

## APPENDIX

## H

PRACHUAP  
KHIRI KHAN  
CANCER  
REGISTRY

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### Registration area

Prachuap Khiri Khan Province is located on the South, about 281 kilometers from Bangkok, at a latitude 11:49 N and longitude 99:48 E, 3 Ft (0 meters) above sea level. The north of Prachuap Khiri Khan is Phetchaburi Province, Chumporn on the south, the Gulf of Thailand on the east and Myanmar on the west. The total area is 6,368 square kilometers. The province, today, is more famous for its natural charm of beaches and mountains than historical attractions. Hua Hin, its major attraction, is one of Thailand's most popular seaside resorts among overseas visitors as well as Thais. Prachuap Khiri Khan is now divided into 7 districts and 1 sub-district: Amphoe Mueang Prochuap Khiri Khan, Bang Saphan, Bang Saphan Noi, Hua Hin, Kui Buri, Pran Buri, Thap Sakae, and King Amphoe Sam Roi Yot.

### Cancer care facilities

Thailand has a national health care system. At the primary health care level, there are no facilities for specialized cancer diagnosis and treatment. The provincial hospital is a general hospital. At the provincial level, there are facilities for cancer surgery, no chemotherapy and radiotherapy. Most of cancer patients are referred to the cancer canters and the other hospitals for diagnosis and treatment.

Cancer surgery services are provided at Prachuap Khiri Khan provincial hospital and private hospitals. The cancer patients are referred for chemotherapy and radiotherapy to other hospitals in Bangkok.

### Registry structure and methods

The population-based cancer

registry of Prachuap Khiri Khan province was set up at The National Cancer Institute, Bangkok in 1999. The sources of information are all hospitals in Prachuap Khiri Khan province and Bangkok Cancer Registry. Cancer cases are collected from the medical records department, outpatient clinics, pathology laboratories, clinical laboratories and death certificates. All data are checked for duplication, verified, coded and keyed into The CanReg4 Programme.

The data on cancer patients are collected by both active and passive methods. Active reporting (collection at source) involves registry personnel actually visiting the sources of data and abstracting the required information onto special forms, or obtaining copies of the necessary documents.

Passive reporting relies upon other health care workers to complete notification forms and forward them to the registry, or send copies of the necessary data.

The primary site and histology are coded according to ICD-O version 3. Second and subsequent primary cancers are also registered. A new registration number is given for each new primary cancer as indicated by the 3 digit ICD-O code, (or cancers with different histology at the same site), as specified in the ICD-O manual.

Cases of carcinoma *in situ* are registered but not included in the calculation of incidence rates. Those that become invasive are re-registered as invasive carcinomas, with the behaviour code changed to "3" (malignant). The most valid basis of diagnosis is recorded for all registered cases.

