C15
Stomach	66	-	95.5	93.9	C16
Small intestine	4	-	100.0	25.0	C17
Colon	72	6.9	83.3	58.3	C18
Rectum	73	-	91.8	53.4	C19-C20
Anus	1	-	100.0	100.0	C21
Liver	253	11.5	17.0	89.3	C22
Gallbladder	19	15.8	31.6	63.2	C23-C24
Pancreas	18	5.6	16.7	77.8	C25
Nose, sinuses	6	-	100.0	50.0	C30-C31
Larynx	15	-	100.0	66.7	C32
Lung	288	7.6	62.8	83.7	C33-C34
Other Thoracic organs	4	-	50.0	0.0	C37-C38
Bone	8	12.5	75.0	87.5	C40-C41
Melanoma of Skin	9	-	100.0	66.7	C43
Other Skin	58	1.7	98.3	22.4	C44
Mesothelioma	0	-	-	-	C45
Kaposi sarcoma	1	-	100.0	0.0	C46
Connective,Soft tissue	10	20.0	70.0	50.0	C47;C49
Breast	7	-	100.0	42.9	C50
Penis	12	-	100.0	83.3	C60
Prostate	51	-	82.4	49.0	C61
Testis	7	-	85.7	57.1	C62
Other male genital	0	-	-	-	C63
Kidney	14	-	78.6	100.0	C64
Renal Pelvis	1	-	100.0	100.0	C65
Ureter	0	-	-	-	C66
Bladder	57	-	89.5	59.6	C67
Other Urinary organs	1	-	100.0	0.0	C68
Eye	3	-	66.7	0.0	C69
Brain, Nervous system	12	-	58.3	125.0	C70-C72
Thyroid	5	-	80.0	40.0	C73
Adrenal gland	2	-	100.0	0.0	C74
Other Endocrine	0	-	-	-	C75
Hodgkin disease	4	-	100.0	50.0	C81
Non-Hodgkin lymphoma	66	-	100.0	56.1	C82-C85;C96
Immunoproliferative dis.	0	-	-	-	C88
Multiple Myeloma	9	-	100.0	88.9	C90
Lymphoid Leukemia	8	-	100.0	75.0	C91
Myeloid Leukemia	22	-	100.0	50.0	C92-C94
Leukemia unspec.	0	-	-	-	C95
Other & unspecified	72	25.0	40.3	95.8	Other
<b>All sites Total</b>	<b>1340</b>	<b>6.1</b>	<b>66.5</b>	<b>74.3</b>	<b>All</b>

%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, 2007, females**

Cancer/site	Cases	%DCO	%HV	M/I ratio	ICD (10th)
Lip	4	-	100.0	25.0	C00
Tongue	6	-	100.0	66.7	C01-C02
Mouth	12	-	100.0	75.0	C03-C06
Salivary glands	8	12.5	87.5	50.0	C07-C08
Tonsil	2	-	100.0	100.0	C09
Other Oropharynx	2	50.0	50.0	100.0	C10
Nasopharynx	12	-	100.0	25.0	C11
Hypopharynx	4	-	100.0	125.0	C12-C13
Pharynx unspecified	0	-	-	-	C14
Esophagus	9	11.1	55.6	100.0	C15
Stomach	49	6.1	81.6	73.5	C16
Small intestine	3	-	100.0	33.3	C17
Colon	55	10.9	78.2	87.3	C18
Rectum	57	-	94.7	42.1	C19-C20
Anus	5	-	100.0	0.0	C21
Liver	111	18.9	19.8	93.7	C22
Gallbladder	24	-	62.5	75.0	C23-C24
Pancreas	22	4.5	40.9	72.7	C25
Nose, sinuses	4	-	100.0	25.0	C30-C31
Larynx	8	-	75.0	87.5	C32
Lung	236	12.3	51.3	97.9	C33-C34
Other Thoracic organs	1	-	100.0	300.0	C37-C38
Bone	5	-	80.0	0.0	C40-C41
Melanoma of Skin	7	-	100.0	42.9	C43
Other Skin	49	-	100.0	26.5	C44
Mesothelioma	0	-	-	-	C45
Kaposi sarcoma	1	-	100.0	0.0	C46
Connective,Soft tissue	8	-	87.5	62.5	C47;C49
Breast	290	1.7	96.6	27.2	C50
Vulva	5	-	100.0	80.0	C51
Vagina	4	-	100.0	25.0	C52
Cervix	250	1.6	96.0	39.6	C53
Corpus	47	-	97.9	29.8	C54
Uterus unspec.	0	-	-	-	C55
Ovary	69	2.9	92.8	27.5	C56
Other Female Genital	2	-	100.0	0.0	C57
Placenta	2	-	100.0	50.0	C58
Kidney	9	-	66.7	33.3	C64
Renal Pelvis	1	-	100.0	0.0	C65
Ureter	1	-	100.0	100.0	C66
Bladder	27	-	85.2	59.3	C67
Other Urinary organs	1	-	100.0	0.0	C68
Eye	4	-	100.0	0.0	C69
Brain, Nervous system	9	-	55.6	66.7	C70-C72
Thyroid	35	-	88.6	22.9	C73
Adrenal gland	0	-	-	-	C74
Other Endocrine	2	-	100.0	50.0	C75
Hodgkin disease	6	-	100.0	0.0	C81
Non-Hodgkin lymphoma	45	-	100.0	35.6	C82-C85;C96
Immunoproliferative dis.	0	-	-	-	C88
Multiple Myeloma	5	-	100.0	140.0	C90
Lymphoid Leukemia	6	-	100.0	50.0	C91
Myeloid Leukemia	22	-	100.0	63.6	C92-C94
Leukemia unspec.	4	-	75.0	125.0	C95
Other & unspecified	66	34.8	45.5	98.5	Other
<b>All sites Total</b>	<b>1616</b>	<b>6.0</b>	<b>79.1</b>	<b>56.4</b>	<b>All</b>

**Table 10: NUMBER OF NEW CANCER CASES IN CHIANGMAI 2007, MALES**

SITE	Number of cases by Age Group (years)											ICD (10th)
	All Ages	Age Unk.	0-	15-	25-	35-	45-	55-	65-	75+	%	
Lip	3	0	0	0	0	0	0	1	2	0	0.2	C00
Tongue	15	0	0	0	0	1	4	3	5	2	1.1	C01-C02
Mouth	9	0	0	0	1	0	3	2	1	2	0.7	C03-C06
Salivary glands	0	0	0	0	0	0	0	0	0	0	0.0	C07-C08
Tonsil	4	0	0	0	0	0	2	2	0	0	0.3	C09
Other Oropharynx	2	0	0	0	0	0	0	0	1	1	0.1	C10
Nasopharynx	29	0	1	1	2	4	7	8	5	1	2.2	C11
Hypopharynx	5	0	0	0	0	0	2	0	1	2	0.4	C12-C13
Pharynx unspec.	0	0	0	0	0	0	0	0	0	0	0.0	C14
Oesophagus	15	0	0	0	0	3	3	3	2	4	1.1	C15
Stomach	66	0	0	1	1	5	10	9	31	9	4.9	C16
Small intestine	4	0	0	0	0	1	0	0	2	1	0.3	C17
Colon	72	0	0	1	3	6	10	17	18	17	5.4	C18
Rectum	73	0	0	2	2	7	12	14	20	16	5.4	C19-C20
Anus	1	0	0	0	0	1	0	0	0	0	0.1	C21
Liver	253	0	0	1	9	35	74	51	50	33	18.9	C22
Gallbladder	19	0	0	0	0	0	3	5	9	2	1.4	C23-C24
Pancreas	18	0	0	0	0	0	6	5	3	4	1.3	C25
Nose, sinuses	6	0	0	0	0	1	1	3	1	0	0.4	C30-C31
Larynx	15	0	0	0	0	1	5	5	2	2	1.1	C32
Lung	288	0	0	0	4	13	35	67	102	67	21.5	C33-C34
Other Thoracic organs	4	0	2	0	1	0	0	1	0	0	0.3	C37-C38
Bone	8	0	2	0	1	1	3	0	0	1	0.6	C40-C41
Melanoma of Skin	9	0	0	0	1	1	2	0	2	3	0.7	C43
Other Skin	58	0	1	1	1	3	6	14	12	20	4.3	C44
Mesothelioma	0	0	0	0	0	0	0	0	0	0	0.0	C45
Kaposi sarcoma	1	0	0	1	0	0	0	0	0	0	0.1	C46
Connective,Soft tissue	10	0	0	1	0	2	2	3	1	1	0.7	C47;C49
Breast	7	0	0	0	0	2	3	1	1	0	0.5	C50
Penis	12	0	0	0	1	2	5	0	2	2	0.9	C60
Prostate	51	0	0	0	0	0	4	11	18	18	3.8	C61
Testis	7	0	0	0	2	2	2	0	1	0	0.5	C62
Other male genital	0	0	0	0	0	0	0	0	0	0	0.0	C63
Kidney	14	0	0	0	1	1	3	3	6	0	1.0	C64
Renal Pelvis	1	0	0	0	0	0	1	0	0	0	0.1	C65
Ureter	0	0	0	0	0	0	0	0	0	0	0.0	C66
Bladder	57	0	0	0	1	1	8	10	17	20	4.3	C67
Other Urinary organs	1	0	0	0	0	1	0	0	0	0	0.1	C68
Eye	3	0	0	0	0	2	0	0	1	0	0.2	C69
Brain, Nervous system	12	0	3	0	0	3	1	3	1	1	0.9	C70-C72
Thyroid	5	0	0	1	0	0	1	2	1	0	0.4	C73
Adrenal gland	2	0	1	1	0	0	0	0	0	0	0.1	C74
Other Endocrine	0	0	0	0	0	0	0	0	0	0	0.0	C75
Hodgkin disease	4	0	0	1	0	0	1	1	0	1	0.3	C81
Non-Hodgkin lymphoma	66	0	2	3	3	7	16	10	16	9	4.9	C82-C85;C96
Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0.0	C88
Multiple Myeloma	9	0	0	0	0	2	2	3	0	2	0.7	C90
Lymphoid Leukaemia	8	0	2	1	0	0	1	0	0	4	0.6	C91
Myeloid Leukaemia	22	0	4	2	1	2	6	2	1	4	1.6	C92-C94
Leukaemia unspec.	0	0	0	0	0	0	0	0	0	0	0.0	C95
Other & unspecified	72	0	0	1	3	5	21	12	17	13	5.4	Other
<b>All sites Total</b>	<b>1340</b>	<b>0</b>	<b>18</b>	<b>19</b>	<b>38</b>	<b>115</b>	<b>265</b>	<b>271</b>	<b>352</b>	<b>262</b>	<b>100.0</b>	<b>All</b>
<b>All sites but C44</b>	<b>1282</b>	<b>0</b>	<b>17</b>	<b>18</b>	<b>37</b>	<b>112</b>	<b>259</b>	<b>257</b>	<b>340</b>	<b>242</b>	<b>95.7</b>	<b>Not C44</b>

