

Chapter II

1

CANCER INCIDENCE AND LEADING SITES

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Thailand is located in South-east Asia between latitudes 5: 37N and 20: 27N, and between longitudes 97: 22E and 105: 37E, with Laos and Cambodia to its east, the Gulf of Thailand and Malaysia to its south, and the Andaman Sea and Myanmar to its west. The total area is 513 155 square kilometers. The climate of the country as a whole is tropical and characterized by moonsoons. Thailand is divided into 76 provinces, within four geographical regions: the Northern, Northeastern, Southern and Central. The geographic area covered by the nine population based cancer registries are shown in Figure 2.1.1 and the estimated population

in each province by sex is shown in Table 2.1.1.

The detailed results from each of the nine registries are shown in the tables of Appendices A-J.

There are figure for the estimate population and two tables for each registry: for each sex, the number of cases registered in 1999 (1998-2000) are shown, by site, with summary rates (crude rate, cumulative rate, age-standardized rate (world standard), and the percentage of microscopically verified and death certificate only cases.

The age-standardized incidence rates (ASR) of cancer at all sites ranged from 104.5 per 100 000 (M) and 77.6 per 100 000 (F) in

Table 2.1.1 Land area and estimated population in 1999

	Population density (person/km ²)	Land area (km ²)	Estimated population Male	Estimated population Female
Chiang Mai	73.7	20107	734437	746668
Lampang	61.7	12534	386813	387060
Nakhon Phanom	122.7	5513	336694	339967
Udon Tani	116.4	11730	663172	701749
Khon Kaen	157.9	10885	855830	862884
Rayong	144.5	3552	257874	255532
Bangkok	3989.9	1569	2985978	3274111
Prachuap Khiri Khan	69.8	6368	221692	222780
Songkhla	167.3	7394	606918	630008

Table 2.1.2 Age-standardized incidence rates (ASR), all sites, 1998-2000

	Male		Female	
	Cases 1998-2000	ASR 1999	Cases 1998-2000	ASR 1999
Chiang Mai	3170	138.7	3760	152.5
Lampang	2042	160.7	2050	148.9
Nakhon Phanom	874	107.7	833	92.6
Udon Thani	3292	242.0	2815	158.4
Khon Kaen	3567	167.6	3281	129.7
Rayong	719	122.8	806	115.2
Bangkok	8466	117.4	10907	116.0
Prachuap Khiri Khan	415	104.5	514	77.6
Songkhla	1667	104.5	1822	98.9
Thailand	94746	127.7	101034	125.5

Prachuap Khiri Khan to 242.0 per 100 000 (M) and 158.4 per 100 000 (F) in Udon Thani (Table 2.1.2).

Figures 2.1.2 - 2.1.10 show the 10 leading cancers in each registry, in terms of the age-standardized incidence rates.

In Chiang Mai, lung cancer is the most important site in men and the second place in women. Cervix cancer is the leading cancer in women. The incidence of cervix cancer in women is the highest amongst the nine registries.

In Lampang, the profile of leading cancer in men is similar to that in Chiang Mai. Lung cancer in men is even higher than in Chiang Mai (ASR=53). Cervix cancer is the second common cancer in women, followed by breast cancer.