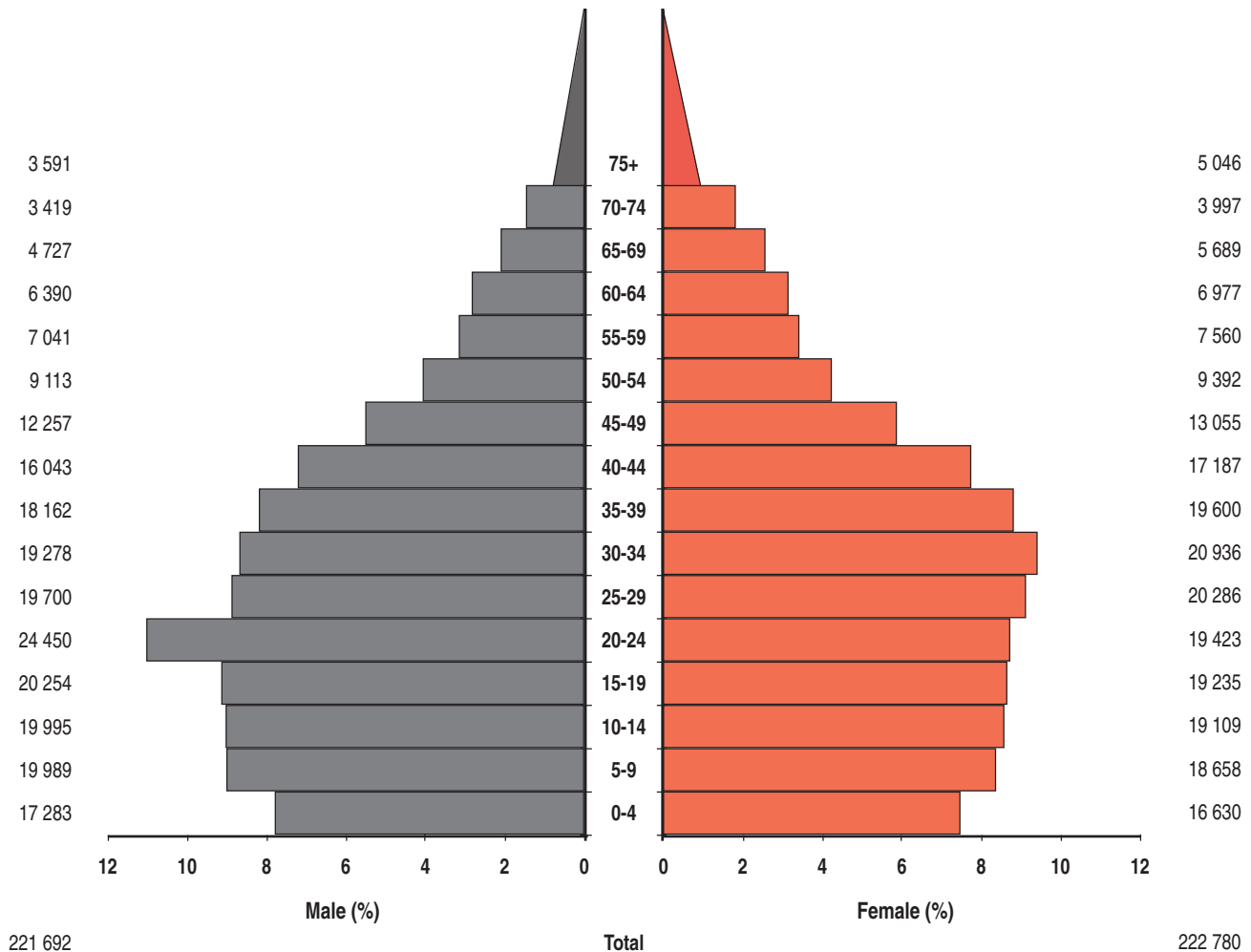
Follow up of registered cancer patients is performed by a mix-

ture of active and passive methods. Registered cases are first matched with death certificates. For the re-

maining cases thought to be alive, follow-up information is obtained by repeated scrutiny of hospital

case records, postal enquires and by home visits.