**Table 11: NUMBER OF NEW CANCER CASES IN CHIANGMAI 2007, FEMALES**

SITE	Number of cases by Age Group (years)										%	ICD (10th)
	All Ages	Age Unk.	0-	15-	25-	35-	45-	55-	65-	75+		
Lip	4	0	0	0	0	0	1	0	2	1	0.2	C00
Tongue	6	0	1	0	0	0	3	1	1	0	0.4	C01-C02
Mouth	12	0	0	0	1	1	0	4	3	3	0.7	C03-C06
Salivary glands	8	0	0	0	3	0	0	1	4	0	0.5	C07-C08
Tonsil	2	0	0	0	0	0	0	0	0	2	0.1	C09
Other Oropharynx	2	0	0	0	0	0	0	0	1	1	0.1	C10
Nasopharynx	12	0	0	0	1	3	3	4	0	1	0.7	C11
Hypopharynx	4	0	0	0	0	0	0	0	1	3	0.2	C12-C13
Pharynx unspec.	0	0	0	0	0	0	0	0	0	0	0.0	C14
Oesophagus	9	0	0	0	0	0	1	1	4	3	0.6	C15
Stomach	49	0	0	0	3	5	12	4	18	7	3.0	C16
Small intestine	3	0	0	0	0	0	1	2	0	0	0.2	C17
Colon	55	0	0	0	2	6	8	14	13	12	3.4	C18
Rectum	57	0	0	1	2	7	15	9	7	16	3.5	C19-C20
Anus	5	0	0	0	0	1	2	1	0	1	0.3	C21
Liver	111	0	1	0	2	6	26	27	31	18	6.9	C22
Gallbladder	24	0	0	0	0	0	5	3	7	9	1.5	C23-C24
Pancreas	22	0	0	0	0	1	9	4	6	2	1.4	C25
Nose, sinuses	4	0	0	1	0	1	1	0	1	0	0.2	C30-C31
Larynx	8	0	0	0	0	0	1	3	2	2	0.5	C32
Lung	236	0	0	0	5	9	42	53	80	47	14.6	C33-C34
Other Thoracic organs	1	0	0	0	0	0	0	0	0	1	0.1	C37-C38
Bone	5	0	1	0	2	0	1	0	0	1	0.3	C40-C41
Melanoma of Skin	7	0	0	0	0	0	2	2	1	2	0.4	C43
Other Skin	49	0	0	1	0	7	5	8	14	14	3.0	C44
Mesothelioma	0	0	0	0	0	0	0	0	0	0	0.0	C45
Kaposi sarcoma	1	0	0	0	0	1	0	0	0	0	0.1	C46
Connective,Soft tissue	8	0	1	0	0	0	2	4	0	1	0.5	C47;C49
Breast	290	0	0	0	16	67	90	67	30	20	17.9	C50
Vulva	5	0	0	0	1	0	1	2	1	0	0.3	C51
Vagina	4	0	1	0	0	0	2	0	1	0	0.2	C52
Cervix	250	0	0	1	11	60	81	51	24	22	15.5	C53
Corpus	47	0	0	0	1	2	17	18	9	0	2.9	C54
Uterus unspec.	0	0	0	0	0	0	0	0	0	0	0.0	C55
Ovary	69	0	1	4	5	16	27	8	6	2	4.3	C56
Other Female Genital	2	0	0	0	0	0	2	0	0	0	0.1	C57
Placenta	2	0	0	0	1	1	0	0	0	0	0.1	C58
Kidney	9	0	2	0	0	0	1	2	1	3	0.6	C64
Renal Pelvis	1	0	0	0	0	0	0	1	0	0	0.1	C65
Ureter	1	0	0	0	0	0	0	0	1	0	0.1	C66
Bladder	27	0	0	0	0	3	1	7	7	9	1.7	C67
Other Urinary organs	1	0	0	0	0	0	1	0	0	0	0.1	C68
Eye	4	0	0	0	0	2	0	1	0	1	0.2	C69
Brain, Nervous system	9	0	0	1	3	1	3	1	0	0	0.6	C70-C72
Thyroid	35	0	0	5	6	10	8	2	3	1	2.2	C73
Adrenal gland	0	0	0	0	0	0	0	0	0	0	0.0	C74
Other Endocrine	2	0	0	0	1	0	0	0	1	0	0.1	C75
Hodgkin disease	6	0	1	1	1	0	1	1	1	0	0.4	C81
Non-Hodgkin lymphoma	45	0	0	4	4	4	15	9	4	5	2.8	C82-C85;C96
Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0.0	C88
Multiple Myeloma	5	0	0	0	0	0	2	1	0	2	0.3	C90
Lymphoid Leukaemia	6	0	2	1	1	0	1	0	1	0	0.4	C91
Myeloid Leukaemia	22	0	4	2	3	2	4	2	4	1	1.4	C92-C94
Leukaemia unspec.	4	0	0	0	0	0	0	0	3	1	0.2	C95
Other & unspecified	66	0	0	0	5	5	11	17	14	14	4.1	Other
<b>All sites Total</b>	<b>1616</b>	<b>0</b>	<b>15</b>	<b>22</b>	<b>80</b>	<b>221</b>	<b>408</b>	<b>335</b>	<b>307</b>	<b>228</b>	<b>100.0</b>	<b>All</b>
<b>All sites but C44</b>	<b>1567</b>	<b>0</b>	<b>15</b>	<b>21</b>	<b>80</b>	<b>214</b>	<b>403</b>	<b>327</b>	<b>293</b>	<b>214</b>	<b>97.0</b>	<b>Not C44</b>

**Table 12: CANCER INCIDENCE IN CHIANGMAI, 2007, MALES**

SITE	All Ages	Incidence per 100,000 by Age Group (years) - MALES										Crude rate	CR 64	CR 74	ASR (W)	ICD (10th)
		0-	15-	25-	35-	45-	55-	65-	75+							
Lip	3	-	-	-	-	-	1.6	5.1	-	0.4	0.02	0.07	<b>0.4</b>	C00		
Tongue	15	-	-	-	0.9	3.2	4.7	12.8	7.6	2.0	0.10	0.23	<b>1.6</b>	C01-C02		
Mouth	9	-	-	0.9	-	2.4	3.1	2.6	7.6	1.2	0.07	0.08	<b>0.9</b>	C03-C06		
Salivary glands	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	<b>0.0</b>	C07-C08		
Tonsil	4	-	-	-	-	1.6	3.1	-	-	0.5	0.04	0.04	<b>0.4</b>	C09		
Other Oropharynx	2	-	-	-	-	-	-	2.6	3.8	0.3	0.00	0.03	<b>0.2</b>	C10		
Nasopharynx	29	0.7	0.8	1.7	3.4	5.5	12.5	12.8	3.8	3.9	0.24	0.37	<b>3.3</b>	C11		
Hypopharynx	5	-	-	-	-	1.6	-	2.6	7.6	0.7	0.02	0.04	<b>0.5</b>	C12-C13		
Pharynx unspec.	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	<b>0.0</b>	C14		
Oesophagus	15	-	-	-	2.6	2.4	4.7	5.1	15.1	2.0	0.09	0.14	<b>1.5</b>	C15		
Stomach	66	-	0.8	0.9	4.3	7.9	14	79.2	34	8.8	0.28	1.08	<b>7.4</b>	C16		
Small intestine	4	-	-	-	0.9	-	-	5.1	3.8	0.5	0.01	0.06	<b>0.4</b>	C17		
Colon	72	-	0.8	2.6	5.2	7.9	26.5	46	64.2	9.6	0.42	0.87	<b>7.7</b>	C18		
Rectum	73	-	1.7	1.7	6	9.5	21.8	51.1	60.4	9.7	0.44	0.95	<b>7.8</b>	C19-C20		
Anus	1	-	-	-	0.9	-	-	-	-	0.1	0.01	0.01	<b>0.1</b>	C21		
Liver	253	-	0.8	7.8	30.1	58.3	79.6	127.8	124.7	33.7	1.79	3.00	<b>26.5</b>	C22		
Gallbladder	19	-	-	-	-	2.4	7.8	23	7.6	2.5	0.10	0.34	<b>2.2</b>	C23-C24		
Pancreas	18	-	-	-	-	4.7	7.8	7.7	15.1	2.4	0.13	0.20	<b>1.8</b>	C25		
Nose, sinuses	6	-	-	-	0.9	0.8	4.7	2.6	-	0.8	0.06	0.09	<b>0.7</b>	C30-C31		
Larynx	15	-	-	-	0.9	3.9	7.8	5.1	7.6	2.0	0.13	0.18	<b>1.6</b>	C32		
Lung	288	-	-	3.5	11.2	27.6	104.5	260.7	253.1	38.3	1.48	4.00	<b>31.3</b>	C33-C34		
Other Thoracic organs	4	1.4	-	0.9	-	-	1.6	-	-	0.5	0.05	0.04	<b>0.7</b>	C37-C38		
Bone	8	1.4	-	0.9	0.9	2.4	-	-	3.8	1.1	0.06	0.05	<b>1.0</b>	C40-C41		
Melanoma of Skin	9	-	-	0.9	0.9	1.6	-	5.1	11.3	1.2	0.03	0.08	<b>0.9</b>	C43		
Other Skin	58	0.7	0.8	0.9	2.6	4.7	21.8	30.7	75.5	7.7	0.31	0.62	<b>6.1</b>	C44		
Mesothelioma	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	<b>0.0</b>	C45		
Kaposi sarcoma	1	-	0.8	-	-	-	-	-	-	0.1	0.00	0.01	<b>0.1</b>	C46		
Connective,Soft tissue	10	-	0.8	-	1.7	1.6	4.7	2.6	3.8	1.3	0.09	0.12	<b>1.1</b>	C47;C49		
Breast	7	-	-	-	1.7	2.4	1.6	2.6	-	0.9	0.05	0.08	<b>0.7</b>	C50		
Penis	12	-	-	0.9	1.7	3.9	-	5.1	7.6	1.6	0.06	0.11	<b>1.2</b>	C60		
Prostate	51	-	-	-	-	3.2	17.2	46	68	6.8	0.24	0.70	<b>5.4</b>	C61		
Testis	7	-	-	1.7	1.7	1.6	-	2.6	-	0.9	0.05	0.07	<b>0.8</b>	C62		
Other male genital	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	<b>0.0</b>	C63		
Kidney	14	-	-	0.9	0.9	2.4	4.7	15.3	-	1.9	0.09	0.24	<b>1.6</b>	C64		
Renal Pelvis	1	-	-	-	-	0.8	-	-	-	0.1	0.01	0.01	<b>0.1</b>	C65		
Ureter	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	<b>0.0</b>	C66		
Bladder	57	-	-	0.9	0.9	6.3	15.6	43.4	75.5	7.6	0.25	0.68	<b>5.8</b>	C67		
Other Urinary organs	1	-	-	-	0.9	-	-	-	-	0.1	0.01	0.01	<b>0.1</b>	C68		
Eye	3	-	-	-	1.7	-	-	2.6	-	0.4	0.02	0.04	<b>0.3</b>	C69		
Brain, Nervous system	12	2.1	-	-	2.6	0.8	4.7	2.6	3.8	1.6	0.11	0.14	<b>1.6</b>	C70-C72		
Thyroid	5	-	0.8	-	-	0.8	3.1	2.6	-	0.7	0.03	0.07	<b>0.6</b>	C73		
Adrenal gland	2	0.7	0.8	-	-	-	-	-	-	0.3	0.01	0.02	<b>0.4</b>	C74		
Other Endocrine	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	<b>0.0</b>	C75		
Hodgkin disease	4	-	0.8	-	-	0.8	1.6	-	3.8	0.5	0.02	0.03	<b>0.4</b>	C81		
Non-Hodgkin lymphoma	66	1.4	2.5	2.6	6	12.6	15.6	40.9	34	8.8	0.44	0.85	<b>7.3</b>	C82-C85;C96		
Immunoproliferative dis.	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	<b>0.0</b>	C88		
Multiple Myeloma	9	-	-	-	1.7	1.6	4.7	-	7.6	1.2	0.09	0.09	<b>0.9</b>	C90		
Lymphoid Leukaemia	8	1.4	0.8	-	-	0.8	-	-	15.1	1.1	0.04	0.04	<b>1.0</b>	C91		
Myeloid Leukaemia	22	2.8	1.7	0.9	1.7	4.7	3.1	2.6	15.1	2.9	0.15	0.18	<b>2.7</b>	C92-C94		
Leukaemia unspec.	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	<b>0.0</b>	C95		
Other & unspecified	72	-	0.8	2.6	4.3	16.6	18.7	43.4	49.1	9.6	0.43	0.86	<b>7.5</b>	Other		
<b>All sites Total</b>	<b>1340</b>	<b>13</b>	<b>16</b>	<b>33</b>	<b>99</b>	<b>209</b>	<b>423</b>	<b>900</b>	<b>990</b>	<b>178.3</b>	<b>7.79</b>	<b>15.67</b>	<b>144.6</b>	<b>All</b>		
<b>All sites but C44</b>	<b>1282</b>	<b>12</b>	<b>15</b>	<b>32</b>	<b>96</b>	<b>204</b>	<b>401</b>	<b>869</b>	<b>914</b>	<b>170.6</b>	<b>7.50</b>	<b>15.15</b>	<b>138.5</b>	<b>Not C44</b>		

