NATIONAL CANCER REGISTRY PROGRAMME

Indian Council of Medical Research

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Two-Year Report of the Population Based Cancer Registries

Incidence and Distribution of Cancer: 1997-98

Prepared by

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Coordinating Unit, Bangalore

November 2002

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Bangalore
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Population based cancer registries provided individual core data. Quality Control checks, tabulations and statistical analysis were done at the Coordinating Unit of NCRP, Bangalore.

The publications of NCRP are intended to contribute to the dissemination of authentic information on cancer incidence by age (Five-year age groups), sex and site (ICD-9).

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The two year 1997-98 report of the population based cancer registries is the result of efforts made by registries under the National Cancer Registry Programme (NCRP) of the Council. It includes data from five urban and one rural cancer registry under the NCRP. These five urban registries are located at Bangalore, Bhopal, Chennai, Delhi and Mumbai and the rural registry is at Barshi in the state of Maharashtra.

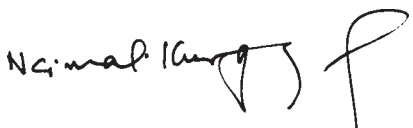
The main emphasis of this updated report is on cancer incidence and patterns of cancer. It attempts to give clues to the burden and types of cancer in these areas where the registries are located so as to present a base for studies in cancer aetiology and control. Though the geographic area and the population covered by the registries is small, compared to the vastness of the country and its huge population, the data does give a fair idea of the cancer problem in the Country. This report is the culmination of sustained efforts made by cancer registries under the NCRP. The format and the statistical tables of the previous reports have been retained.

Some similarities as well as major differences exist in the ranking of leading sites of cancer among the registries. Cancer of the stomach is a consistent leading site of cancer among males in Bangalore and Chennai, whereas it is lower down among the leading sites of cancer in Bhopal, Delhi or Mumbai. Similarly, cancer of the gall bladder is a leading site of cancer especially among women in Delhi and Bhopal, but is hardly seen in Bangalore and Chennai.

The reports of the NCRP are recognised nationally and internationally, as the standard work of reference for our Country, on the incidence of different types of cancer, their patterns and variations between regions. Such data are always important in suggesting possible aetiological factors for different cancers in knowing the severity of the problem and for determining the thrust areas in cancer control.

It is hoped that this publication will serve as a ready reference on cancer incidence in India for researchers, clinicians, health administrators and others interested in this field.

The registries and all of their staff, deserve thanks for the work they have put in and making available their data.



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23 July 2003

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National Cancer Registry Programme

Under the National Cancer Registry Programme (NCRP), the Indian Council of Medical Research commenced a network of cancer registries across the country in December 1981.

The programme was commenced with the following objectives:

1. To generate reliable data on the magnitude and patterns of cancer - this would be based on morbidity and mortality information in different regions of the country according to sex, age and residence of the patient, anatomical site of cancer and proportion of histological type or microscopic confirmation for each site; pattern of different types of cancer according to relative proportions or ratios in various population sub-groups such as religion, language spoken, educational status; clinical stage of disease when patients come to hospital for treatment and where possible the nature of treatment received and outcome;

2. To undertake epidemiologic research, such as case control or cohort studies based on observations of registry data;

3. Provide data base for developing appropriate strategies to aid in National Cancer Control Programme; this would be in the form of planning, monitoring and evaluation of activities under this programme;

4. Develop human resource in cancer registration and epidemiology.

Data collection commenced from 1 January 1982 in the population based cancer registries at Bangalore, Chennai and Mumbai, and also in the hospital based cancer registries at Chandigarh, Dibrugarh and Thiruvananthapuram. In order to extend the assessment of cancer patient care, hospital cancer registries were also started at Bangalore, Chennai and Mumbai in 1984. From 1986 two more urban population based cancer registries were started in Delhi and Bhopal. For the first time a population based rural cancer registry was also started by the ICMR during the subsequent year (1987) in Barshi in the state of Maharashtra. To ensure uniformity in the data collected by different registries, code manuals separately for HBCRs (NCRP, 1987) and PBCRs (NCRP, 1987) were prepared. These code manuals are used for the data from 1st January 1986. Under the auspices of the World Health Organization, a project on “Development of an Atlas of Cancer in India” was commenced in 2001. As a fallout of this, a North Eastern Regional Cancer Registry (NERCR) has been commenced in six areas at Guwahati, Dibrugarh and Silchar in Assam, Aizawl in Mizoram, Imphal in Manipur and Gangtok in Sikkim with a Monitoring Unit at Regional Medical Research Centre, Dibrugarh. These registries have started collation of information on cancer cases from 1 January 2003. The map of India depicting the locations of the various cancer registries is shown in the adjoining page.

The NCRP is a long-term activity of the Indian Council of Medical Research. The programme is one of the many major activities of the Division of Non-Communicable Diseases and an Officer-in-charge

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coordinates it. The Programme is assisted by a Steering Committee that meets periodically to oversee and guide its functioning. A review meeting is held annually, where the Principal Investigators and staff of the registries under the NCRP, present data and participate in the discussions.

Cancer registration in India is active. Staff of registries visit hospitals on routine basis and scrutinise the records in various departments that include pathology, radiology, radiotherapy, in-patient wards and out-patient clinics to elicit the desired information on reported cancer cases in a "common core proforma" that has been standardised for all cancer registries in India. Proforma contains items on patient identification, socio-demographic variables, diagnostic and treatment details. Coding of the disease is done according to International Classification of Diseases (WHO, 1975). This facilitates comparison of our data at International level. In addition, to facilitate the detailed histologic studies, coding is also done according to International Classification of Disease for Oncology (WHO, 1976). The hospitals include the main cancer hospitals, other general hospitals in both the government and private sector. Besides, pathology laboratories that routinely report cancer cases are also visited. Death certificates are also scrutinised from the municipal corporation units. Every attempt is made by registries to register all cancer patients in the registration area who are resident (at least one year) in the area in all hospitals and copy all death certificates in which cancer is mentioned.

Certain basic checks of data, especially those related to duplicate verification and matching with mortality records, are carried out by the individual registries. After this, the data is sent to the Coordinating Unit for subjecting the data to various range, consistency and unlikely combinations including a further round of possible duplicate listing. The list of cases with the items of patient information, that require verification are sent to the respective registries by the Coordinating Unit. Individual registries go through the records/reports of such cases and wherever necessary discuss with the concerned clinician or the pathologist. On receiving the clarifications the Coordinating Unit prepares the detailed tabulations by five-year age group, site and sex, including rates. The individual registries use these tables to prepare the registry's annual report. The Coordinating Unit collates the data and perform tabulations to prepare the consolidated report of that year.

A workshop is held annually, with the objectives of discussing the various aspects of working of the registry, problematic cases, use of coding and discussion on medical terminology, statistical and epidemiologic methods. About 2-3 senior and junior staff from each of the registries under the NCRP, participate in the workshop.

Apart from the above, the Coordinating Unit undertakes and coordinates epidemiologic and other research studies, including those to ensure that the quality of data is of a high standard and that coverage of cancer cases in the registry area is as complete as possible.

Over the years, staff from registries under the NCRP, have benefited from both short and long term training fellowships in established institutions abroad. This has helped them and the registries to develop into departments of epidemiology and undertake several studies on their own and contribute to several research publications in indexed journals.

Two-year Report of the Population Based Cancer Registries: 1997-1998

Incidence and Distribution of Cancer

INTRODUCTION AND SUMMARY OF THE REPORT

Cancer Registration is a process of continuing, systematic collection of data on the occurrence and characteristics of reportable neoplasms (MacLennan *et al*, 1978). Broadly there are two types of cancer registries – Population Based (PBCR) and hospital based (HBCR). Besides, there are also special purpose cancer registries in relation to specific exposure, childhood, specific anatomical site or morphology.

The primary concern of a PBCR is cancer in the community. The PBCRs provide information on cancer incidence and mortality and trends over time in the specific geographic area covered by the registry. In terms of assessing patient care, they provide overall population based cancer survival rates with reference to the community. The PBCRs constitute a base for carrying out research studies on cancer etiology through epidemiologic studies. To initiate, establish and sustain population based cancer registries as per international standards requires meticulous planning, cooperation of medical institutions in the area, dedicated and committed personnel and adequate funding. There are several sources from where staff of registries, collect information on cancer cases. These include pathology reports, medical records, radiology and radiotherapy departments and death certificates to name a few. The availability of up-dated investigation/diagnostic facilities, well maintained medical records using International Classification of Diseases together with an efficient death registration system are essential for good quality cancer registration.

The methodology of data collection by the registries in India is active in that registry staff, regularly and periodically visit various sources to actively pursue and collect information on cancers reported and interview patients wherever possible. The advent of computing technology and the age of electronic information processing have transformed working of registries in India as elsewhere in the world. This change is particularly noticed in helping duplicate checks of patient records, matching cases with death certificates and the number of range and consistency checks that can be carried out on the data.

Studying the magnitude and patterns of cancer would be the first step in determining clues to the cause of cancer and having a baseline to plan and assess control measures. Epidemiologic studies based on these help in knowing what is happening and what can be done about it. Cancer registries provide the needed information to undertake such investigations.

The previous consolidated report of the population based cancer registries published last year (2001) was of the seven-year data from 1990 to 1996 of the five urban (Bangalore, Bhopal, Chennai, Delhi and Mumbai) and one rural (Barshi) population based cancer registry. The present report covers the data of the above registries for the years 1997 and 1998. It seeks to emphasize cancer incidence and patterns of cancer in the areas covered by these registries. It attempts to give clues to the burden and patterns of cancer in these areas so as to provide a base for studies in cancer causation and its control.

Though the geographic area and population covered by the population based cancer registries under the NCRP are small compared to the vastness of India and its population, they give a fair idea of the cancer problem in the country. This report is the culmination of sustained efforts made by cancer registries under the NCRP.

Chapter 1 gives the picture of cancer incidence. Cancer incidence rate is generally expressed as age-adjusted or age-standardized (according to world standard population) incidence rate per 100,000 persons. For all anatomical sites the rates vary from 91.9 to 120.9 in urban males and 108.7 to 134.8 in urban females. Incidence rates in the rural registry of Barshi are lower. The urban incidence rates are similar to that seen in Indians in Singapore (Males: 101.5; Females: 131.7) (Parkin *et al*, 2002).

Chapter 2 deals with the leading sites of cancer in the different registries and compares with cancer incidence rates in registries in five continents. Overall, among males as in the previous report cancer of the lung is numerically the number one cancer. It is the leading site in Delhi, Mumbai and Bhopal, second and third leading site among males in Chennai and Bangalore respectively. Another site of cancer associated with the use of tobacco, namely, cancer of the oesophagus is an important leading site in both males and females. As in the reports of earlier years, cancer of the stomach in males continues to be the leading site of cancer in the southern registries of Chennai and Bangalore. In women, cancers of the cervix and breast, together account for over 40-45% of cancers in urban women and over 57% of cancers in the rural registry in Barshi. Lymphoreticular malignancies as a group are a very important set of neoplasms. They comprise over 10% of malignant neoplasms, have a potential for cure and are of interest in terms of aetiology and epidemiology.

In Chapter 3, salient statistics of two broad groups of cancers – childhood cancers and tobacco related cancers are tabulated. Childhood cancers are an important set of neoplasms as many of them have different aetiological factors and in recent years have potential for cure. The sites of cancer associated with use of tobacco account for 36 to 55% of all sites of cancer in males and 10-16% of all cancers in women.

The basis of diagnosis of cancer is one of the most important parameters in assessing the quality and completeness of the coverage of a population based cancer registry. This is discussed in Chapter 4.

Chapter 5 of the report briefly deals with mortality data. There are certain limitations in the collection of mortality data. These include the system of registration of death and certification of the cause of death. Though in urban centres all deaths are generally registered, information on exact cause of death is lacking. When cancer is mentioned as a cause, the anatomical site is not mentioned and when the site is mentioned the histology or morphology is not stated. Because of this, there are difficulties in having a clear and complete picture of cancer mortality as opposed to cancer morbidity. However, traditionally Mumbai has developed a relatively better system mainly because of the earlier Coroner's act. Chennai registry has made extra efforts to enlist deaths due to all causes and trace back these deaths to elicit cause.

The authenticity of the data depends on its quality, and with reference to the population based cancer registry, this would be both in terms of completeness of coverage of cancer cases in the geographic area as well as the reliability of the data. Registries routinely undertake various exercises to ensure that the data they collate and process is of high quality. A thorough check of data is also done before tabulation and these aspects are dealt in detail in Chapter 6.

Chapter 7 lists the definitions and statistical methods followed.

Cancer registration is a means to a purpose and not a purpose in itself. It is the forerunner of studies in descriptive epidemiology of cancer, which in turn generates specific scientific hypotheses. The registries under the NCRP have highlighted the need to undertake aetiological studies in several sites of cancer, cancer of the stomach in the south and gall bladder cancer in Delhi, to name a few.

Chapter 1

POPULATION AND CANCER INCIDENCE

Cancer incidence refers to the number of new cases of cancer seen in the population of a defined geographic area over a definite period of time. Site-specific annual cancer incidence rates, are the number of site-specific cancers in a year per 100,000 persons at risk. The average annual rates are calculated for the two-year period 1997-98.

Area covered and population at risk: The geographic area covered by the six population based registries and the average estimated population for the two-year period (1997-98) are given in Table 1.1.

The number of cases registered by each of the registries during the two-year period (1997-98) is given in Table 1.2.

The crude (CR), age adjusted (AAR) and truncated (TR) incidence rates for all sites are given in Table 1.3 and Figure 1.1.

The crude rate varies in males from 37.3 per 100,000 in Barshi to 86.7 per 100,000 in Chennai and in females it varies from 44.1 in Barshi to 101.2 in Chennai. The age adjusted rates also show variations. Like in the previous years the capital of the country has the highest age adjusted rate in both sexes. Except in Bhopal the rates (both crude and age adjusted) are higher in females than in males.

The truncated incidence rate is the age adjusted incidence rate in the truncated 35-64 year age group. Besides crude and age adjusted rates the truncated rates provide another assessment of incidence rates, especially in the Indian population which has over 60% of cancers in this 35-64 year age group. They provide a useful estimate of comparison. For example, though the AAR in Bhopal shows a higher male rate compared to that in females the truncated rate of females in that registry is higher than that in males.

Age Specific Incidence Rates:

Figure 1.2 illustrates the average annual age specific incidence rates for all sites of cancer, in the six registries by sex in both arithmetic and log scale. While the logarithmic graph is better for measuring trends, the arithmetic one is useful for assessing the gravity of the problem. The graphs show increasing rate of cancer with increasing age and the graphs of all urban registries are close together without fluctuation indicating similarities in the rise.

TABLE 1.1: Area Covered and Population at Risk

Registry	Area (sq.km.)	Male	Female	Total Population
Bangalore	276.4	2709340	2452415	5161755
Barshi	3713.4	258038	239251	497289
Bhopal	284.9	696264	624435	1320699
Chennai	170.0	2104490	1989281	4093771
Delhi	685.3	6164338	5079573	11243911
Mumbai	603.0	6185132	5027251	11212383

TABLE 1.2: Total Number of Cases Registered

Registry	Male	Female	Total Cases
Bangalore	3081	3554	6635
Barshi	193	211	404
Bhopal	871	778	1649
Chennai	3652	4026	7678
Delhi	9023	8805	17828
Mumbai	8617	8504	17121
All Registries	**25437**	**25878**	**51315**

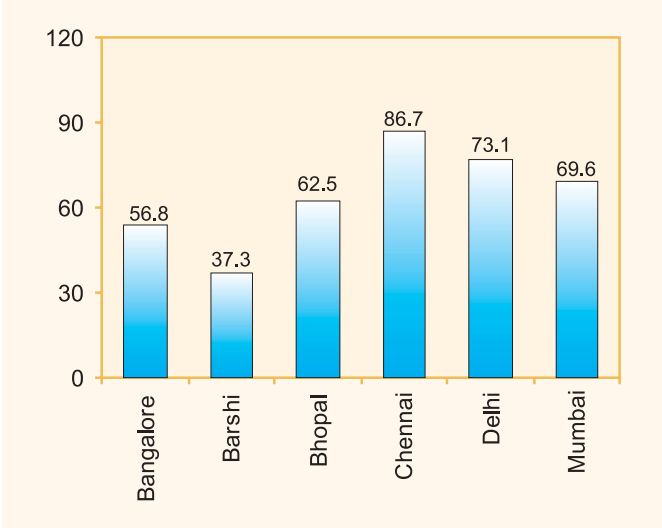
TABLE 1.3: Crude Rate (CR), Age Adjusted (AAR) and Truncated (TR) Incidence Rates per 100,000 population in different PBCR's

Registry	Males			Females		
	CR	AAR	TR	CR	AAR	TR
Bangalore	56.8	91.9	145.0	72.4	114.8	231.8
Barshi	37.3	43.9	71.8	44.1	51.7	115.5
Bhopal	62.5	116.7	190.3	62.2	108.7	234.5
Chennai	86.7	111.3	199.5	101.2	125.2	262.9
Delhi	73.1	120.9	200.5	86.7	134.8	273.1
Mumbai	69.6	117.3	160.5	84.6	127.9	230.8

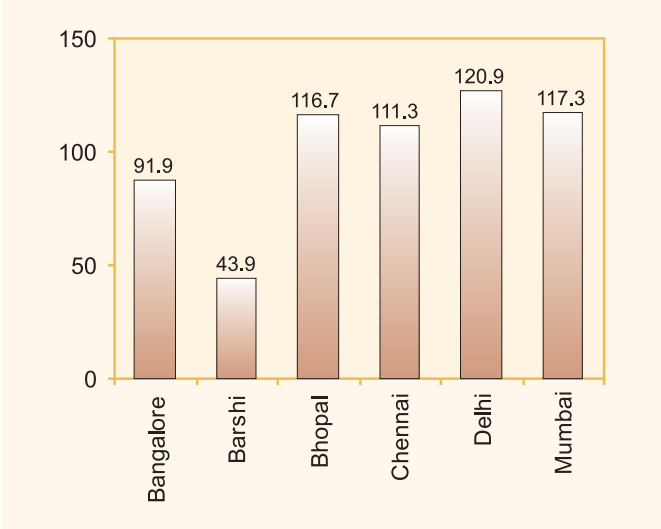
Fig. 1.1: Average Annual Crude, Age Adjusted and Truncated Incidence Rates
All Sites of Cancer : ICD 140-208

MALES

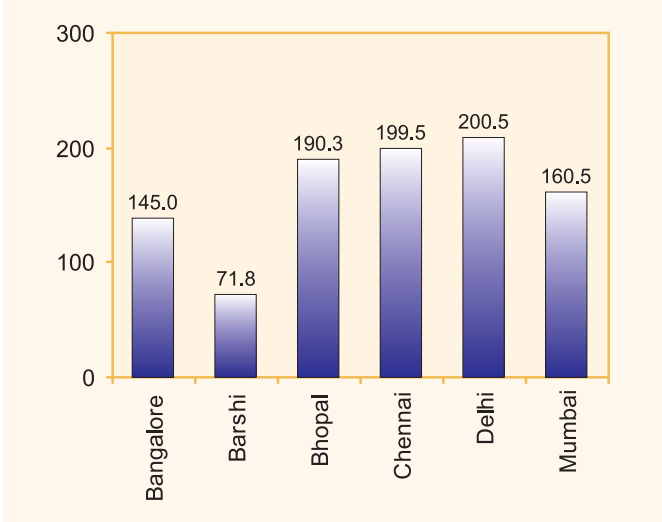
Crude Rate



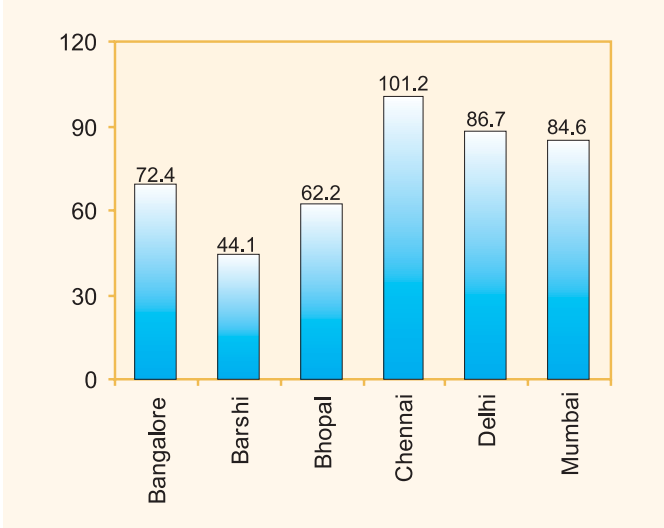
Age Adjusted Rate

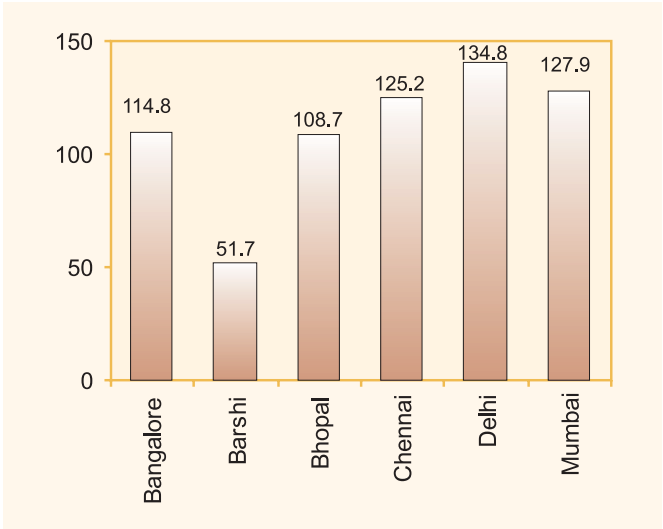


Truncated Rate



FEMALES





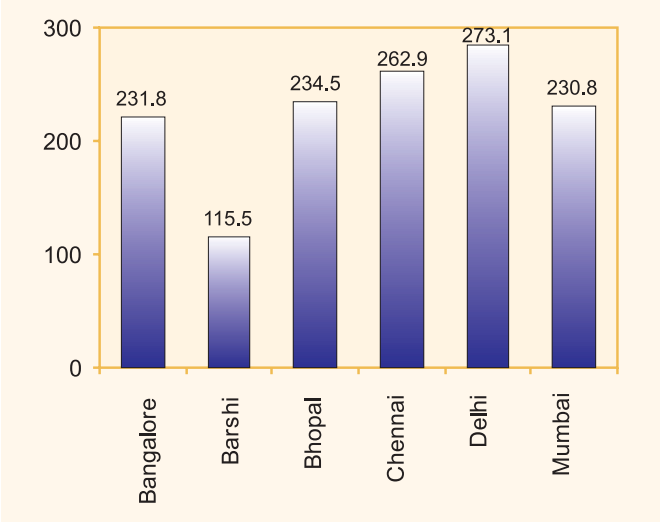
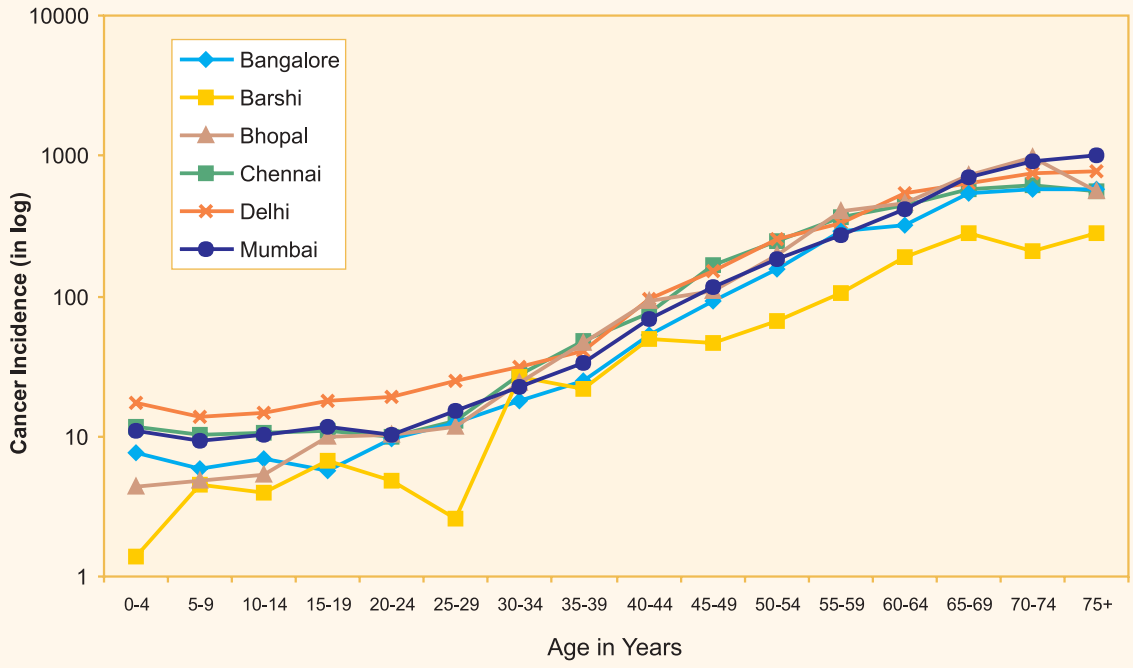


Fig. 1.2(a): Average Annual Age Specific Cancer Incidence Rates - All Sites of Cancer

MALES



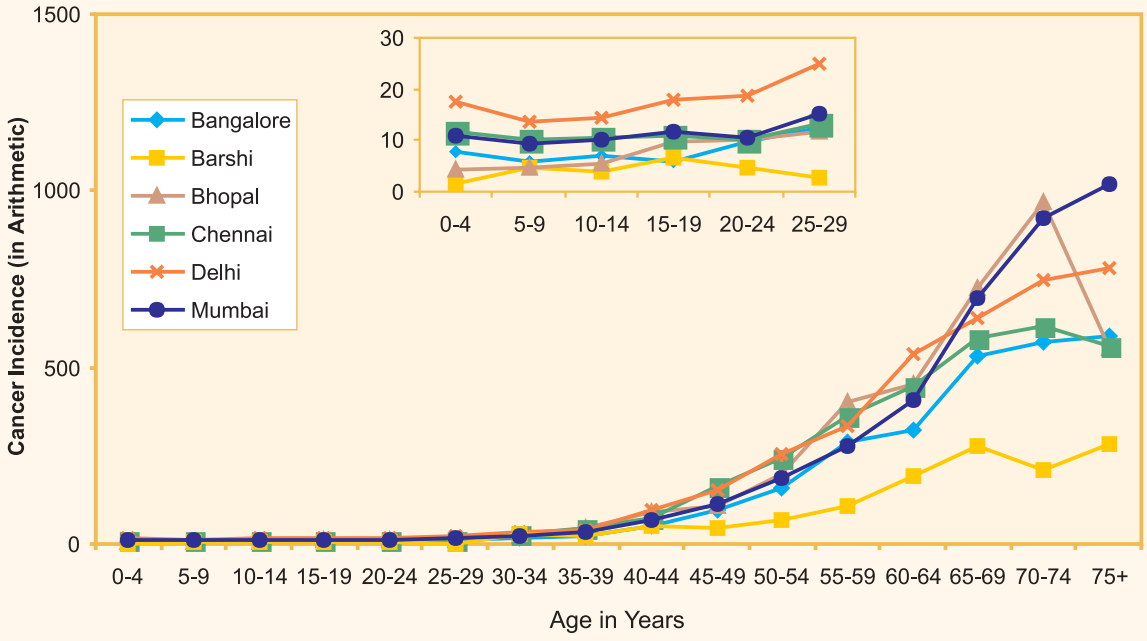
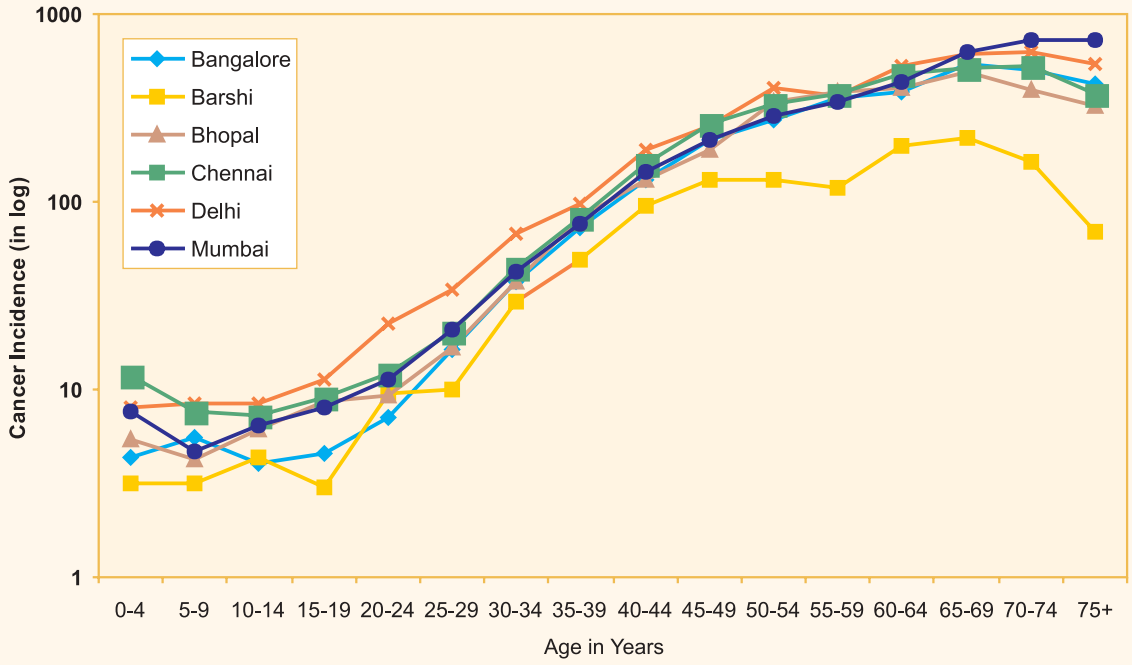
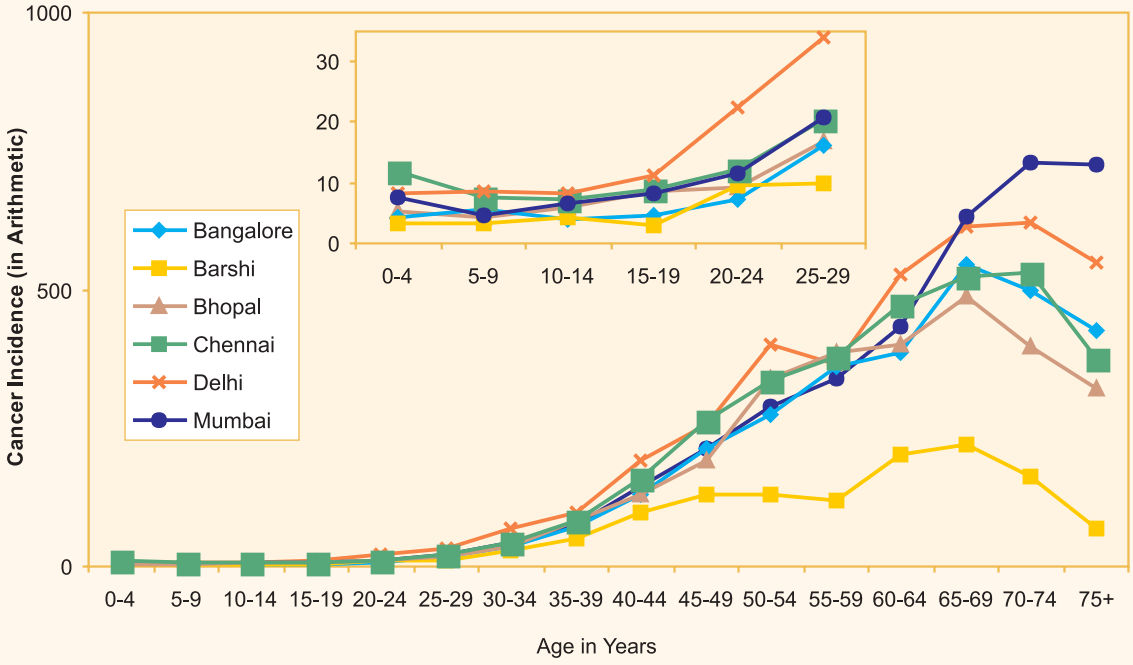


Fig. 1.2(b): Average Annual Age Specific Cancer Incidence Rates - All Sites of Cancer

FEMALES





Cumulative Incidence Rate and Risk

Population based cancer registries provide age specific cancer incidence rates in the different registry areas. Through these rates it is possible to arrive or estimate the risk of the particular population in developing cancer during their lifetime. This is just a better way of expressing the incidence rates in simpler terms for easier comprehension. The cumulative rate/risk could be estimated by sex and for any specific site of cancer. The details of these calculations are provided in Chapter 7. For practical purposes the cumulative rate is a good approximation of the cumulative risk. Based on the cumulative risk the probability of a person developing cancer in the absence of a competing cause of death can be calculated and this is expressed as “one in”.

The cumulative rate can be estimated from the age specific rates either for the five-year age groups from 0-64 years or for the age group 0-74 years. Since the average life expectancy of the population of India has gone up one may have to examine the estimates obtained from both calculations. These are given in Table 1.4. Table 1.5 also provides the cumulative incidence rate in selected population based registries across the world (Parkin et al, 2002). Except for Indians in Singapore, the cumulative incidence rates of cancer in all other represented centres are substantially higher than that seen among the registries in India.

Based on the above, and assuming that the age specific rates (from 0-74 years) of the years 1997-98 are sustained, and there is no other competing cause of death, one could estimate, that, on an average about one in about eight men and one in about seven women in the urban centres could develop cancer in their lifetime.

TABLE 1.4: Cumulative Incidence Rate, Cumulative Risk & Possibility of one in number of persons developing cancer of All Sites (ICD9: 140-208)

Calculation based on age specific rates from 0-64 and 0-74 years of age

Registry	Cumulative Rate (%)		Cumulative Risk (%)		Possibility of one in no. of persons developing cancer	
	Males	Females	Males	Females	Males	Females
0-64 yrs						
Bangalore	8.06	10.80	7.75	10.24	13	10
Barshi	4.05	5.04	3.97	4.91	25	20
Bhopal	10.49	10.80	9.96	10.24	10	10
Chennai	10.11	11.69	9.62	11.03	10	9
Delhi	10.45	12.21	9.92	11.49	10	9
Mumbai	9.37	11.17	8.94	10.57	11	9
0-74 yrs						
Bangalore	11.08	13.39	10.49	12.53	10	8
Barshi	5.10	5.86	4.97	5.69	20	18
Bhopal	15.34	12.50	14.22	11.75	7	9
Chennai	13.19	14.35	12.35	13.37	8	7
Delhi	13.97	15.23	13.04	14.13	8	7
Mumbai	13.98	14.82	13.04	13.77	8	7

TABLE 1.5: Cumulative Incidence Rates in selected registries across the world

Registry	Cumulative Incidence Rate (0-74 years)	
	Males	Females
Singapore – Indians	10.43	15.40
US: SEER		
White	44.58	32.80
Black`	61.33	31.63
Japan - Osaka	31.98`	17.09
Canada	39.79	29.46
United Kingdom		
England	35.97	28.92
Scotland	44.92	35.69
Australia - Victoria	41.85	29.85

Chapter 2

LEADING SITES OF CANCER AND INTERNATIONAL COMPARISONS

Tables 2.1 to 2.6 and the corresponding bar charts in Figures 2.1 to 2.6 give the leading sites of cancer in the six registries in males and females. The leading sites of cancer were decided on the basis of relative proportion to all sites of cancer in that sex or in other words based on crude incidence rates. In the description below reference and comparison is made with the consolidated report of 1990-96.

Among males, cancer of the stomach continued to be the leading site of cancer in both Bangalore and Chennai. Cancer of the lung was the leading site of cancer in the three urban registries of Bhopal, Delhi and Mumbai constituting around 10% of cancers of all sites. In Bangalore cancer of the rectum which was the tenth leading site earlier is at present the seventh leading site. In Barshi cancer of the liver which was the eighth leading site is now the first leading site along with cancer of the hypo-pharynx. In Bhopal cancer of the urinary bladder and colon are one in ten leading sites of cancer. Cancer of the rectum is one of ten leading sites in Chennai, in this report. Cancer of the prostate, which was the eighth leading site earlier, is now the third leading site in Delhi. So also in Mumbai this site of cancer which was the eighth leading site is now the fifth leading site.

Among females in Bangalore, cancer breast has replaced cancer cervix as the leading site of cancer. The same change has been seen in Bhopal. In Chennai, cancer cervix continues to be the leading site, but the gap in the relative proportion of cervix and breast cancers has narrowed. In Delhi and Mumbai there is little change in the order of relative proportions of leading sites of cancer.