**Figure 1** Population pyramid, Prachuap Khiri Khan, 1999



**Table 1** Annual incidence, Prachuap Khiri Khan, 1998-2000

	Male						Female						ICD-10
	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (percent)	Cum. rates 0-74	No. cases	Freq. (%)	Crude rate (per 100,000)	ASR world	Cum. rates 0-64 (percent)	Cum. rates 0-74	
Lip	0	0.0	0.0	0.0	0.0	0.0	10	1.9	1.5	1.4	0.0	0.1	C00
Tongue	12	2.9	1.8	2.0	0.1	0.3	5	1.0	0.7	0.9	0.0	0.1	C01-02
Salivary gland	5	1.2	0.8	0.9	0.1	0.1	3	0.6	0.4	0.5	0.0	0.0	C07-C08
Mouth	16	3.9	2.4	2.8	0.1	0.3	11	2.1	1.6	1.6	0.0	0.1	C03-C06
Oropharynx	4	1.0	0.6	0.8	0.0	0.1	1	0.2	0.1	0.1	0.0	0.0	C09-C10
Nasopharynx	12	2.9	1.8	1.8	0.1	0.2	5	1.0	0.7	0.8	0.1	0.1	C11
Hypopharynx	2	0.5	0.3	0.4	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	C12-C13
Pharynx unspecified	3	0.7	0.5	0.6	0.0	0.1	1	0.2	0.1	0.2	0.0	0.0	C14
Esophagus	27	6.5	4.1	5.2	0.3	0.6	8	1.6	1.2	1.4	0.1	0.2	C15
Stomach	12	2.9	1.8	2.3	0.1	0.4	12	2.3	1.8	2.0	0.1	0.2	C16
Small intestine	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	C17
Colon	24	5.8	3.6	4.5	0.2	0.6	18	3.5	2.7	3.0	0.2	0.3	C18
Rectum	17	4.1	2.6	3.2	0.1	0.5	12	2.3	1.8	2.0	0.2	0.2	C19-21
Liver and bile duct	42	10.1	6.3	7.3	0.5	0.9	15	2.9	2.2	2.4	0.1	0.3	C22,C24
Gallbladder	2	0.5	0.3	0.4	0.0	0.0	3	0.6	0.4	0.5	0.0	0.1	C23
Pancreas	3	0.7	0.5	0.6	0.0	0.1	3	0.6	0.4	0.5	0.0	0.1	C25
Nose, sinuses etc.	1	0.2	0.2	0.1	0.0	0.0	1	0.2	0.1	0.2	0.0	0.0	C30-C31
Larynx	13	3.1	2.0	2.3	0.2	0.3	2	0.4	0.3	0.3	0.0	0.1	C32
Bronchus, lung	63	15.2	9.5	12.1	0.5	1.5	17	3.3	2.5	2.8	0.2	0.3	C33-C34
Other thoracic organs	2	0.5	0.3	0.3	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	C37-C38
Bone	0	0.0	0.0	0.0	0.0	0.0	3	0.6	0.4	0.5	0.0	0.0	C40-C41
Connective tissue	9	2.2	1.4	1.4	0.1	0.1	1	0.2	0.1	0.2	0.0	0.0	C47,C49
Melanoma of skin	2	0.5	0.3	0.4	0.0	0.0	1	0.2	0.1	0.1	0.0	0.0	C43
Other skin	14	3.4	2.1	2.6	0.1	0.3	15	2.9	2.2	2.1	0.0	0.1	C44
Breast	2	0.5	0.3	0.3	0.0	0.0	112	21.7	16.8	16.0	1.4	1.7	C50
Uterus unspecified							6	1.2	0.9	0.9	0.1	0.1	C55
Cervix uteri							142	27.5	21.2	21.2	1.8	2.3	C53
Placenta							1	0.2	0.1	0.1	0.0	0.0	C58
Corpus uteri							10	1.9	1.5	1.7	0.2	0.2	C54
Ovary							14	2.7	2.1	2.0	0.1	0.2	C56
Other female genital							4	0.8	0.6	0.7	0.0	0.1	C51,C52,C57
Prostate	13	3.1	2.0	2.6	0.0	0.3							C61
Testis	3	0.7	0.5	0.5	0.0	0.1							C62
Penis	13	3.1	2.0	2.3	0.1	0.2							C60
Bladder	11	2.7	1.7	2.1	0.1	0.2	2	0.4	0.3	0.3	0.0	0.0	C67
Kidney etc.	3	0.7	0.5	0.5	0.0	0.1	3	0.6	0.4	0.5	0.0	0.1	C64-C66:C68
Eye	1	0.2	0.2	0.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	C69
Brain, nervous system	4	1.0	0.6	0.8	0.0	0.1	4	0.8	0.6	0.5	0.0	0.0	C70-C72
Thyroid	12	2.9	1.8	2.0	0.1	0.2	19	3.7	2.8	2.6	0.2	0.2	C73
Other endocrine	1	0.2	0.2	0.2	0.0	0.0	1	0.2	0.1	0.2	0.0	0.0	C74-C75
Hodgkin disease	1	0.2	0.2	0.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	C81
Non-Hodgkin lymphoma	26	6.3	3.9	4.1	0.2	0.3	16	3.1	2.4	2.4	0.2	0.2	C82-C85,C96
Multiple myeloma	5	1.2	0.8	1.0	0.0	0.2	0	0.0	0.0	0.0	0.0	0.0	C88,C90
Lymphoid leukemia	8	1.9	1.2	1.2	0.1	0.1	5	1.0	0.7	0.8	0.0	0.0	C91
Myeloid leukemia	3	0.7	0.5	0.5	0.0	0.0	4	0.8	0.6	0.6	0.0	0.1	C92
Leukemia unspecified	1	0.2	0.2	0.2	0.0	0.0	6	1.2	0.9	1.0	0.1	0.1	C95
Other and unspecified	23	5.5	3.5	4.1	0.2	0.4	18	3.5	2.7	2.8	0.2	0.3	O&U
<b>All sites</b>	<b>415</b>	<b>100.0</b>	<b>62.4</b>	<b>74.7</b>	<b>3.71</b>	<b>8.82</b>	<b>514</b>	<b>100.0</b>	<b>76.9</b>	<b>77.6</b>	<b>5.8</b>	<b>8.1</b>	<b>ALL</b>