**Table 13: CANCER INCIDENCE IN CHIANGMAI, 2007, FEMALES**

SITE	Incidence per 100,000 by Age Group (years) - FEMALES										Crude rate	CR 64	CR 74	ASR (W)	ICD (10th)
	All Ages	0-	15-	25-	35-	45-	55-	65-	75+						
Lip	4	-	-	-	-	0.7	-	4.5	3.1	0.5	0.01	0.05	0.4	C00	
Tongue	6	0.7	-	-	-	2.1	1.5	2.3	-	0.8	0.04	0.07	0.7	C01-C02	
Mouth	12	-	-	0.9	0.8	-	5.9	6.8	9.3	1.5	0.08	0.14	1.2	C03-C06	
Salivary glands	8	-	-	2.6	-	-	1.5	9.1	-	1.0	0.05	0.13	0.9	C07-C08	
Tonsil	2	-	-	-	-	-	-	-	6.2	0.3	0.00	0.00	0.1	C09	
Other Oropharynx	2	-	-	-	-	-	-	2.3	3.1	0.3	0.00	0.02	0.2	C10	
Nasopharynx	12	-	-	0.9	2.3	2.1	5.9	-	3.1	1.5	0.11	0.10	1.2	C11	
Hypopharynx	4	-	-	-	-	-	-	2.3	9.3	0.5	0.00	0.02	0.3	C12-C13	
Pharynx unspec.	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C14	
Oesophagus	9	-	-	-	-	0.7	1.5	9.1	9.3	1.1	0.03	0.12	0.8	C15	
Stomach	49	-	-	2.6	3.8	8.5	5.9	40.9	21.6	6.2	0.20	0.60	4.7	C16	
Small intestine	3	-	-	-	-	0.7	2.9	-	-	0.4	0.03	0.03	0.3	C17	
Colon	55	-	-	1.7	4.6	5.7	20.6	29.5	37.1	7.0	0.35	0.64	5.3	C18	
Rectum	57	-	0.8	1.7	5.3	10.6	13.2	15.9	49.4	7.2	0.32	0.48	5.0	C19-C20	
Anus	5	-	-	-	0.8	1.4	1.5	-	3.1	0.6	0.03	0.03	0.4	C21	
Liver	111	0.7	-	1.7	4.6	18.4	39.7	70.4	55.6	14.1	0.65	1.35	10.9	C22	
Gallbladder	24	-	-	-	-	3.5	4.4	15.9	27.8	3.0	0.07	0.23	2.1	C23-C24	
Pancreas	22	-	-	-	0.8	6.4	5.9	13.6	6.2	2.8	0.15	0.28	2.1	C25	
Nose, sinuses	4	-	0.8	-	0.8	0.7	-	2.3	-	0.5	0.01	0.04	0.4	C30-C31	
Larynx	8	-	-	-	-	0.7	4.4	4.5	6.2	1.0	0.06	0.10	0.8	C32	
Lung	236	-	-	4.3	6.9	29.8	77.9	181.7	145.2	29.9	1.26	3.04	22.9	C33-C34	
Other Thoracic organs	1	-	-	-	-	-	-	-	3.1	0.1	0.00	0.00	0.1	C37-C38	
Bone	5	0.7	-	1.7	-	0.7	-	-	3.1	0.6	0.03	0.02	0.6	C40-C41	
Melanoma of Skin	7	-	-	-	-	1.4	2.9	2.3	6.2	0.9	0.04	0.06	0.6	C43	
Other Skin	49	-	0.8	-	5.3	3.5	11.8	31.8	43.3	6.2	0.23	0.55	4.6	C44	
Mesothelioma	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C45	
Kaposi sarcoma	1	-	-	-	0.8	-	-	-	-	0.1	0.01	0.01	0.1	C46	
Connective,Soft tissue	8	0.7	-	-	-	1.4	5.9	-	3.1	1.0	0.08	0.08	0.9	C47;C49	
Breast	290	-	-	13.7	51.2	63.8	98.5	68.1	61.8	36.8	2.29	2.91	27.6	C50	
Vulva	5	-	-	0.9	-	0.7	2.9	2.3	-	0.6	0.05	0.07	0.5	C51	
Vagina	4	0.7	-	-	-	1.4	-	2.3	-	0.5	0.03	0.05	0.5	C52	
Cervix	250	-	0.8	9.4	45.8	57.4	74.9	54.5	68	31.7	1.85	2.36	23.4	C53	
Corpus	47	-	-	0.9	1.5	12.1	26.4	20.4	-	6.0	0.40	0.61	4.8	C54	
Uterus unspec.	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C55	
Ovary	69	0.7	3.3	4.3	12.2	19.1	11.8	13.6	6.2	8.8	0.49	0.63	6.7	C56	
Other Female Genital	2	-	-	-	-	1.4	-	-	-	0.3	0.01	0.01	0.2	C57	
Placenta	2	-	-	0.9	0.8	-	-	-	-	0.3	0.02	0.02	0.2	C58	
Kidney	9	1.5	-	-	-	0.7	2.9	2.3	9.3	1.1	0.06	0.09	1.1	C64	
Renal Pelvis	1	-	-	-	-	-	1.5	-	-	0.1	0.01	0.01	0.1	C65	
Ureter	1	-	-	-	-	-	-	2.3	-	0.1	0.00	0.02	0.1	C66	
Bladder	27	-	-	-	2.3	0.7	10.3	15.9	27.8	3.4	0.15	0.31	2.5	C67	
Other Urinary organs	1	-	-	-	-	0.7	-	-	-	0.1	0.01	0.01	0.1	C68	
Eye	4	-	-	-	1.5	-	1.5	-	3.1	0.5	0.03	0.03	0.4	C69	
Brain, Nervous system	9	-	0.8	2.6	0.8	2.1	1.5	-	-	1.1	0.08	0.07	0.9	C70-C72	
Thyroid	35	-	4.2	5.2	7.6	5.7	2.9	6.8	3.1	4.4	0.22	0.31	3.6	C73	
Adrenal gland	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C74	
Other Endocrine	2	-	-	0.9	-	-	-	2.3	-	0.3	0.01	0.02	0.2	C75	
Hodgkin disease	6	0.7	0.8	0.9	-	0.7	1.5	2.3	-	0.8	0.05	0.06	0.8	C81	
Non-Hodgkin lymphoma	45	-	3.3	3.4	3.1	10.6	13.2	9.1	15.5	5.7	0.34	0.43	4.4	C82-C85;C96	
Immunoproliferative dis.	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C88	
Multiple Myeloma	5	-	-	-	-	1.4	1.5	-	6.2	0.6	0.03	0.03	0.4	C90	
Lymphoid Leukaemia	6	1.5	0.8	0.9	-	0.7	-	2.3	-	0.8	0.04	0.07	0.9	C91	
Myeloid Leukaemia	22	3	1.7	2.6	1.5	2.8	2.9	9.1	3.1	2.8	0.15	0.23	2.8	C92-C94	
Leukaemia unspec.	4	-	-	-	-	-	-	6.8	3.1	0.5	0.00	0.07	0.4	C95	
Other & unspecified	66	-	-	4.3	3.8	7.8	25	31.8	43.3	8.4	0.44	0.73	6.4	Other	
<b>All sites Total</b>	<b>1616</b>	<b>11</b>	<b>18</b>	<b>69</b>	<b>169</b>	<b>289</b>	<b>492</b>	<b>697</b>	<b>705</b>	<b>205.0</b>	<b>10.09</b>	<b>16.05</b>	<b>156.6</b>	<b>All</b>	
<b>All sites but C44</b>	<b>1567</b>	<b>11</b>	<b>17</b>	<b>69</b>	<b>164</b>	<b>286</b>	<b>480</b>	<b>665</b>	<b>661</b>	<b>198.8</b>	<b>9.89</b>	<b>15.59</b>	<b>152.0</b>	<b>Not C44</b>	