TABLE 2.1 : Ten Leading Sites of Cancer - Bangalore

Number of Cases, Relative Proportion (%), Crude Rate (CR), Age Adjusted Rate (AAR) and Truncated Rate (TR)

Males

Sl.No.	Leading Sites	No. of Cases	%	CR	AAR	TR
1	**Stomach**	282	9.15	5.20	8.92	12.68
2	**Oesophagus**	221	7.17	4.08	6.95	12.95
3	**Lung**	218	7.08	4.02	7.05	10.47
4	**Hypopharynx**	171	5.55	3.16	5.40	9.75
5	**Prostate**	138	4.48	2.55	4.88	3.23
6	**NHL**	135	4.38	2.49	3.60	5.29
7	**Rectum**	124	4.02	2.29	3.58	6.23
8	**Brain**	123	3.99	2.27	2.93	4.55
9	**Larynx**	111	3.60	2.05	3.58	6.09
10	**Tongue**	106	3.44	1.96	3.27	5.81
	ALL SITES	**3081**	**100.00**	**56.87**	**91.97**	**145.08**

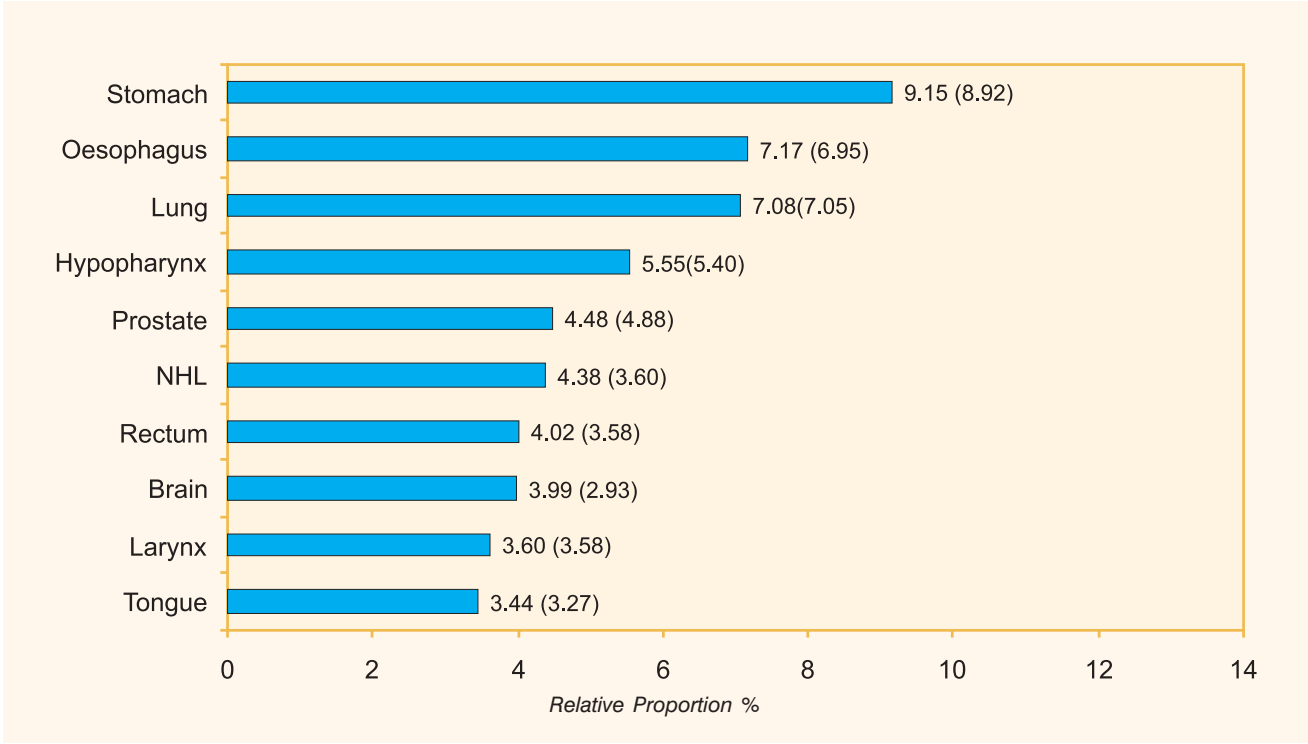
Females

Sl.No.	Leading Sites	No. of Cases	%	CR	AAR	TR
1	**Breast**	822	23.13	16.76	25.16	59.41
2	**Cervix Uteri**	683	19.22	13.93	21.93	51.12
3	**Oral Cavity**	197	5.54	4.02	7.08	13.54
4	**Oesophagus**	186	5.23	3.79	6.78	11.83
5	**Ovary**	161	4.53	3.28	5.06	10.97
6	**Stomach**	160	4.50	3.26	5.33	9.34
7	**Thyroid Gland**	94	2.64	1.92	2.60	5.22
8	**Body Uterus**	88	2.48	1.79	3.18	6.94
9	**Rectum**	84	2.36	1.71	2.81	5.09
10	**NHL**	74	2.08	1.51	2.47	2.94
	ALL SITES	**3554**	**100.00**	**72.47**	**114.82**	**231.86**

Fig. 2.1: Ten Leading Sites of Cancer - Bangalore

Age Adjusted Rates given in parentheses

Males



Females

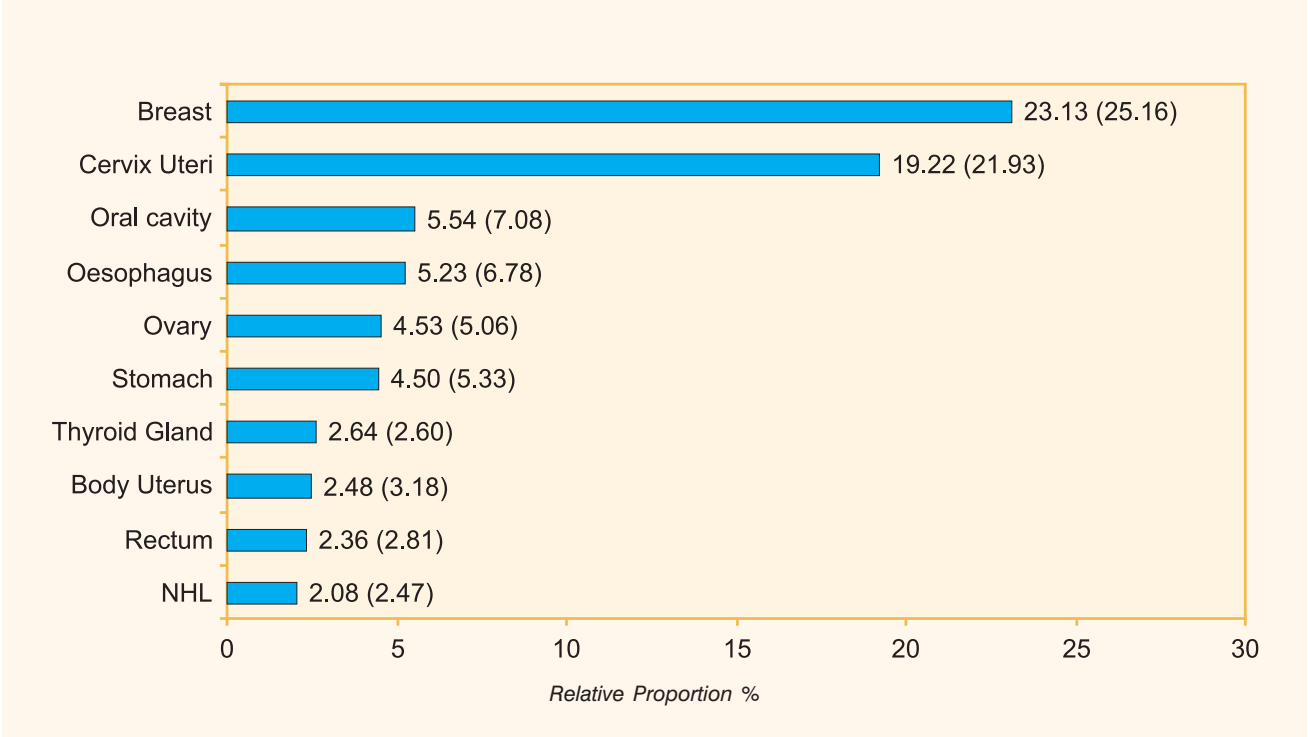


TABLE 2.2 : Ten Leading Sites of Cancer - Barshi

Number of Cases, Relative Proportion (%), Crude Rate (CR), Age Adjusted Rate (AAR) and Truncated Rate (TR)

Males

Sl.No.	Leading Sites	No. of Cases	%	CR	AAR	TR
1	**Hypopharynx**	20	10.36	3.88	4.55	5.17
2	**Liver**	20	10.36	3.88	4.62	8.42
3	**Oesophagus**	17	8.81	3.29	3.92	9.79
4	**Rectum**	13	6.74	2.52	3.01	5.38
5	**Oral Cavity**	13	6.74	2.52	2.96	6.68
6	**Penis Etc**	9	4.66	1.74	2.04	1.50
7	**Leuk Myeloid**	8	4.15	1.55	1.71	2.70
8	**Lung**	7	3.63	1.36	1.62	3.09
9	**Stomach**	6	3.11	1.16	1.41	3.64
10	**Tongue**	5	2.59	0.97	1.13	2.24
	ALL SITES	**193**	**100.00**	**37.39**	**43.90**	**71.84**

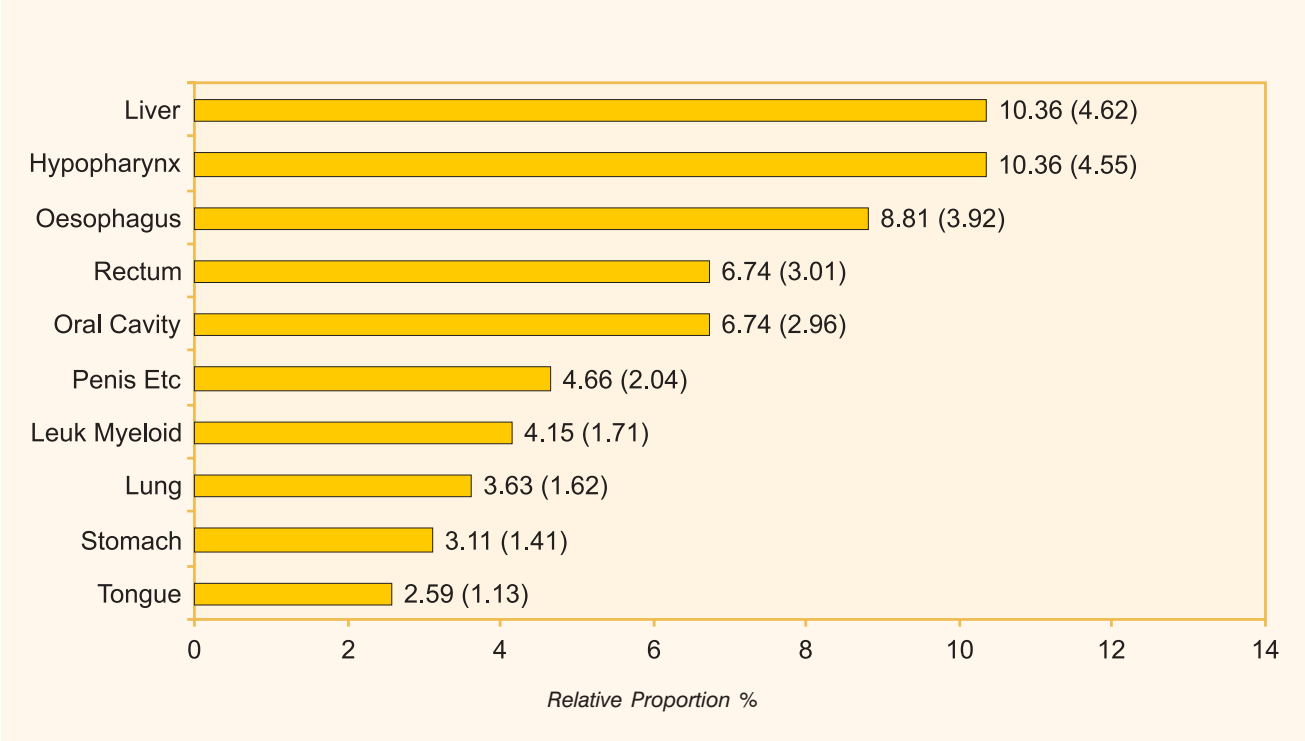
Females

Sl.No.	Leading Sites	No. of Cases	%	CR	AAR	TR
1	**Cervix Uteri**	89	42.18	18.60	21.92	52.46
2	**Breast**	32	15.17	6.69	8.10	20.39
3	**Oesophagus**	10	4.74	2.09	2.66	5.27
4	**Ovary**	9	4.27	1.88	2.09	5.48
5	**Oral Cavity**	7	3.32	1.47	1.81	5.10
6	**Rectum**	7	3.32	1.46	1.76	4.01
7	**Vagina**	5	2.37	1.04	1.30	2.50
8	**Stomach**	5	2.37	1.04	1.11	2.27
9	**Colon**	4	1.90	0.84	1.05	1.55
10	**Lung**	4	1.90	0.84	0.98	0.74
	ALL SITES	**211**	**100.00**	**44.14**	**51.72**	**115.51**

Fig. 2.2 : Ten Leading Sites of Cancer - Barshi

Age Adjusted Rates given in parentheses

Males



Females

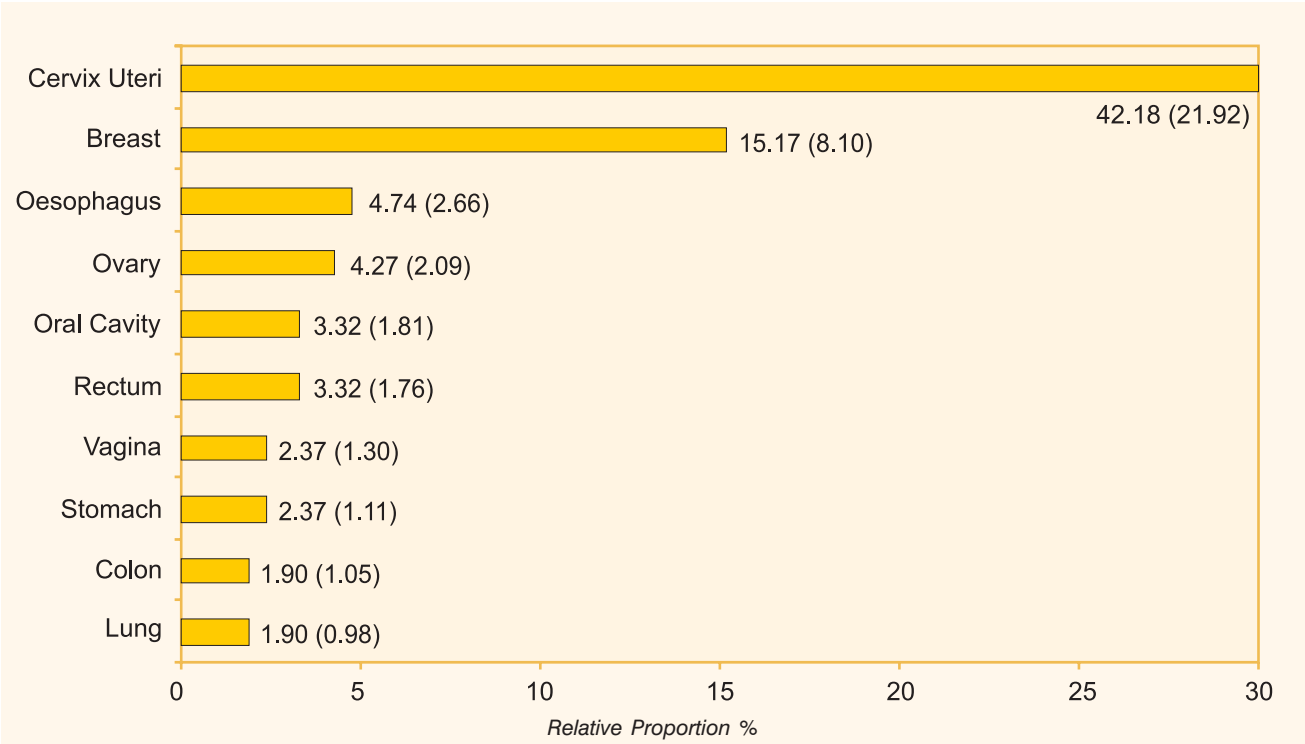


TABLE 2.3 : Leading Sites of Cancer - Bhopal

Number of Cases, Relative Proportion (%), Crude Rate (CR), Age Adjusted Rate (AAR) and Truncated Rate (TR)

Males

Sl.No.	Leading Sites	No. of Cases	%	CR	AAR	TR
1	**Lung**	104	11.94	7.47	15.55	27.35
2	**Oral Cavity**	82	9.41	5.89	10.19	20.15
3	**Tongue**	70	8.04	5.03	10.29	16.75
4	**Oesophagus**	70	8.04	5.03	10.39	16.15
5	**Hypopharynx**	50	5.74	3.59	7.39	10.96
6	**Prostate**	49	5.63	3.52	8.17	7.37
7	**Larynx**	44	5.05	3.16	5.84	13.36
8	**Uri Bladder**	33	3.79	2.37	4.95	7.12
9	**NHL**	31	3.56	2.23	3.59	2.35
10	**Colon**	27	3.10	1.94	3.65	6.84
	ALL SITES	**871**	**100.00**	**62.54**	**116.70**	**190.36**

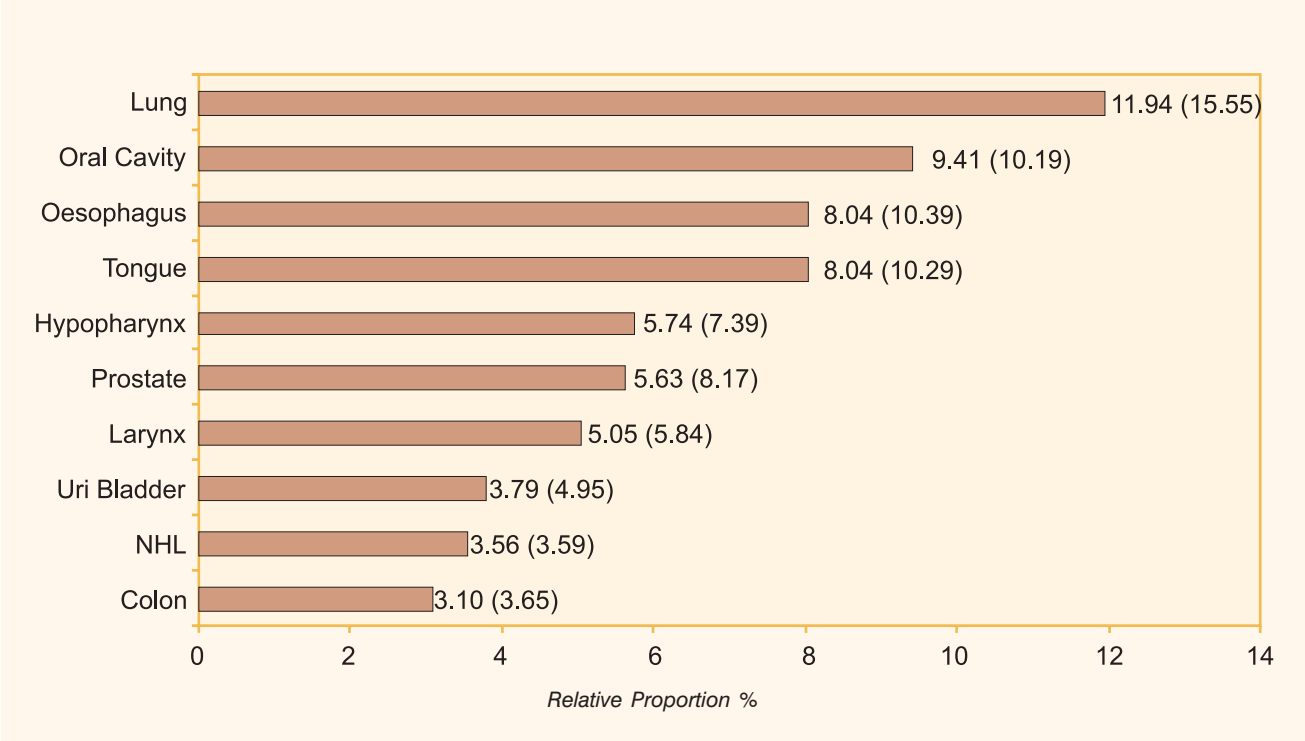
Females

Sl.No.	Leading Sites	No. of Cases	%	CR	AAR	TR
1.	**Breast**	179	23.01	14.33	24.51	62.96
2	**Cervix Uteri**	173	22.24	13.85	24.06	59.68
3	**Oral Cavity**	47	6.04	3.76	7.28	15.81
4	**Ovary**	46	5.91	3.68	5.74	13.02
5	**Oesophagus**	28	3.60	2.24	4.80	8.52
6	**Gall Bladder**	24	3.08	1.92	3.89	8.15
7	**NHL**	23	2.96	1.84	3.07	4.67
8	**Leuk Myelocytic**	21	2.70	1.68	1.86	3.91
9	**Thyroid Gland**	17	2.19	1.36	2.08	2.89
10	**Lung**	15	1.93	1.20	2.40	3.83
	ALL SITES	**778**	**100.00**	**62.26**	**108.73**	**234.53**

Fig. 2.3 : Ten Leading Sites of Cancer - Bhopal

Age Adjusted Rates given in parentheses

Males



Females

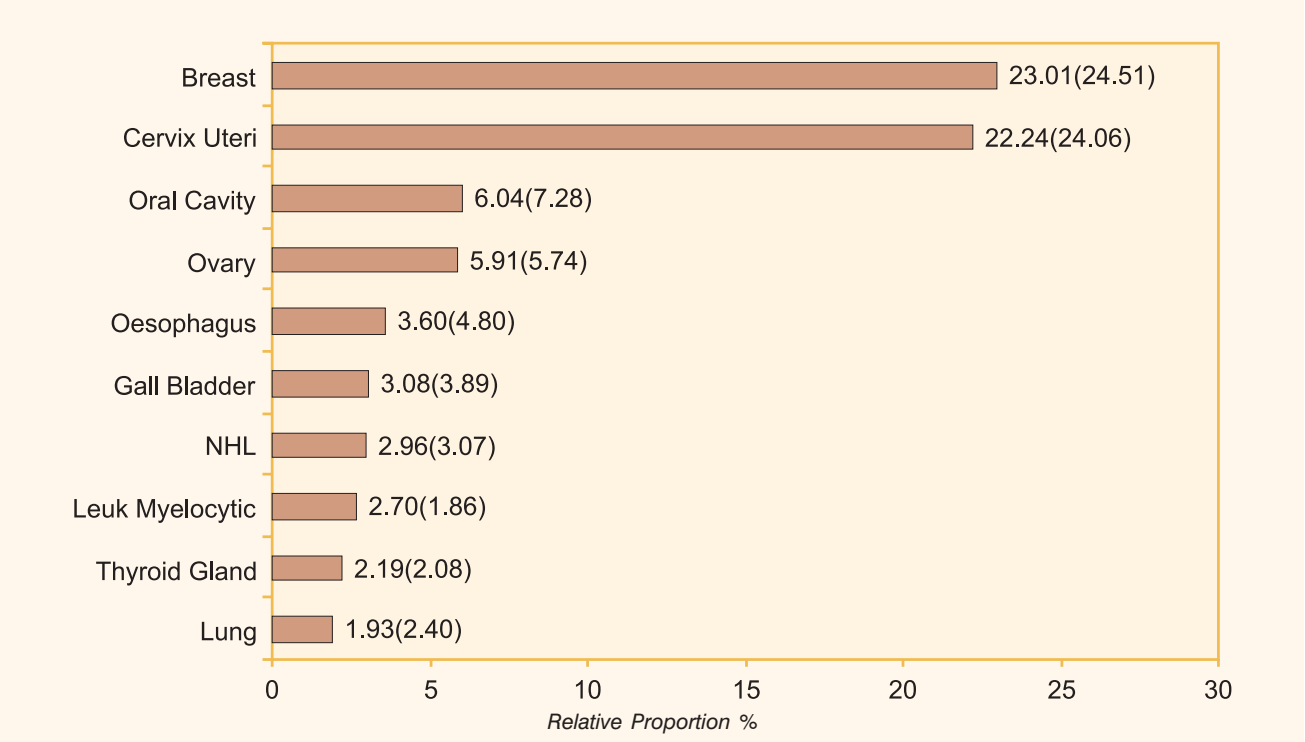


TABLE 2.4 : Ten Leading Sites of Cancer - Chennai

Number of Cases, Relative Proportion (%), Crude Rate (CR), Age Adjusted Rate (AAR) and Truncated Rate (TR)

Males

Sl.No.	Leading Sites	No. of Cases	%	CR	AAR	TR
1	**Stomach**	426	11.66	10.12	13.16	26.08
2	**Lung**	370	10.13	8.79	11.41	24.58
3	**Oesophagus**	295	8.08	7.01	9.30	18.33
4	**Tongue**	192	5.26	4.56	5.90	12.55
5	**Oral Cavity**	190	5.20	4.51	5.92	11.37
6	**Hypopharynx**	167	4.57	3.97	5.16	11.03
7	**Larynx**	165	4.52	3.92	5.23	10.01
8	**Prostate**	147	4.03	3.49	5.25	3.67
9	**NHL**	140	3.83	3.33	3.79	7.18
10	**Rectum**	127	3.48	3.02	3.83	6.10
	ALL SITES	**3652**	**100.00**	**86.78**	**111.37**	**199.52**

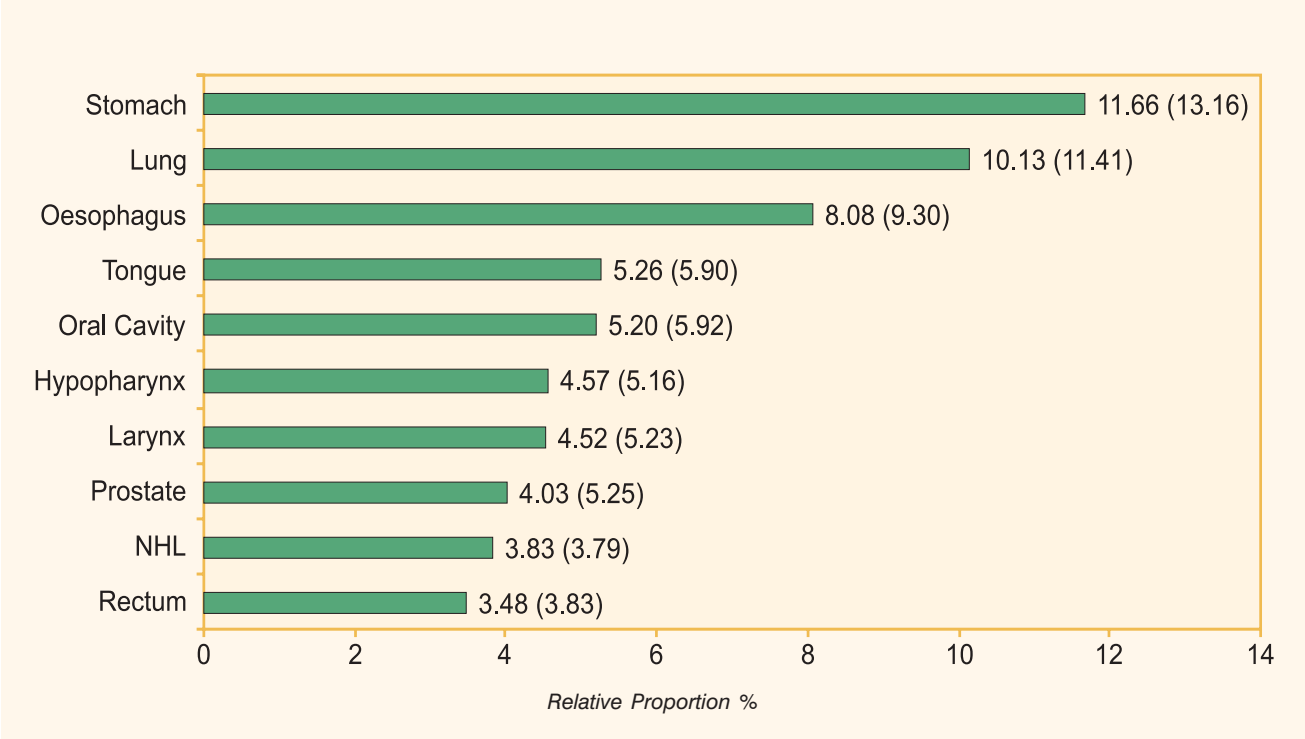
Females

Sl.No.	Leading Sites	No. of Cases	%	CR	AAR	TR
1	**Cervix Uteri**	979	24.32	24.61	30.35	75.79
2	**Breast**	878	21.81	22.07	26.68	59.65
3	**Stomach**	225	5.59	5.66	7.01	15.16
4	**Ovary**	208	5.17	5.23	6.14	12.88
5	**Oesophagus**	195	4.84	4.90	6.30	13.29
6	**Oral Cavity**	166	4.12	4.17	5.53	10.31
7	**Rectum**	97	2.41	2.44	3.07	5.35
8	**NHL**	92	2.29	2.32	2.78	4.76
9	**Body Uterus**	89	2.21	2.24	2.99	6.00
10	**Brain**	76	1.89	1.91	1.94	3.70
	ALL SITES	**4026**	**100.00**	**101.20**	**125.26**	**262.96**

Fig. 2.4 : Ten Leading Sites of Cancer - Chennai

Age Adjusted Rates given in parentheses

Males



Females

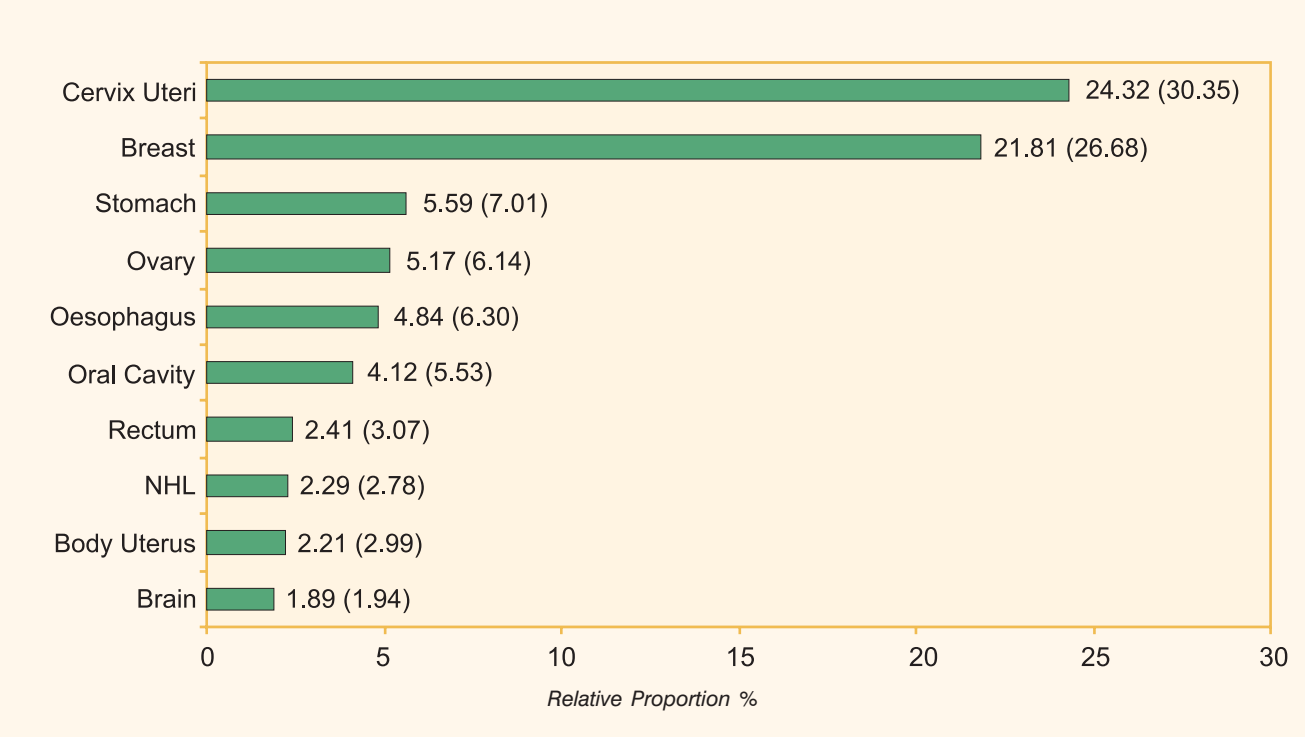


TABLE 2.5: Ten Leading Sites of Cancer - Delhi

Number of Cases, Relative Proportion (%), Crude Rate (CR), Age Adjusted Rate (AAR) and Truncated Rate (TR)

Males

Sl.No.	Leading Sites	No. of Cases	%	CR	AAR	TR
1	**Lung**	897	9.94	7.28	13.34	24.80
2	**Larynx**	575	6.37	4.66	8.31	15.70
3	**Prostate**	481	5.33	3.90	8.53	6.75
4	**Brain**	421	4.67	3.41	4.33	6.86
5	**NHL**	412	4.57	3.34	4.75	7.15
6	**Oesophagus**	393	4.36	3.19	5.71	10.92
7	**Tongue**	384	4.26	3.11	5.35	11.35
8	**Urinary Bladder**	382	4.23	3.10	6.04	7.77
9	**Oral Cavity**	333	3.69	2.71	4.47	9.70
10	**Leuk Lymphatic**	301	3.34	2.44	2.89	2.57
	ALL SITES	**9023**	**100.00**	**73.19**	**120.90**	**200.58**

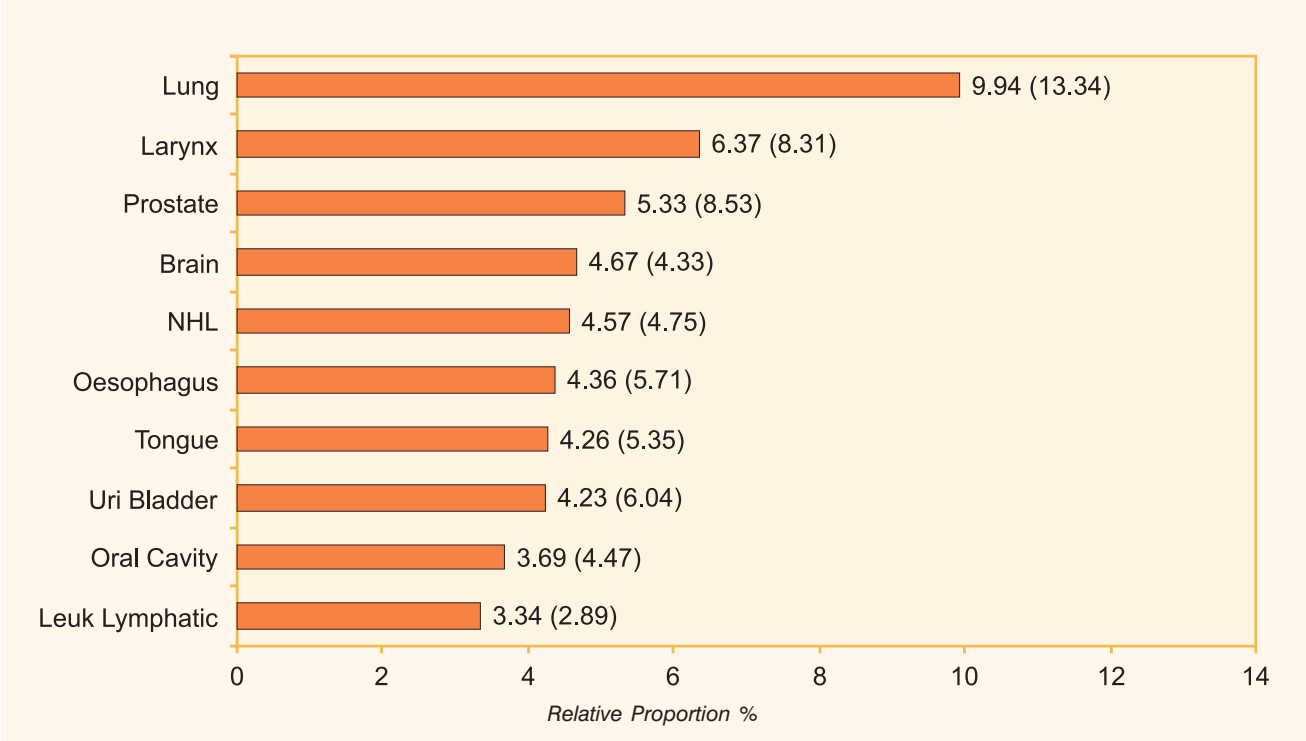
Females

Sl.No.	Leading Sites	No. of Cases	%	CR	AAR	TR
1	**Breast**	2062	23.42	20.30	30.76	71.94
2	**Cervix Uteri**	1463	16.62	14.40	22.13	52.02
3	**Ovary**	660	7.50	6.50	10.18	21.64
4	**Gall Bladder**	569	6.46	5.60	9.80	19.70
5	**Body Uterus**	216	2.45	2.13	3.66	7.20
6	**Brain**	216	2.45	2.13	2.65	4.92
7	**NHL**	203	2.31	2.00	3.01	5.01
8	**Oesophagus**	194	2.20	1.91	3.51	6.18
9	**Leuk Myelocytic**	183	2.08	1.80	2.02	3.36
10	**Lung**	172	1.95	1.69	3.02	5.76
	ALL SITES	**8805**	**100.00**	**86.73**	**134.81**	**273.12**