**Table 2** Percentage of morphologically verified and death certificate only cases, Prachuap Khiri Khan, 1998-2000

	Male			Female			ICD-10
	Cases	%MV	%DCO	Cases	%MV	%DCO	
Oral cavity	33	72.5	0.0	29	65.5	0.0	C00-C08
Oropharynx, etc.	7	71.4	0.0	2	50.0	0.0	C09-C10;C14
Nasopharynx	12	84.2	0.0	5	60.0	0.0	C11
Hypopharynx	2	77.8	0.0	0	0.0	0.0	C12-C13
Esophagus	27	75.9	0.0	8	50.0	0.0	C15
Stomach	12	65.0	0.0	12	50.0	0.0	C16
Small intestine	0	0.0	0.0	0	0.0	0.0	C17
Colon and rectum	41	64.4	0.0	30	50.0	3.3	C18-C21
Liver and bile duct	42	25.5	0.0	15	13.3	0.0	C22;C24
Gallbladder	2	0.0	0.0	3	66.7	0.0	C23
Pancreas	3	27.3	0.0	3	33.3	0.0	C25
Nose, sinuses, etc.	1	100.0	0.0	1	100.0	0.0	C30-C31
Larynx	13	73.9	0.0	2	50.0	0.0	C32
Bronchus, lung	63	47.0	0.0	17	35.3	0.0	C33-C34
Other thoracic organs	2	100.0	0.0	0	0.0	0.0	C37-C38
Bone	0	0.0	0.0	3	100.0	0.0	C40-C41
Connective tissue	9	0.0	0.0	1	0.0	0.0	C47,C49
Skin and melanoma	16	95.0	0.0	16	87.5	0.0	C43-C44
Breast	2	0.0	0.0	112	83.0	0.0	C50
Cervix uteri				142	71.1	0.0	C53
Corpus uteri				10	80.0	0.0	C54
Uterus unspecified				6	50.0	0.0	C55
Ovary				14	54.3	0.0	C56
Other female genital				4	0.0	0.0	C51,C52,C57
Placenta				1	100.0	0.0	C58
Penis	13	58.3	0.0				C60
Prostate	13	60.0	0.0				C61
Testis	3	100.0	0.0				C62
Kidney etc.	3	75.0	0.0	3	100.0	0.0	C64-C66,C68
Bladder	11	52.6	0.0	2	100.0	0.0	C67
Eye	1	100.0	0.0	0	0.0	0.0	C69
Brain, nervous system	4	71.4	0.0	4	100.0	0.0	C70-C72
Thyroid	12	60.0	0.0	19	78.9	0.0	C73
Other endocrine	1	0.0	0.0	1	100.0	0.0	C74-C75
Hodgkin disease	1	100.0	0.0	0	0.0	0.0	C81
Non-Hodgkin lymphoma	26	76.9	0.0	16	66.7	0.0	C82-C85,C96
Multiple myeloma	5	100.0	0.0	0	0.0	0.0	C88;C90
Leukemia	12	97.1	0.0	15	33.3	0.0	C91-C95
Other and unspecified	23	61.5	0.0	18	88.9	0.0	O&U
All sites	415	60.5	0.0	514	73.1	0.2	ALL