**Table 14: NUMBER OF CANCER DEATHS IN CHIANGMAI, 2007, MALES**

SITE	Number of cases by Age Group (years)										%	ICD (10th)
	All Ages	Age Unk.	0-	15-	25-	35-	45-	55-	65-	75+		
Lip	0	0	0	0	0	0	0	0	0	0	0.0	C00
Tongue	12	0	0	0	0	0	3	3	2	4	1.2	C01-C02
Mouth	7	0	0	0	0	0	2	0	2	3	0.7	C03-C06
Salivary glands	3	0	0	0	0	0	0	0	1	2	0.3	C07-C08
Tonsil	5	0	0	0	0	0	1	3	0	1	0.5	C09
Other Oropharynx	1	0	0	0	0	0	0	0	1	0	0.1	C10
Nasopharynx	20	0	0	0	0	0	6	6	4	4	2.0	C11
Hypopharynx	9	0	0	0	0	1	2	0	4	2	0.9	C12-C13
Pharynx unspec.	0	0	0	0	0	0	0	0	0	0	0.0	C14
Oesophagus	12	0	0	0	0	3	1	3	2	3	1.2	C15
Stomach	62	0	0	0	2	4	7	13	18	18	6.2	C16
Small intestine	1	0	0	0	0	0	0	0	0	1	0.1	C17
Colon	42	0	0	0	3	3	3	9	6	18	4.2	C18
Rectum	39	0	0	0	0	6	2	9	14	8	3.9	C19-C20
Anus	1	0	0	0	0	0	0	1	0	0	0.1	C21
Liver	226	0	0	1	5	30	70	50	41	29	22.7	C22
Gallbladder	12	0	0	0	0	1	1	1	7	2	1.2	C23-C24
Pancreas	14	0	0	0	0	0	2	4	3	5	1.4	C25
Nose, sinuses	3	0	0	0	0	0	0	2	1	0	0.3	C30-C31
Larynx	10	0	0	0	0	0	3	1	3	3	1.0	C32
Lung	241	0	0	0	1	9	33	43	91	64	24.2	C33-C34
Other Thoracic organs	0	0	0	0	0	0	0	0	0	0	0.0	C37-C38
Bone	7	0	1	1	2	0	1	0	0	2	0.7	C40-C41
Melanoma of Skin	6	0	0	0	0	0	1	3	0	2	0.6	C43
Other Skin	13	0	0	0	0	0	2	1	3	7	1.3	C44
Mesothelioma	0	0	0	0	0	0	0	0	0	0	0.0	C45
Kaposi sarcoma	0	0	0	0	0	0	0	0	0	0	0.0	C46
Connective,Soft tissue	5	0	0	0	0	0	1	1	2	1	0.5	C47;C49
Breast	3	0	0	0	0	0	0	2	0	1	0.3	C50
Penis	10	0	0	0	1	0	1	3	2	3	1.0	C60
Prostate	25	0	0	0	0	0	0	0	9	16	2.5	C61
Testis	4	0	1	0	0	1	1	0	1	0	0.4	C62
Other male genital	1	0	0	0	0	0	0	0	0	1	0.1	C63
Kidney	14	0	0	0	1	0	0	5	7	1	1.4	C64
Renal Pelvis	1	0	0	0	0	0	1	0	0	0	0.1	C65
Ureter	1	0	0	0	0	0	0	0	0	1	0.1	C66
Bladder	34	0	0	0	0	1	5	2	9	17	3.4	C67
Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0.0	C68
Eye	0	0	0	0	0	0	0	0	0	0	0.0	C69
Brain, Nervous system	15	0	4	1	1	2	2	2	2	1	1.5	C70-C72
Thyroid	2	0	0	0	0	0	1	1	0	0	0.2	C73
Adrenal gland	0	0	0	0	0	0	0	0	0	0	0.0	C74
Other Endocrine	1	0	1	0	0	0	0	0	0	0	0.1	C75
Hodgkin disease	2	0	0	0	1	0	0	0	0	1	0.2	C81
Non-Hodgkin lymphoma	37	0	0	0	1	1	6	9	11	9	3.7	C82-C85;C96
Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0.0	C88
Multiple Myeloma	8	0	0	0	0	0	1	4	1	2	0.8	C90
Lymphoid Leukaemia	6	0	2	1	0	0	1	0	1	1	0.6	C91
Myeloid Leukaemia	11	0	1	1	1	0	3	2	1	2	1.1	C92-C94
Leukaemia unspec.	0	0	0	0	0	0	0	0	0	0	0.0	C95
Other & unspecified	69	0	0	0	3	5	18	12	19	12	6.9	Other
<b>All sites Total</b>	<b>995</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>22</b>	<b>67</b>	<b>181</b>	<b>195</b>	<b>268</b>	<b>247</b>	<b>100.0</b>	<b>All</b>
<b>All sites but C44</b>	<b>982</b>	<b>0</b>	<b>10</b>	<b>5</b>	<b>22</b>	<b>67</b>	<b>179</b>	<b>194</b>	<b>265</b>	<b>240</b>	<b>98.7</b>	<b>Not C44</b>

**Table 15: NUMBER OF CANCER DEATHS IN CHIANGMAI, 2007, FEMALES**

SITE	Number of cases by Age Group (years)										%	ICD (10th)
	All Ages	Age Unk.	0-	15-	25-	35-	45-	55-	65-	75+		
Lip	1	0	0	0	0	0	0	0	1	0	0.1	C00
Tongue	4	0	0	0	0	0	3	0	0	1	0.4	C01-C02
Mouth	9	0	0	0	0	0	0	1	3	5	1.0	C03-C06
Salivary glands	4	0	0	0	0	0	0	0	3	1	0.4	C07-C08
Tonsil	2	0	0	0	0	0	0	0	0	2	0.2	C09
Other Oropharynx	2	0	0	0	0	0	0	1	1	0	0.2	C10
Nasopharynx	3	0	0	0	0	0	2	0	1	0	0.3	C11
Hypopharynx	5	0	0	0	0	0	1	1	0	3	0.5	C12-C13
Pharynx unspec.	0	0	0	0	0	0	0	0	0	0	0.0	C14
Oesophagus	9	0	0	0	0	0	0	1	4	4	1.0	C15
Stomach	36	0	0	1	1	2	9	4	9	10	3.9	C16
Small intestine	1	0	0	0	0	0	1	0	0	0	0.1	C17
Colon	48	0	0	0	2	2	11	7	10	16	5.3	C18
Rectum	24	0	0	0	1	3	5	3	3	9	2.6	C19-C20
Anus	0	0	0	0	0	0	0	0	0	0	0.0	C21
Liver	104	0	0	0	3	5	26	24	26	20	11.4	C22
Gallbladder	18	0	0	0	0	1	2	3	3	9	2.0	C23-C24
Pancreas	16	0	0	0	1	0	4	3	5	3	1.8	C25
Nose, sinuses	1	0	0	1	0	0	0	0	0	0	0.1	C30-C31
Larynx	7	0	0	0	0	0	0	1	2	4	0.8	C32
Lung	231	0	0	0	4	6	22	60	85	54	25.3	C33-C34
Other Thoracic organs	3	0	0	0	0	0	1	0	1	1	0.3	C37-C38
Bone	0	0	0	0	0	0	0	0	0	0	0.0	C40-C41
Melanoma of Skin	3	0	0	0	0	0	1	1	0	1	0.3	C43
Other Skin	13	0	0	0	0	1	0	0	3	9	1.4	C44
Mesothelioma	0	0	0	0	0	0	0	0	0	0	0.0	C45
Kaposi sarcoma	0	0	0	0	0	0	0	0	0	0	0.0	C46
Connective,Soft tissue	5	0	0	0	1	0	1	2	0	1	0.5	C47;C49
Breast	79	0	0	0	1	4	34	17	11	12	8.7	C50
Vulva	4	0	0	0	0	1	1	1	0	1	0.4	C51
Vagina	1	0	0	0	0	0	1	0	0	0	0.1	C52
Cervix	99	0	0	0	3	9	28	20	22	17	10.9	C53
Corpus	14	0	0	0	1	0	4	3	2	4	1.5	C54
Uterus unspec.	0	0	0	0	0	0	0	0	0	0	0.0	C55
Ovary	19	0	0	1	0	1	8	6	1	2	2.1	C56
Other Female Genital	0	0	0	0	0	0	0	0	0	0	0.0	C57
Placenta	1	0	0	0	0	1	0	0	0	0	0.1	C58
Kidney	3	0	0	0	0	0	1	0	1	1	0.3	C64
Renal Pelvis	0	0	0	0	0	0	0	0	0	0	0.0	C65
Ureter	1	0	0	0	0	0	0	0	1	0	0.1	C66
Bladder	16	0	0	0	0	0	1	3	3	9	1.8	C67
Other Urinary organs	0	0	0	0	0	0	0	0	0	0	0.0	C68
Eye	0	0	0	0	0	0	0	0	0	0	0.0	C69
Brain, Nervous system	6	0	0	1	0	2	1	2	0	0	0.7	C70-C72
Thyroid	8	0	0	0	0	0	0	1	6	1	0.9	C73
Adrenal gland	1	0	0	0	0	0	0	1	0	0	0.1	C74
Other Endocrine	1	0	1	0	0	0	0	0	0	0	0.1	C75
Hodgkin disease	0	0	0	0	0	0	0	0	0	0	0.0	C81
Non-Hodgkin lymphoma	16	0	0	0	2	1	2	3	3	5	1.8	C82-C85;C96
Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0	0.0	C88
Multiple Myeloma	7	0	0	0	0	0	3	1	0	3	0.8	C90
Lymphoid Leukaemia	3	0	2	0	0	0	0	0	0	1	0.3	C91
Myeloid Leukaemia	14	0	3	1	1	2	4	2	1	0	1.5	C92-C94
Leukaemia unspec.	5	0	0	0	0	0	0	0	3	2	0.5	C95
Other & unspecified	65	0	0	0	4	4	10	14	19	14	7.1	Other
<b>All sites Total</b>	<b>912</b>	<b>0</b>	<b>6</b>	<b>5</b>	<b>25</b>	<b>45</b>	<b>187</b>	<b>186</b>	<b>233</b>	<b>225</b>	<b>100.0</b>	<b>All</b>
<b>All sites but C44</b>	<b>899</b>	<b>0</b>	<b>6</b>	<b>5</b>	<b>25</b>	<b>44</b>	<b>187</b>	<b>186</b>	<b>230</b>	<b>216</b>	<b>98.6</b>	<b>Not C44</b>