Fig. 2.5 : Ten Leading Sites of Cancer - Delhi

Age Adjusted Rates given in parentheses

Males



Females

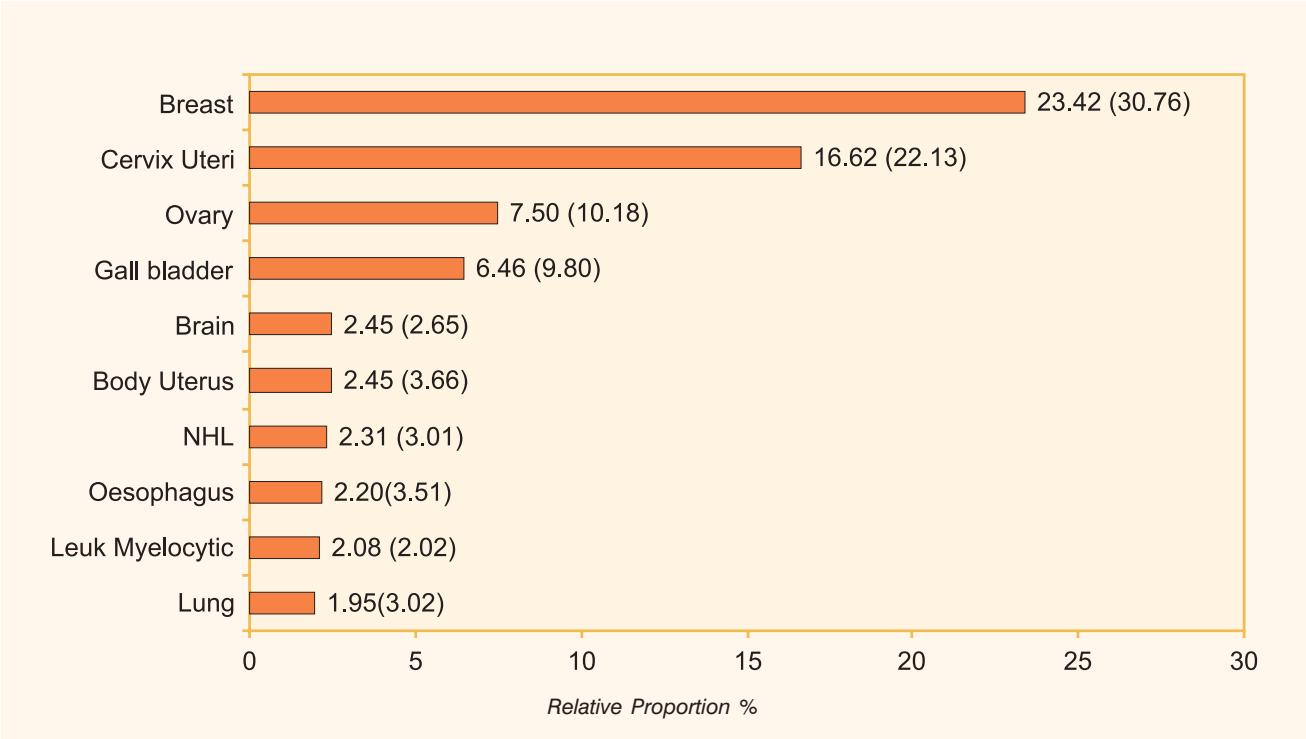


TABLE 2.6: Ten Leading Sites of Cancer - Mumbai

Number of Cases, Relative Proportion (%), Crude Rate (CR), Age Adjusted Rate (AAR) and Truncated Rate (TR)

Males

Sl.No.	Leading Sites	No. of Cases	%	CR	AAR	TR
1	**Lung**	783	9.09	6.33	11.88	16.04
2	**Oesophagus**	564	6.55	4.56	8.51	11.44
3	**Larynx**	492	5.71	3.98	7.04	10.57
4	**Oral Cavity**	460	5.34	3.72	5.64	10.60
5	**Prostate**	445	5.16	3.60	8.19	4.51
6	**Tongue**	417	4.84	3.37	5.51	10.09
7	**Stomach**	415	4.82	3.35	6.03	7.77
8	**NHL**	386	4.48	3.12	4.49	6.43
9	**Hypopharynx**	362	4.20	2.93	5.24	7.80
10	**Brain**	354	4.11	2.86	3.45	5.34
	ALL SITES	**8617**	**100.00**	**69.63**	**117.34**	**160.51**

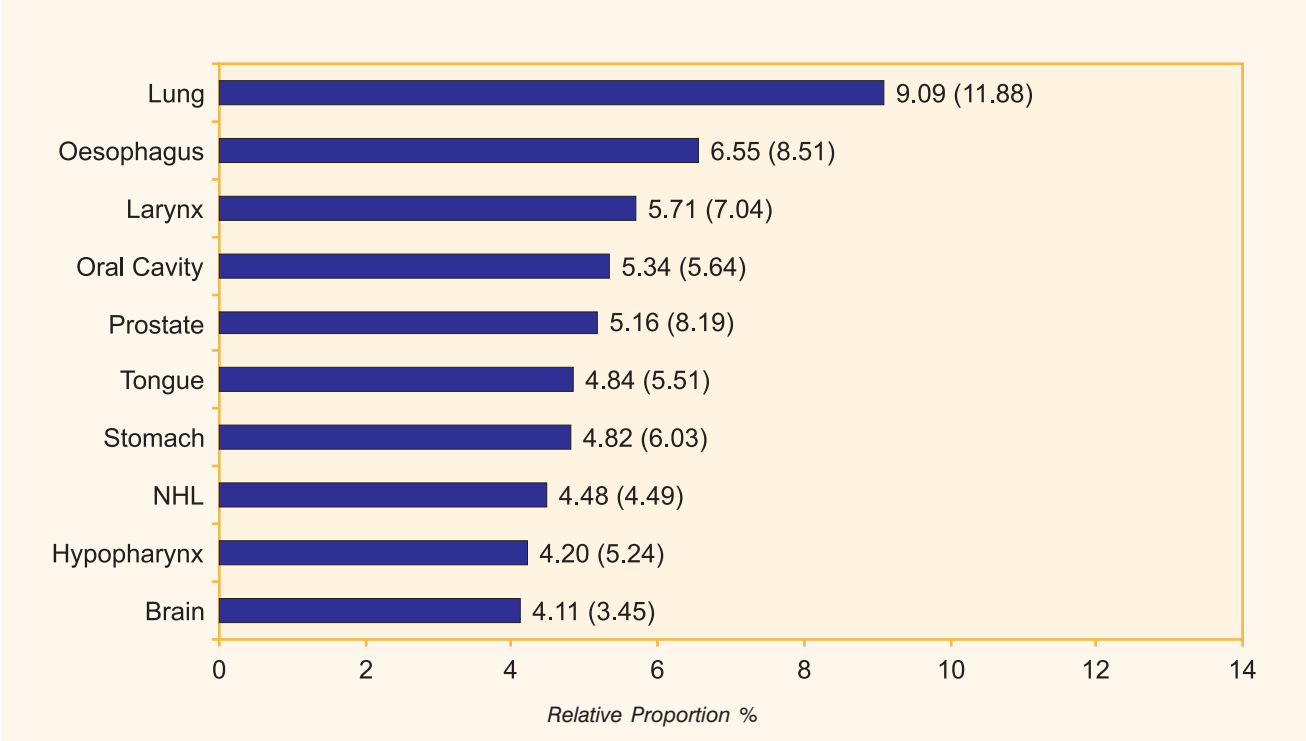
Females

Sl.No.	Leading Sites	No.of Cases	%	CR	AAR	TR
1	**Breast**	2123	24.96	21.11	30.78	63.70
2	**Cervix Uteri**	1240	14.58	12.33	18.19	39.62
3	**Ovary**	614	7.22	6.11	8.81	17.65
4	**Oesophagus**	367	4.32	3.65	6.17	9.42
5	**Oral Cavity**	279	3.28	2.78	4.43	7.99
6	**Lung**	267	3.14	2.66	4.40	7.45
7	**Stomach**	242	2.85	2.41	3.84	6.81
8	**NHL**	224	2.63	2.23	3.41	5.46
9	**Colon**	197	2.32	1.96	3.23	4.99
10	**Brain**	196	2.30	1.95	2.53	4.18
	ALL SITES	**8504**	**100.00**	**84.64**	**128.97**	**230.86**

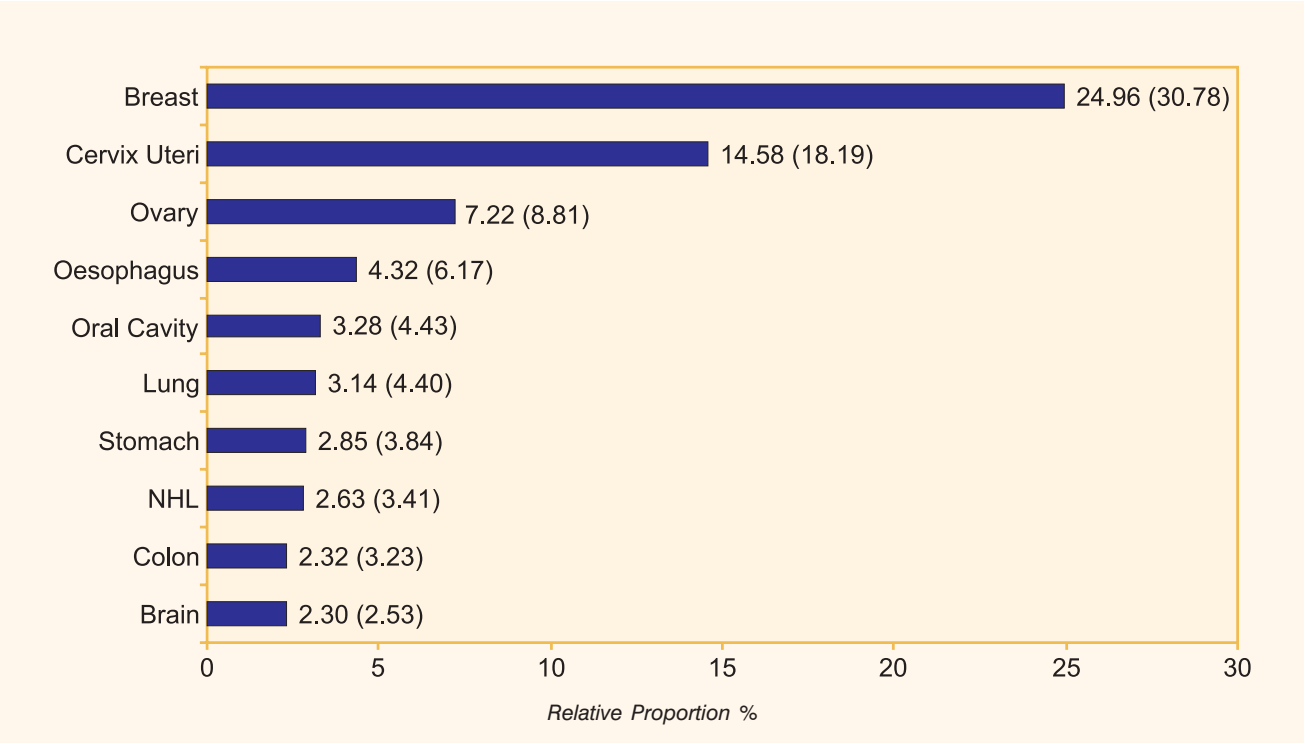
Fig. 2.6 : Ten Leading Sites of Cancer - Mumbai

Age Adjusted Rates given in parentheses

Males



Females

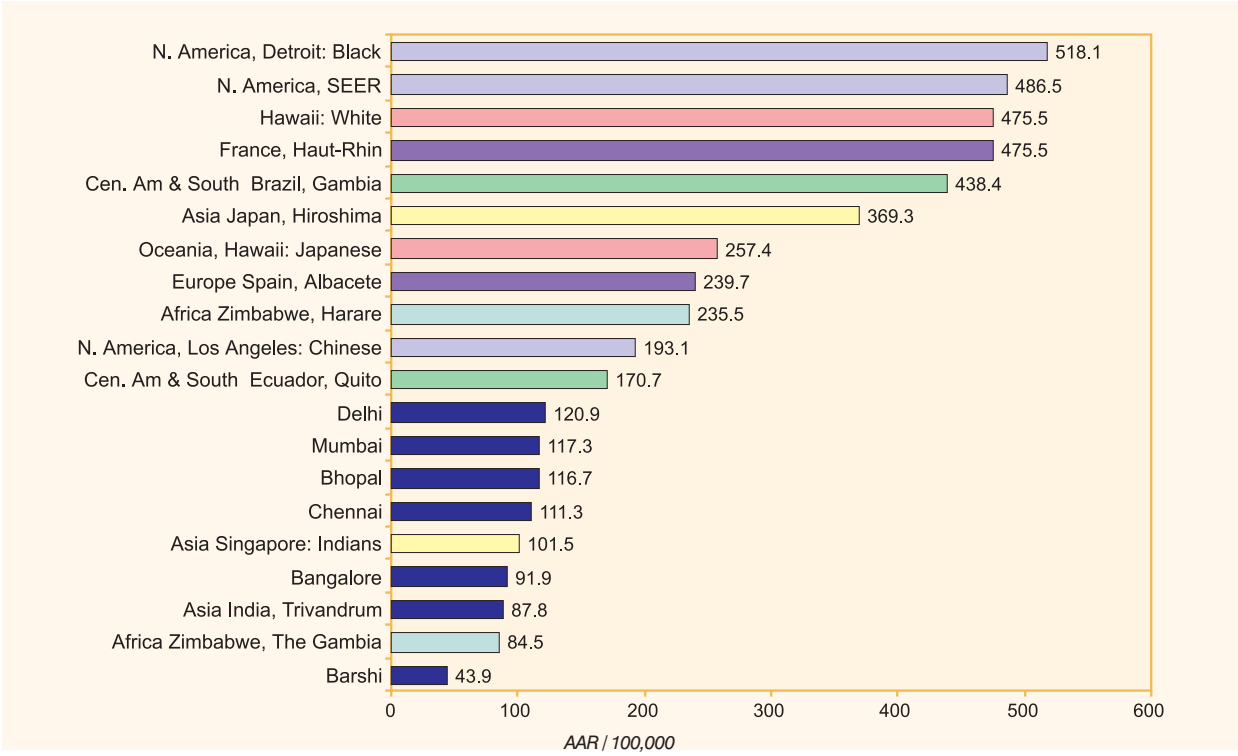


International Comparisons

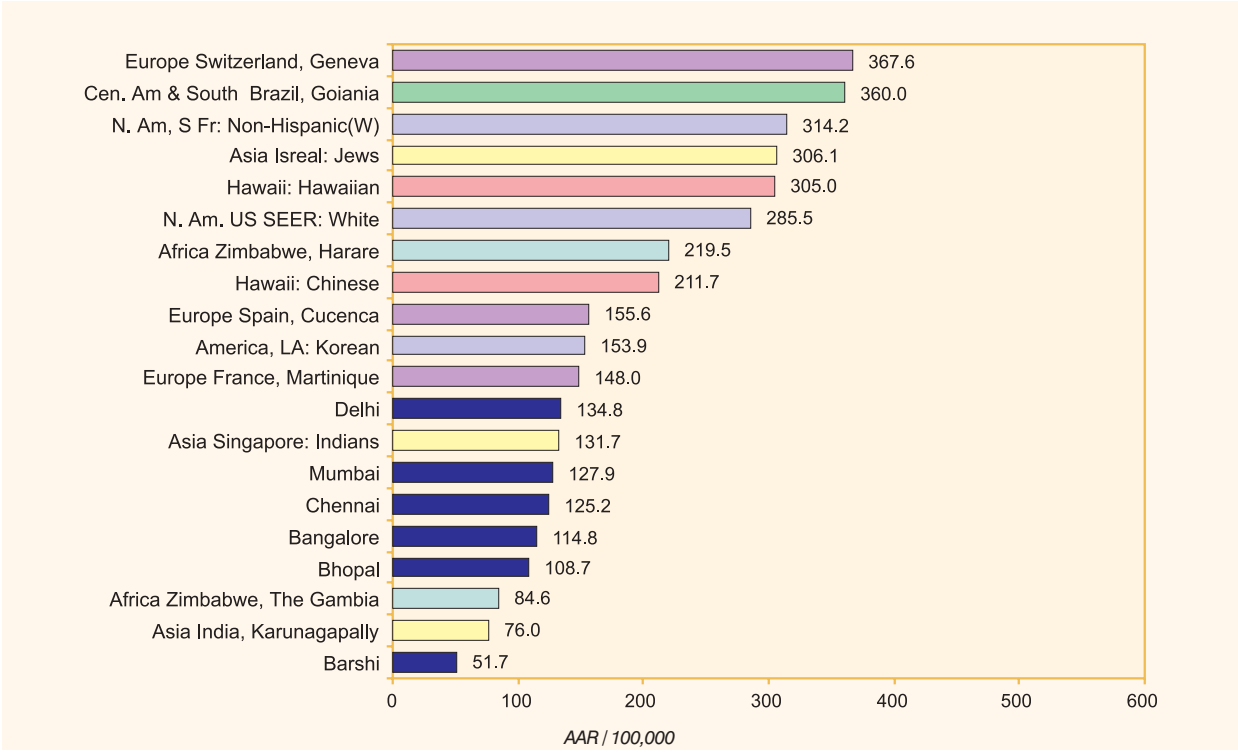
The international comparison of Age Adjusted Incidence Rates of all sites of cancer is shown below:

Fig. 2.7: International Comparisons of Age Adjusted Incidence Rates (AAR) (All Sites - ICD-9: 140-208)

Males



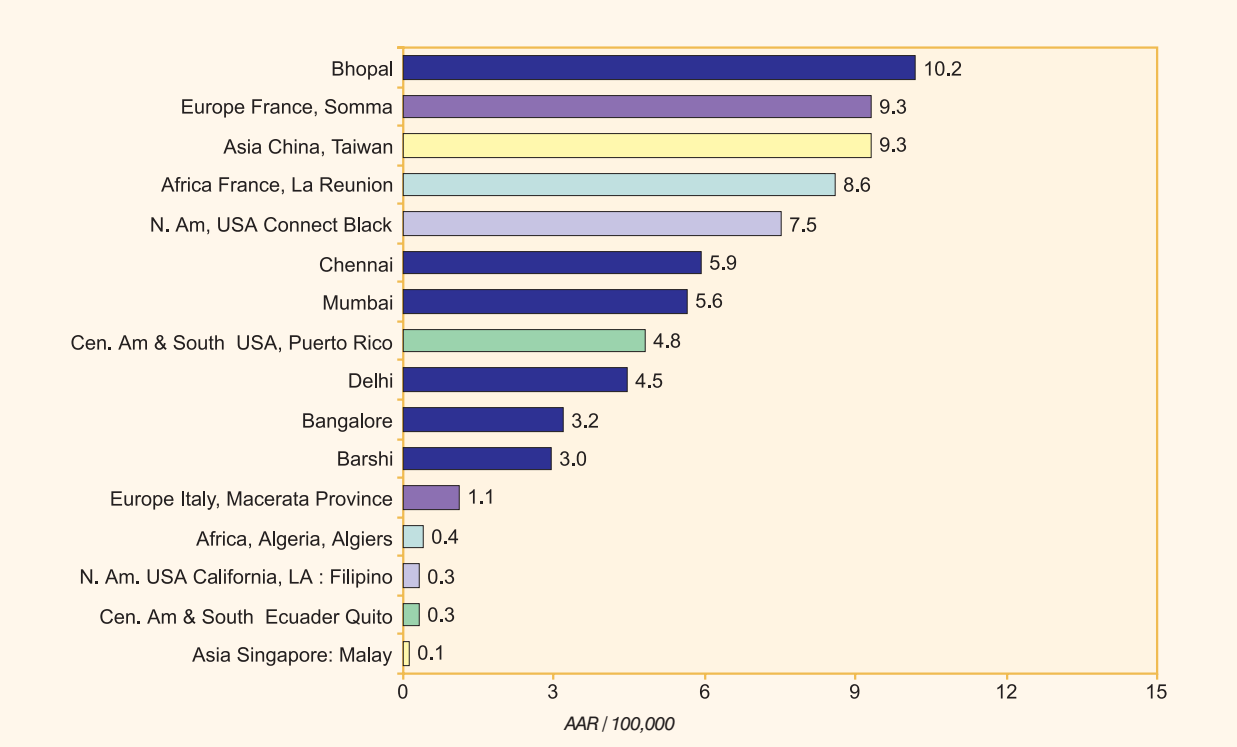
Females



Figures 2.8 to 2.13 give the International Comparisons of Age Adjusted Incidence Rates of selected sites of cancer.

Fig. 2.8: International Comparisons of Age Adjusted Incidence Rates (AAR) (Oral Cavity - ICD-9: 143-145)

Males



Females

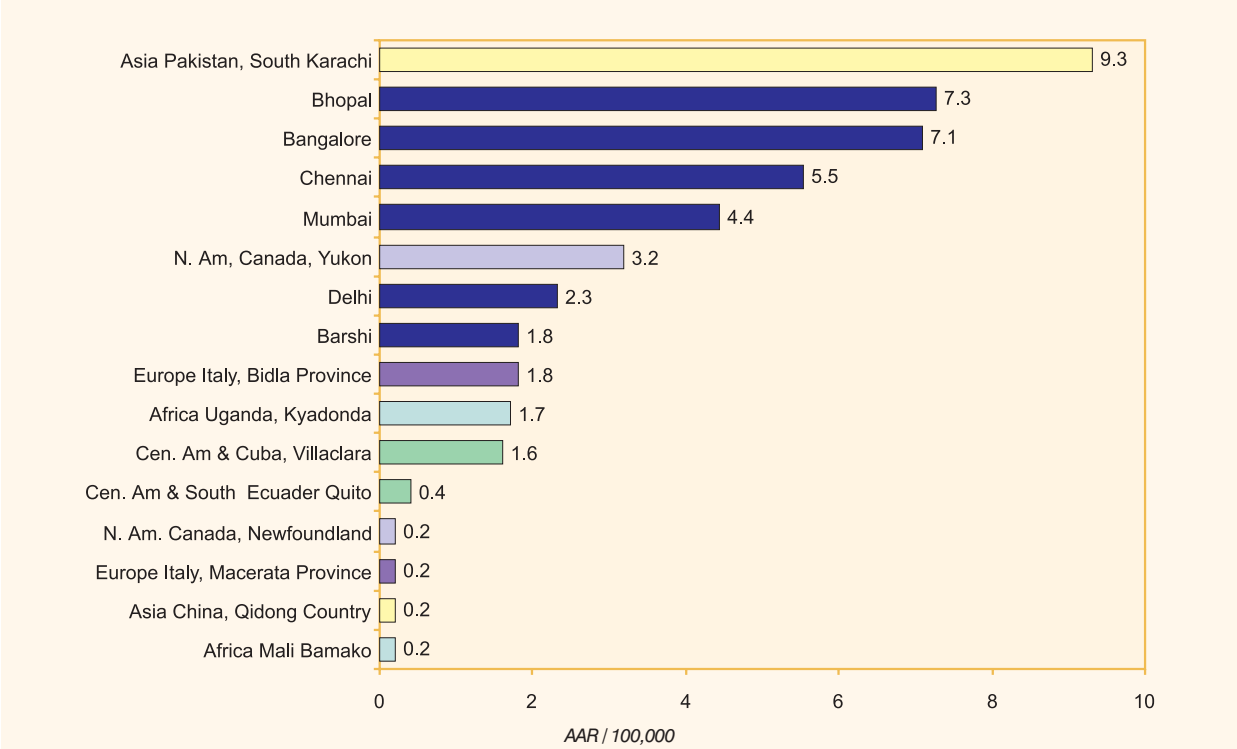
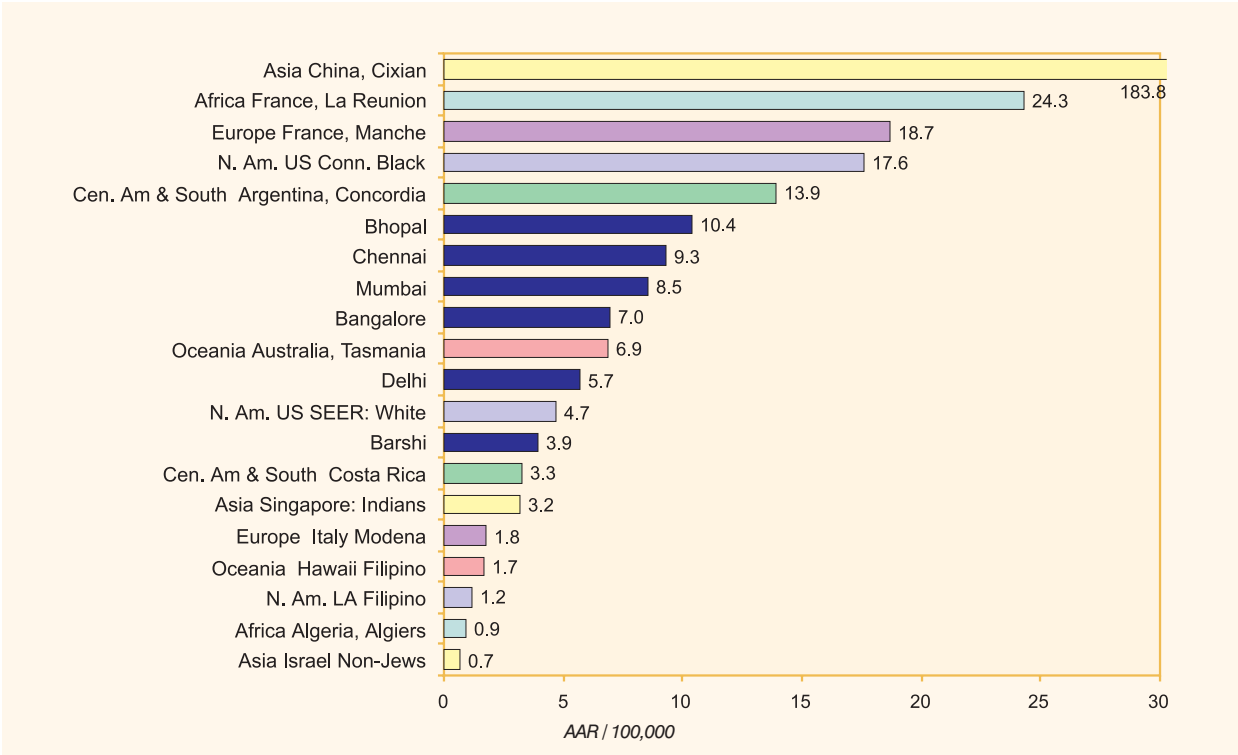


Fig. 2.9: International Comparisons of Age Adjusted Incidence Rates (AAR) (Oesophagus - ICD-9: 150)

Males



Females

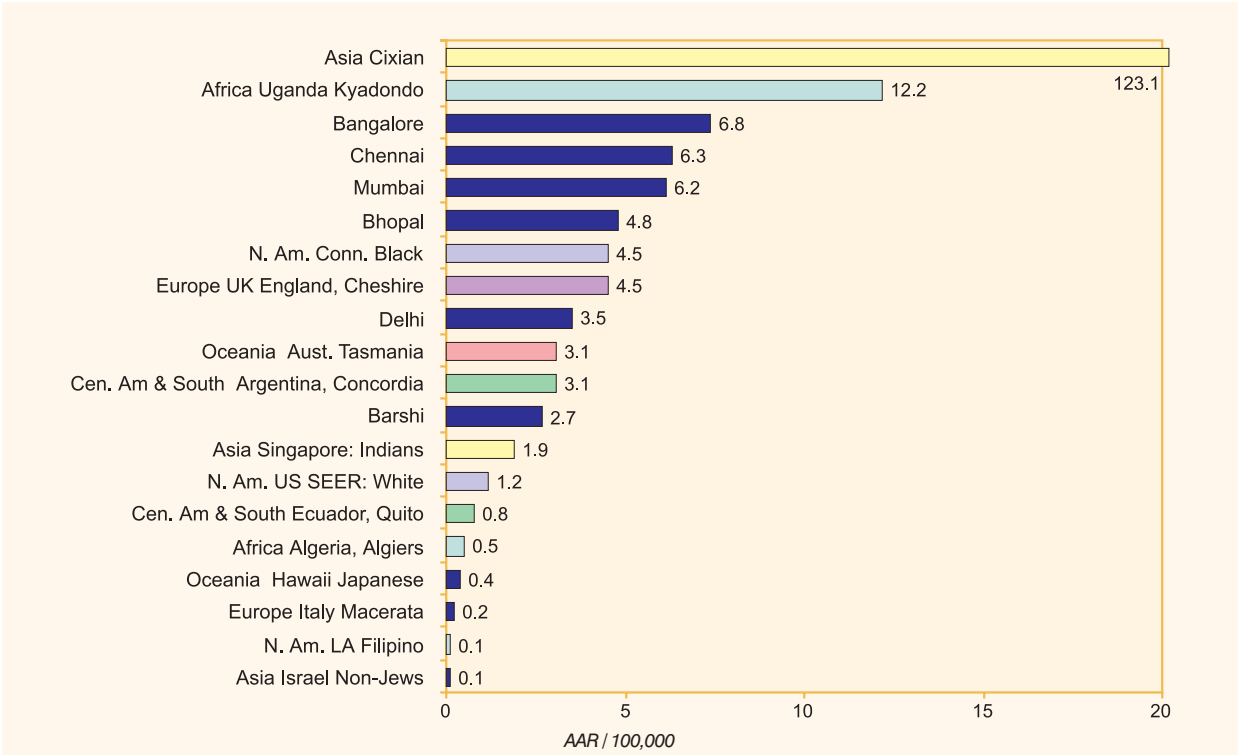
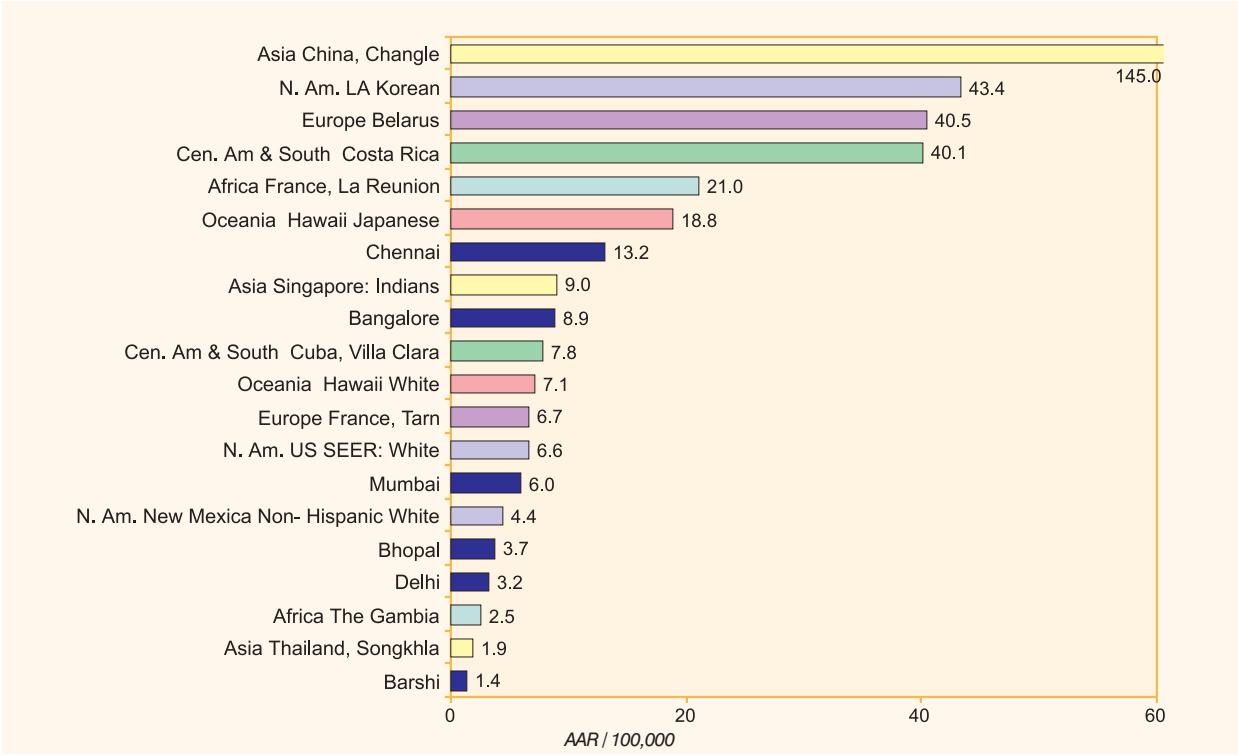


Fig. 2.10: International Comparisons of Age Adjusted Incidence Rates (AAR) (Stomach - ICD-9: 151)

Males



Females

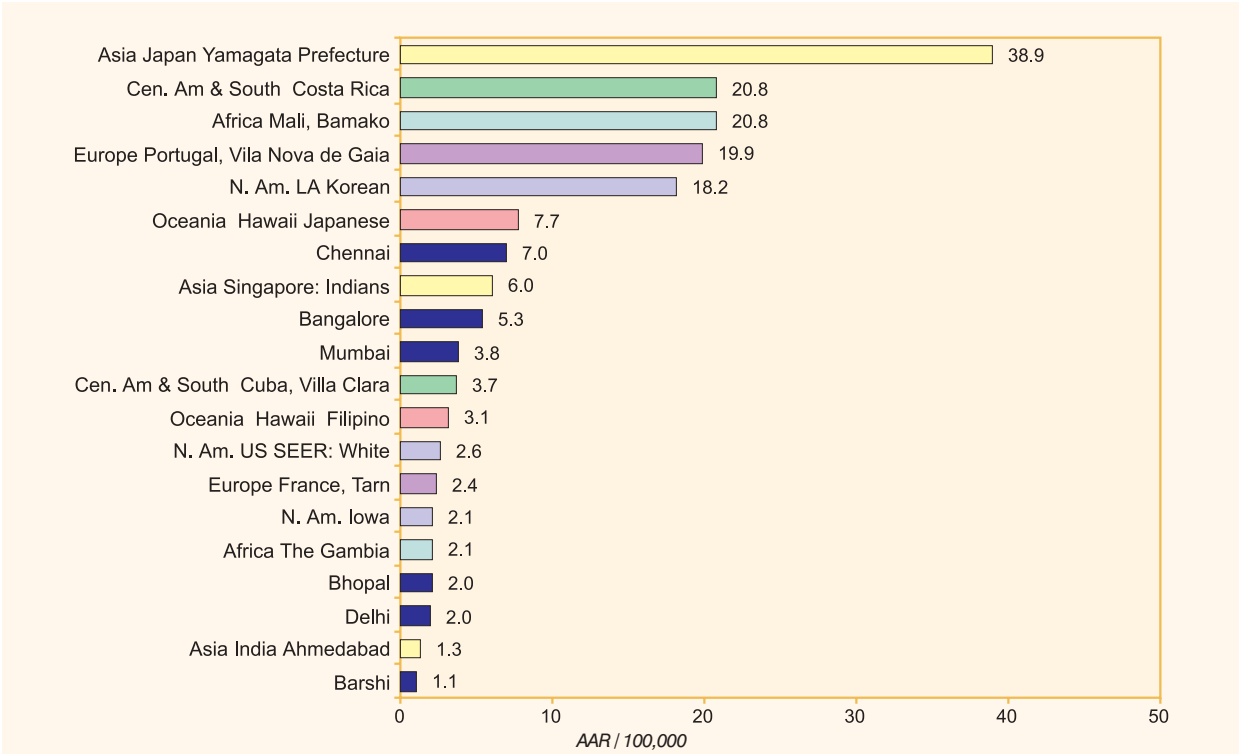
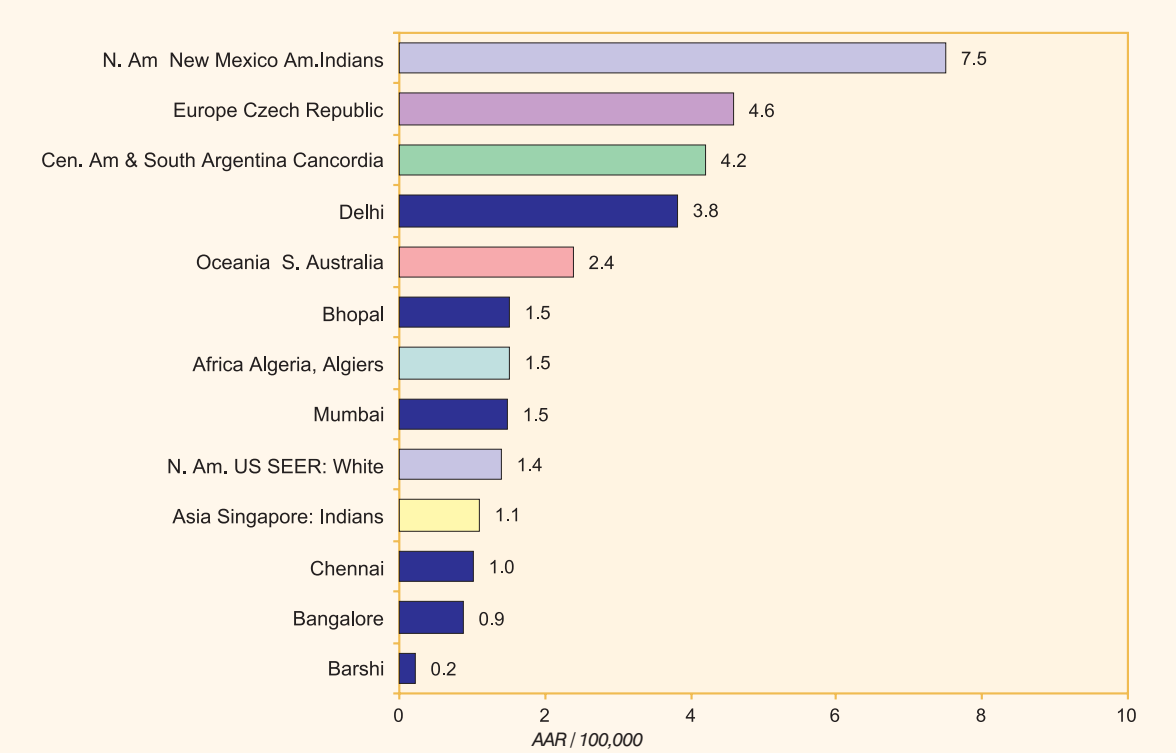