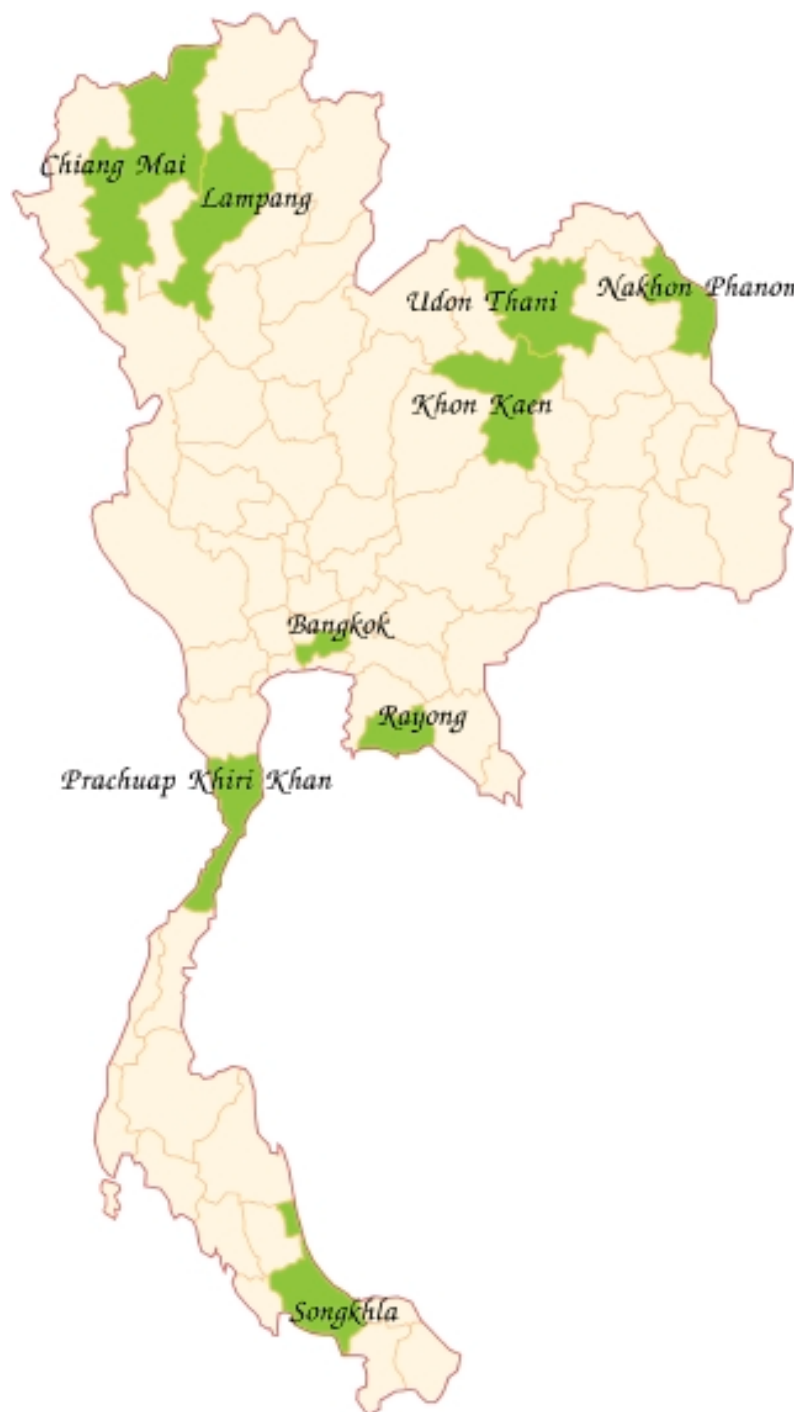
In the northeastern region: Nakhon Phanom, Udon Thani and Khon Kaen, the picture is dominated by liver cancer, by far the most common cancer in men (45-59% of all cancers) and women (24.2-32.4% of all cancers). Cervix cancer is second in frequency in women.

In Rayong, lung cancer is the most important cancer in men, followed by liver & bile duct cancer, esophagus cancer (ASR is highest in the nine registries). Cervix cancer is also very high incidence (ASR=28.5) and followed by breast cancer and lung cancer.

In Bangkok, lung cancer is the most important cancer of men, followed by cancers of the liver & bile duct, and then the colon & rectum. In women, breast cancer is the leading cancer, ahead of cervix cancer (in contrast to the other eight registries), and colon & rectum cancer is third in frequency.

In Prachuap Khiri Khan, lung cancer is the most common cancer

Figure 2.1.1 Thailand : regions and areas covered by the cancer registries



in men, followed by cancers of colon & rectum and liver & bile duct. Cervix cancer is the leading cancer in women, followed by breast cancer and colon & rectum cancer.

In Songkhla, the leading site in men is lung cancer, followed by cancers of colon & rectum, oral cavity and esophagus. In women, cervix and breast cancers predomi-