**Table 16: CANCER DEATHS IN CHIANGMAI, 2007, MALES**

SITE	All Ages	Incidence per 100,000 by Age Group (years) - MALES									Crude rate	CR 64	CR 74	ASR (W)	ICD (10th)
		0-	15-	25-	35-	45-	55-	65-	75+						
Lip	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C00	
Tongue	12	-	-	-	-	2.4	4.7	5.1	15.1	1.6	0.07	0.12	1.1	C01-C02	
Mouth	7	-	-	-	-	1.6	-	5.1	11.3	0.9	0.02	0.07	0.7	C03-C06	
Salivary glands	3	-	-	-	-	-	-	2.6	7.6	0.4	0.00	0.03	0.3	C07-C08	
Tonsil	5	-	-	-	-	0.8	4.7	-	3.8	0.7	0.06	0.06	0.6	C09	
Other Oropharynx	1	-	-	-	-	-	-	2.6	-	0.1	0.00	0.03	0.1	C10	
Nasopharynx	20	-	-	-	-	4.7	9.4	10.2	15.1	2.7	0.15	0.25	2.1	C11	
Hypopharynx	9	-	-	-	0.9	1.6	-	10.2	7.6	1.2	0.02	0.12	1.0	C12-C13	
Pharynx unspec.	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C14	
Oesophagus	12	-	-	-	2.6	0.8	4.7	5.1	11.3	1.6	0.07	0.12	1.2	C15	
Stomach	62	-	-	1.7	3.4	5.5	20.3	46	68	8.3	0.32	0.77	6.7	C16	
Small intestine	1	-	-	-	-	-	-	-	3.8	0.1	0.00	0.00	0.1	C17	
Colon	42	-	-	2.6	2.6	2.4	14	15.3	68	5.6	0.24	0.37	4.4	C18	
Rectum	39	-	-	-	5.2	1.6	14	35.8	30.2	5.2	0.21	0.57	4.2	C19-C20	
Anus	1	-	-	-	-	-	1.6	-	-	0.1	0.01	0.01	0.1	C21	
Liver	226	-	0.8	4.3	25.8	55.2	78	104.8	109.5	30.1	1.64	2.65	23.9	C22	
Gallbladder	12	-	-	-	0.9	0.8	1.6	17.9	7.6	1.6	0.03	0.21	1.3	C23-C24	
Pancreas	14	-	-	-	-	1.6	6.2	7.7	18.9	1.9	0.07	0.15	1.4	C25	
Nose, sinuses	3	-	-	-	-	-	3.1	2.6	-	0.4	0.04	0.07	0.5	C30-C31	
Larynx	10	-	-	-	-	2.4	1.6	7.7	11.3	1.3	0.04	0.12	0.9	C32	
Lung	241	-	-	0.9	7.7	26	67.1	232.5	241.8	32.1	1.04	3.32	25.8	C33-C34	
Other Thoracic organs	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C37-C38	
Bone	7	0.7	0.8	1.7	-	0.8	-	-	7.6	0.9	0.04	0.04	0.9	C40-C41	
Melanoma of Skin	6	-	-	-	-	0.8	4.7	-	7.6	0.8	0.05	0.05	0.6	C43	
Other Skin	13	-	-	-	-	1.6	1.6	7.7	26.4	1.7	0.04	0.11	1.2	C44	
Mesothelioma	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C45	
Kaposi sarcoma	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C46	
Connective,Soft tissue	5	-	-	-	-	0.8	1.6	5.1	3.8	0.7	0.02	0.07	0.5	C47;C49	
Breast	3	-	-	-	-	-	3.1	-	3.8	0.4	0.03	0.03	0.3	C50	
Penis	10	-	-	0.9	-	0.8	4.7	5.1	11.3	1.3	0.07	0.12	1.1	C60	
Prostate	25	-	-	-	-	-	-	23	60.4	3.3	0.00	0.23	2.3	C61	
Testis	4	0.7	-	-	0.9	0.8	-	2.6	-	0.5	0.03	0.05	0.6	C62	
Other male genital	1	-	-	-	-	-	-	-	3.8	0.1	0.00	0.00	0.1	C63	
Kidney	14	-	-	0.9	-	-	7.8	17.9	3.8	1.9	0.10	0.27	1.8	C64	
Renal Pelvis	1	-	-	-	-	0.8	-	-	-	0.1	0.01	0.01	0.1	C65	
Ureter	1	-	-	-	-	-	-	-	3.8	0.1	0.00	0.00	0.1	C66	
Bladder	34	-	-	-	0.9	3.9	3.1	23	64.2	4.5	0.08	0.31	3.2	C67	
Other Urinary organs	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C68	
Eye	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C69	
Brain, Nervous system	15	2.8	0.8	0.9	1.7	1.6	3.1	5.1	3.8	2.0	0.13	0.17	2.3	C70-C72	
Thyroid	2	-	-	-	-	0.8	1.6	-	-	0.3	0.03	0.03	0.3	C73	
Adrenal gland	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C74	
Other Endocrine	1	0.7	-	-	-	-	-	-	-	0.1	0.01	0.01	0.2	C75	
Hodgkin disease	2	-	-	0.9	-	-	-	-	3.8	0.3	0.01	0.00	0.2	C81	
Non-Hodgkin lymphoma	37	-	-	0.9	0.9	4.7	14	28.1	34	4.9	0.23	0.50	4.1	C82-C85;C96	
Immunoproliferative dis.	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C88	
Multiple Myeloma	8	-	-	-	-	0.8	6.2	2.6	7.6	1.1	0.07	0.10	0.9	C90	
Lymphoid Leukaemia	6	1.4	0.8	-	-	0.8	-	2.6	3.8	0.8	0.04	0.06	0.9	C91	
Myeloid Leukaemia	11	0.7	0.8	0.9	-	2.4	3.1	2.6	7.6	1.5	0.08	0.10	1.3	C92-C94	
Leukaemia unspec.	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C95	
Other & unspecified	69	-	-	2.6	4.3	14.2	18.7	48.6	45.3	9.2	0.40	0.87	7.3	Other	
<b>All sites Total</b>	<b>995</b>	<b>7</b>	<b>4</b>	<b>19</b>	<b>58</b>	<b>143</b>	<b>304</b>	<b>685</b>	<b>933</b>	<b>132.4</b>	<b>5.37</b>	<b>11.57</b>	<b>106.4</b>	<b>All</b>	
<b>All sites but C44</b>	<b>982</b>	<b>7</b>	<b>4</b>	<b>19</b>	<b>58</b>	<b>141</b>	<b>303</b>	<b>677</b>	<b>907</b>	<b>130.7</b>	<b>5.34</b>	<b>11.47</b>	<b>105.2</b>	<b>Not C44</b>	

**Table 17: CANCER DEATHS IN CHIANGMAI, 2007, FEMALES**

SITE	Incidence per 100,000 by Age Group (years) - FEMALES										Crude rate	CR 64	CR 74	ASR (W)	ICD (10th)
	All Ages	0-	15-	25-	35-	45-	55-	65-	75+						
Lip	1	-	-	-	-	-	-	2.3	-	0.1	0.00	0.02	0.1	C00	
Tongue	4	-	-	-	-	2.1	-	-	3.1	0.5	0.02	0.02	0.3	C01-C02	
Mouth	9	-	-	-	-	-	1.5	6.8	15.5	1.1	0.01	0.08	0.7	C03-C06	
Salivary glands	4	-	-	-	-	-	-	6.8	3.1	0.5	0.00	0.07	0.4	C07-C08	
Tonsil	2	-	-	-	-	-	-	-	6.2	0.3	0.00	0.00	0.1	C09	
Other Oropharynx	2	-	-	-	-	-	1.5	2.3	-	0.3	0.01	0.03	0.2	C10	
Nasopharynx	3	-	-	-	-	1.4	-	2.3	-	0.4	0.01	0.04	0.3	C11	
Hypopharynx	5	-	-	-	-	0.7	1.5	-	9.3	0.6	0.02	0.02	0.4	C12-C13	
Pharynx unspec.	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C14	
Oesophagus	9	-	-	-	-	-	1.5	9.1	12.4	1.1	0.02	0.11	0.9	C15	
Stomach	36	-	0.8	0.9	1.5	6.4	5.9	20.4	30.9	4.6	0.16	0.37	3.1	C16	
Small intestine	1	-	-	-	-	0.7	-	-	-	0.1	0.01	0.01	0.1	C17	
Colon	48	-	-	1.7	1.5	7.8	10.3	22.7	49.4	6.1	0.22	0.44	4.2	C18	
Rectum	24	-	-	0.9	2.3	3.5	4.4	6.8	27.8	3.0	0.11	0.17	2.0	C19-C20	
Anus	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C21	
Liver	104	-	-	2.6	3.8	18.4	35.3	59	61.8	13.2	0.60	1.18	9.7	C22	
Gallbladder	18	-	-	-	0.8	1.4	4.4	6.8	27.8	2.3	0.06	0.13	1.4	C23-C24	
Pancreas	16	-	-	0.9	-	2.8	4.4	11.4	9.3	2.0	0.10	0.21	1.6	C25	
Nose, sinuses	1	-	0.8	-	-	-	-	-	-	0.1	0.00	0.01	0.1	C30-C31	
Larynx	7	-	-	-	-	-	1.5	4.5	12.4	0.9	0.01	0.06	0.6	C32	
Lung	231	-	-	3.4	4.6	15.6	88.2	193	166.9	29.3	1.17	3.06	22.7	C33-C34	
Other Thoracic organs	3	-	-	-	-	0.7	-	2.3	3.1	0.4	0.01	0.03	0.2	C37-C38	
Bone	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C40-C41	
Melanoma of Skin	3	-	-	-	-	0.7	1.5	-	3.1	0.4	0.02	0.02	0.2	C43	
Other Skin	13	-	-	-	0.8	-	-	6.8	27.8	1.6	0.01	0.08	1.0	C44	
Mesothelioma	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C45	
Kaposi sarcoma	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C46	
Connective,Soft tissue	5	-	-	0.9	-	0.7	2.9	-	3.1	0.6	0.05	0.04	0.5	C47;C49	
Breast	79	-	-	0.9	3.1	24.1	25	25	37.1	10.0	0.56	0.81	7.3	C50	
Vulva	4	-	-	-	0.8	0.7	1.5	-	3.1	0.5	0.03	0.03	0.4	C51	
Vagina	1	-	-	-	-	0.7	-	-	-	0.1	0.01	0.01	0.1	C52	
Cervix	99	-	-	2.6	6.9	19.9	29.4	50	52.5	12.6	0.61	1.11	9.4	C53	
Corpus	14	-	-	0.9	-	2.8	4.4	4.5	12.4	1.8	0.09	0.14	1.3	C54	
Uterus unspec.	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C55	
Ovary	19	-	0.8	-	0.8	5.7	8.8	2.3	6.2	2.4	0.16	0.18	1.8	C56	
Other Female Genital	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C57	
Placenta	1	-	-	-	0.8	-	-	-	-	0.1	0.01	0.01	0.1	C58	
Kidney	3	-	-	-	-	0.7	-	2.3	3.1	0.4	0.01	0.03	0.2	C64	
Renal Pelvis	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C65	
Ureter	1	-	-	-	-	-	-	2.3	-	0.1	0.00	0.02	0.1	C66	
Bladder	16	-	-	-	-	0.7	4.4	6.8	27.8	2.0	0.07	0.14	1.4	C67	
Other Urinary organs	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C68	
Eye	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C69	
Brain, Nervous system	6	-	0.8	-	1.5	0.7	2.9	-	-	0.8	0.06	0.06	0.7	C70-C72	
Thyroid	8	-	-	-	-	-	1.5	13.6	3.1	1.0	0.02	0.16	0.9	C73	
Adrenal gland	1	-	-	-	-	-	1.5	-	-	0.1	0.02	0.02	0.2	C74	
Other Endocrine	1	0.7	-	-	-	-	-	-	-	0.1	0.01	0.01	0.3	C75	
Hodgkin disease	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C81	
Non-Hodgkin lymphoma	16	-	-	1.7	0.8	1.4	4.4	6.8	15.5	2.0	0.08	0.14	1.4	C82-C85;C96	
Immunoproliferative dis.	0	-	-	-	-	-	-	-	-	0.0	0.00	0.00	0.0	C88	
Multiple Myeloma	7	-	-	-	-	2.1	1.5	-	9.3	0.9	0.04	0.04	0.6	C90	
Lymphoid Leukaemia	3	1.5	-	-	-	-	-	-	3.1	0.4	0.02	0.02	0.4	C91	
Myeloid Leukaemia	14	2.2	0.8	0.9	1.5	2.8	2.9	2.3	-	1.8	0.13	0.15	2.0	C92-C94	
Leukaemia unspec.	5	-	-	-	-	-	-	6.8	6.2	0.6	0.00	0.07	0.5	C95	
Other & unspecified	65	-	-	3.4	3.1	7.1	20.6	43.1	43.3	8.2	0.38	0.79	6.4	Other	
<b>All sites Total</b>	<b>912</b>	<b>4</b>	<b>4</b>	<b>21</b>	<b>34</b>	<b>133</b>	<b>273</b>	<b>529</b>	<b>695</b>	<b>115.7</b>	<b>4.83</b>	<b>9.70</b>	<b>86.3</b>	<b>All</b>	
<b>All sites but C44</b>	<b>899</b>	<b>4</b>	<b>4</b>	<b>21</b>	<b>34</b>	<b>133</b>	<b>273</b>	<b>522</b>	<b>667</b>	<b>114.1</b>	<b>4.83</b>	<b>9.64</b>	<b>85.4</b>	<b>Not C44</b>	