Fig. 2.11: International Comparisons of Age Adjusted Incidence Rates (AAR) (Gall Bladder - ICD-9: 156)

Males



Females

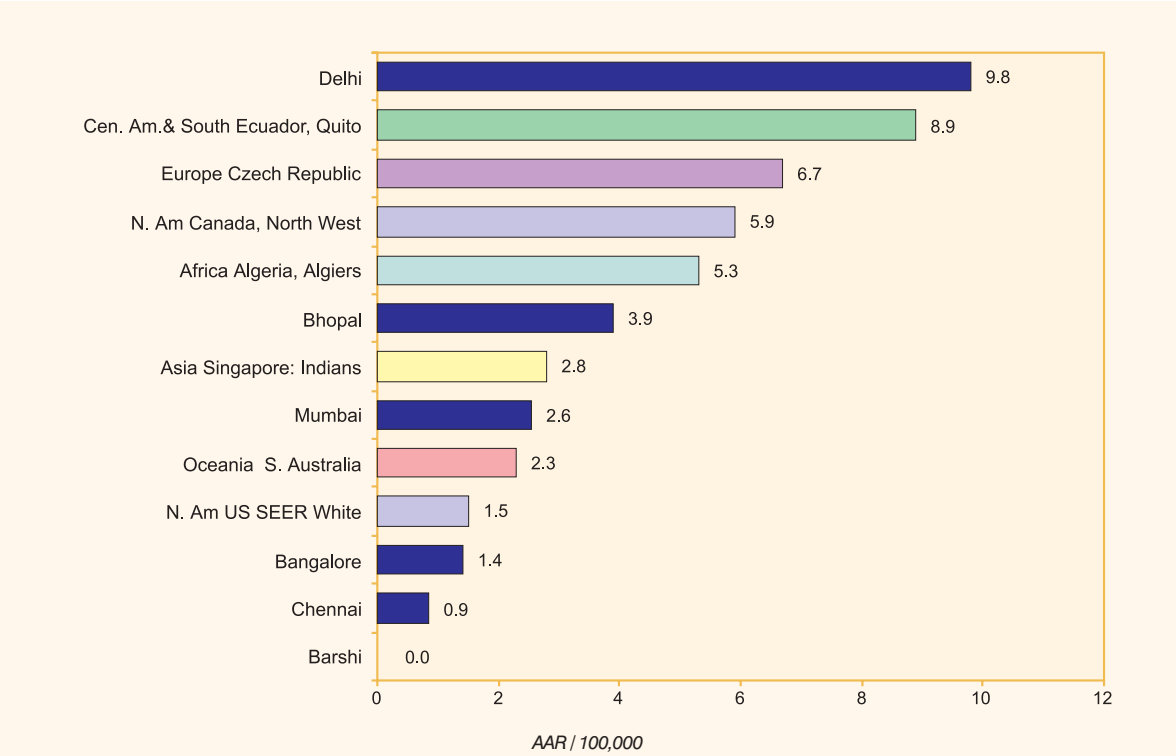


Fig. 2.12: International Comparisons of Age Adjusted Incidence Rates (AAR) (Female Breast - ICD-9: 174)

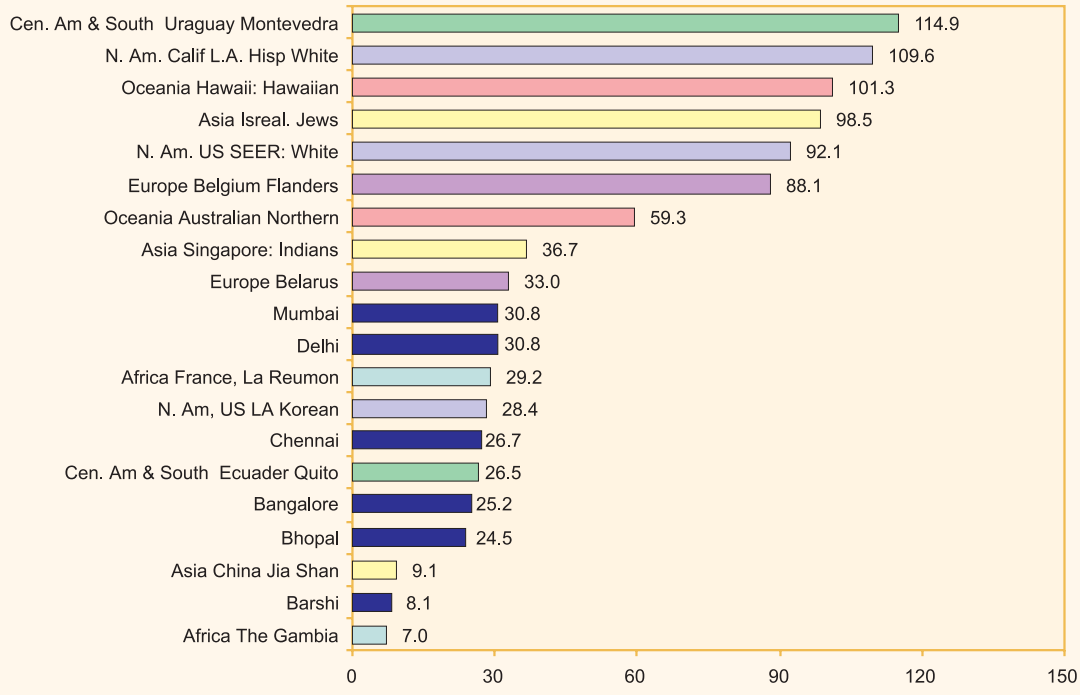
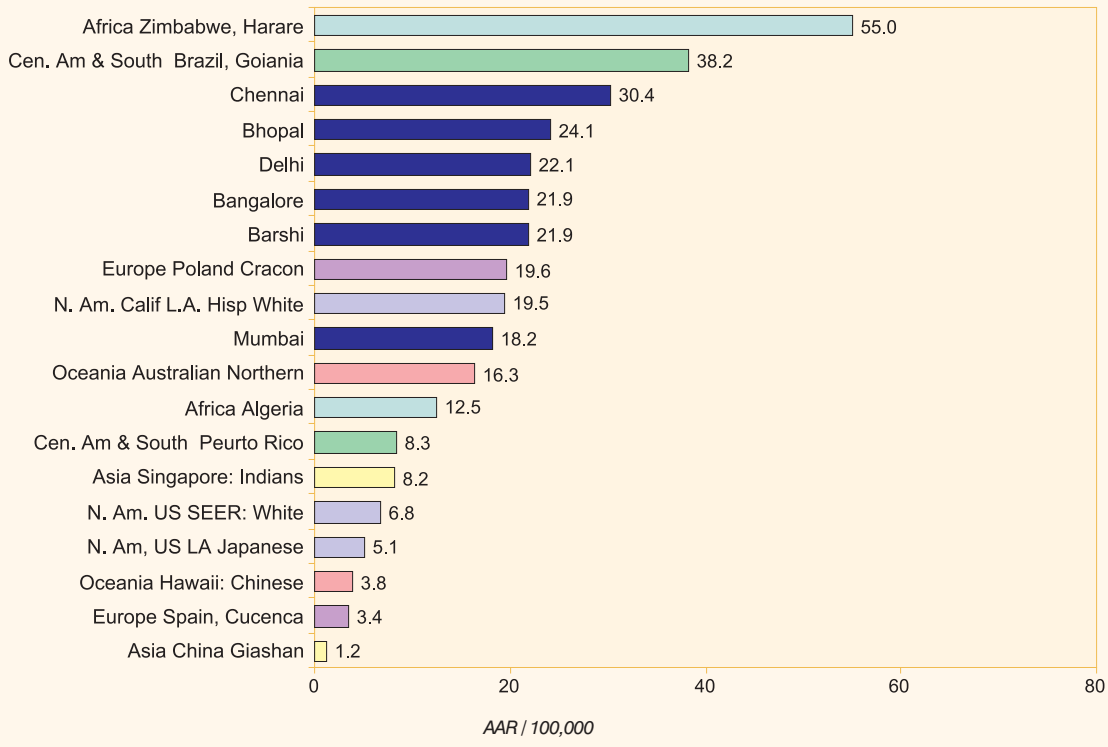


Fig. 2.13: International Comparisons of Age Adjusted Incidence Rates (AAR) (Cervix - ICD-9: 180)



Chapter 3

CANCERS IN BROAD GROUPS

Cancers in Childhood (0-14 years)

Cancers in childhood constitute one of the most important groups of tumours, not only because of the age of occurrence, connoting a different set of aetiological factors from those commonly seen in adult cancers, but also because, in the past decade or so, with advances particularly in chemotherapy, many of the childhood cancers have gained a remarkably high potency for cure.

The proportion of childhood cancers relative to all sites of cancers varies from 2.08 percent in females in Bangalore to 6.22 percent in Delhi (Table 3.1).

Table 3.2 gives the number and relative proportion of broad types of childhood cancers in the different registries according to the classification scheme of the IARC (Parkin et al, 1988). Leukaemias and lymphomas followed closely by tumours of the Central Nervous System constitute the vast majority of childhood cancers.

Table 3.3 gives the number and relative proportion of the specific types of childhood cancer.

TABLE 3.1: Number (#) & Proportion (%) of Cancers in Childhood relative to all Cancers

Registry	Males			Females		
	All Cancers	#	%	All Cancers	#	%
Bangalore	3081	110	3.57	3554	74	2.08
Barshi	193	6	3.10	211	6	2.84
Bhopal	871	24	2.75	778	24	3.08
Chennai	3652	114	3.12	4026	90	2.24
Delhi	9023	561	6.22	8805	289	3.28
Mumbai	8617	344	4.00	8504	197	2.32

TABLE 3.2: Number (#) and Relative Proportion (%) of Broad Types of Cancers in Childhood

Males

Broad Types of Cancers in Childhood	Bangalore		Barshi		Bhopal		Chennai		Delhi		Mumbai	
	#	%	#	%	#	%	#	%	#	%	#	%
I. Leukaemias	38	34.55	1	16.67	3	12.50	42	36.84	186	33.16	105	30.52
II. Lymphomas	26	23.64	1	16.67	6	25.00	24	21.05	81	14.44	60	17.44
III. C.N.S. Tumours	13	11.82	0	0.00	3	12.50	16	14.04	75	13.37	64	18.60
IV. S.N.S. Tumours	6	5.45	1	16.67	3	12.50	1	0.88	20	3.57	15	4.36
V. Retinoblastoma	5	4.55	0	0.00	3	12.50	8	7.02	21	3.74	9	2.62
VI. Renal Tumours	1	0.91	0	0.00	0	0.00	5	4.39	27	4.81	18	5.23
VII. Hepatic Tumours	1	0.91	0	0.00	0	0.00	0	0.00	5	0.89	11	3.20
VIII. Bone Tumours	4	3.64	0	0.00	1	4.17	5	4.39	28	4.99	13	3.78
IX. Soft Tissue Sarcoma	4	3.64	0	0.00	3	12.50	7	6.14	23	4.10	17	4.94
X. Germ Cell Tumours	3	2.73	0	0.00	1	4.17	1	0.88	10	1.78	6	1.74
XI. Other Carcinomas	6	5.45	0	0.00	1	4.17	4	3.51	48	8.56	22	6.40
XII. Other & Unsp.	3	2.73	3	50.00	0	0.00	1	0.88	37	6.99	4	1.16
All Types	**110**	**100.0**	**6**	**100.0**	**24**	**100.0**	**114**	**100.0**	**561**	**100.0**	**344**	**100.0**

Females

Broad Types of Cancers in Childhood	Bangalore		Barshi		Bhopal		Chennai		Delhi		Mumbai	
	#	%	#	%	#	%	#	%	#	%	#	%
I. Leukaemias	17	22.97	1	16.67	9	37.50	28	31.11	114	39.45	58	29.44
II. Lymphomas	7	9.46	0	0.00	2	8.33	9	10.00	26	9.00	17	8.63
III. C.N.S. Tumours	17	22.97	0	0.00	1	4.17	10	11.11	31	10.73	28	14.21
IV. S.N.S. Tumours	4	5.41	0	0.00	0	0.00	11	12.22	6	2.08	10	5.08
V. Retinoblastoma	2	2.70	0	0.00	1	4.17	7	7.78	11	3.81	7	3.55
VI. Renal Tumours	2	2.70	0	0.00	1	4.17	9	10.00	12	4.15	11	5.58
VII. Hepatic Tumours	1	1.35	0	0.00	0	0.00	0	0.00	4	1.38	4	2.03
VIII. Bone Tumours	5	6.76	0	0.00	2	8.33	3	3.33	23	7.96	17	8.63
IX. Soft Tissue Sarcoma	6	8.11	0	0.00	2	8.33	3	3.33	12	4.15	14	7.11
X. Germ Cell Tumours	3	4.05	0	0.00	4	16.67	4	4.44	10	3.46	13	6.60
XI. Other Carcinomas	5	6.76	0	0.00	1	4.17	5	5.56	25	8.65	12	6.09
XII. Other & Unsp.	5	6.75	5	83.33	1	4.17	1	1.11	15	5.19	6	3.04
All Types	**74**	**100.0**	**6**	**100.0**	**24**	**100.0**	**90**	**100.0**	**289**	**100.0**	**197**	**100.0**

TABLE 3.3(a): Number (#) and Relative Proportion (%) of Specific Types of Cancer in Childhood

Males

Specific Types of Cancers in Childhood	Bangalore		Barshi		Bhopal		Chennai		Delhi		Mumbai	
	#	%	#	%	#	%	#	%	#	%	#	%
I. Leukaemias	38	34.55	1	16.67	3	12.50	42	36.84	186	33.16	105	30.52
(a) Acute lymphocytic	21	19.09	0	0.00	2	8.33	33	28.95	137	24.42	69	20.06
(b) Other lymphoid	1	0.91	0	0.00	0	0.00	0	0.00	4	0.71	1	0.29
(c) Acute non-lymphocytic	7	6.36	0	0.00	1	4.17	3	2.63	20	3.57	17	4.94
(d) Chronic myeloid	1	0.91	1	16.67	0	0.00	1	0.88	5	0.89	7	2.03
(e) Others	8	7.27	0	0.00	0	0.00	5	4.39	20	3.57	11	3.20
II. Lymphomas	26	23.64	1	16.67	6	25.00	24	21.05	81	14.44	60	17.44
(a) Hodgkin's	11	10.00	0	0.00	0	0.00	9	7.89	40	7.13	18	5.23
(b) Non-Hodgkin	9	8.18	1	16.67	3	12.50	11	9.65	34	6.06	23	6.69
(c) Burkitt's	2	1.82	0	0.00	2	8.33	1	0.88	2	0.36	6	1.74
(d) Unspecified	4	3.64	0	0.00	1	4.17	3	2.63	5	0.89	13	3.78
(e) Histiocytosis X	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
(f) Others	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
III. C.N.S. Tumours	13	11.82	0	0.00	3	12.50	16	14.04	75	13.37	64	18.60
(a) Ependymoma	0	0.00	0	0.00	0	0.00	1	0.88	3	0.53	5	1.45
(b) Astrocytoma	8	7.27	0	0.00	1	4.17	9	7.89	15	2.67	29	8.43
(c) Medulloblastoma	4	3.64	0	0.00	1	4.17	3	2.63	20	3.57	21	6.10
(d) Other glioma	1	0.91	0	0.00	0	0.00	2	1.75	12	2.14	4	1.16
(e) Others	0	0.00	0	0.00	1	4.17	1	0.88	25	4.46	5	1.45
IV. S.N.S. Tumours	6	5.45	1	16.67	3	12.50	1	0.88	20	3.57	15	4.36
(a) Neuroblastoma	6	5.45	1	16.67	2	8.33	1	0.88	18	3.21	15	4.36
(b) Other	0	0.00	0	0.00	1	4.17	0	0.00	2	0.36	0	0.00
V. Retinoblastoma	5	4.55	0	0.00	3	12.50	8	7.02	21	3.74	9	2.62
VI. Renal Tumours	1	0.91	0	0.00	0	0.00	5	4.39	27	4.81	18	5.23
(a) Wilms' tumour	1	0.91	0	0.00	0	0.00	5	4.39	19	3.39	14	4.07
(b) Renal carcinoma	0	0.00	0	0.00	0	0.00	0	0.00	2	0.36	1	0.29
(c) Others	0	0.00	0	0.00	0	0.00	0	0.00	6	1.07	3	0.87
VII. Hepatic Tumours	1	0.91	0	0.00	0	0.00	0	0.00	5	0.89	11	3.20
(a) Hepatoblastoma	1	0.91	0	0.00	0	0.00	0	0.00	2	0.36	3	0.87
(b) Hepatic carcinoma	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	1.16
(c) Others	0	0.00	0	0.00	0	0.00	0	0.00	3	0.53	4	1.16
VIII.Malignant Bone Tumours	4	3.64	0	0.00	1	4.17	5	4.39	28	4.99	13	3.78
(a) Osteosarcoma	3	2.73	0	0.00	0	0.00	2	1.75	11	1.96	5	1.45
(b) Chondrosarcoma	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
(c) Ewing's sarcoma	1	0.91	0	0.00	1	4.17	3	2.63	9	1.60	4	1.16
(d) Others	0	0.00	0	0.00	0	0.00	0	0.00	8	1.43	4	1.16
IX. Soft-tissue Sarcomas	4	3.64	0	0.00	3	12.50	7	6.14	23	4.10	17	4.94
(a) Rhabdomyos	1	0.91	0	0.00	2	8.33	4	3.51	14	2.50	10	2.91
(b) Fibrosarcoma	1	0.91	0	0.00	1	4.17	1	0.88	3	0.53	0	0.00
(c) Others	2	1.82	0	0.00	0	0.00	2	1.75	6	1.07	7	2.03
X. Germ-Cell Tumours	3	2.73	0	0.00	1	4.17	1	0.88	10	1.78	6	1.74
(a) Non-gonadal	1	0.91	0	0.00	0	0.00	1	0.88	2	0.36	1	0.29
(b) Gonadal	2	1.82	0	0.00	1	4.17	0	0.00	5	0.89	5	1.45
(c) Gonadal carcinoma	0	0.00	0	0.00	0	0.00	0	0.00	1	0.18	0	0.00
(d) Others	0	0.00	0	0.00	0	0.00	0	0.00	2	0.36	0	0.00
XI. Other Carcinomas	6	5.45	0	0.00	1	4.17	4	3.51	48	8.56	22	6.40
(a) Adrenocortical carcinoma	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
(b) Thyroid carcinoma	1	0.91	0	0.00	0	0.00	0	0.00	2	0.36	1	0.29
(c) Nasopharyngeal carcinoma	0	0.00	0	0.00	0	0.00	1	0.88	0	0.00	3	0.87
(d) Malanomatous neoplasms	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	0.29
(e) Others	5	4.55	0	0.00	1	4.17	3	2.63	46	8.20	17	4.94
XII. Others	3	2.73	3	50.00	0	0.00	1	0.88	37	6.59	4	1.16
All Types	**110**	**100.00**	**6**	**100.00**	**24**	**100.00**	**114**	**100.00**	**561**	**100.00**	**344**	**100.00**

TABLE 3.3(b): Number (#) and Relative Proportion (%) of Specific Types of Cancer in Childhood

Females

Specific Types of Cancers in Childhood	Bangalore		Barshi		Bhopal		Chennai		Delhi		Mumbai	
	#	%	#	%	#	%	#	%	#	%	#	%
I. Leukaemias	17	22.97	1	16.67	9	37.50	28	31.11	114	39.45	58	29.44
(a) Acute lymphocytic	11	14.86	1	16.67	4	16.67	21	23.33	75	25.95	40	20.30
(b) Other lymphoid	0	0.00	0	0.00	1	4.17	0	0.00	4	1.38	0	0.00
(c) Acute non-lymphocytic	2	2.70	0	0.00	2	8.33	3	3.33	15	5.19	12	6.09
(d) Chronic myeloid	0	0.00	0	0.00	1	4.17	1	1.11	8	2.77	1	0.51
(e) Others	4	5.41	0	0.00	1	4.17	3	3.33	12	4.15	5	2.54
II. Lymphomas	7	9.46	0	0.00	2	8.33	9	10.00	26	9.00	17	8.63
(a) Hodgkin's	4	5.41	0	0.00	0	0.00	2	2.22	13	4.50	8	4.06
(b) Non-Hodgkin	1	1.35	0	0.00	2	8.33	4	4.44	10	3.46	3	1.52
(c) Burkitt's	1	1.35	0	0.00	0	0.00	1	1.11	1	0.35	1	0.51
(d) Unspecified	1	1.35	0	0.00	0	0.00	2	2.22	1	0.35	5	2.54
(e) Histiocytosis X	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
(f) Others	0	0.00	0	0.00	0	0.00	0	0.00	1	0.35	0	0.00
III. C.N.S. Tumours	17	22.97	0	0.00	1	4.17	10	11.11	31	10.73	28	14.21
(a) Ependymoma	2	2.70	0	0.00	0	0.00	1	1.11	1	0.35	1	0.51
(b) Astrocytoma	9	12.16	0	0.00	1	4.17	1	1.11	9	3.11	10	5.08
(c) Medulloblastoma	3	4.05	0	0.00	0	0.00	6	6.67	11	3.81	6	3.05
(d) Other glioma	1	1.35	0	0.00	0	0.00	1	1.11	4	1.38	6	3.05
(e) Others	2	2.70	0	0.00	0	0.00	1	1.11	6	2.08	5	2.54
IV. S.N.S Tumours	4	5.41	0	0.00	0	0.00	11	12.22	6	2.08	10	5.08
(a) Neuroblastoma	3	4.05	0	0.00	0	0.00	11	12.22	6	2.08	9	4.57
(b) Other	1	1.35	0	0.00	0	0.00	0	0.00	0	0.00	1	0.51
V. Retinoblastoma	2	2.70	0	0.00	1	4.17	7	7.78	11	3.81	7	3.55
VI. Renal Tumours	2	2.70	0	0.00	1	4.17	9	10.00	12	4.15	11	5.58
(a) Wilms' tumour	2	2.70	0	0.00	1	4.17	9	10.00	9	3.11	10	5.08
(b) Renal carcinoma	0	0.00	0	0.00	0	0.00	0	0.00	3	1.04	1	0.51
(c) Others	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
VII.Hepatic Tumours	1	1.35	0	0.00	0	0.00	0	0.00	4	1.38	4	2.03
(a) Hepatoblastoma	1	1.35	0	0.00	0	0.00	0	0.00	3	1.04	2	1.02
(b) Hepatic carcinoma	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	1.02
(c) Others	0	0.00	0	0.00	0	0.00	0	0.00	1	0.35	0	0.00
VIII.Malignant Bone Tumours	5	6.76	0	0.00	2	8.33	3	3.33	23	7.96	17	8.63
(a) Osteosarcoma	1	1.35	0	0.00	0	0.00	2	2.22	4	1.38	7	3.55
(b) Chondrosarcoma	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
(c) Ewing's sarcoma	3	4.05	0	0.00	1	4.17	0	0.00	9	3.11	4	2.03
(d) Others	1	1.35	0	0.00	1	4.17	1	1.11	10	3.46	6	3.05
IX. Soft-tissue Sarcomas	6	8.11	0	0.00	2	8.33	3	3.33	12	4.15	14	7.11
(a) Rhabdomyos	4	5.41	0	0.00	2	8.33	2	2.22	10	3.46	9	4.57
(b) Fibrosarcoma	0	0.00	0	0.00	0	0.00	0	0.00	1	0.35	1	0.51
(c) Others	2	2.70	0	0.00	0	0.00	1	1.11	1	0.35	4	2.03
X. Germ-Cell Tumours	3	4.05	0	0.00	4	16.67	4	4.44	10	3.46	13	6.60
(a) Non-gonadal	0	0.00	0	0.00	0	0.00	0	0.00	2	0.69	1	0.51
(b) Gonadal	3	4.05	0	0.00	2	8.33	3	3.33	1	0.35	9	4.57
(c) Gonadal carcinoma	0	0.00	0	0.00	1	4.17	0	0.00	2	0.69	2	1.02
(d) Others	0	0.00	0	0.00	1	4.17	1	1.11	5	1.73	1	0.51
XI. Other Carcinomas	5	6.76	0	0.00	1	4.17	5	5.56	25	8.65	12	6.09
(a) Adrenocortical carcinoma	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
(b) Thyroid carcinoma	2	2.70	0	0.00	0	0.00	1	1.11	0	0.00	3	1.52
(c) Nasopharyngeal carcinoma	0	0.00	0	0.00	0	0.00	2	2.22	1	0.35	0	0.00
(d) Malanomatous neoplasms	0	0.00	0	0.00	0	0.00	1	1.11	0	0.00	0	0.00
(e) Others	3	4.05	0	0.00	1	4.17	1	1.11	24	8.30	9	4.57
XII. Others	5	6.75	5	83.33	1	4.17	1	1.11	15	5.19	6	3.04
All Types	**74**	**100.00**	**6**	**100.00**	**24**	**100.00**	**90**	**100.00**	**289**	**100.00**	**197**	**100.00**

Tobacco Related Cancers

Sites of cancer that have been associated with use of tobacco (Tobacco Related Cancers – TRCs) include lip, tongue, oral cavity, pharynx (including oropharynx & hypopharynx) oesophagus, larynx, lung and urinary bladder.

The total proportion of these sites of cancer relative to all sites in males and females is illustrated in Figure 3.1. In males this proportion varies from 36.1% in Bangalore to 54.6% in Bhopal, whereas in females Bangalore has the highest proportion of 16.2%. The relative proportion of different anatomical sites (listed above) that constitutes the TRCs is given in Table 3.4 and 3.5 and depicted in Figure 3.2.

TABLE 3.4 : Number (#) & Relative Proportion (%) of specific sites of cancer related to use of tobacco relative to all sites of cancer

Sites of Cancer	Bangalore		Barshi		Bhopal		Chennai		Delhi		Mumbai	
	#	%	#	%	#	%	#	%	#	%	#	%
Males												
Lip	5	0.16	1	0.52	4	0.46	10	0.27	24	0.27	24	0.28
Tongue	106	3.44	5	2.59	70	8.04	192	5.26	384	4.26	417	4.84
Oral Cavity	101	3.28	13	0.52	82	9.41	190	5.20	333	3.69	460	5.34
Oropharynx	75	2.43	1	10.36	17	1.95	80	2.19	212	2.35	164	1.90
Hypopharynx	171	5.55	20	0.00	50	5.74	167	4.57	193	2.14	362	4.20
Pharynx etc	34	1.10	0	8.81	2	0.23	18	0.49	37	0.41	92	1.07
Oesophagus	221	7.17	17	2.59	70	8.04	295	8.08	393	4.36	564	6.55
Larynx	111	3.60	5	3.63	44	5.05	165	4.52	575	6.37	492	5.71
Lung	218	7.08	7	2.59	104	11.94	370	10.13	897	9.94	783	9.09
Uri. Bladder	70	2.27	5	6.74	33	3.79	84	2.30	382	4.23	277	3.21
TRC	1112	36.09	162	38.34	476	54.65	1571	43.02	3430	38.01	3635	42.18
All Sites	**3081**	**100.0**	**193**	**100.0**	**871**	**100.0**	**3652**	**100.0**	**9023**	**100.0**	**8617**	**100.0**
Females												
Lip	4	0.11	1	0.47	1	0.13	7	0.17	8	0.09	11	0.13
Tongue	33	0.93	2	0.95	14	1.80	52	1.29	116	1.32	166	1.95
Oral Cavity	197	5.54	7	3.32	47	6.04	166	4.12	140	1.59	279	3.28
Oropharynx	13	0.37	0	0.00	1	0.13	16	0.40	46	0.52	27	0.32
Hypopharynx	44	1.24	1	0.47	4	0.51	59	1.47	31	0.35	81	0.95
Pharynx etc	9	0.25	0	0.00	0	0.00	3	0.07	10	0.11	29	0.34
Oesophagus	186	5.23	10	4.74	28	3.60	195	4.84	194	2.20	367	4.32
Larynx	13	0.37	2	0.95	5	0.64	20	0.50	75	0.85	75	0.88
Lung	60	1.69	4	1.90	15	1.93	73	1.81	172	1.95	267	3.14
Uri. Bladder	21	0.59	2	0.95	5	0.64	37	0.92	93	1.06	72	0.85
TRC	580	16.32	29	13.74	120	15.42	628	15.60	885	10.05	1374	16.16
All Sites	**3554**	**100.0**	**211**	**100.0**	**778**	**100.0**	**4026**	**100.0**	**8805**	**100.0**	**8504**	**100.0**

TABLE 3.5 : Number (#) & Proportion (%) of specific sites of cancer related to use of tobacco relative to all Tobacco Related Cancers (TRC)

Males

Sites of Cancer	Bangalore		Barshi		Bhopal		Chennai		Delhi		Mumbai	
	#	%	#	%	#	%	#	%	#	%	#	%
Lip	5	0.45	1	0.62	4	0.84	10	0.64	24	0.70	24	0.66
Tongue	106	9.53	5	3.09	70	14.71	192	12.22	384	11.20	417	11.47
Oral Cavity	101	9.08	13	8.02	82	17.23	190	12.09	333	9.71	460	12.65
Oropharynx	75	6.74	1	0.62	17	3.57	80	5.09	212	6.18	164	4.51
Hypopharynx	171	15.38	20	12.35	50	10.50	167	10.63	193	5.63	362	9.96
Pharynx etc	34	3.06	0	0.00	2	0.42	18	1.15	37	1.08	92	2.53
Oesophagus	221	19.87	17	10.49	70	14.71	295	18.78	393	11.46	564	15.52
Larynx	111	9.98	5	3.09	44	9.24	165	10.50	575	16.76	492	13.54
Lung	218	19.60	7	4.32	104	21.85	370	23.55	897	26.15	783	21.54
Uri.Bladder	70	6.29	5	3.09	33	6.93	84	5.35	382	11.14	277	7.62
TRC	**1112**	**100.00**	**162**	**100.00**	**476**	**100.00**	**1571**	**100.00**	**3430**	**100.00**	**3635**	**100.00**

Females

Sites of Cancer	Bangalore		Barshi		Bhopal		Chennai		Delhi		Mumbai	
	#	%	#	%	#	%	#	%	#	%	#	%
Lip	4	0.69	1	3.45	1	0.83	7	1.11	8	0.90	11	0.80
Tongue	33	5.69	2	6.90	14	11.67	52	8.28	116	13.11	166	12.08
Oral Cavity	197	33.97	7	24.14	47	39.17	166	26.43	140	15.82	279	20.31
Oropharynx	13	2.24	0	0.00	1	0.83	16	2.55	46	5.20	27	1.97
Hypopharynx	44	7.59	1	3.45	4	3.33	59	9.39	31	3.50	81	5.90
Pharynx etc	9	1.55	0	0.00	0	0.00	3	0.48	10	1.13	29	2.11
Oesophagus	186	32.07	10	34.48	28	23.33	195	31.05	194	21.92	367	26.71
Larynx	13	2.24	2	6.90	5	4.17	20	3.18	75	8.47	75	5.46
Lung	60	10.34	4	13.79	15	12.50	73	11.62	172	19.44	267	19.43
Uri.Bladder	21	3.62	2	6.90	5	4.17	37	5.89	93	10.51	72	5.24
TRC	**580**	**100.00**	**29**	**100.00**	**120**	**100.00**	**628**	**100.00**	**885**	**100.00**	**1374**	**100.00**

Fig. 3.1: Proportion (%) of Tobacco Related Cancers Relative to All Sites

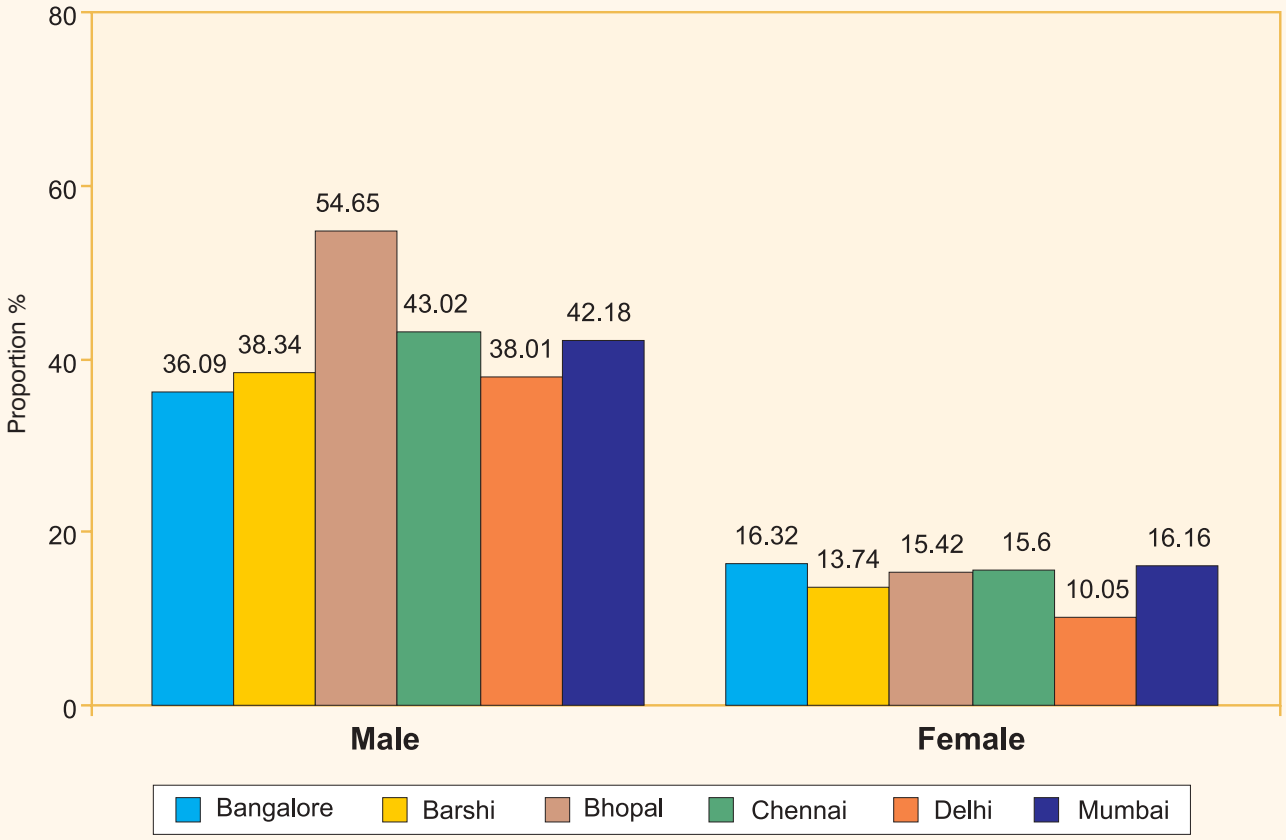
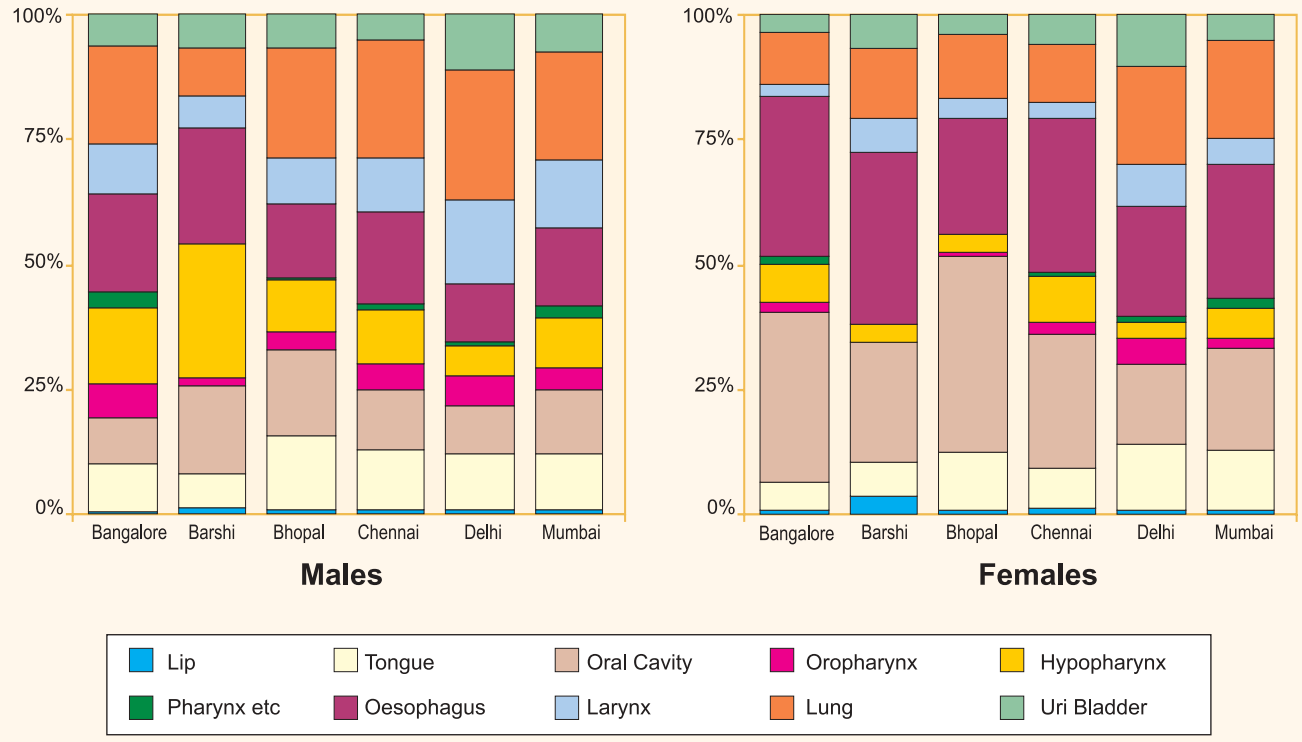


Fig. 3.2: Proportion of Specific Tobacco Related Sites Relative to all Tobacco Related Cancers



Chapter 4

BASIS OF DIAGNOSIS

The basis of diagnosis is shown in Table 4.1 and diagrammatically represented in Figure 4.1. All registries show only slight differences in proportion of microscopic confirmation of diagnosis in males and females. All registries except Delhi have recorded a higher proportion of microscopic diagnosis in females compared to males.