### CHIANG MAI POPULATION AND ADMINISTRATIVE DIVISIONS

In 2007, Chiang Mai province was composed of 24 districts (amphurs) (Fig. 53). Local administration consisted of one municipality and 29 subdistrict municipalities. Total population in Chiang Mai in 2007 was 1,664,399, consisting of 814,524 males and 846,875 females. The population density averaged 82.8 people per km<sup>2</sup>. The highest population density was in Muang District (1,458.7 people per km<sup>2</sup>), followed by Saraphi, Sanpatong, Sansai, and Sankamphaeng districts. The lowest population density was in Mae Chaem District (20.0 people per km<sup>2</sup>). Eighty percent of the population was born in the province; the remainder was made up of Thai, Chinese, Laos, and hill tribe people. Buddhism was the professed religion of 91.8% of the people in the province. Of the remainder, most were either Christians or Muslims.

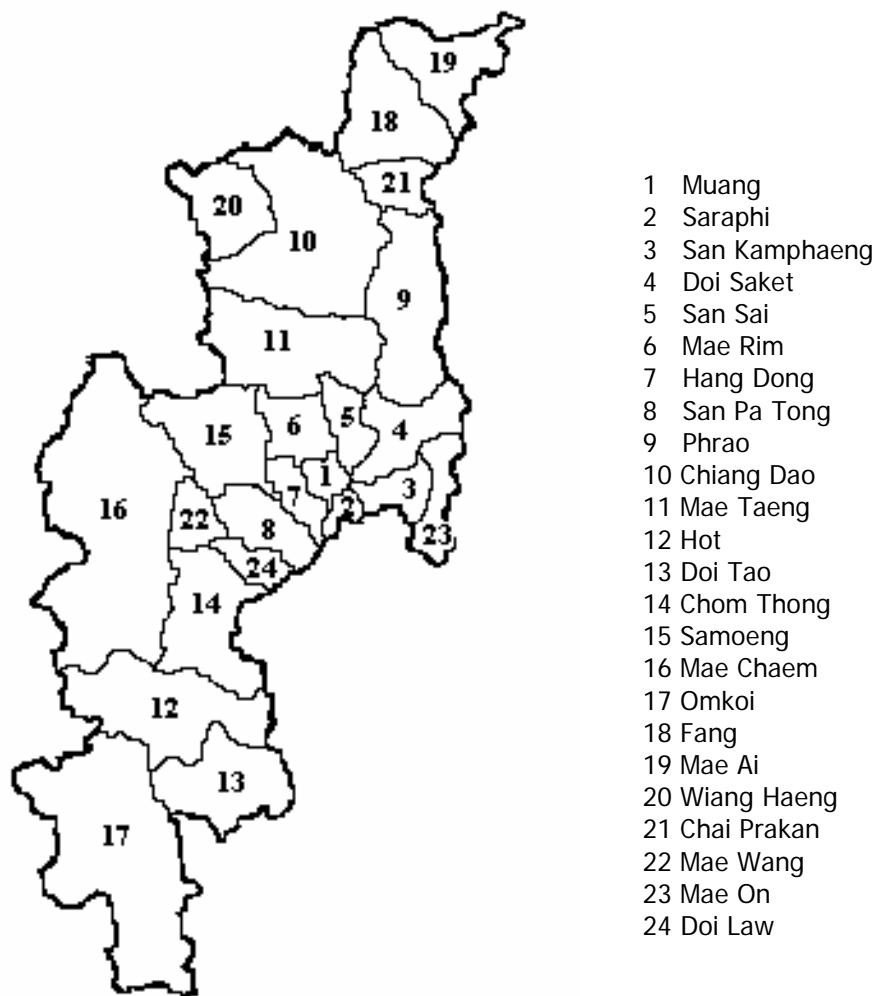
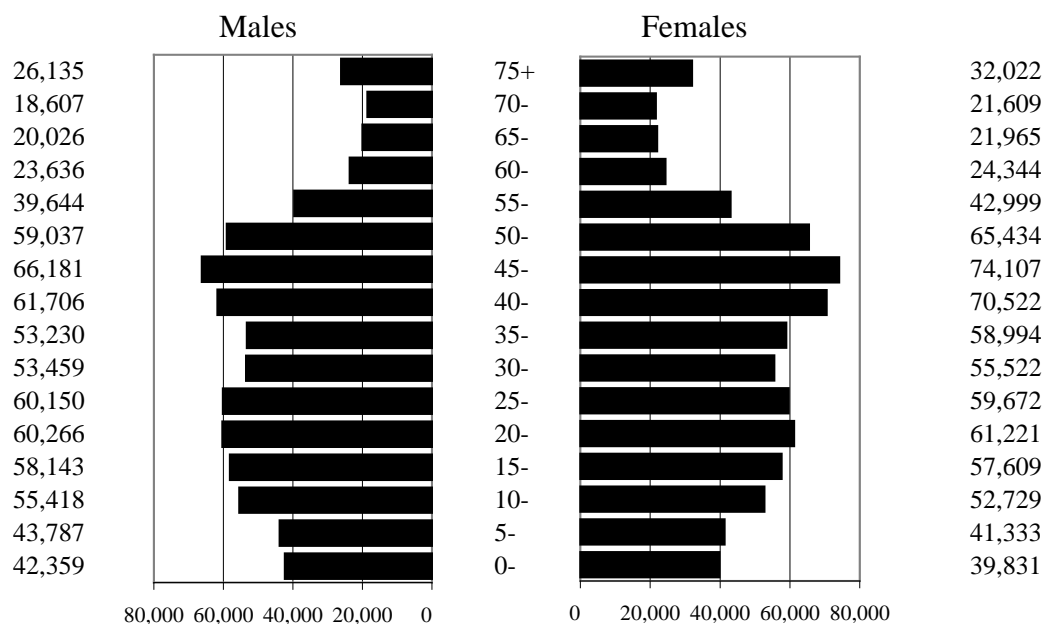


Figure 53: Districts of Chiang Mai



**Figure 54: Population pyramid, Chiang Mai, 2007**

### Age and Sex

The age-sex distribution in 2007 is illustrated by population pyramids (Fig. 54). In 2007, 18.1% of the total population was under age 15 and 12.4% was 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 800,000 outpatients and 48,000 inpatients 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 and give special lectures for doctors and other health personnel at provincial hospitals.

### Overview

In 2007, there were 4,919 cases of new cancer at Maharaj Nakorn Chiang Mai Hospital. Thirty-eight percent were Chiang Mai residents, 40.9% came from nearby provinces (Lampoon, Lampang, Phayao and Chiang Rai), 19.1% came from the other provinces in the northern region, and only 1.4% resided outside the northern region.

### Non-invasive cancers

There were 251 cases of non-invasive cancer registered in the year 2007, accounting for 5.1% of all cases. The most common non-invasive cancer was carcinoma in situ of cervix, followed by benign neoplasm of brain, meninges and other parts of central nervous system. The age distribution was shown in table 18.

**Table 18: Age distribution of non-invasive cancers, 2007**

SITE	All Ages	0-	15-	25-	35-	45-	55-	65-	75+	ICD (10th)
Cervix	160	0	2	23	55	62	13	4	1	D06
Brain, Nervous system	40	3	3	2	8	18	4	2	0	D32,D33,D42,D43
Myelodysplastic syndrome	34	1	0	1	1	6	10	7	8	D46,D47
Breast	9	0	0	0	2	5	1	1	0	D05
Other	8	0	2	1	0	2	1	0	2	
<b>All sites</b>	<b>251</b>	<b>4</b>	<b>7</b>	<b>27</b>	<b>66</b>	<b>93</b>	<b>29</b>	<b>14</b>	<b>11</b>	

### Invasive cancers

#### Age and sex

There were 2,124 male and 2,544 female invasive cancer cases in the year 2007, with a male to female ratio of 1:1.2, but 1,152 (45.3%) of the cancers in females occurred in sex-specific sites (i.e. breast and reproductive organs), while only 92 cases (4.3%) of cancers of males occurred in sex-specific sites (i.e. prostate, testis, and penis). When sex-specific sites were excluded, the male to female ratio increased to 1.5:1.

Ages ranged from less than one year to 95 years. The mean age at diagnosis was 55.3; the median age was 55 years. For males, the mean age was 56.9 and the median age was 58 years. For females, the mean age was 54.0 and the median age was 54 years. In the age group 30 to 59, female cancer cases were much more common than male cancer cases, but male cancer cases were more common than female cancer cases after age 60 (Fig. 55). There were 98 cases of cancer in children (age less than 15), accounting for only 2.1% of all cases, but there were 1,859 cases in the old-age group (age 60 and over), accounting for 39.8% of all cases.

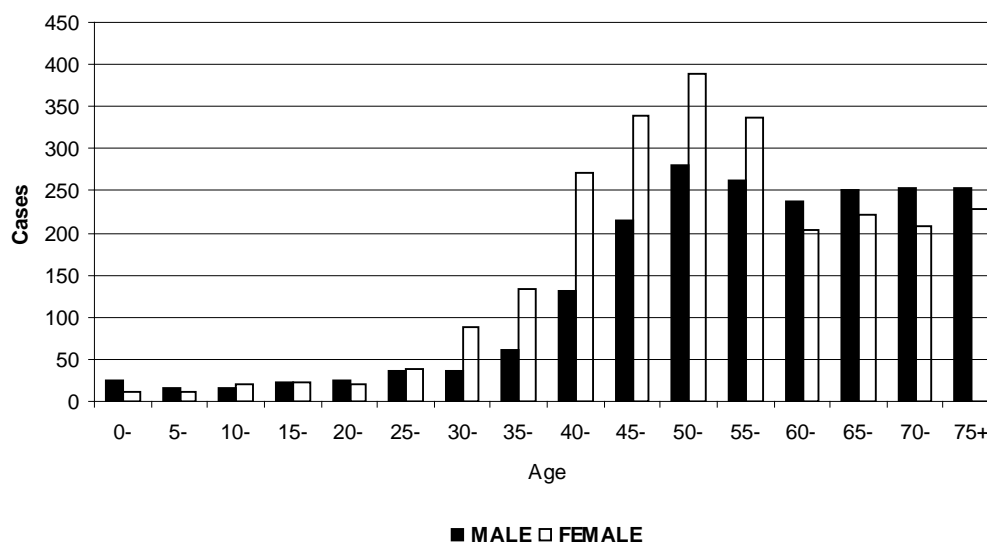


Figure 55: Age distribution of new cancer cases at Maharaj Nakorn Chiang Mai Hospital, 2007

### Basis of diagnosis

There were 3,955 histologically verified cases (80.4%). Sixty-four percent had primary sites and 7.7% had metastasis sites (Table 19). By site, for both males and females the incidence of cases clinically diagnosed cases was high for the liver and pancreas (Table 22).

Table 19: Type of diagnosis

Type of diagnosis	No.	%
<b>Histological verification</b>	<b>3955</b>	<b>80.4</b>
Histology of primary	3183	64.7
Histology of metastasis	378	7.7
Cytology/hematology	394	8.0
<b>No histological verification</b>	<b>964</b>	<b>19.6</b>
Clinical only	42	0.9
Clinical and Investigations	853	17.3
Operation/surgery	56	1.1
Immuno/Biochemistry	13	0.3
	<b>4919</b>	<b>100.0</b>

Table 20: Stages of diseases

Stage	No.	%
Non-invasive	251	5.1
Localized	697	14.2
Locally advanced	1617	32.9
Regional node metastasis	575	11.7
Distant metastasis	1075	21.9
Not applicable	498	10.1
Unknown/Not staged	206	4.2
	<b>4919</b>	<b>100.0</b>



### Stage of disease

Thirty-three percent of cases were diagnosed at an advanced stage (21.9% distant metastasis and 11.7% regional node metastasis), and 47.0% were diagnosed at a localized stage and locally advanced (Table 20). Ten percent were staged as not applicable; most of this group were lymphoma, leukemia, and brain tumor cases.

In 1,075 cases of distant metastasis at first visit, 14.8% had multiple sites of metastasis. The most common site of distant metastasis was lung (22.6%), followed by distant lymph nodes (17.2%), bone (12.7%), liver (14.0%), and brain (10.0%).

### Leading sites of invasive cancer cases

For invasive cancer in both sexes combined, lung cancer was the most common (15.8%), followed by liver, cervix, breast, and non-Hodgkin's lymphoma (Table 21). Together these five types of cancer accounted for 52.4% of all new cancers. For males, the most common cancer was liver cancer, accounting for 21.6% of all new cases, followed by lung cancer, non-Hodgkin's lymphoma, rectal cancer, and bladder cancer. For females, the most common cancers were cervical cancer, accounting for 21.5% of all new cases, followed by breast, lung, liver, and ovarian cancers.

**Table 21: Ten leading cancers at Maharaj Nakorn Chiang Mai Hospital, 2007**

Males	cases	%	Females	cases	%	Both sexes	cases	%
Liver	458	21.6	Cervix	548	21.5	Lung	730	15.6
Lung	435	20.5	Breast	298	11.7	Liver	631	13.5
NHL	132	6.2	Lung	295	11.6	Cervix	548	11.7
Rectum	92	4.3	Liver	173	6.8	Breast	305	6.5
Bladder	77	3.6	Ovary	158	6.2	NHL	232	5.0
Nasopharynx	72	3.4	Thyroid	109	4.3	Ovary	158	3.4
Stomach	61	2.9	Corpus	106	4.2	Rectum	155	3.3
Colon	56	2.6	NHL	100	3.9	Thyroid	127	2.7
Prostate	51	2.4	Rectum	63	2.5	Colon	109	2.3
Skin,non-melanoma	47	2.2	Colon	53	2.1	Bladder	108	2.3

### Childhood cancer

There were 98 cases of childhood cancer (age less than 1 to 14), accounting for 2.1% of all cancer cases. The most common childhood cancer was leukemia, accounting for 22.4% of all childhood cancer, followed by brain and nervous system (14.3%), NHL (14.3%), liver (7.1%), and bone (6.1%).

**Table 22: Percentage of data verification by sites, 2007**

	Males				Females			
	cases	Clinical	Cyto	Histo	cases	Clinical	Cyto	Histo
Lip	6	0.0	0.0	100.0	5	0.0	0.0	100.0
Tongue	37	5.4	0.0	94.6	14	0.0	0.0	100.0
Mouth	26	0.0	0.0	100.0	29	0.0	0.0	100.0
Salivary glands	7	0.0	14.3	85.7	11	0.0	27.3	72.7
Tonsil	10	0.0	0.0	100.0	6	0.0	0.0	100.0
Other Oropharynx	8	0.0	0.0	100.0	3	0.0	0.0	100.0
Nasopharynx	72	5.6	2.8	91.7	25	0.0	0.0	100.0
Hypopharynx	19	10.5	5.3	84.2	3	0.0	0.0	100.0
Eesophagus	27	18.5	3.7	77.8	11	36.4	0.0	63.6
Stomach	61	13.1	0.0	86.9	40	10.0	2.5	87.5
Small intestine	3	0.0	0.0	100.0	3	0.0	0.0	100.0
Colon	56	8.9	0.0	91.1	53	5.7	1.9	92.5
Rectum	92	8.7	0.0	91.3	63	7.9	1.6	90.5
Anus	1	0.0	0.0	100.0	7	0.0	0.0	100.0
Liver	458	74.0	4.8	21.2	173	67.1	3.5	29.5
Gallbladder	30	50.0	0.0	50.0	40	45.0	2.5	52.5
Pancreas	28	78.6	0.0	21.4	22	59.1	0.0	40.9
Nose, sinuses	20	0.0	0.0	100.0	11	18.2	0.0	81.8
Larynx	39	0.0	0.0	100.0	14	14.3	0.0	85.7
Lung	435	29.4	14.5	56.1	295	28.1	17.6	54.2
Other Thoracic organs	10	40.0	0.0	60.0	5	0.0	0.0	100.0
Bone	18	5.6	0.0	94.4	10	20.0	0.0	80.0
Melanoma of Skin	18	0.0	0.0	100.0	15	0.0	0.0	100.0
Other Skin	47	2.1	0.0	97.9	52	0.0	0.0	100.0
Kaposi sarcoma	3	0.0	0.0	100.0	2	0.0	0.0	100.0
Connective,Soft tissue	22	9.1	9.1	81.8	22	4.5	0.0	95.5
Breast	7	0.0	14.3	85.7	298	2.3	10.7	86.9
Vulva					20	0.0	0.0	100.0
Vagina					8	0.0	12.5	87.5
Cervix Uteri					548	2.7	0.4	96.9
Corpus Uteri					106	0.9	0.0	99.1
Uterus unspec.					4	0.0	0.0	100.0
Ovary					158	6.3	3.2	90.5
Other Female Genital					7	0.0	0.0	100.0
Placenta					3	0.0	0.0	100.0
Penis	19	0.0	0.0	100.0				
Prostate	51	35.3	0.0	64.7				
Testis	14	7.1	0.0	92.9				
Other male genital	1	0.0	0.0	100.0				
Kidney	25	20.0	0.0	80.0	15	20.0	0.0	80.0
Renal Pelvis	6	16.7	0.0	83.3	4	0.0	50.0	50.0
Ureter	0	-	-	-	2	0.0	0.0	100.0
Bladder	77	9.1	0.0	90.9	31	9.7	3.2	87.1
Other Urinary organs	1	0.0	0.0	100.0	2	0.0	0.0	100.0
Eye	11	18.2	0.0	81.8	8	0.0	0.0	100.0
Brain, Nervous system	35	34.3	0.0	65.7	35	40.0	0.0	60.0
Thyroid	18	5.6	38.9	55.6	109	3.7	13.8	82.6
Adrenal gland	2	0.0	0.0	100.0	0	-	-	-
Other Endocrine	0	-	-	-	3	0.0	0.0	100.0
Hodgkin disease	11	0.0	0.0	100.0	6	0.0	0.0	100.0
Non-Hodgkin lymphoma	132	0.0	3.8	96.2	100	0.0	8.0	92.0
Multiple Myeloma	23	0.0	34.8	65.2	11	0.0	63.6	36.4
Lymphoid Leukemia	18	0.0	83.3	16.7	15	0.0	73.3	26.7
Myeloid Leukemia	45	0.0	80.0	20.0	50	0.0	74.0	26.0
Leukemia unspec.	0	-	-	-	2	50.0	50.0	0.0
Other & unspecified	75	38.7	5.3	56.0	65	29.2	18.5	52.3
<b>All sites Total</b>	<b>2124</b>	<b>29.3</b>	<b>7.9</b>	<b>62.8</b>	<b>2544</b>	<b>13.0</b>	<b>7.8</b>	<b>79.2</b>