The degree of microscopic confirmation varies from 76.6 percent in males in Chennai to 89.1 percent among females in Barshi.

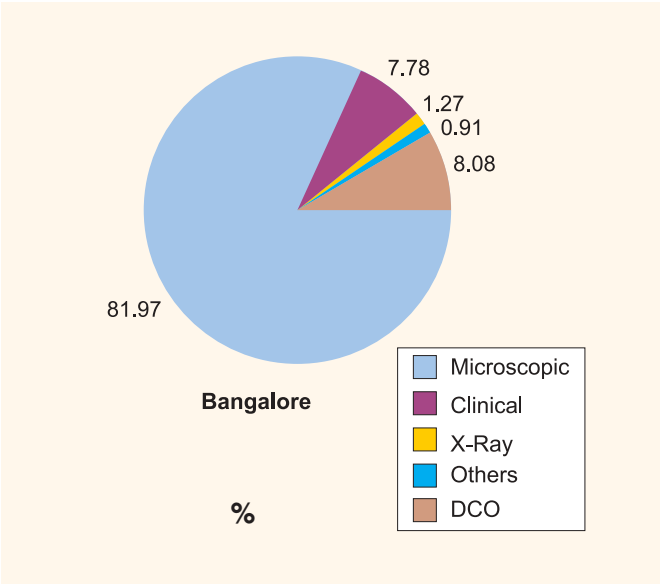
Table 4.2 and Figure 4.2 give further details of the number and proportion of different types of microscopic diagnosis.

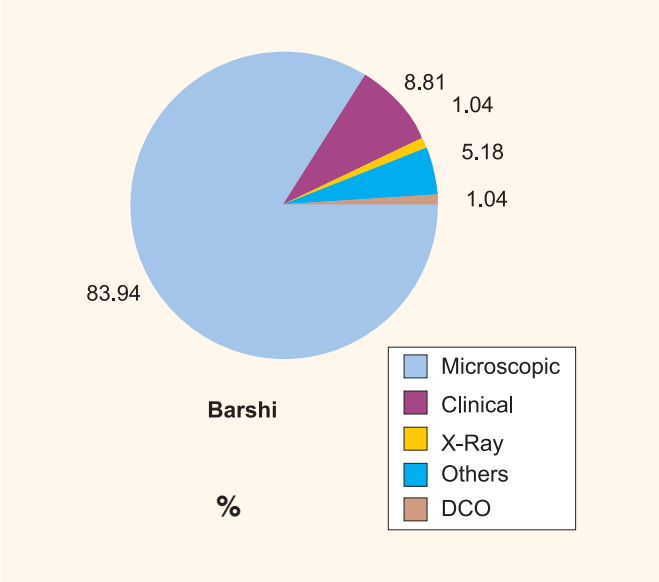
TABLE 4.1: Number (#) & Relative Proportion (%) of cancers based on different methods of diagnosis

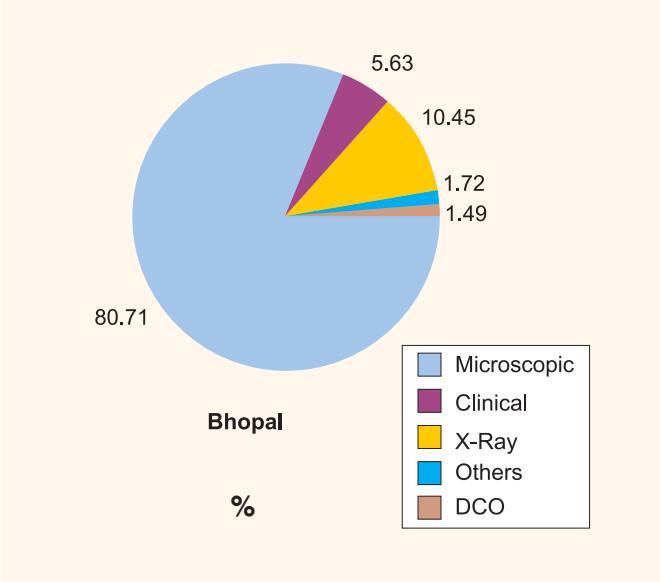
Registries	Micro		X-ray		Clinical		Others		DCO		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Males												
Bangalore	2526	81.97	39	1.27	239	7.78	28	0.91	249	8.08	3081	100.0
Barshi	162	83.94	2	1.04	17	8.81	10	5.18	2	1.04	193	100.0
Bhopal	703	80.71	91	10.45	49	5.63	15	1.72	13	1.49	871	100.0
Chennai	2795	76.54	214	5.86	220	6.02	312	8.54	111	3.04	3652	100.0
Delhi	7532	83.48	175	1.94	608	6.74	174	1.93	534	5.92	9023	100.0
Mumbai	6777	78.65	227	2.63	849	9.85	168	1.95	596	6.92	8617	100.0
Females												
Bangalore	3071	86.41	16	0.45	225	6.33	21	0.59	221	6.22	3554	100.0
Barshi	188	89.10	4	1.90	12	5.69	7	3.32	0	0.00	211	100.0
Bhopal	657	84.45	38	4.88	54	6.94	16	2.06	13	1.67	778	100.0
Chennai	3342	83.01	70	1.74	296	7.35	205	5.09	113	2.81	4026	100.0
Delhi	7242	82.25	96	1.09	828	9.40	184	2.09	455	5.17	8805	100.0
Mumbai	6992	82.22	152	1.79	629	7.40	194	2.28	537	6.31	8504	100.0

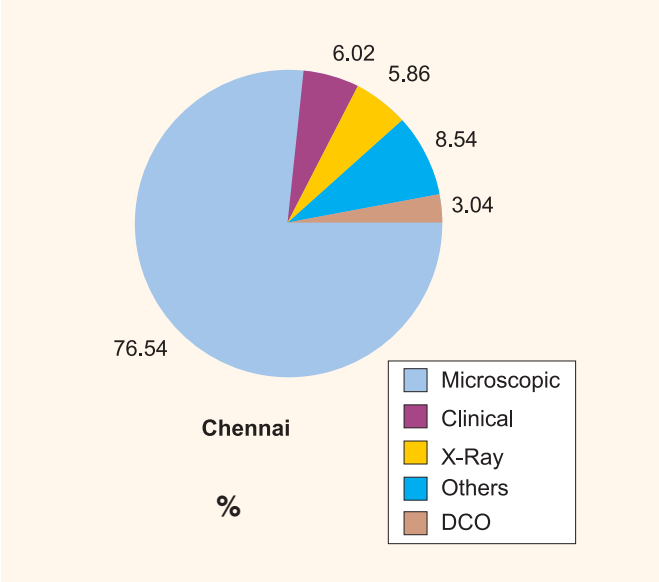
Fig. 4.1(a) : Relative Proportion (%) of cancers based on different methods of diagnosis

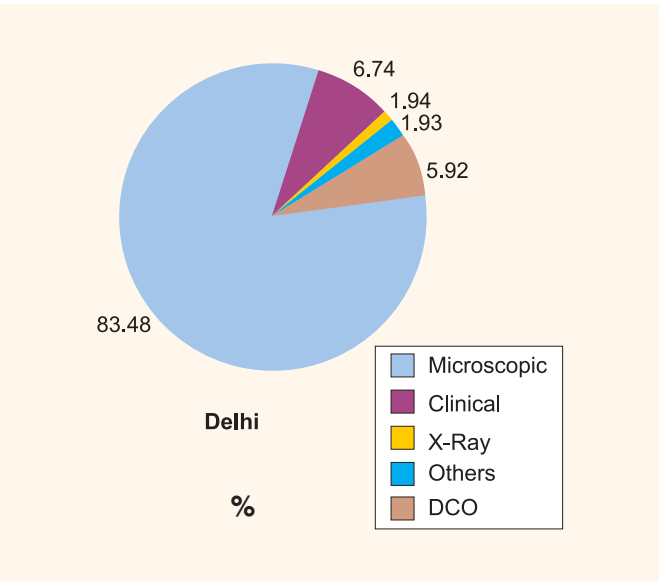
Males











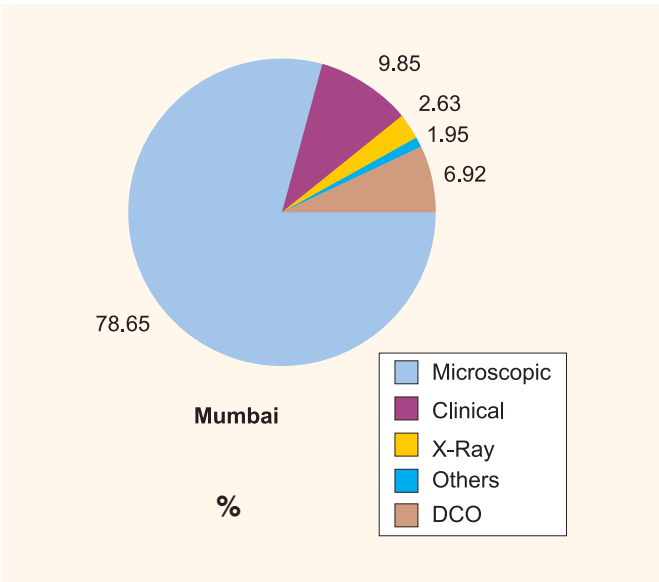
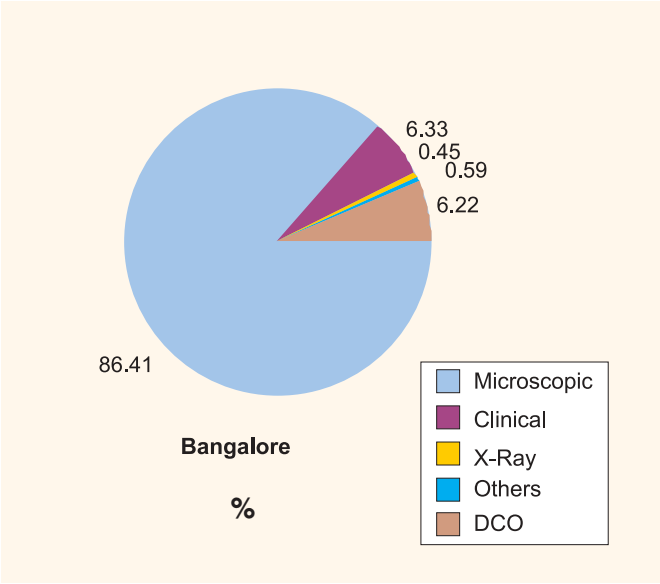
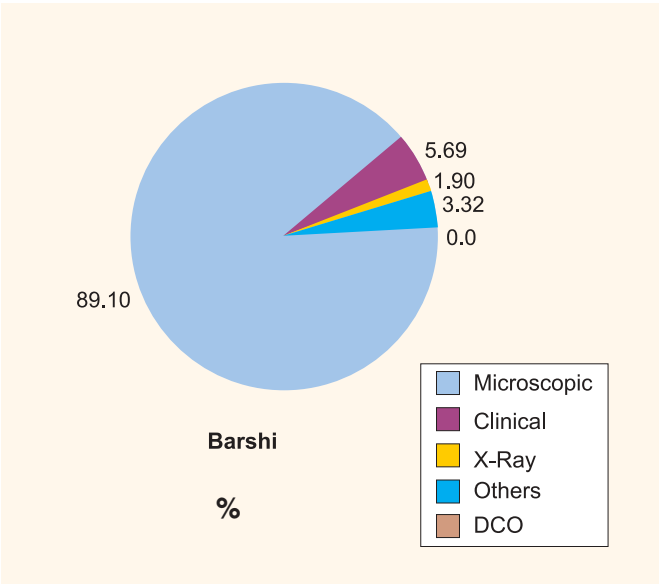
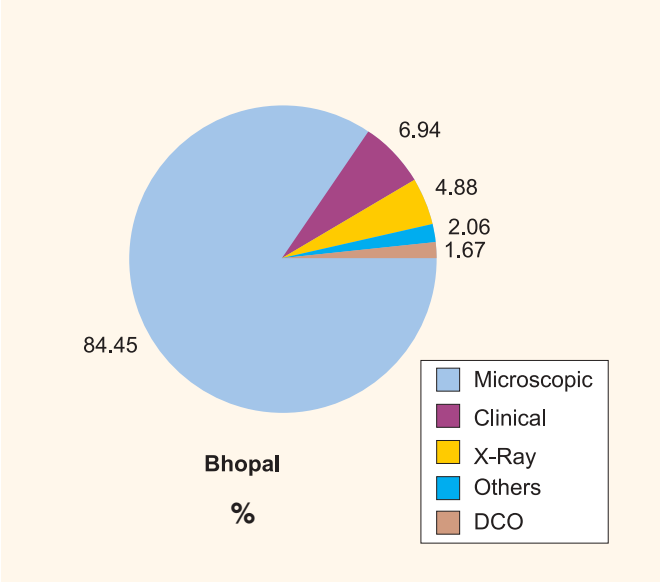
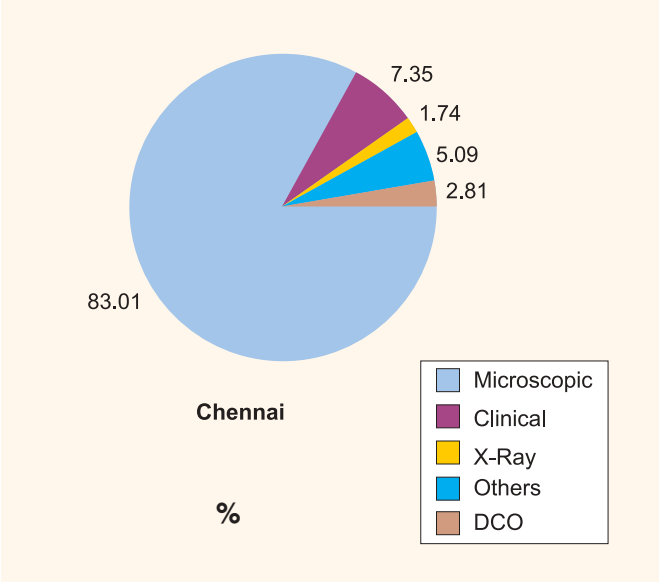


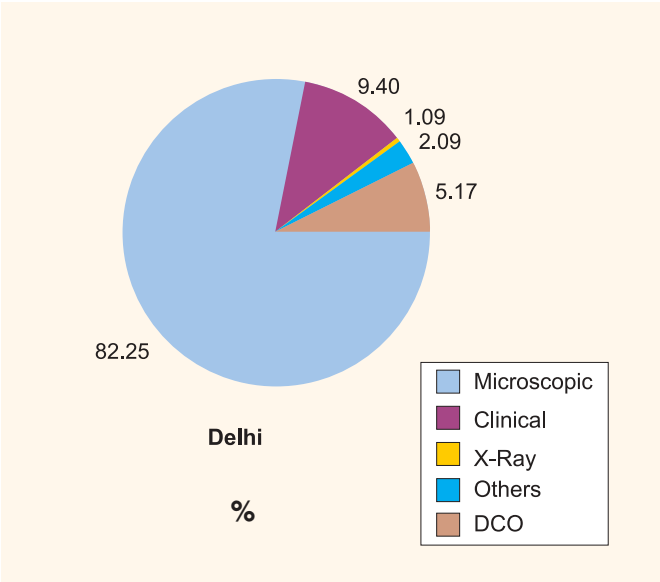
Fig. 4.1(b) : Relative Proportion (%) of cancers based on different methods of diagnosis
Females











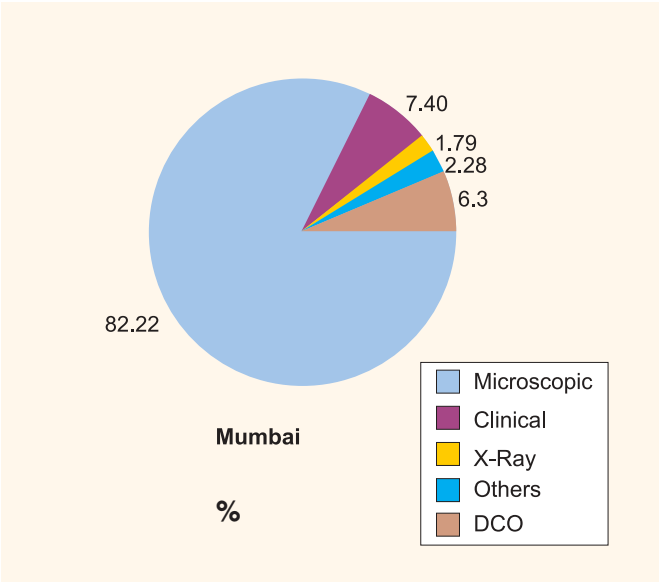
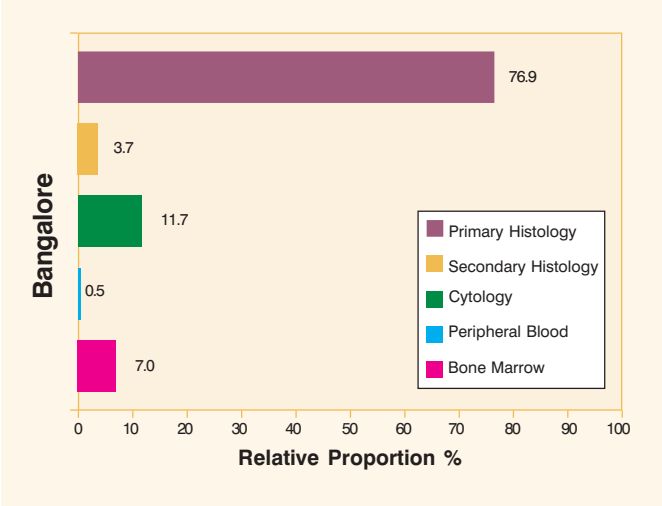


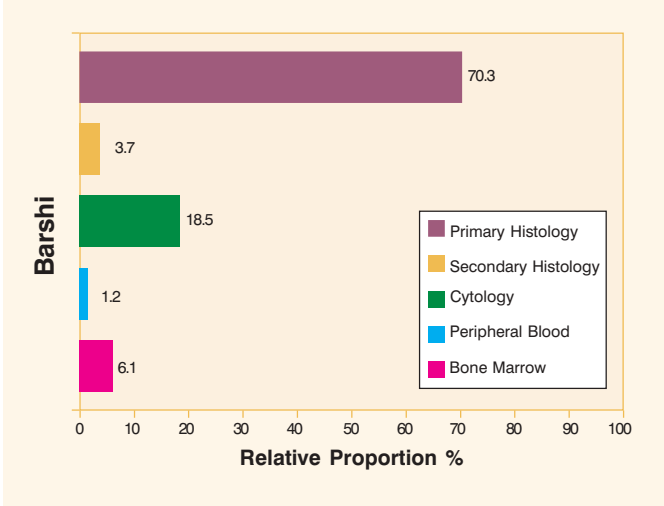
TABLE 4.2: Number (#) & Relative Proportion (%) of cancers based on different types of Microscopic Diagnosis

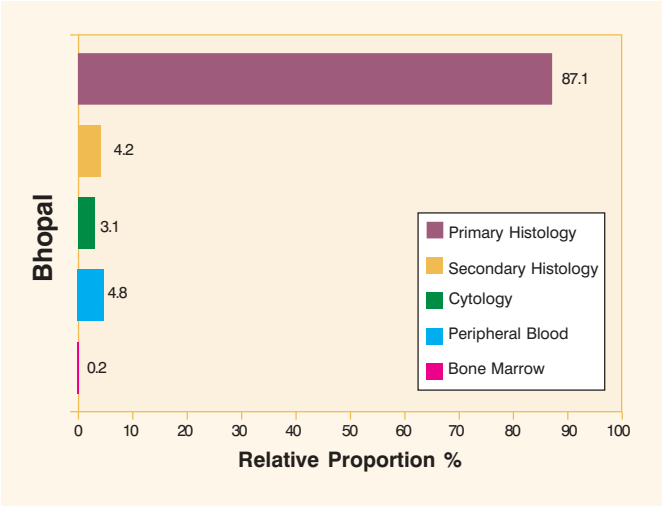
Type of Micro-scopic Diagnosis	Bangalore		Barshi		Bhopal		Chennai		Delhi		Mumbai	
	#	%	#	%	#	%	#	%	#	%	#	%
Males												
Pri. Hist	1944	76.9	114	70.3	615	87.1	2437	87.2	5108	67.8	5350	78.9
Sec. Hist	95	3.7	6	3.7	30	4.2	119	4.2	492	6.5	394	5.8
Cytology	298	11.7	30	18.5	22	3.1	77	2.7	1101	14.6	507	7.4
Blood Film	13	0.5	2	1.2	34	4.8	1	0.0	0	0.0	341	5.0
Bone marrow	176	7.0	10	6.1	2	0.2	161	5.7	831	11.0	185	2.7
Total	**2526**	**100.0**	**162**	**100.0**	**703**	**100.0**	**2795**	**100.0**	**7532**	**100.0**	**6777**	**100.0**
Females												
Pri. Hist	2653	86.3	158	84.0	584	88.8	3037	90.8	4137	57.1	5924	84.7
Sec. Hist	50	1.6	2	1.0	19	2.8	64	1.9	419	5.7	281	4.0
Cytology	262	8.5	23	12.2	20	3.0	126	3.7	2226	30.7	427	6.1
Blood Film	5	0.1	0	0.0	25	3.8	0	0.0	1	0.0	229	3.2
Bone marrow	101	3.2	5	2.6	9	1.3	115	3.4	459	6.3	131	1.8
Total	**3071**	**100.0**	**188**	**100.0**	**657**	**100.0**	**3342**	**100.0**	**7242**	**100.0**	**6992**	**100.0**

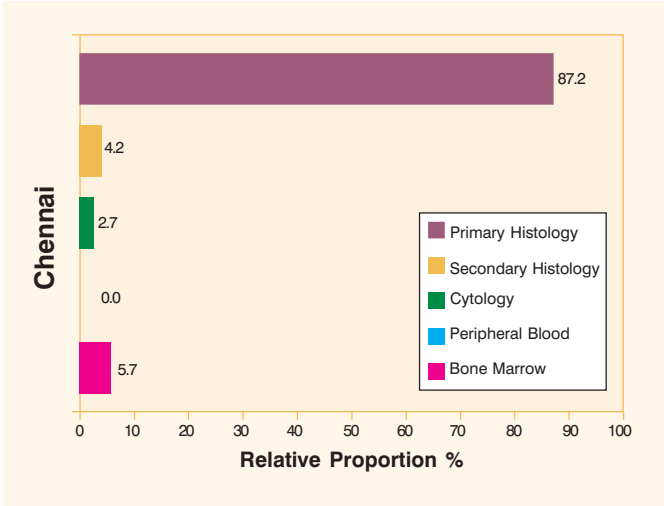
Fig. 4.2(a): Relative Proportion (%) of cancers based on different types of Microscopic Diagnosis

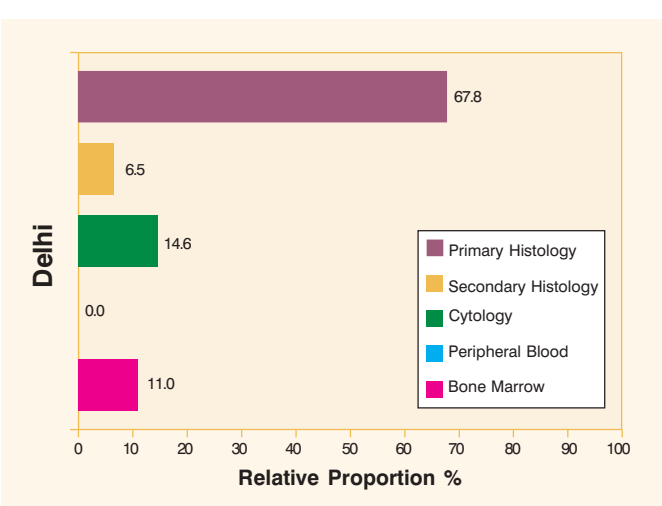
Males











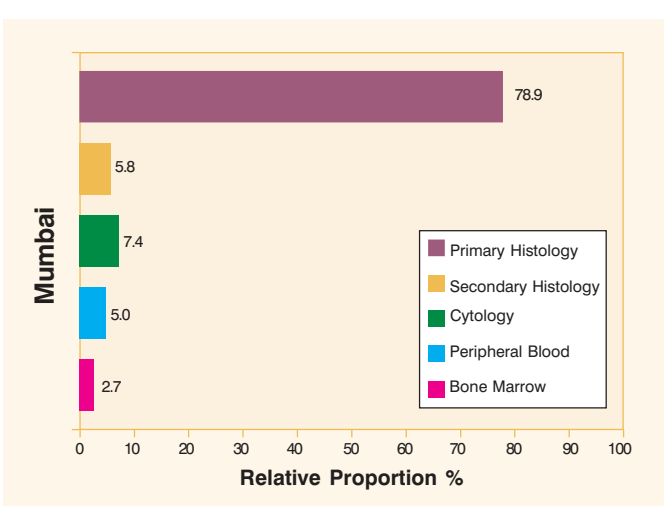
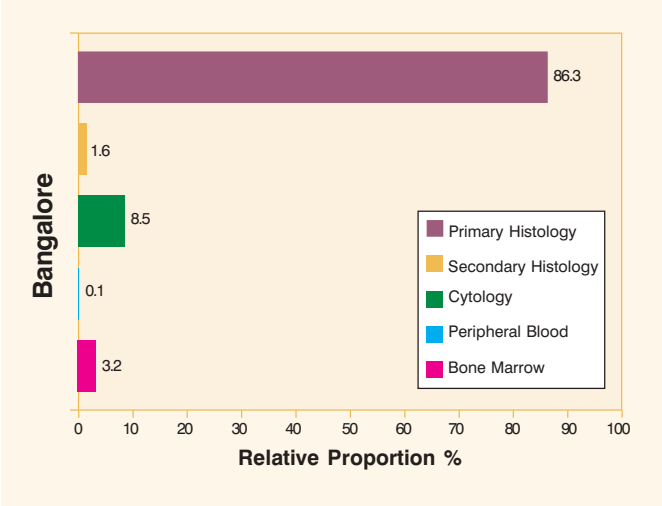
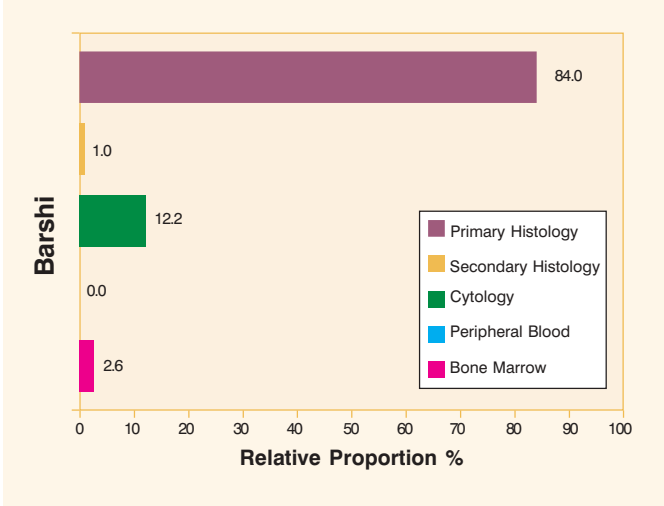
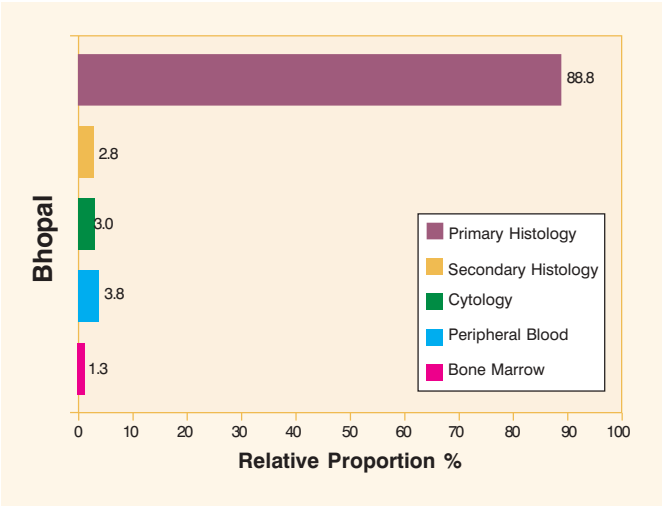


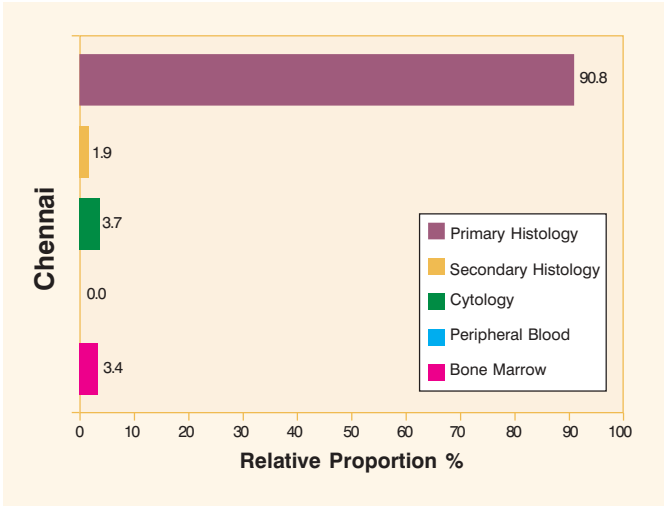
Fig. 4.2(b) : Relative Proportion (%) of cancers based on different types of Microscopic Diagnosis

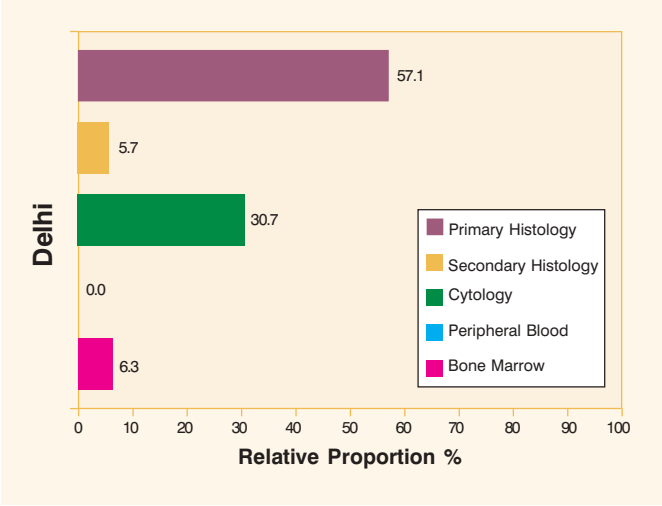
Females

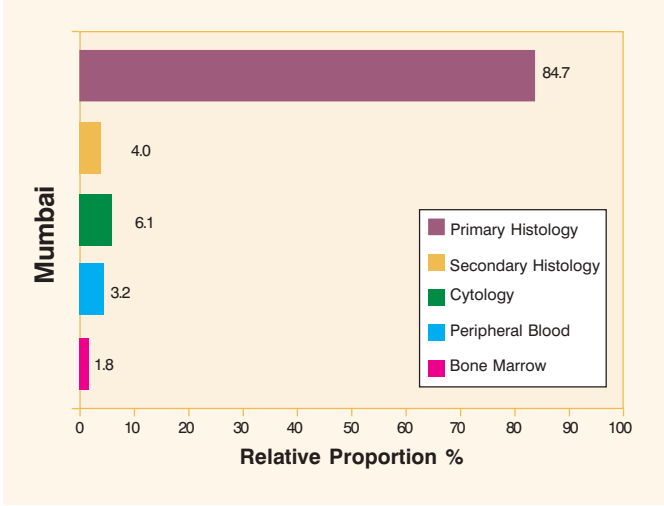












Chapter 5

CANCER MORTALITY

Registries routinely collect information on cancer mortality from the municipal corporation units. This includes visits to the vital statistics division as well. Registries also obtain information on cancer deaths through post cards sent for follow-up or active follow-up done for survival studies, hospital and other institutional deaths etc.

During the visits to the death registration /vital statistics units or during the scrutiny of death registers in medical institutions, the registry staff complete a standard proforma for all cases where cancer is mentioned as a cause of death. The proforma includes identifying information, registration number, place of registration, death registry number, place of death (whether medical institution, residence or elsewhere or unknown) cause of death, histology report, date of death, the background of the person certifying the death (whether allopathic practitioner or otherwise, coroner, others like panchanamas or unknown), and wherever available the name and address of the Institution or practitioner certifying the death. It also includes obtaining the residential status of the deceased (whether resident of registry area or otherwise) and the residential address. Details on cancer deaths of persons not residing in the registry area are excluded.

The information on deaths so collected is compiled and matched with incident data of all the days, months and years prior to the date of death of the individual. These constitute the matched deaths for that particular year. The unmatched deaths are included with that particular year's incident/morbidity data and constitute the category "Death Certificates Only".

Table 5.1 provides the total number of incident and mortality cases of all sites (ICD-9: 140-208) of cancer and the Mortality Incidence Ratio (M/I%). The M/I% varies from 13.4% in females in Bhopal to 92.2% in males in Barshi. Among the urban registries the M/I% of Mumbai and Chennai are comparable with that seen in registries from western countries.

Cancer Mortality Rate is defined as the number of cancer deaths occurring in a defined population, in a defined geographic area during a particular year(s) per 100,000 of that population. The age adjusted mortality rate is similar to the age adjusted incidence rate where the mortality rate is adjusted to the standard world population. Like the age specific incidence rates the age specific mortality rates are also calculated and this could be site and gender specific.

TABLE 5.1: Number of Incident and Mortality cases and Mortality–Incidence Percent (M/I%)

Registry	MALES			FEMALES		
	Incidence	Mortality	M/I%	Incidence	Mortality	M/I%
Bangalore	3081	1030	33.4	3554	857	24.1
Barshi	193	178	92.2	211	154	73.0
Bhopal	871	169	19.4	778	104	13.4
Chennai	3652	2020	55.3	4026	1679	41.7
Delhi	9023	1997	22.1	8805	1507	17.1
Mumbai	8617	4335	50.3	8504	3813	44.8

Table 5.2 gives the crude, age adjusted and truncated mortality rates of all sites (ICD-9: 140-208) for each registry for males and females.