Clinical Percentage of cases with clinical diagnosis  
 Cyto Percentage of cases with cytological diagnosis  
 Histo Percentage of cases with histological diagnosis

**Table 23: NUMBER OF NEW CANCER CASES IN MAHARAJ NAKORN CHIANGMAI HOSPITAL, 2007, MALES**

SITE	Number of cases by Age Group (years)										ICD (10th)
	All Ages	0-	15-	25-	35-	45-	55-	65-	75+	%	
Lip	6	0	0	0	0	1	1	3	1	0.3	C00
Tongue	37	0	0	0	2	12	9	10	4	1.7	C01-C02
Mouth	26	0	0	2	2	5	9	7	1	1.2	C03-C06
Salivary glands	7	0	0	1	0	0	5	1	0	0.3	C07-C08
Tonsil	10	0	0	1	1	4	3	0	1	0.5	C09
Other Oropharynx	8	0	0	0	0	1	2	3	2	0.4	C10
Nasopharynx	72	2	2	4	12	23	16	10	3	3.4	C11
Hypopharynx	19	0	0	0	2	4	1	6	6	0.9	C12-C13
Pharynx unspec.	0	0	0	0	0	0	0	0	0	0.0	C14
Oesophagus	27	0	0	0	2	10	7	4	4	1.3	C15
Stomach	61	0	0	2	6	16	15	16	6	2.9	C16
Small intestine	3	0	0	0	1	0	0	1	1	0.1	C17
Colon	56	0	1	2	8	10	15	11	9	2.6	C18
Rectum	92	0	3	4	11	18	23	20	13	4.3	C19-C20
Anus	1	0	0	0	1	0	0	0	0	0.0	C21
Liver	458	3	2	11	52	145	117	91	37	21.6	C22
Gallbladder	30	0	0	0	0	7	7	12	4	1.4	C23-C24
Pancreas	28	0	0	1	5	8	6	5	3	1.3	C25
Nose, sinuses	20	0	0	2	2	4	5	6	1	0.9	C30-C31
Larynx	39	0	0	0	1	9	14	9	6	1.8	C32
Lung	435	0	0	3	20	80	122	150	60	20.5	C33-C34
Other Thoracic organs	10	3	1	2	0	2	1	1	0	0.5	C37-C38
Bone	18	4	5	3	0	3	3	0	0	0.8	C40-C41
Melanoma of Skin	18	1	0	0	1	3	4	7	2	0.8	C43
Other Skin	47	1	0	0	4	10	13	5	14	2.2	C44
Mesothelioma	0	0	0	0	0	0	0	0	0	0.0	C45
Kaposi sarcoma	3	0	1	2	0	0	0	0	0	0.1	C46
Connective,Soft tissue	22	1	2	2	3	3	4	5	2	1.0	C47;C49
Breast	7	0	0	0	2	4	0	1	0	0.3	C50
Penis	19	0	0	2	5	5	3	2	2	0.9	C60
Prostate	51	0	0	0	0	5	14	23	9	2.4	C61
Testis	14	1	4	5	2	2	0	0	0	0.7	C62
Other male genital	1	1	0	0	0	0	0	0	0	0.0	C63
Kidney	25	1	0	0	3	5	9	5	2	1.2	C64
Renal Pelvis	6	0	0	0	1	4	1	0	0	0.3	C65
Ureter	0	0	0	0	0	0	0	0	0	0.0	C66
Bladder	77	0	0	1	5	10	17	22	22	3.6	C67
Other Urinary organs	1	0	0	0	1	0	0	0	0	0.0	C68
Eye	11	6	0	0	3	0	0	2	0	0.5	C69
Brain, Nervous system	35	7	4	3	4	6	3	6	2	1.6	C70-C72
Thyroid	18	0	1	2	2	5	4	3	1	0.8	C73
Adrenal gland	2	1	1	0	0	0	0	0	0	0.1	C74
Other Endocrine	0	0	0	0	0	0	0	0	0	0.0	C75
Hodgkin disease	11	2	1	2	1	1	2	0	2	0.5	C81
Non-Hodgkin lymphoma	132	9	8	8	13	36	18	26	14	6.2	C82-C85;C96
Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0.0	C88
Multiple Myeloma	23	0	0	0	3	4	8	6	2	1.1	C90
Lymphoid Leukaemia	18	5	3	1	1	1	2	1	4	0.8	C91
Myeloid Leukaemia	45	6	8	4	3	13	2	4	5	2.1	C92-C94
Leukaemia unspec.	0	0	0	0	0	0	0	0	0	0.0	C95
Other & unspecified	75	1	1	3	7	16	16	22	9	3.5	Other
<b>All sites Total</b>	<b>2124</b>	<b>55</b>	<b>48</b>	<b>73</b>	<b>192</b>	<b>495</b>	<b>501</b>	<b>506</b>	<b>254</b>	<b>100.0</b>	<b>All</b>
<b>All sites but C44</b>	<b>2077</b>	<b>54</b>	<b>48</b>	<b>73</b>	<b>188</b>	<b>485</b>	<b>488</b>	<b>501</b>	<b>240</b>	<b>97.8</b>	<b>Not C44</b>

**Table 24: NUMBER OF NEW CANCER CASES IN MAHARAJ NAKORN CHIANGMAI HOSPITAL, 2007, FEMALES**

SITE	Number of cases by Age Group (years)										ICD (10th)
	All Ages	0-	15-	25-	35-	45-	55-	65-	75+	%	
Lip	5	0	0	0	0	1	1	3	0	0.2	C00
Tongue	14	1	0	0	2	4	4	2	1	0.6	C01-C02
Mouth	29	0	0	1	1	2	11	7	7	1.1	C03-C06
Salivary glands	11	0	1	3	0	1	1	4	1	0.4	C07-C08
Tonsil	6	0	0	0	0	1	1	1	3	0.2	C09
Other Oropharynx	3	0	0	0	1	0	1	0	1	0.1	C10
Nasopharynx	25	0	1	1	4	10	9	0	0	1.0	C11
Hypopharynx	3	0	0	0	0	0	0	1	2	0.1	C12-C13
Pharynx unspec.	0	0	0	0	0	0	0	0	0	0.0	C14
Oesophagus	11	0	0	0	0	1	1	4	5	0.4	C15
Stomach	40	0	0	3	6	14	6	8	3	1.6	C16
Small intestine	3	0	0	0	0	1	2	0	0	0.1	C17
Colon	53	0	0	0	5	13	16	12	7	2.1	C18
Rectum	63	0	0	4	4	18	11	14	12	2.5	C19-C20
Anus	7	0	0	0	2	2	1	1	1	0.3	C21
Liver	173	4	0	3	14	49	46	39	18	6.8	C22
Gallbladder	40	0	0	0	1	11	7	13	8	1.6	C23-C24
Pancreas	22	0	0	0	1	7	5	9	0	0.9	C25
Nose, sinuses	11	0	1	0	2	2	1	3	2	0.4	C30-C31
Larynx	14	0	1	0	0	1	5	4	3	0.6	C32
Lung	295	0	0	2	20	67	82	92	32	11.6	C33-C34
Other Thoracic organs	5	1	0	0	0	3	0	0	1	0.2	C37-C38
Bone	10	2	2	2	0	3	0	0	1	0.4	C40-C41
Melanoma of Skin	15	0	0	2	1	2	5	2	3	0.6	C43
Other Skin	52	0	1	2	4	6	10	15	14	2.0	C44
Mesothelioma	0	0	0	0	0	0	0	0	0	0.0	C45
Kaposi sarcoma	2	0	0	0	1	0	0	0	1	0.1	C46
Connective,Soft tissue	22	2	0	3	5	1	6	3	2	0.9	C47;C49
Breast	298	0	1	16	73	98	68	30	12	11.7	C50
Vulva	20	0	0	2	3	5	5	4	1	0.8	C51
Vagina	8	1	0	0	0	3	0	2	2	0.3	C52
Cervix Uteri	548	0	1	29	146	180	99	56	37	21.5	C53
Corpus Uteri	106	0	0	2	12	35	36	20	1	4.2	C54
Uterus unspec.	4	0	0	0	1	0	2	1	0	0.2	C55
Ovary	158	4	10	9	30	61	19	21	4	6.2	C56
Other Female Genital	7	0	0	0	0	6	0	1	0	0.3	C57
Placenta	3	0	0	2	0	1	0	0	0	0.1	C58
Kidney	15	2	0	0	2	4	3	2	2	0.6	C64
Renal Pelvis	4	0	0	0	0	1	1	1	1	0.2	C65
Ureter	2	0	0	0	0	1	0	1	0	0.1	C66
Bladder	31	0	0	0	3	0	12	8	8	1.2	C67
Other Urinary organs	2	0	0	0	0	1	1	0	0	0.1	C68
Eye	8	0	0	0	2	0	2	2	2	0.3	C69
Brain, Nervous system	35	7	3	5	6	8	2	2	2	1.4	C70-C72
Thyroid	109	1	8	17	26	35	11	8	3	4.3	C73
Adrenal gland	0	0	0	0	0	0	0	0	0	0.0	C74
Other Endocrine	3	0	0	1	0	0	1	1	0	0.1	C75
Hodgkin disease	6	1	1	1	0	1	1	1	0	0.2	C81
Non-Hodgkin lymphoma	100	5	6	7	12	28	16	15	11	3.9	C82-C85;C96
Immunoproliferative dis.	0	0	0	0	0	0	0	0	0	0.0	C88
Multiple Myeloma	11	0	0	0	0	4	4	1	2	0.4	C90
Lymphoid Leukaemia	15	4	3	3	1	2	0	2	0	0.6	C91
Myeloid Leukaemia	50	7	2	4	5	15	9	4	4	2.0	C92-C94
Leukaemia unspec.	2	0	0	0	0	0	0	0	2	0.1	C95
Other & unspecified	65	1	1	3	9	20	16	9	6	2.6	Other
<b>All sites Total</b>	<b>2544</b>	<b>43</b>	<b>43</b>	<b>127</b>	<b>405</b>	<b>729</b>	<b>540</b>	<b>429</b>	<b>228</b>	<b>100.0</b>	<b>All</b>
<b>All sites but C44</b>	<b>2492</b>	<b>43</b>	<b>42</b>	<b>125</b>	<b>401</b>	<b>723</b>	<b>530</b>	<b>414</b>	<b>214</b>	<b>98.0</b>	<b>Not C44</b>

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