TABLE 5.2: Crude (CMR), Age Adjusted (AAMR) and Truncated (TMR) Mortality Rate

Registry	MALES			FEMALES		
	CMR	AAMR	TMR	CMR	AAMR	TMR
Bangalore	19.0	31.8	46.4	17.4	28.8	52.8
Barshi	34.4	40.2	52.5	32.2	38.9	78.5
Bhopal	12.1	22.8	39.2	8.3	15.5	30.9
Chennai	47.9	62.3	113.0	42.2	52.5	105.5
Delhi	16.2	27.6	44.1	14.8	24.6	46.6
Mumbai	35.0	62.5	78.1	37.9	61.2	96.8

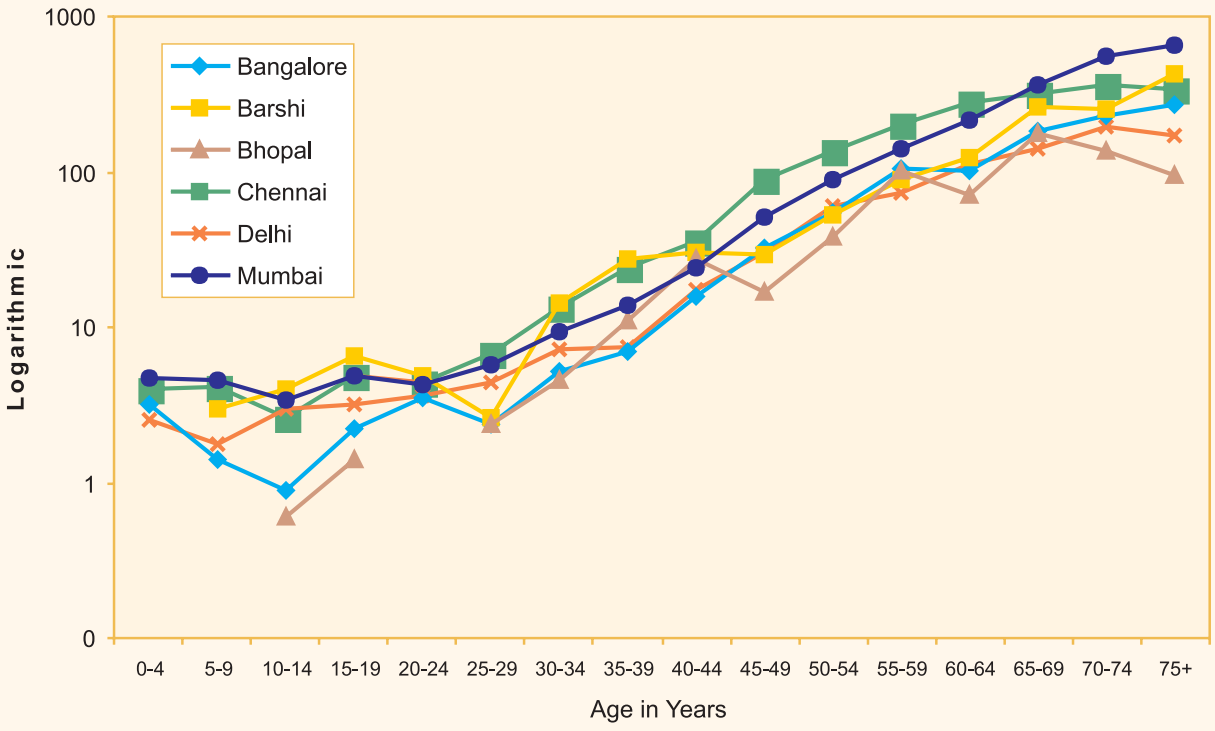
The number of matched deaths and number of “Death Certificate Only” (DCO) cases and total deaths is shown in Table 5.3.

The age specific mortality rates for the six registries for males and females are depicted in the Figures 5.1(a) and (b). The graphs of age specific incidence and mortality are depicted for each of the registries for males and females in Figures 5.2(a) to 5.2(f).

TABLE 5.3: Number of Matched Deaths (MD), Number of DCO’s and Total Deaths (TD)

Registry	MALES			FEMALES		
	MD	DCO’s	TD	MD	DCO’s	TD
Bangalore	781	249	1030	636	221	857
Barshi	176	2	178	154	0	154
Bhopal	156	13	169	91	13	104
Chennai	1909	111	2020	1566	113	1679
Delhi	1463	534	1997	1052	455	1507
Mumbai	3739	596	4335	3276	537	3813

Fig. 5.1(a): Average Annual Age Specific Cancer Mortality Rates - All Sites of Cancer - MALES



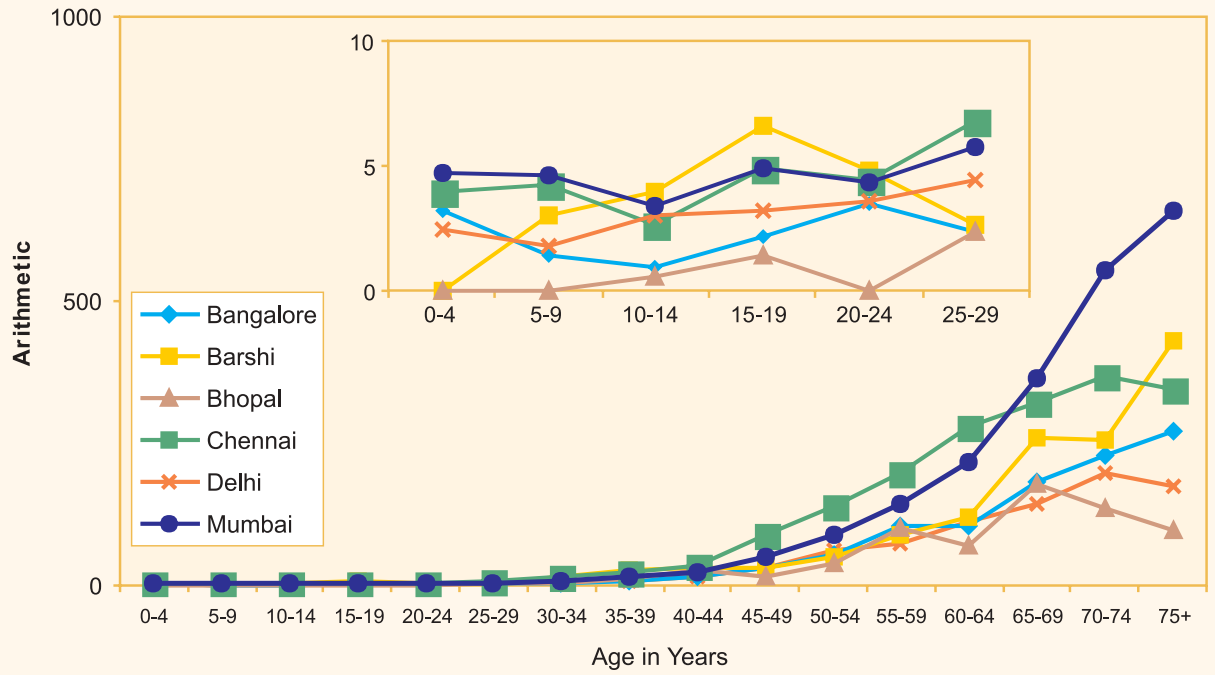
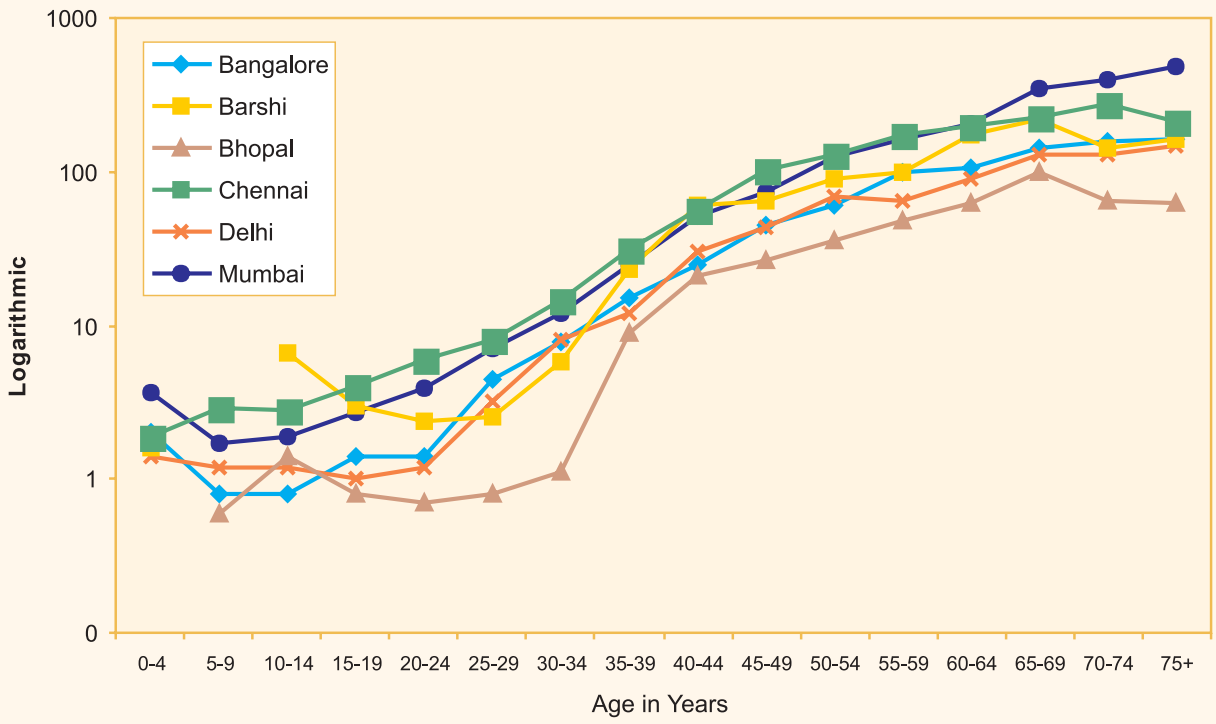


Fig 5.1(b): Average Annual Age Specific Cancer Mortality Rates - All Sites of Cancer - FEMALES



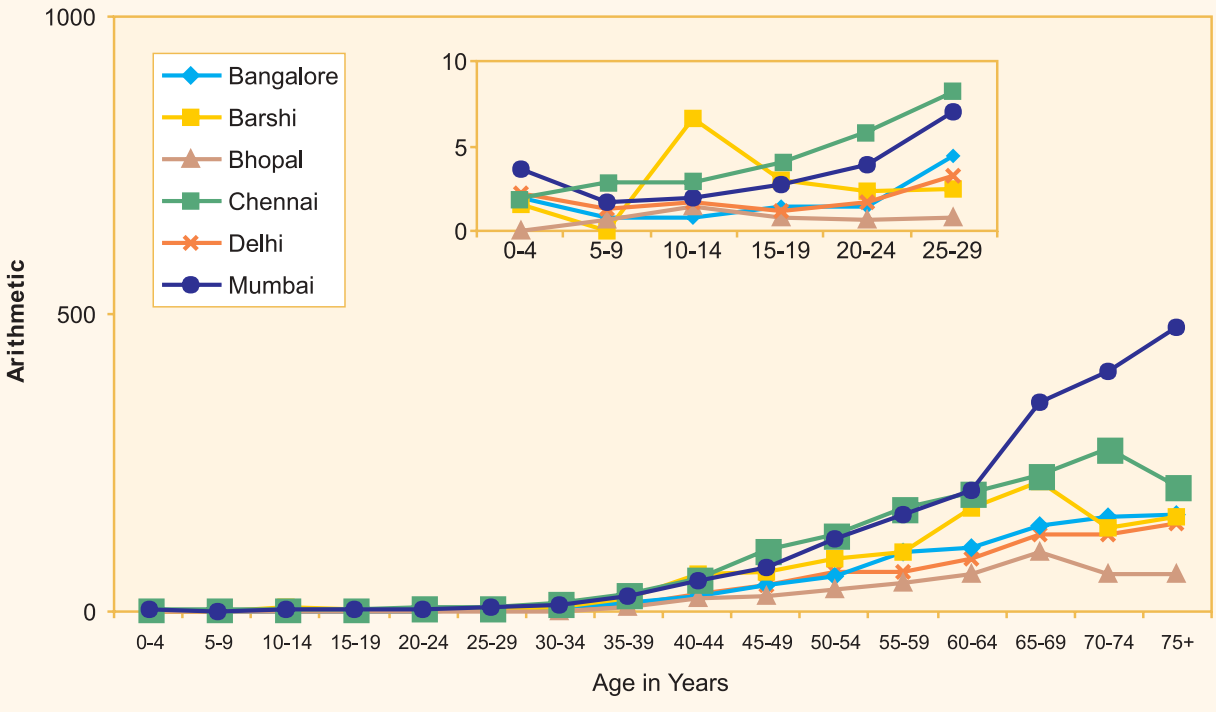
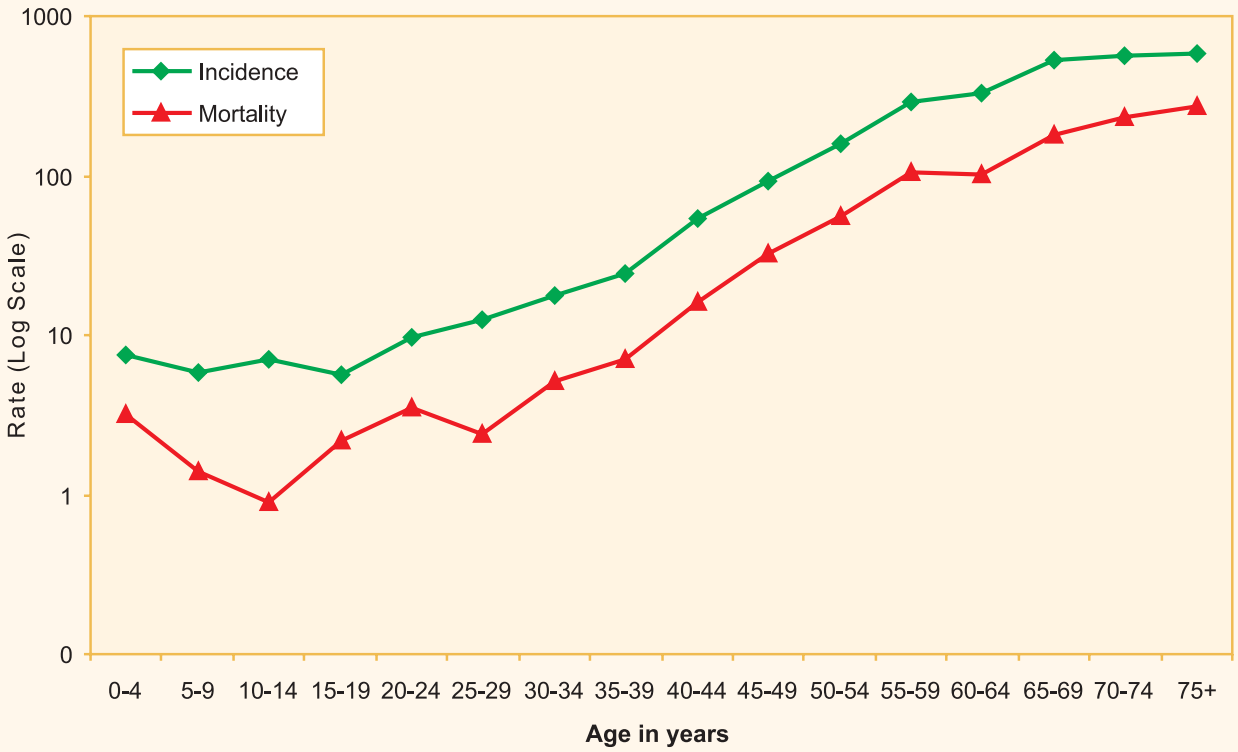


Fig. 5.2(a): Average Annual Age Specific Incidence & Mortality Rates - All Sites of Cancer – Bangalore

Males



Females

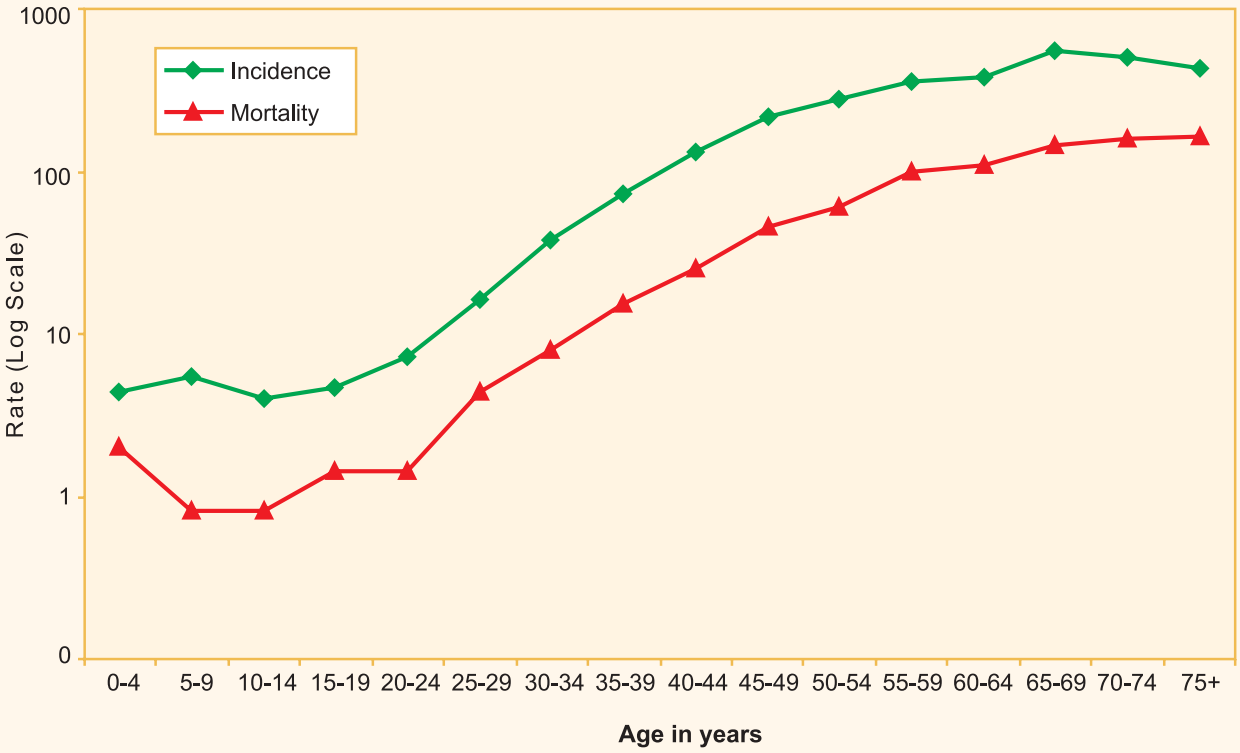
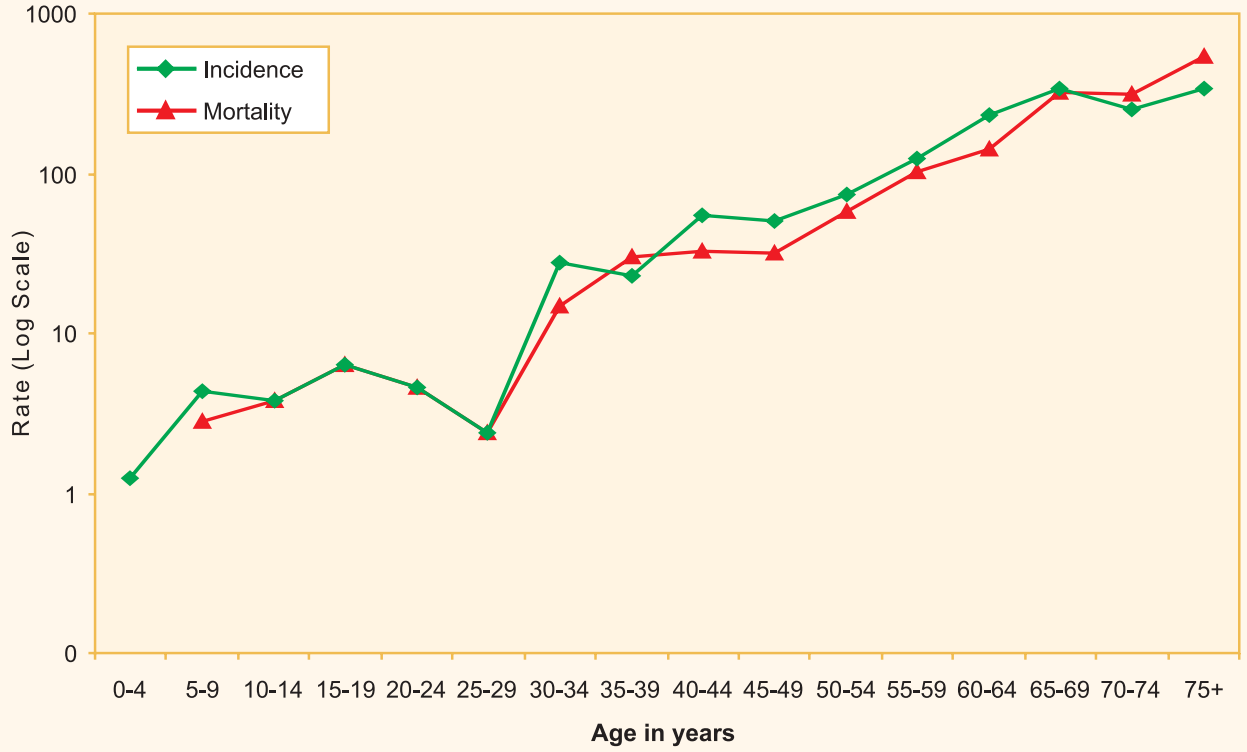


Fig. 5.2(b): Average Annual Age Specific Incidence & Mortality Rates - All Sites of Cancer – Barshi

Males



Females

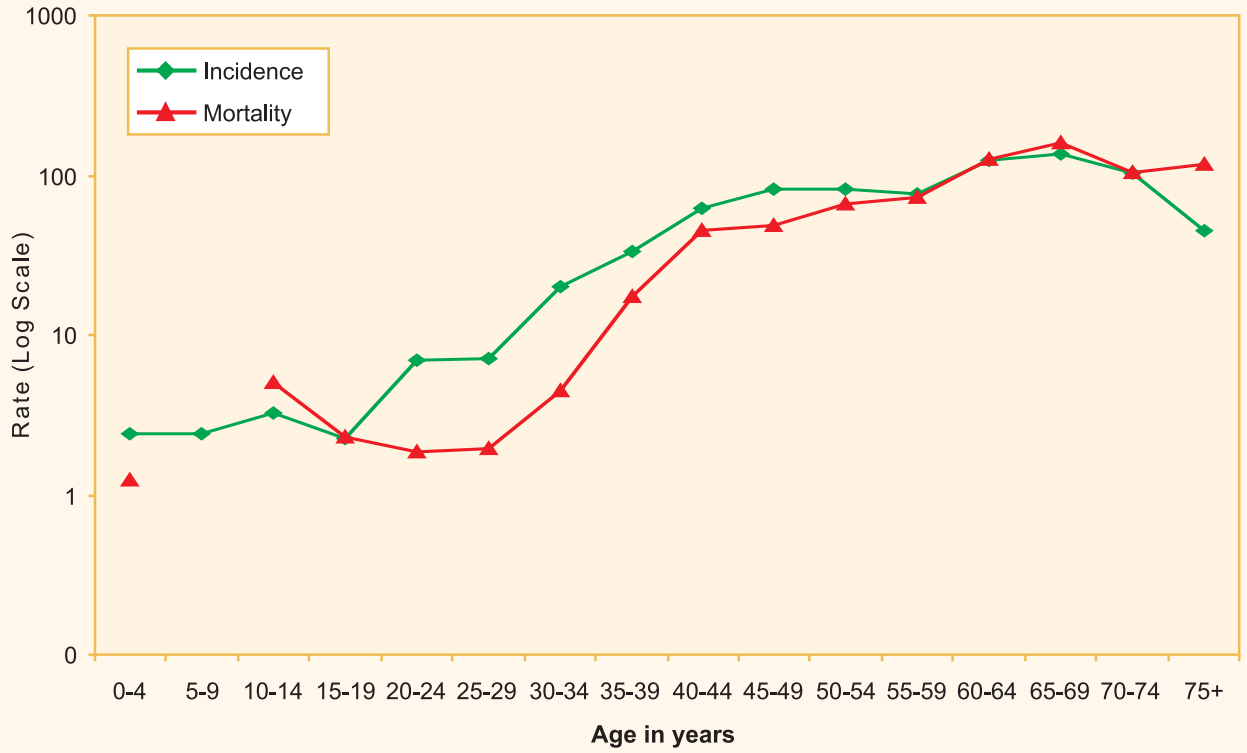
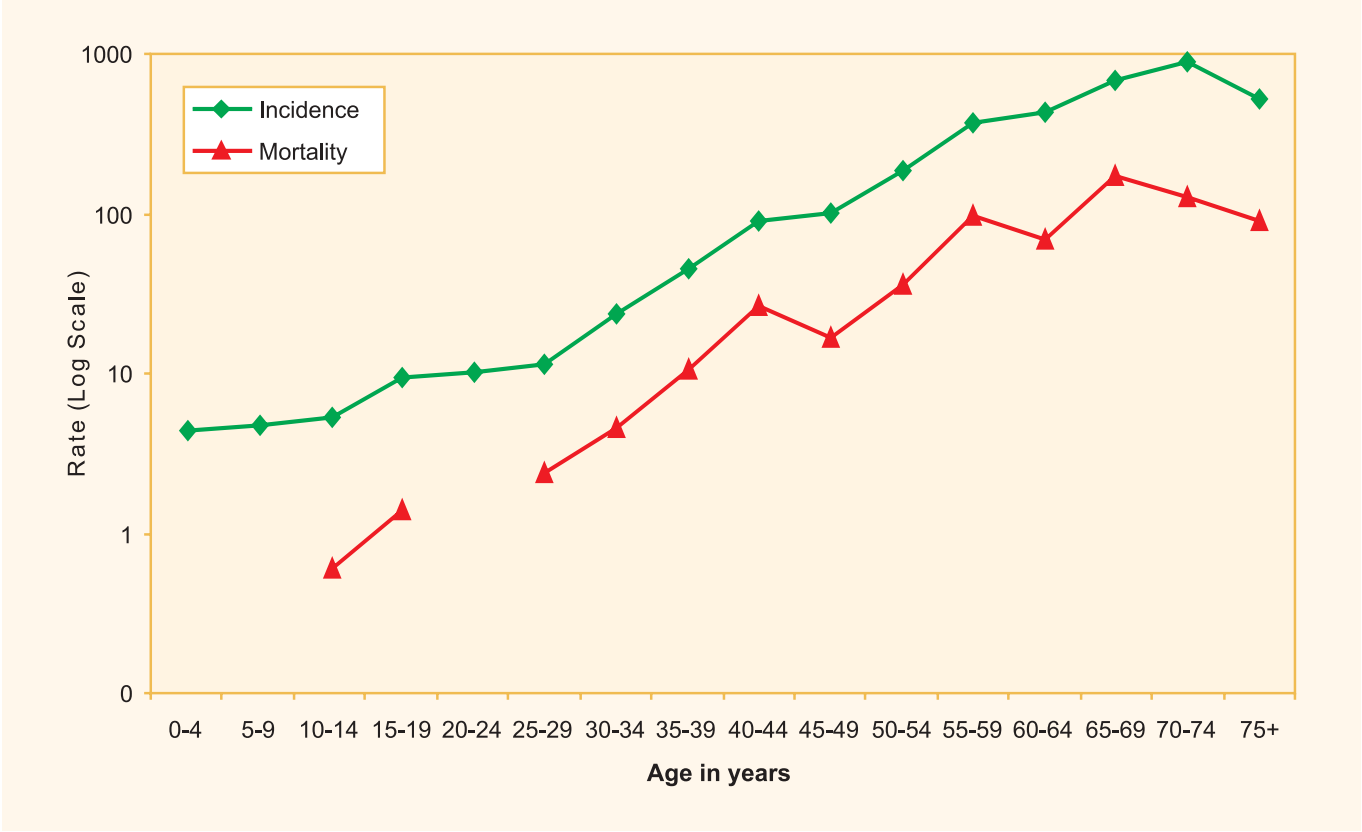


Fig. 5.2(c): Average Annual Age Specific Incidence & Mortality Rates - All Sites of Cancer – Bhopal

Males



Females

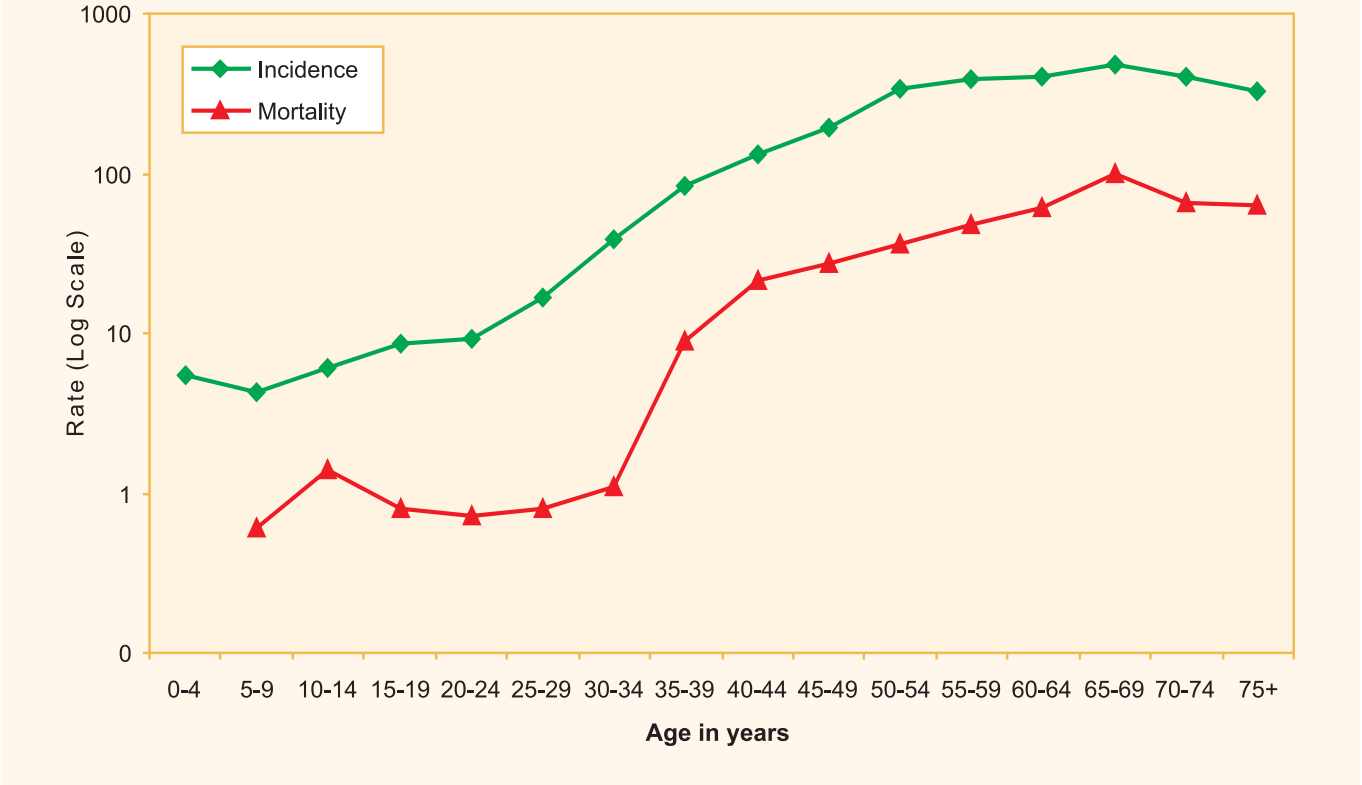
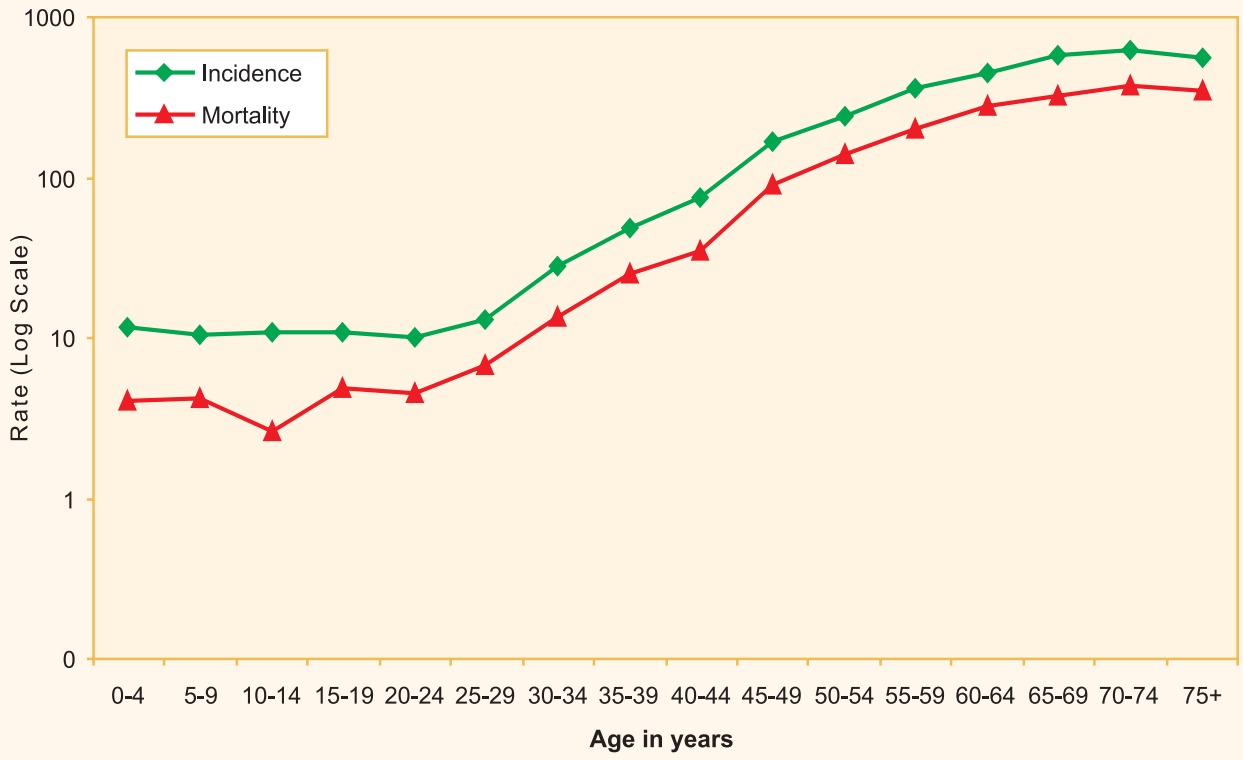


Fig. 5.2(d): Average Annual Age Specific Incidence & Mortality Rates - All Sites of Cancer – Chennai

Males



Females

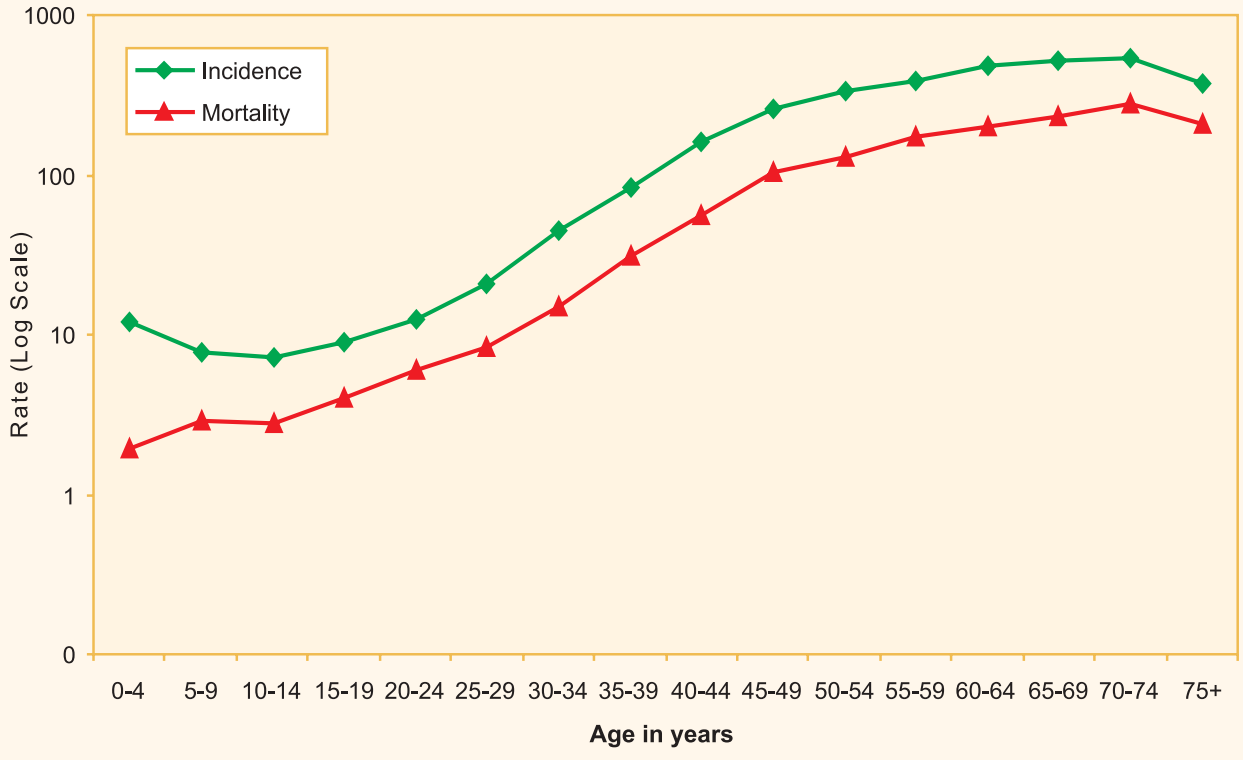
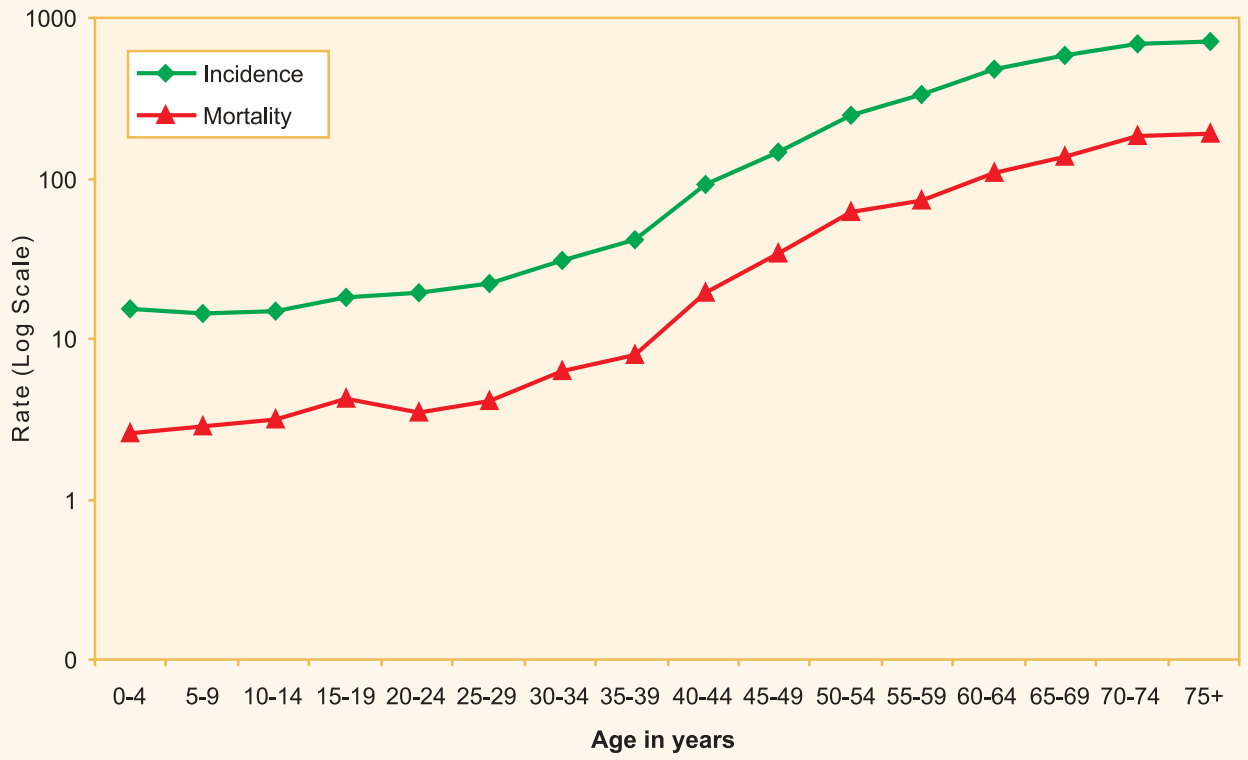


Fig. 5.2(e): Average Annual Age Specific Incidence & Mortality Rates - All Sites of Cancer – Delhi

Males



Females

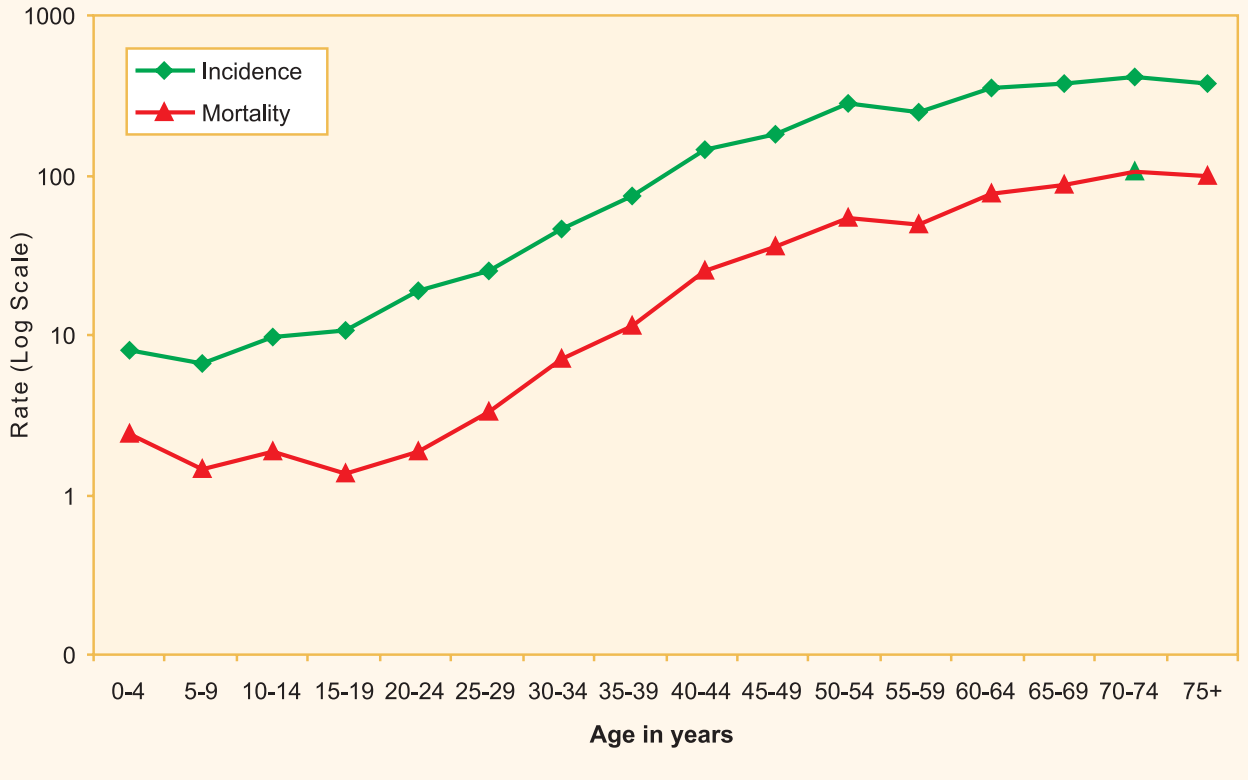
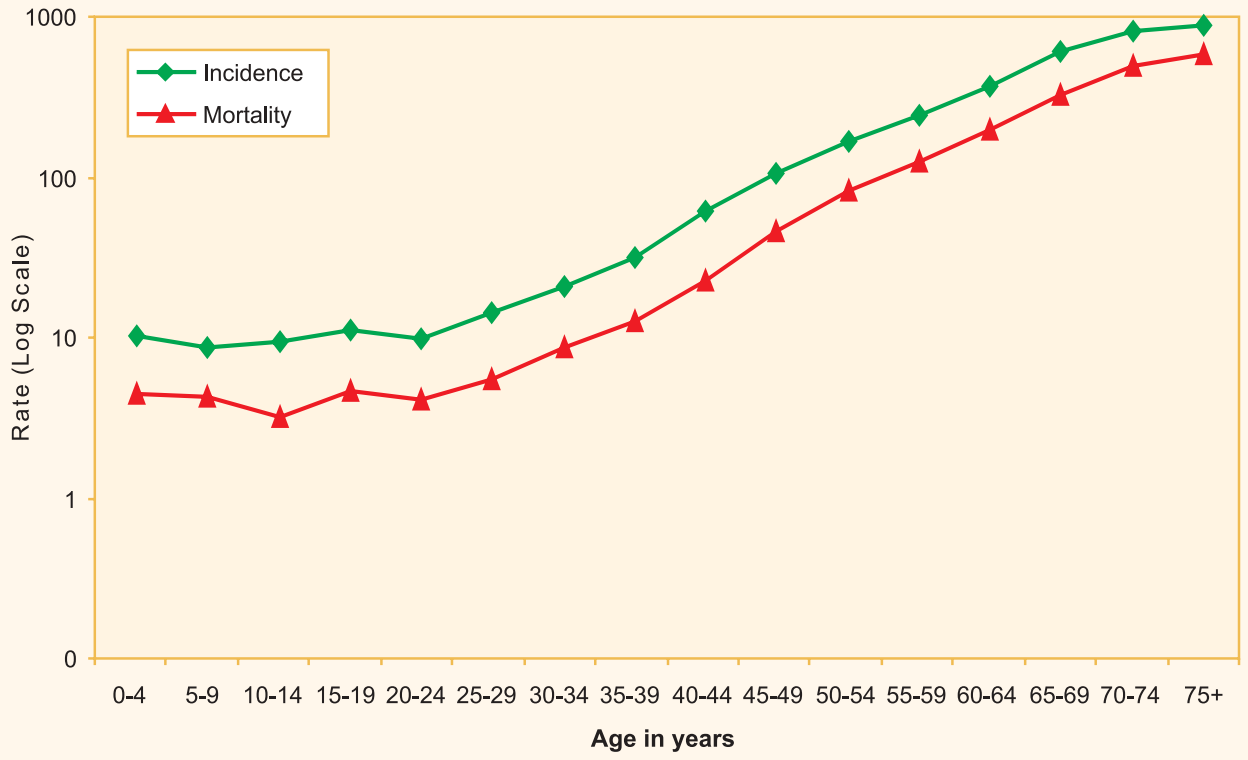
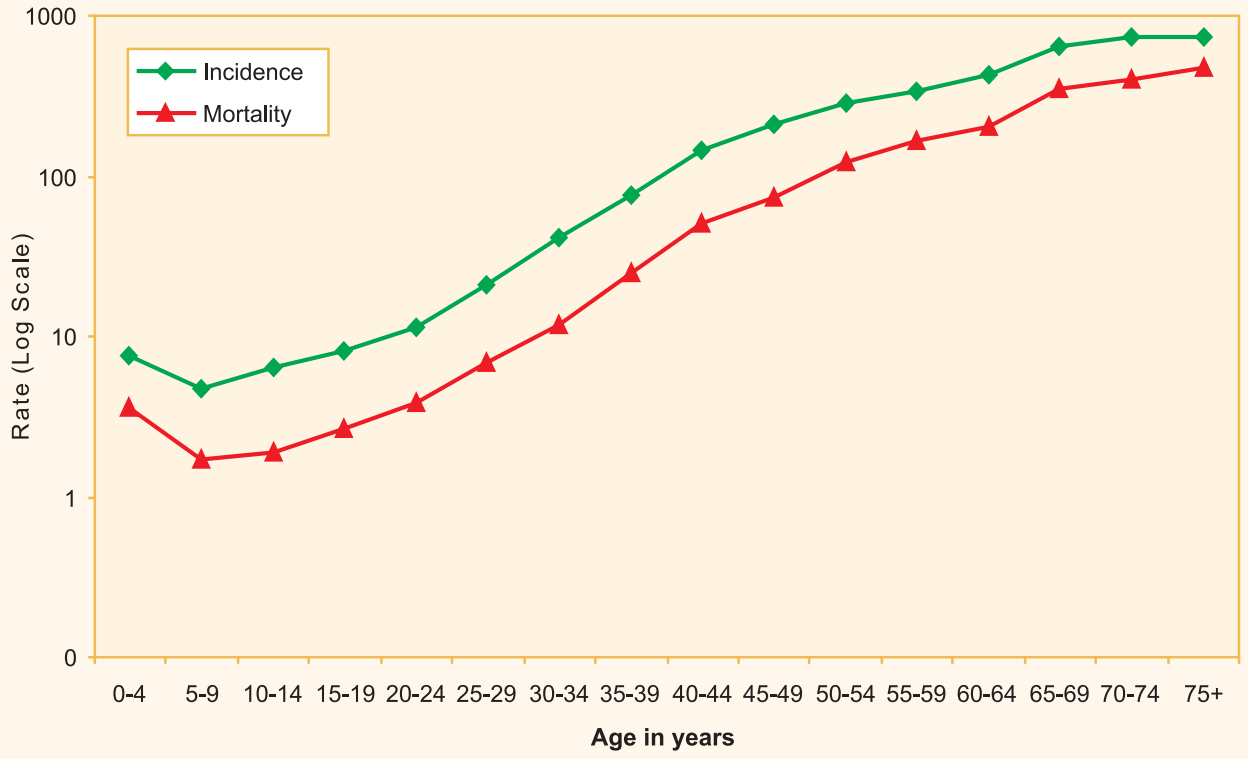


Fig. 5.2(f): Average Annual Age Specific Incidence & Mortality Rates - All Sites of Cancer – Mumbai

Males



Females



Chapter 6

DATA QUALITY AND INDICES OF RELIABILITY

The main objectives of a population based cancer registry are:

1. ***Completeness of coverage:*** to obtain information on all cancers diagnosed in the population of the geographic area defined by the cancer registry, so as to ensure a high degree of case ascertainment;

2. ***Adequacy of data:*** to have certain basic core items of patient information on all cases;

3. ***Accuracy of data:*** to ensure that data are free from errors of abstraction, coding, data entry, duplicate registrations etc.;

4. ***Comparability of data:*** to adopt advances in electronic information technology in coding, classification etc., that would assure comparability internally and externally;

5. ***Reliability of data:*** to ensure reliability of data through periodic audits.

Apart from the above, the registries routinely undertake various exercises to ensure that the data they collate and process is of high quality. These exercises are based on the publication "Comparability and Quality Control in Cancer Registration" published by the International Agency for Research on Cancer (Parkin *et al*, 1994) and suitably modified so as to be practically applicable for the set-up of the cancer registries under the NCRP. These exercises include:

1. **Details of sources of registration:** A comprehensive account of the various sources of registration is obtained in order to know and minimize duplicate registrations at an early stage and identify number of cases whose residential status including duration of stay remains unknown. The latter helps in pinpointing sources and the channels of referral of these resident unknown cases where greater efforts are made to minimize such cases. This exercise also helps in knowing the number of sources of registration per case – an index to assess coverage.

2. **Notifications per case:** By notifications per case is meant, the different types of reports confirming the diagnosis of cancer in a given case. For example, a patient with a lump in the breast could initially have fine needle aspiration cytology, followed by a biopsy and finally a mastectomy specimen, with all three reports having evidence of malignancy. Notifications

per case give an idea of the diagnostic work-up and mechanics of reporting while also providing an indirect measure of completeness of coverage.

3. **Re-abstraction of Random Sample:** All registries regularly re-abstract a ten percent random sample of cases. This is done by supervisory staff, and the core proforma is completed afresh for all these cases, without reference to the original abstracts. Differences between original and re-abstracted data are tabulated and categorised into minor and major disagreements, justifiable disagreements and errors. The above tabulations are prepared by all registries and presented and discussed in the NCRP workshops every year. Overall such re-abstraction errors have been less than five percent.

4. **Range and Consistency Checks:** Besides data entry and other checks carried out by the registries, the Coordinating Unit has developed a comprehensive software programme (based on the IARC publication indicated above). The summary checks that have been carried out on this data set include:

   a) Range checks for all variables in the core proforma;

   b) Consistency checks that include:

      i) Method of diagnosis and site, histology & clinical extent of disease;

      ii) Gender and site and primary/secondary histology;

      iii) Primary histology and ICD-9 conversion codes for lymphomas/leukaemias;

      iv) Unlikely age and site/histology combinations;

      v) Wrong or unlikely combinations of site and histology for 58 families.

Aside from the above, within the data itself there are certain indices of reliability. These include the proportion of microscopic verification, the proportion of cases categorized as “Death Certificate Only”, and the Mortality Incidence Ratio.

Proportion of Microscopic Verification

This is an indicator of the validity of diagnostic information (Parkin *et al*, 1994).

Death Certificate Only

These are cases for which there is no other information other than a death certificate with cancer mentioned as a cause of death. This means that these cases obtained through the death registration units etc. cannot be matched with any of the registered cases. To some extent the proportion of these cases reflect the proportion of cancer cases that could possibly be missed by the registry. Generally, such cases should be minimal.

Table 6.1 provides the number and proportion of cancers of all sites that have a microscopic diagnosis and the number and proportion of DCO's. The tabulations by specific site are given with detailed tabulations of data of individual registries.

Mortality Incidence (M/I) Ratio

The Mortality Incidence (M/I) Ratio is another important indicator of completeness. The ratio is a comparison of the number of deaths attributed to a specific cancer and the number of incident cases during the same time-period (Parkin *et al*, 2002). In general in cancers with very poor survival such as cancer of the liver, the M/I ratio will be close to 1 (or 100%). Cancers with a better survival like breast cancer would have figures less than one. The M/I ratio by site of cancer is given along with the detailed tabulations of data of individual registries.

The table (Table 6.1) below summarises the above three indices of reliability for all sites of cancer and compares it with the data of SEER of USA, Oxford, UK, Japan and Singapore.

TABLE 6.1: Proportion of Microscopic Verification (MV%), Proportion of DCO's (DCO%) and Mortality-Incidence Percent (M/I%) (1997-1998).

Registry	MALES			FEMALES		
	MV%	DCO%	M/I%	MV%	DCO%	M/I%
Bangalore	82.0	8.0	33.4	86.4	6.2	24.1
Barshi	83.9	1.0	92.2	89.1	0.0	73.0
Bhopal	80.7	1.5	19.4	84.5	1.7	13.4
Chennai	76.5	3.0	55.3	83.0	2.8	41.7
Delhi	83.5	5.9	22.1	82.3	5.2	17.1
Mumbai	78.7	6.9	50.3	82.2	6.3	44.8
US, SEER: White	94.0	1.0	41.0	94.0	1.0	42.0
UK, Oxford	82.0	2.0	59.0	85.0	2.0	53.0
Japan, Miyagi	76.0	16.0	57.0	74.0	18.0	51.0
Singapore	86.0	1.0	72.0	91.0	1.0	55.0

Chapter 7

DEFINITIONS, STATISTICAL TERMS AND METHODS USED IN CALCULATIONS

Cancer Case: All neoplasms with a behaviour code of '3' as defined by the International Classification of Diseases – Oncology, (First edition) are considered reportable and therefore registered.

Age-Group: The age groups used for estimating populations as well as grouping cancer cases is as per the WHO guidelines which is 0-4, 5-9, 10-14….75+. According to the same definition the age group 0-14 constitutes childhood cancer.

Incidence: Cancer incidence denotes new cases diagnosed in a defined population in a specified time period. For this report all cancer cases diagnosed from 1 January 1997 to 31 December 1998 in the different geographic areas covered by the six population based cancer registries, are included.

Rates: Rates for cancer are always expressed per 100,000 population. For childhood cancer this may be expressed as per one million, but the latter is not used in this report.

Crude Incidence Rate (CR): This refers to the rate obtained by division of the total number of cancer cases by the corresponding estimated population (mid-year) and multiplying by 100,000.

$$CR = \frac{\text{New cases of cancer of a particular year}}{\text{Estimated population of the same year}} \times 100{,}000$$

Age Specific Rate (ASpR): This refers to the rate obtained by division of the total number of cancer cases by the corresponding estimated population in that age group and sex/site/geographic area/time period and multiplying by 100,000.

$$ASpR = \frac{\text{New cases of cancer of a particular year in the given age group}}{\text{Estimated population of the same year for the given age group}} \times 100{,}000$$

Age Adjusted or Age Standardised Rate (AAR): Most cancers increase to occur as age increases. Therefore the higher the proportion of older population the higher the number of cancers. Most developed and western countries have a higher proportion of older population. So in order to make rates of cancer comparable between developed and developing countries a world standard population (given below) that takes this into account is used to arrive at age adjusted or age standardised rates. This is calculated according to the direct method (Boyle and Parkin, 1991) by obtaining the age specific rates and applying these rates to the standard population in that age group. The world standard population approximates the proportional age distribution of the world and is given below:

TABLE 7.1: Age Distribution of World Standard Population

Age Group	World Standard Population
0 – 4	12,000
5 – 9	10,000
10 – 14	9,000
15 – 19	9,000
20 – 24	8,000
25 – 29	8,000
30 – 34	6,000
35 – 39	6,000
40 – 44	6,000
45 – 49	6,000
50 – 54	5,000
55 – 59	4,000
60 – 64	4,000
65 – 69	3,000
70 – 74	2,000
75 +	2,000
All Ages	**100,000**

$$AAR = \frac{\sum_{i=1}^{A} a_i \, w_i}{\sum_{i=1}^{A} w_i}$$

where:

a_i is the age specific rate (AspR) in age class i;

w_i is the standard population in age class i;

A represents the number of age intervals.

Or expressed in more simpler terms thus:

$$AAR = \sum \frac{(ASpR) \times (\text{No. of persons in Std. world population in that 5 yr. age group})}{100{,}000}$$

Cumulative Risk: This refers to the probability that the person will develop a particular cancer during a certain age period in the absence of any other cause of death. The Cumulative Rate (CuR) is an approximation of the cumulative risk. It is obtained by adding the annual age-specific incidence rates for each five year age interval (up to either 64 or 74 years of age or for whatever age group is to be used to calculate the cumulative risk) multiplied by 5 (representing the five year age interval) times 100/100,000.

$$CuR = \frac{5 \times \sum (ASpR) \times 100}{100{,}000}$$

and Cumulative Risk is expressed as

Cumulative Risk = 100 × [1-exp (- cumulative rate/100)]

Truncated Age Adjusted Incidence Rate (TR): This is similar to the age adjusted rate except that it is calculated for the truncated age group 35-64 years of age.

***Trends in Age Adjusted Incidence Rates*:** The significance of trend in AAR was assessed based on the method and formula provided by Boyle and Parkin, 1991.

Coding Manual: The coding manual (NCRP, 1987) has been used by all registries, in abstracting cancer patient information, coding of the same and data entry on to the computer. For Topography – Site codes, both the Ninth Revision of the International Classification of Diseases (ICD-9) (WHO, 1977) as well as the ICD-O (Oncology) First Edition (WHO, 1976) have been used. For Morphology codes the latter has been used.

The populations of 1991 and 2001 (Total Population) have been used in this report to calculate the estimates of population for the years 1997 to 1998.

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INDIVIDUAL REGISTRY DATA: 1997-1998

Write up and Selected Detailed Tabulations

BRIEF DESCRIPTION OF REGISTRY

FIGURE 1:

Population pyramid showing age distribution

LIST OF TABLES

1. Main Sources of Registration of Incident Cancers.
2. Number of Incident Cancers by Five Year Age Group and Site (ICD-9).
3. Average Annual Age Specific, Crude, Age Adjusted (with Standard Error) and Truncated (35-64 Yrs) Incidence Rate per 100,000 population.
4. Cumulative Rate & Cumulative Risk of Individual Sites Based on Age Specific Rates (from 0–64 Years and from 0–74 Years).

POPULATION BASED CANCER REGISTRY, BANGALORE
Kidwai Memorial Institute of Oncology, Bangalore

Dr P.S. Prabhakaran, MBBS, MS, Director,
Kidwai Memorial Institute of Oncology & Principal Investigator, PBCR, Bangalore

Dr Aruna E Prasad, MBBS, MD, Officer-in-Charge, PBCR, Bangalore

To study cancer patterns in Bangalore Urban Agglomeration a Population Based Cancer Registry (PBCR) was established at Kidwai Memorial Institute of Oncology in December 1981 under the auspices of National Cancer Registry Programme of the Indian Council of Medical Research. The actual registration of cancer cases in the area covering Bangalore Urban Agglomerate commenced from 1st January 1982. KIMIO is recognized as Regional Cancer Research and Treatment Centre in Karnataka State. The PBCR covers an area of 365.7 sq. km.

Bangalore is the capital of the State of Karnataka, India, in the southern part of the country and lies at 13°N and 78°E. It is situated at an altitude of 914 metres above mean sea level (MSL). The Urban Agglomeration has been divided into Bangalore Mahanagara Palike consisting of 100 wards and adjoining 8 city municipal councils and 25 death registration units for administrative convenience. The Population Based Cancer Registry covers an urban population of 5.1 millions. Kannada is the predominantly spoken language, Hindus (83%) formed the majority followed by Muslim 10%, Christian 6% and others 1%.

METHOD OF CANCER REGISTRATION IN PBCR, BANGALORE

The Assistant Social Scientist of the registry, visit the various sources of registration i.e. Government Hospitals, Private Hospitals, Teaching Hospitals, Nursing Homes, Diagnostic laboratories and hospices to collect data on cancer cases who are residents of the city of Bangalore in a standard format (i.e. core proforma). The Assistant Social Scientist visit the sources according to the regular weekly schedule. The incident data of cancer cases are collected by interviewing the cases wherever possible and or from medical records. If there is any doubt in residential status the house visit will be conducted wherever possible. The details of proved cancer are compiled in the core proforma by the staff of PBCR. The first edition of the International Classification of Diseases for Oncology (ICD-O) and the 9th revision of the International Classification of Diseases (ICD-9) have been used to code topography and morphology. Since 1998 as per the instruction of the Coordinating Unit, data are coded using the second edition of ICD-O.

Data on mortality are collected from the death registers maintained at the corporation death unit and city municipal councils. Death registers in Government Hospitals and other private hospitals are scrutinized for more information on cause of death. The death registration system is not properly

maintained and the information obtained is often inadequate. Frequently the cause of death is given as cardio respiratory arrest. Efforts are being made to improve the system by conducting meetings with medical officers of various death registration units.

Data entry, range and consistency checks, tabulation etc. are all carried out with in house programs developed on D-base and EPI-Info packages. Duplicate checks are carried out by the combination of computer programme and manual verification.

All the information collected from the said sources are kept strictly confidential and used only for research purposes. No contacts in any form are made with the patient registered exclusively from the private hospital. The registry owes its success to the unstinted co-operation of the chiefs and other personnel of all the institutions that have participated in the registry programme and seeks their continued support.

All patients registered under PBCR are classified into proved cancer, proved non-cancer, probably cancer and probably non-cancer. A report concerning cancer is published every year based on the data (usually of two years). Besides this the PBCR provided a background for studies in KMIO by providing the data on cancer burden in the community and registry aids in cancer control programme. The staff of PBCR is actively involved in various studies of cancers in the community care, helps plan services for geographical area and contribute to professional and public education concerning cancer. Active follow-up through visits of homes of patients was a new activity of the registry. This was done for selected sites of cancer and results of survival analysis have since been published. The registry is now in the process of undertaking specific exercises to determine completeness of coverage as well quality assurance of data.

Staff of Population Based Cancer Registry, Bangalore

Mr K. Puttaswamy, M.Sc., L.LB.	:	Senior Bio-statistician
Mr K.V. Krishna Reddy, M.Sc.	:	Junior Bio-statistician
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Mr C.S. Dayananda, M.A.	:	Assistant Social Scientist
Smt P. Savithramma, B.A.	:	Typist & Data Entry Operator

Figure BLR-1 :
Population Pyramid showing Age Distribution : 1997-98

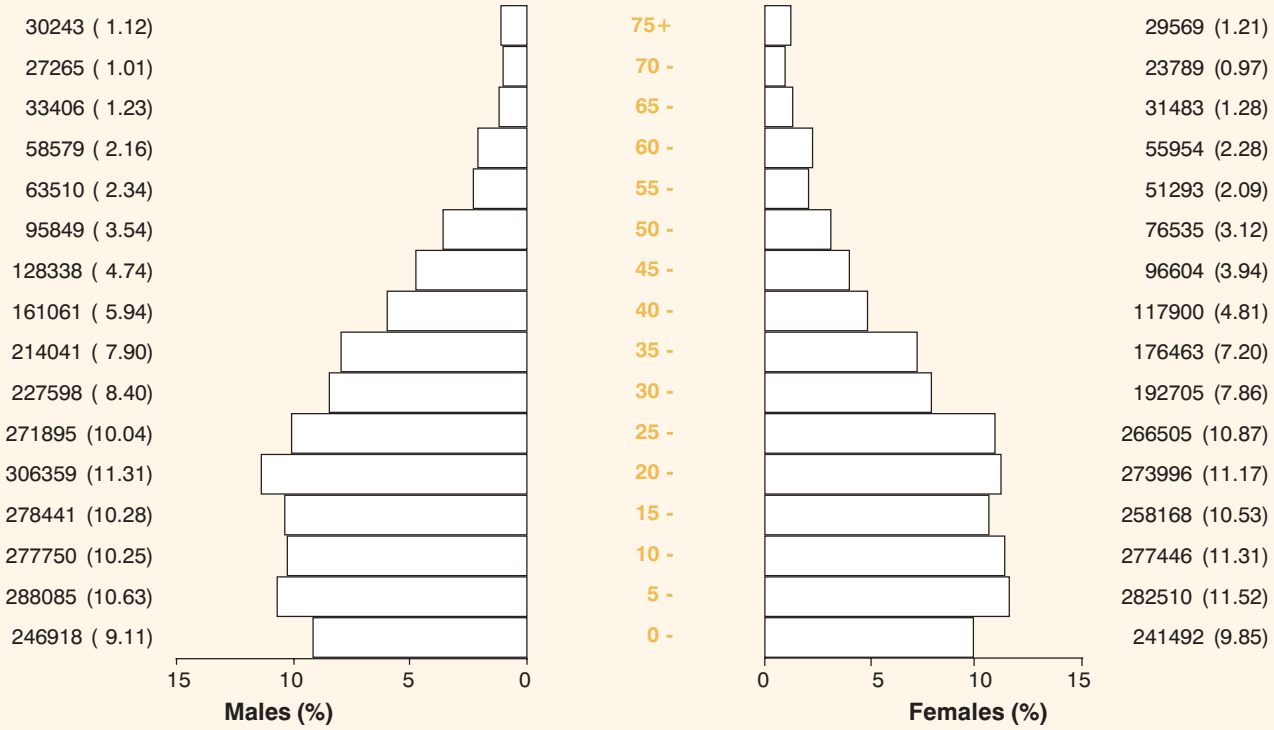

TABLE BLR-1:
Main Sources* of Registration of Incident Cases of Cancer in Bangalore - 1997-1998

Name of the Institution	Number	%
Kidwai Memorial Institute of Oncology	2864	43.1
Bangalore Institute of Oncology	1038	15.6
Curie Institute of Oncology	415	6.3
St.John's Medical College	381	5.7
Manipal Hospital	290	4.4
Victoria Hospital	178	2.7
St.Martha's Hospital	169	2.5
M.S.Ramaiah Medical College	159	2.4
Bangalore Hospital	151	2.3
St. Philomena's Hospital	71	1.1
Municipal Corporations	465	7.0
Others	454	6.8
Total All Sources	**6635**	**100.0**

** 1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 1997-98.*

** 2. The numbers and proportion listed are the minimum number of cases. Institutions could have registered / reported more cases, since duplicate registrations and non-resident/registry cases are not included.*

TABLE BLR-2(a): Number of Incident Cancers by Five Year Age Group and Site (ICD-9): 1997–1998 – Males

%= Relative Proportion of Cancers of All Sites.

Bangalore

ICD-9	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	Total	%
140	Lip	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	1	5	0.16
141	Tongue	0	0	0	0	0	2	1	3	4	9	18	20	11	9	16	13	106	3.44
142	Salivary Gland	0	1	0	1	2	1	2	0	1	2	1	2	6	1	0	0	20	0.65
143	Gum	0	0	0	0	0	0	0	0	0	1	2	3	4	1	1	0	12	0.39
144	Floor of Mouth	0	0	0	0	0	0	0	0	2	4	1	1	4	3	1	0	16	0.52
145	Other Mouth	0	0	0	0	0	0	1	2	4	6	10	16	10	11	6	7	73	2.37
146	Oropharynx	0	0	0	0	0	0	1	0	6	5	10	15	11	17	4	6	75	2.43
147	Nasopharynx	0	0	0	3	1	3	0	0	1	0	2	1	4	1	0	3	19	0.62
148	Hypopharynx	0	0	0	0	3	0	2	5	6	16	17	26	35	21	17	23	171	5.55
149	Pharynx Etc.	0	0	0	1	0	1	1	0	0	4	1	3	8	4	2	9	34	1.10
150	Oesophagus	0	0	0	0	1	2	5	4	5	24	29	45	33	26	26	21	221	7.17
151	Stomach	0	0	0	0	2	5	7	8	17	19	30	31	38	46	38	41	282	9.15
152	Small Intestine	0	0	0	0	0	0	0	1	1	1	0	0	2	0	0	1	6	0.19
153	Colon	0	0	0	1	0	2	0	1	6	5	11	14	8	9	12	6	75	2.43
154	Rectum	0	0	0	1	8	1	3	9	10	5	16	14	19	13	14	11	124	4.02
155	Liver	1	0	0	0	0	1	2	4	0	3	11	11	18	8	12	13	84	2.73
156	Gall Bladder	0	0	0	0	0	0	1	1	4	4	3	3	1	4	2	7	30	0.97
157	Pancreas	0	1	1	0	0	0	3	2	3	5	3	5	5	7	7	1	43	1.40
158	Retroperitoneum	1	0	0	1	0	0	0	2	1	3	3	1	3	2	2	2	21	0.68
159	Other Dig Sys	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	3	0.10
160	Nasal Cavity	0	0	0	0	0	2	0	1	4	2	1	2	2	2	1	1	18	0.58
161	Larynx	0	0	0	0	0	0	2	1	8	10	12	20	16	21	11	10	111	3.60
162	Lung	0	0	0	0	1	0	4	7	9	16	26	31	28	36	32	28	218	7.08
163	Pleura	0	0	0	0	0	0	0	1	0	1	3	0	2	1	3	5	16	0.52
164	Thymus	0	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	4	0.13
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
170	Bone	1	0	3	3	1	1	0	3	1	1	1	3	0	1	1	5	25	0.81
171	Conn Tissue	1	1	0	1	5	3	2	3	2	6	1	1	5	1	0	1	33	1.07
172	Skin Melanoma	0	0	0	0	0	0	0	0	1	2	0	1	0	1	1	0	6	0.19
173	Skin Other	0	0	1	0	0	0	0	1	3	3	3	5	6	6	6	6	40	1.30
175	Breast Male	0	0	0	0	0	0	1	0	0	1	0	0	0	1	1	0	4	0.13
185	Prostate	0	0	0	0	0	0	0	0	1	1	7	4	19	23	29	54	138	4.48
186	Testis	2	0	0	1	4	5	4	1	7	4	2	0	0	1	0	2	33	1.07
187	Penis Etc	1	0	0	0	0	1	2	3	3	6	3	8	5	4	4	3	43	1.40
188	Uri Bladder	0	0	0	0	0	0	1	2	4	4	6	8	9	6	14	16	70	2.27
189	Kidney	1	0	0	0	0	0	2	3	5	4	7	6	7	7	2	6	50	1.62
190	Eye	5	0	0	0	1	0	0	0	1	0	0	0	0	1	0	1	9	0.29
191	Brain	4	4	7	5	2	8	10	14	10	19	6	5	8	12	6	3	123	3.99
192	Nervous Sys	0	0	1	0	1	1	0	1	0	0	0	0	0	2	1	1	8	0.26
193	Thyroid Gland	0	0	1	0	1	2	3	2	5	4	6	5	2	1	2	3	37	1.20
194	Oth Endo Gland	2	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	5	0.16
195	Ill Def Sites	2	0	2	0	2	1	0	3	3	2	2	4	1	0	0	4	26	0.84
196	Sec Lymph Node	0	1	0	0	0	2	1	1	3	4	12	8	11	9	3	4	59	1.91
197	Sec Res Etc	0	0	0	0	0	0	4	2	1	7	4	6	9	8	9	3	53	1.72
198	Sec Other	0	0	0	0	1	0	1	3	4	4	5	3	5	4	3	6	39	1.27
199	Primary Unk	0	0	0	1	2	4	2	4	6	9	12	17	9	12	17	20	115	3.73
200	Lymphosarcoma	0	3	1	0	2	2	2	0	0	2	1	3	3	3	2	4	28	0.91
201	Hodgkins Dis	1	5	5	2	1	7	2	2	2	1	6	1	3	2	0	2	42	1.36
202	Oth Lymph Node	2	4	5	2	2	2	7	5	10	11	10	8	10	15	7	7	107	3.47
203	Mult Myeloma	0	0	0	0	0	0	0	3	3	3	8	4	16	3	4	4	48	1.56
204	Leuk Lymphatic	10	5	7	6	5	2	0	2	1	0	0	1	2	0	3	4	48	1.56
205	Leuk Myelocytic	4	4	2	1	9	5	6	5	13	3	6	7	4	3	4	1	77	2.50
206	Leuk Monocytic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
207	Leuk Misc	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.03
208	Leuk Uns	1	4	2	3	1	3	1	1	1	2	0	2	1	0	2	3	27	0.88
	TOTAL	**39**	**33**	**38**	**33**	**59**	**70**	**87**	**117**	**184**	**250**	**319**	**377**	**405**	**369**	**329**	**372**	**3081**	
	%	*1.2*	*1.0*	*1.2*	*1.0*	*1.9*	*2.2*	*2.8*	*3.8*	*5.9*	*8.1*	*10.3*	*12.2*	*13.1*	*11.9*	*10.6*	*12.0*	*100.0*	

TABLE BLR-2(b): Number of Incident Cancers by Five Year Age Group and Site (ICD-9): 1997–1998 – Females

%= Relative Proportion of Cancers of All Sites.

Bangalore

ICD-9	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	Total	%
140	Lip	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	0	4	0.11
141	Tongue	0	0	0	0	0	0	0	1	1	4	7	5	6	4	3	2	33	0.93
142	Salivary Gland	0	0	1	1	0	1	1	0	0	0	0	0	0	2	0	0	6	0.17
143	Gum	0	0	0	0	0	0	0	0	4	4	8	5	5	12	6	4	48	1.35
144	Floor of Mouth	0	0	0	0	0	0	0	2	0	1	1	1	0	0	0	0	5	0.14
145	Other Mouth	0	0	0	0	0	1	3	4	13	20	12	20	28	19	14	10	144	4.05
146	Oropharynx	0	0	0	0	0	0	0	0	2	0	1	1	2	4	1	2	13	0.37
147	Nasopharynx	0	1	1	1	0	0	0	0	1	0	1	1	0	1	1	3	11	0.31
148	Hypopharynx	0	0	0	0	0	0	2	4	2	8	4	4	7	7	1	5	44	1.24
149	Pharynx Etc	0	0	0	0	0	0	1	1	0	2	0	0	1	0	1	3	9	0.25
150	Oesophagus	0	0	0	0	0	1	2	8	8	13	21	28	32	28	25	20	186	5.23
151	Stomach	0	0	0	1	3	5	8	14	11	9	14	20	24	21	18	12	160	4.50
152	Small Intestine	0	1	0	0	0	0	0	0	2	1	0	1	0	0	0	0	5	0.14
153	Colon	0	0	0	0	0	0	2	2	7	9	7	9	6	2	5	4	53	1.49
154	Rectum	0	0	0	0	2	4	2	3	10	2	9	8	17	9	9	9	84	2.36
155	Liver	1	0	0	0	0	1	1	0	4	2	3	4	4	5	6	7	38	1.07
156	Gall Bladder	0	0	0	0	0	0	1	1	1	3	3	5	6	5	7	6	38	1.07
157	Pancreas	0	1	0	0	0	0	1	1	1	4	0	2	1	0	3	3	17	0.48
158	Retroperitoneum	1	0	0	0	0	0	0	1	1	0	1	1	4	1	0	2	12	0.34
159	Other Dig Sys	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	4	0.11
160	Nasal Cavity	0	0	1	0	0	0	0	1	1	2	3	2	3	0	2	0	15	0.42
161	Larynx	0	0	0	0	0	0	1	0	1	3	2	0	0	4	2	0	13	0.37
162	Lung	0	0	0	1	0	0	2	0	5	5	10	9	8	8	7	5	60	1.69
163	Pleura	0	0	0	0	0	1	1	1	0	0	1	2	2	2	1	1	12	0.34
164	Thymus	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.03
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
170	Bone	2	2	4	2	0	1	3	1	1	0	2	3	2	2	2	1	28	0.79
171	Conn Tissue	0	0	0	1	2	0	1	1	3	2	3	0	0	1	1	1	16	0.45
172	Skin Melanoma	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	4	0.11
173	Skin Other	0	0	0	1	1	1	1	1	1	2	7	3	9	4	3	3	37	1.04
174	Breast Female	0	0	0	1	5	17	49	80	121	130	109	83	88	47	34	58	822	23.13
179	Uterine Un	0	0	0	0	0	0	0	0	2	3	5	2	0	3	0	1	16	0.45
180	Cervix Uteri	0	0	0	0	2	14	28	64	72	115	101	83	79	69	27	29	683	19.22
181	Placenta	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3	0.08
182	Body Uterus	0	0	0	0	0	0	0	5	1	10	20	12	17	16	3	4	88	2.48
183	Ovary	2	0	1	1	2	8	7	16	12	30	21	20	12	14	10	5	161	4.53
184	Vagina	0	0	0	0	0	1	1	3	3	2	2	2	7	7	5	6	39	1.10
188	Uri Bladder	1	0	0	0	0	0	0	1	1	0	3	1	1	4	5	4	21	0.59
189	Kidney	1	2	0	0	1	1	1	1	0	2	1	2	3	1	0	0	16	0.45
190	Eye	3	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	5	0.14
191	Brain	4	10	3	2	2	7	6	8	4	6	3	6	6	1	1	1	70	1.97
192	Nervous System	1	0	1	1	0	0	1	0	1	0	1	0	0	0	0	0	6	0.17
193	Thyroid Gland	0	0	2	2	9	8	6	9	9	8	11	7	10	5	3	5	94	2.64
194	Oth Endo Gland	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2	0.06
195	Ill Def Sites	0	0	0	1	1	1	0	2	0	0	0	1	5	0	0	2	13	0.37
196	Sec Lymph Node	0	0	0	0	0	0	1	3	2	3	5	3	3	2	2	3	27	0.76
197	Sec Res Etc	0	0	0	0	0	0	0	1	5	4	6	4	9	2	7	3	41	1.15
198	Sec Other	0	0	0	0	1	1	1	2	1	4	1	1	2	3	3	0	20	0.56
199	Primary Unk	0	0	2	0	1	4	1	12	4	9	8	11	20	14	10	21	117	3.29
200	Lymphosarcoma	0	1	0	1	0	0	0	0	1	2	0	1	0	4	2	2	14	0.39
201	Hodgkins Dis	0	3	1	0	1	5	3	1	2	1	1	0	0	4	0	3	25	0.70
202	Oth Lymphoma	0	2	0	1	4	2	3	2	1	6	3	4	8	10	10	4	60	1.69
203	Mult Myeloma	0	0	0	0	0	0	0	0	1	1	3	2	2	6	1	3	19	0.53
204	Leuk Lymphatic	3	5	3	2	2	0	2	0	0	2	1	0	1	0	1	0	22	0.62
205	Leuk Myelocytic	0	1	1	2	4	3	7	6	3	2	8	4	6	4	3	1	55	1.55
206	Leuk Monocytic	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.03
207	Leuk Misc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk Uns	3	1	1	1	0	0	1	0	1	1	3	0	1	0	1	0	14	0.39
	TOTAL	**22**	**30**	**22**	**24**	**44**	**90**	**153**	**264**	**328**	**440**	**439**	**384**	**448**	**360**	**246**	**260**	**3554**	
	%	*0.6*	*0.8*	*0.6*	*0.6*	*1.2*	*2.5*	*4.3*	*7.4*	*9.2*	*12.3*	*12.3*	*10.8*	*12.6*	*10.1*	*6.9*	*7.3*	*100.0*	

TABLE BLR-3(a):
Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error (SE)) and Truncated (35-64 Yrs) (TR) Incidence Rate per 100,000 population: 1997-1998 - Males
Bangalore

ICD-9	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	CR	AAR	SE	TR
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	1.6	0.9	0.0	0.0	1.7	0.09	**0.15**	0.07	0.41
141	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.7	1.2	3.5	9.4	15.7	9.4	13.5	29.3	21.5	1.96	**3.27**	0.33	5.81
142	0.0	0.2	0.0	0.2	0.3	0.2	0.4	0.0	0.3	0.8	0.5	1.6	5.1	1.5	0.0	0.0	0.37	**0.49**	0.12	1.16
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.0	2.4	3.4	1.5	1.8	0.0	0.22	**0.40**	0.11	0.99
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.6	0.5	0.8	3.4	4.5	1.8	0.0	0.30	**0.52**	0.13	1.05
145	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	1.2	2.3	5.2	12.6	8.5	16.5	11.0	11.6	1.35	**2.30**	0.28	4.35
146	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.9	1.9	5.2	11.8	9.4	25.4	7.3	9.9	1.38	**2.45**	0.29	4.31
147	0.0	0.0	0.0	0.5	0.2	0.6	0.0	0.0	0.3	0.0	1.0	0.8	3.4	1.5	0.0	5.0	0.35	**0.51**	0.12	0.76
148	0.0	0.0	0.0	0.0	0.5	0.0	0.4	1.2	1.9	6.2	8.9	20.5	29.9	31.4	31.2	38.0	3.16	**5.40**	0.43	9.75
149	0.0	0.0	0.0	0.2	0.0	0.2	0.2	0.0	0.0	1.6	0.5	2.4	6.8	6.0	3.7	14.9	0.63	**1.10**	0.19	1.58
150	0.0	0.0	0.0	0.0	0.2	0.4	1.1	0.9	1.6	9.4	15.1	35.4	28.2	38.9	47.7	34.7	4.08	**6.95**	0.48	12.95
151	0.0	0.0	0.0	0.0	0.3	0.9	1.5	1.9	5.3	7.4	15.6	24.4	32.4	68.8	69.7	67.8	5.20	**8.92**	0.55	12.68
152	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.4	0.0	0.0	1.7	0.0	0.0	1.7	0.11	**0.15**	0.07	0.40
153	0.0	0.0	0.0	0.2	0.0	0.4	0.0	0.2	1.9	1.9	5.7	11.0	6.8	13.5	22.0	9.9	1.38	**2.32**	0.28	4.00
154	0.0	0.0	0.0	0.2	1.3	0.2	0.7	2.1	3.1	1.9	8.3	11.0	16.2	19.5	25.7	18.2	2.29	**3.58**	0.34	6.23
155	0.2	0.0	0.0	0.0	0.0	0.2	0.4	0.9	0.0	1.2	5.7	8.7	15.4	12.0	22.0	21.5	1.55	**2.68**	0.30	4.43
156	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.2	1.6	1.6	2.4	0.9	6.0	3.7	11.6	0.55	**0.89**	0.17	1.27
157	0.0	0.2	0.2	0.0	0.0	0.0	0.7	0.5	0.9	1.9	1.6	3.9	4.3	10.5	12.8	1.7	0.79	**1.27**	0.21	1.95
158	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.5	0.3	1.2	1.6	0.8	2.6	3.0	3.7	3.3	0.39	**0.62**	0.14	1.09
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.8	0.0	0.0	1.8	0.0	0.06	**0.08**	0.05	0.14
160	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.2	1.2	0.8	0.5	1.6	1.7	3.0	1.8	1.7	0.33	**0.48**	0.12	0.93
161	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	2.5	3.9	6.3	15.7	13.7	31.4	20.2	16.5	2.05	**3.58**	0.35	6.09
162	0.0	0.0	0.0	0.0	0.2	0.0	0.9	1.6	2.8	6.2	13.6	24.4	23.9	53.9	58.7	46.3	4.02	**7.05**	0.49	10.47
163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	1.6	0.0	1.7	1.5	5.5	8.3	0.30	**0.51**	0.13	0.60
164	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.07	**0.08**	0.04	0.22
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
170	0.2	0.0	0.5	0.5	0.2	0.2	0.0	0.7	0.3	0.4	0.5	2.4	0.0	1.5	1.8	8.3	0.46	**0.65**	0.13	0.67
171	0.2	0.2	0.0	0.2	0.8	0.6	0.4	0.7	0.6	2.3	0.5	0.8	4.3	1.5	0.0	1.7	0.61	**0.72**	0.14	1.44
172	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.0	0.8	0.0	1.5	1.8	0.0	0.11	**0.19**	0.08	0.31
173	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.9	1.2	1.6	3.9	5.1	9.0	11.0	9.9	0.74	**1.28**	0.21	1.86
175	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.0	0.0	1.5	1.8	0.0	0.07	**0.12**	0.06	0.08
185	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	3.7	3.1	16.2	34.4	53.2	89.3	2.55	**4.88**	0.42	3.23
186	0.4	0.0	0.0	0.2	0.7	0.9	0.9	0.2	2.2	1.6	1.0	0.0	0.0	1.5	0.0	3.3	0.61	**0.70**	0.12	0.94
187	0.2	0.0	0.0	0.0	0.0	0.2	0.4	0.7	0.9	2.3	1.6	6.3	4.3	6.0	7.3	5.0	0.79	**1.24**	0.20	2.38
188	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	1.2	1.6	3.1	6.3	7.7	9.0	25.7	26.5	1.29	**2.24**	0.27	2.94
189	0.2	0.0	0.0	0.0	0.0	0.0	0.4	0.7	1.6	1.6	3.7	4.7	6.0	10.5	3.7	9.9	0.92	**1.51**	0.22	2.74
190	1.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	1.5	0.0	1.7	0.17	**0.34**	0.08	0.06
191	0.8	0.7	1.3	0.9	0.3	1.5	2.2	3.3	3.1	7.4	3.1	3.9	6.8	18.0	11.0	5.0	2.27	**2.93**	0.28	4.55
192	0.0	0.0	0.2	0.0	0.2	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	3.0	1.8	1.7	0.15	**0.23**	0.09	0.04
193	0.0	0.0	0.2	0.0	0.2	0.4	0.7	0.5	1.6	1.6	3.1	3.9	1.7	1.5	3.7	5.0	0.68	**0.95**	0.16	1.94
194	0.4	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.09	**0.17**	0.05	0.18
195	0.4	0.0	0.4	0.0	0.3	0.2	0.0	0.7	0.9	0.8	1.0	3.1	0.9	0.0	0.0	6.6	0.48	**0.65**	0.13	1.14
196	0.0	0.2	0.0	0.0	0.0	0.4	0.2	0.2	0.9	1.6	6.3	6.3	9.4	13.5	5.5	6.6	1.09	**1.80**	0.24	3.56
197	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.5	0.3	2.7	2.1	4.7	7.7	12.0	16.5	5.0	0.98	**1.66**	0.24	2.62
198	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.7	1.2	1.6	2.6	2.4	4.3	6.0	5.5	9.9	0.72	**1.13**	0.19	1.96
199	0.0	0.0	0.0	0.2	0.3	0.7	0.4	0.9	1.9	3.5	6.3	13.4	7.7	18.0	31.2	33.1	2.12	**3.48**	0.34	4.96
200	0.0	0.5	0.2	0.0	0.3	0.4	0.4	0.0	0.0	0.8	0.5	2.4	2.6	4.5	3.7	6.6	0.52	**0.71**	0.15	0.88
201	0.2	0.9	0.9	0.4	0.2	1.3	0.4	0.5	0.6	0.4	3.1	0.8	2.6	3.0	0.0	3.3	0.78	**0.84**	0.15	1.24
202	0.4	0.7	0.9	0.4	0.3	0.4	1.5	1.2	3.1	4.3	5.2	6.3	8.5	22.5	12.8	11.6	1.97	**2.89**	0.30	4.41
203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.9	1.2	4.2	3.1	13.7	4.5	7.3	6.6	0.89	**1.46**	0.22	3.39
204	2.0	0.9	1.3	1.1	0.8	0.4	0.0	0.5	0.3	0.0	0.0	0.8	1.7	0.0	5.5	6.6	0.89	**1.14**	0.16	0.48
205	0.8	0.7	0.4	0.2	1.5	0.9	1.3	1.2	4.0	1.2	3.1	5.5	3.4	4.5	7.3	1.7	1.42	**1.73**	0.21	2.88
206	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
207	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	**0.02**	0.01	0.00
208	0.2	0.7	0.4	0.5	0.2	0.6	0.2	0.2	0.3	0.8	0.0	1.6	0.9	0.0	3.7	5.0	0.50	**0.56**	0.12	0.58
All	**7.8**	**5.9**	**7.1**	**6.1**	**9.9**	**13.4**	**18.6**	**27.2**	**56.8**	**97.8**	**166.2**	**296.8**	**346.1**	**552.7**	**603.2**	**615.7**	**56.8**	**91.9**	**1.72**	**145.0**

TABLE BLR-3(b):
Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error (SE)) and Truncated (35-64 Yrs) (TR) Incidence Rate per 100,000 population: 1997-1998 - Females
Bangalore

ICD-9	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	CR	AAR	SE	TR
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.7	1.0	0.0	0.0	0.0	0.0	0.08	**0.13**	0.06	0.40
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	2.1	4.6	4.9	5.4	6.4	6.3	3.4	0.67	**1.21**	0.21	2.62
142	0.0	0.0	0.2	0.2	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.12	**0.18**	0.08	0.00
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	2.1	5.2	4.9	4.5	19.1	12.6	6.8	0.98	**1.83**	0.27	2.79
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.5	0.7	1.0	0.0	0.0	0.0	0.0	0.10	**0.15**	0.07	0.46
145	0.0	0.0	0.0	0.0	0.0	0.2	0.8	1.1	5.5	10.4	7.8	19.5	25.0	30.2	29.4	16.9	2.94	**5.10**	0.43	10.29
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.7	1.0	1.8	6.4	2.1	3.4	0.27	**0.50**	0.14	0.62
147	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.4	0.0	0.7	1.0	0.0	1.6	2.1	5.1	0.22	**0.33**	0.11	0.32
148	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1	0.8	4.1	2.6	3.9	6.3	11.1	2.1	8.5	0.90	**1.48**	0.23	2.88
149	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	1.0	0.0	0.0	0.9	0.0	2.1	5.1	0.18	**0.28**	0.09	0.37
150	0.0	0.0	0.0	0.0	0.0	0.2	0.5	2.3	3.4	6.7	13.7	27.3	28.6	44.5	52.5	33.8	3.79	**6.78**	0.51	11.83
151	0.0	0.0	0.0	0.2	0.5	0.9	2.1	4.0	4.7	4.7	9.1	19.5	21.4	33.4	37.8	20.3	3.26	**5.33**	0.44	9.34
152	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.0	1.0	0.0	0.0	0.0	0.0	0.10	**0.12**	0.06	0.38
153	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	3.0	4.7	4.6	8.8	5.4	3.2	10.5	6.8	1.08	**1.78**	0.25	4.19
154	0.0	0.0	0.0	0.0	0.4	0.8	0.5	0.9	4.2	1.0	5.9	7.8	15.2	14.3	18.9	15.2	1.71	**2.81**	0.32	5.09
155	0.2	0.0	0.0	0.0	0.0	0.2	0.3	0.0	1.7	1.0	2.0	3.9	3.6	7.9	12.6	11.8	0.77	**1.37**	0.22	1.80
156	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.4	1.6	2.0	4.9	5.4	7.9	14.7	10.1	0.77	**1.41**	0.23	2.10
157	0.0	0.2	0.0	0.0	0.0	0.0	0.3	0.3	0.4	2.1	0.0	1.9	0.9	0.0	6.3	5.1	0.35	**0.54**	0.14	0.92
158	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.0	0.7	1.0	3.6	1.6	0.0	3.4	0.24	**0.42**	0.12	0.84
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.9	1.6	0.0	1.7	0.08	**0.14**	0.07	0.20
160	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.3	0.4	1.0	2.0	1.9	2.7	0.0	4.2	0.0	0.31	**0.49**	0.13	1.25
161	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.4	1.6	1.3	0.0	0.0	6.4	4.2	0.0	0.27	**0.48**	0.14	0.60
162	0.0	0.0	0.0	0.2	0.0	0.0	0.5	0.0	2.1	2.6	6.5	8.8	7.1	12.7	14.7	8.5	1.22	**2.14**	0.28	4.02
163	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.0	0.0	0.7	1.9	1.8	3.2	2.1	1.7	0.24	**0.42**	0.12	0.65
164	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	**0.02**	0.02	0.00
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
170	0.4	0.4	0.7	0.4	0.0	0.2	0.8	0.3	0.4	0.0	1.3	2.9	1.8	3.2	4.2	1.7	0.57	**0.77**	0.15	0.95
171	0.0	0.0	0.0	0.2	0.4	0.0	0.3	0.3	1.3	1.0	2.0	0.0	0.0	1.6	2.1	1.7	0.33	**0.45**	0.12	0.82
172	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.7	0.0	0.0	1.6	0.0	1.7	0.08	**0.15**	0.07	0.21
173	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.3	0.4	1.0	4.6	2.9	8.0	6.4	6.3	5.1	0.75	**1.27**	0.21	2.47
174	0.0	0.0	0.0	0.2	0.9	3.2	12.7	22.7	51.3	67.3	71.2	80.9	78.6	74.6	71.5	98.1	16.76	**25.16**	0.91	59.41
179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.6	3.3	1.9	0.0	4.8	0.0	1.7	0.33	**0.57**	0.14	1.24
180	0.0	0.0	0.0	0.0	0.4	2.6	7.3	18.1	30.5	59.5	66.0	80.9	70.6	109.6	56.7	49.0	13.93	**21.93**	0.87	51.12
181	0.0	0.0	0.0	0.0	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	**0.05**	0.03	0.00
182	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.4	5.2	13.1	11.7	15.2	25.4	6.3	6.8	1.79	**3.18**	0.35	6.94
183	0.4	0.0	0.2	0.2	0.4	1.5	1.8	4.5	5.1	15.5	13.7	19.5	10.7	22.2	21.0	8.5	3.28	**5.06**	0.41	10.97
184	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.9	1.3	1.0	1.3	1.9	6.3	11.1	10.5	10.1	0.80	**1.37**	0.23	1.88
188	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.0	2.0	1.0	0.9	6.4	10.5	6.8	0.43	**0.80**	0.17	0.71
189	0.2	0.4	0.0	0.0	0.2	0.2	0.3	0.3	0.0	1.0	0.7	1.9	2.7	1.6	0.0	0.0	0.33	**0.46**	0.12	0.96
190	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	1.6	0.0	0.0	0.10	**0.22**	0.07	0.11
191	0.8	1.8	0.5	0.4	0.4	1.3	1.6	2.3	1.7	3.1	2.0	5.8	5.4	1.6	2.1	1.7	1.43	**1.60**	0.22	3.15
192	0.2	0.0	0.2	0.2	0.0	0.0	0.3	0.0	0.4	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.12	**0.16**	0.06	0.19
193	0.0	0.0	0.4	0.4	1.6	1.5	1.6	2.6	3.8	4.1	7.2	6.8	8.9	7.9	6.3	8.5	1.92	**2.60**	0.28	5.22
194	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.04	**0.05**	0.04	0.10
195	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.6	0.0	0.0	0.0	1.0	4.5	0.0	0.0	3.4	0.27	**0.39**	0.11	0.83
196	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	0.8	1.6	3.3	2.9	2.7	3.2	4.2	5.1	0.55	**0.90**	0.18	1.88
197	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.1	2.1	3.9	3.9	8.0	3.2	14.7	5.1	0.84	**1.45**	0.23	3.04
198	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.6	0.4	2.1	0.7	1.0	1.8	4.8	6.3	0.0	0.41	**0.67**	0.15	1.08
199	0.0	0.0	0.4	0.0	0.2	0.8	0.3	3.4	1.7	4.7	5.2	10.7	17.9	22.2	21.0	35.5	2.39	**3.93**	0.38	6.43
200	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.4	1.0	0.0	1.0	0.0	6.4	4.2	3.4	0.29	**0.48**	0.14	0.40
201	0.0	0.5	0.2	0.0	0.2	0.9	0.8	0.3	0.8	0.5	0.7	0.0	0.0	6.4	0.0	5.1	0.51	**0.59**	0.14	0.42
202	0.0	0.4	0.0	0.2	0.7	0.4	0.8	0.6	0.4	3.1	2.0	3.9	7.1	15.9	21.0	6.8	1.22	**1.99**	0.27	2.54
203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	2.0	1.9	1.8	9.5	2.1	5.1	0.39	**0.72**	0.17	0.98
204	0.6	0.9	0.5	0.4	0.4	0.0	0.5	0.0	0.0	1.0	0.7	0.0	0.9	0.0	2.1	0.0	0.45	**0.46**	0.11	0.42
205	0.0	0.2	0.2	0.4	0.7	0.6	1.8	1.7	1.3	1.0	5.2	3.9	5.4	6.4	6.3	1.7	1.12	**1.51**	0.22	2.81
206	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	**0.02**	0.02	0.00
207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
208	0.6	0.2	0.2	0.2	0.0	0.0	0.3	0.0	0.4	0.5	2.0	0.0	0.9	0.0	2.1	0.0	0.29	**0.42**	0.10	0.62
All	**4.4**	**5.6**	**4.1**	**4.8**	**8.2**	**17.1**	**40.5**	**75.4**	**138.4**	**227.6**	**287.7**	**374.2**	**400.6**	**572.3**	**516.7**	**440.2**	**72.4**	**114.8**	**0.91**	**231.8**

TABLE BLR-4(a): Cumulative Rate (Cu.Rate%) & Cumulative Risk (Cu. Risk) of Individual Sites (ICD-9) Based on Age Specific Rates (from 0–64 Years and from 0–74 Years) 1997-1998: Males - Bangalore

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu. Rate %	Cu. Risk	Cu. Rate%	Cu. Risk
140	Lip	0.01	0.01	0.01	0.01
141	Tongue	0.27	0.27	0.42	0.42
142	Salivary Gland	0.06	0.06	0.06	0.06
143	Gum	0.04	0.04	0.05	0.05
144	Floor of Mouth	0.06	0.06	0.07	0.07
145	Other Mouth	0.24	0.23	0.29	0.29
146	Oropharynx	0.28	0.28	0.32	0.32
147	Nasopharynx	0.04	0.04	0.04	0.04
148	Hypopharynx	0.50	0.50	0.66	0.66
149	Pharynx Etc.	0.09	0.09	0.11	0.11
150	Oesophagus	0.66	0.65	0.89	0.89
151	Stomach	0.79	0.79	1.14	1.13
152	Small Intestine	0.01	0.01	0.01	0.01
153	Colon	0.21	0.21	0.32	0.32
154	Rectum	0.32	0.32	0.45	0.45
155	Liver	0.22	0.22	0.33	0.33
156	Gall Bladder	0.07	0.07	0.09	0.09
157	Pancreas	0.12	0.12	0.19	0.19
158	Retroperitoneum	0.05	0.05	0.07	0.07
159	Other Dig Sys	0.01	0.00	0.01	0.01
160	Nasal Cavity	0.05	0.05	0.06	0.06
161	Larynx	0.37	0.37	0.47	0.47
162	Lung	0.64	0.64	0.93	0.93
163	Pleura	0.03	0.03	0.05	0.05
164	Thymus	0.01	0.01	0.01	0.01
165	Other Resp	0.00	0.00	0.00	0.00
170	Bone	0.04	0.04	0.05	0.05
171	Conn Tissue	0.07	0.07	0.07	0.07
172	Skin Melanoma	0.02	0.02	0.03	0.03
173	Skin Other	0.11	0.11	0.17	0.17
175	Breast Male	0.01	0.01	0.02	0.02
185	Prostate	0.29	0.29	0.56	0.55
186	Testis	0.05	0.05	0.05	0.05
187	Penis Etc	0.11	0.11	0.15	0.15
188	Uri Bladder	0.15	0.15	0.28	0.28
189	Kidney	0.15	0.15	0.17	0.17
190	Eye	0.02	0.01	0.02	0.01
191	Brain	0.27	0.27	0.32	0.32
192	Nervous Sys	0.02	0.02	0.03	0.03
193	Thyroid Gland	0.08	0.08	0.10	0.10
194	Oth Endo Gland	0.01	0.01	0.01	0.01
195	Ill Def Sites	0.04	0.04	0.04	0.04
196	Sec Lymph Node	0.20	0.19	0.22	0.22
197	Sec Res Etc	0.15	0.15	0.24	0.24
198	Sec Other	0.10	0.10	0.12	0.12
199	Primary Unk	0.27	0.27	0.42	0.42
200	Lymphosarcoma	0.06	0.06	0.08	0.08
201	Hodgkins Dis	0.08	0.08	0.08	0.08
202	Oth Lymph Node	0.28	0.28	0.34	0.34
203	Mult Myeloma	0.14	0.14	0.18	0.18
204	Leuk Lymphatic	0.05	0.05	0.08	0.08
205	Leuk Myelocytic	0.14	0.14	0.18	0.18
206	Leuk Monocytic	0.00	0.00	0.00	0.00
207	Leuk Misc	0.00	0.00	0.00	0.00
208	Leuk Uns	0.03	0.03	0.05	0.05
	ALL SITES	**8.06**	**7.75**	**11.08**	**10.49**

TABLE BLR-4(b): Cumulative Rate (Cu.Rate%) & Cumulative Risk (Cu. Risk) of Individual Sites (ICD-9) Based on Age Specific Rates (from 0–64 Years and from 0–74 Years) 1997-1998: Females - Bangalore

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu. Rate %	Cu. Risk	Cu. Rate%	Cu. Risk
140	Lip	0.01	0.01	0.01	0.01
141	Tongue	0.12	0.12	0.15	0.15
142	Salivary Gland	0.02	0.02	0.02	0.02
143	Gum	0.19	0.19	0.25	0.25
144	Floor of Mouth	0.01	0.01	0.01	0.01
145	Other Mouth	0.50	0.50	0.65	0.65
146	Oropharynx	0.05	0.05	0.06	0.06
147	Nasopharynx	0.02	0.02	0.03	0.03
148	Hypopharynx	0.15	0.15	0.16	0.16
149	Pharynx Etc	0.01	0.01	0.02	0.02
150	Oesophagus	0.64	0.63	0.90	0.89
151	Stomach	0.50	0.50	0.69	0.69
152	Small Intestine	0.01	0.01	0.01	0.01
153	Colon	0.15	0.15	0.21	0.21
154	Rectum	0.26	0.25	0.35	0.35
155	Liver	0.10	0.10	0.17	0.17
156	Gall Bladder	0.11	0.11	0.19	0.19
157	Pancreas	0.03	0.03	0.06	0.06
158	Retroperitoneum	0.04	0.04	0.04	0.04
159	Other Dig Sys	0.01	0.01	0.01	0.01
160	Nasal Cavity	0.04	0.04	0.06	0.06
161	Larynx	0.05	0.05	0.07	0.07
162	Lung	0.20	0.20	0.28	0.28
163	Pleura	0.04	0.04	0.05	0.05
164	Thymus	0.00	0.00	0.00	0.00
165	Other Resp	0.00	0.00	0.00	0.00
170	Bone	0.06	0.06	0.09	0.08
171	Conn Tissue	0.04	0.04	0.05	0.05
172	Skin Melanoma	0.01	0.01	0.01	0.01
173	Skin Other	0.12	0.12	0.15	0.15
174	Breast Female	2.32	2.29	2.68	2.64
179	Uterine Un	0.06	0.06	0.06	0.06
180	Cervix Uteri	2.23	2.20	2.51	2.48
181	Placenta	0.00	0.00	0.00	0.00
182	Body Uterus	0.36	0.36	0.39	0.39
183	Ovary	0.48	0.48	0.58	0.58
184	Vagina	0.12	0.12	0.17	0.17
188	Uri Bladder	0.06	0.06	0.11	0.11
189	Kidney	0.05	0.05	0.05	0.05
190	Eye	0.01	0.01	0.01	0.01
191	Brain	0.14	0.14	0.15	0.15
192	Nervous System	0.01	0.01	0.01	0.01
193	Thyroid Gland	0.23	0.23	0.27	0.27
194	Oth Endo Gland	0.00	0.00	0.00	0.00
195	Ill Def Sites	0.03	0.03	0.03	0.03
196	Sec Lymph Node	0.08	0.08	0.10	0.10
197	Sec Res Etc	0.12	0.12	0.19	0.19
198	Sec Other	0.06	0.06	0.09	0.09
199	Primary Unk	0.34	0.34	0.44	0.44
200	Lymphosarcoma	0.05	0.05	0.07	0.07
201	Hodgkins Dis	0.06	0.06	0.06	0.06
202	Oth Lymphoma	0.18	0.18	0.28	0.28
203	Mult Myeloma	0.08	0.08	0.09	0.09
204	Leuk Lymphatic	0.03	0.03	0.04	0.04
205	Leuk Myelocytic	0.14	0.14	0.18	0.18
206	Leuk Monocytic	0.00	0.00	0.00	0.00
207	Leuk Misc	0.00	0.00	0.00	0.00
208	Leuk Uns	0.03	0.03	0.04	0.04
	ALL SITES	**10.80**	**10.24**	**13.39**	**12.53**

POPULATION BASED RURAL CANCER REGISTRY, BARSHI (BARSHI, PARANDA & BHUM)
Nargis Dutt Memorial Cancer Hospital, Barshi

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Dr B.M. Nene, Co-Principal Investigator
Mr M.K. Chauhan, Co-investigator
Mr D.N. Rao, Co-investigator
Dr V.R. Keskar, Co-Investigator
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The Rural Cancer Registry: Barshi, Paranda & Bhum, which was set up in 1987, is the first Rural Cancer Registry in the country.

The registry area comprises rural area of three sub-districts in western India viz. Barshi in Solapur district and Paranda & Bhum in Osmanabad district, situated in the campus of Nargis Dutt Memorial Cancer Hospital (NDMCH) (located on the outskirts of Barshi town) with a total population about 0.4 million in 346 villages spread over 3713 Sq. km. The village is the basic administrative unit in rural areas and is defined as having greater than 25% of the male working population engaged in agricultural activities, a population of less than 400 persons per Sq. km. and a total population of generally less than 5000. The registry area is situated between latitudes 17.1° & 18.4° N longitudes 76° & 76.4°E. Most of the population are Hindus (96%), Muslims accounting for 3% and other religious groups 1%. Diagnosis and treatment facilities within the area itself are almost non-existent. The villagers seek care from various centres even as far as 400 kms.

The registry is jointly funded by the Tata Memorial Centre, Mumbai and the Indian Council of Medical Research, New Delhi. The diagnostic and treatment facilities are provided by NDMCH with technological support from Tata Memorial Hospital.

The usual method of registration has been modified to overcome deficiencies in diagnostic services in the rural setting. Trained field investigators visit the villages regularly and interact with the rural community to identify and motivate likely cancer cases to visit NDMCH for early diagnosis and treatment. To screen symptomatic cases cancer detection clinics are held biannually in each of the 12 zones, into which the Registry area is divided. Data on cancer cases from the area are also collected from various hospitals & histopathological laboratories (situated far & wide), which serve the population. However 60% of cases, are registered from NDMCH to which the field investigator generally refer the suspected cases.

Information on deaths is collected from village death records and also directly from the local community (during village visits). As deaths are not generally medically certified, relatives of all deceased

are contacted to collect relevant information to assist in 'follow back' to the medical records in the treating hospital or physician to identify proven cancer cases. The diagnostic charges for all patients from the Registry area are borne by the Registry and for disadvantaged patients, the treatment is free.

The age-sex growth rates are estimated from the 1981 & 1991 sample survey of rural population in each of the two districts (conducted during the decennial census) and applied to the reported population of 1991, to obtain the extrapolated population for 1997-1998.

Cancer Incidence

During the year 1997-98, 193 males and 211 females were diagnosed as cancer cases. The age-adjusted-incidence rates were 43.9 per 100,000 for males and 51.7 per 100,000 for females.

Among males, hypopharynx, oesophagus, rectum, liver and penis emerged as the leading sites of cancer and cervix and breast continued to be the leading sites of cancer among females. The following table gives the period-wise incidence of common cancer in males and females.

Period-wise incidence of common cancer - Males (AAR per 100,000)

ICD9	Site Description	1988-90	1991-93	1994-96	1997-98
148	Hypopharynx	5.8	6.2	3.6	4.6
150	Oesophagus	6.0	4.6	3.1	3.9
154	Rectum	2.8	2.0	1.2	3.0
155	Liver	1.2	2.4	1.7	4.6
162	Lung	1.1	1.3	2.0	1.6
185	Prostate	3.9	2.9	3.2	0.7
187	Penis	3.9	2.9	3.2	2.0
205	Leuk Myeloid	0.9	1.4	1.7	1.7
140-208	**All Sites**	**51.4**	**49.3**	**43.5**	**43.9**

Period-wise incidence of common cancer - Females

ICD9	Site Description	1988-90	1991-93	1994-96	1997-98
174	Breast	7.9	8.2	9.1	8.1
180	Cervix	25.0	30.9	28.6	21.9
140-208	**All Sites**	**51.6**	**59.8**	**56.7**	**51.7**

In the year 1997-98, the incidence rates for liver and hypopharyngeal cancer were leading sites among males (4.6 per 100,000) and cervix continued to have the highest rate among females (21.9 per 100,000). From the above table it can be seen that the rate for cervical cancer has shown a declining trend from 25.0 in 1988-90 to 21.9 in 1997-98. The increase in the liver cancer rate in 1997-98 compared to earlier years is not known and the reason for this increase needs to be studied in detail.

Cancer Mortality

In all 178 deaths among males and 154 among females were reported. The age adjusted death rates was 40.2 per 100,000 in males and 38.9 per 100,000 in females.

Quality Control

Quality control checks formulated by the National Cancer Registry Programme and International Agency for Research on Cancer are carried out routinely.

The data are evaluated for completeness by conducting annual house-to-house survey in a sample of villages. The indications are that a diagnosed case is not likely to be missed by the registry. However there is likely to be under-registration due to undiagnosed cases by registry. The under-registration is because the case do not reach to any of the diagnostic centre and medical records by the private practitioners are almost non-existent.

The registry activities have enhanced cancer awareness in the population and this has resulted in improved stage at diagnosis and improved 5 year survival in cervical cancers (1,2).

References

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2. K. Jayant, B.M. Nene, K.A. Dinshaw, A.M. Budukh, P.S. Dale. Survival from Cervical Cancer in Barshi registry rural India. In: Sankaranarayanan R., Black R.J., Parkin D.M., editors. Cancer Survival in developing countries, IARC Scientific. Publication No.135, Lyon, France: International Agency for Research on Cancer, 1998: 123-34.

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FIGURE BRS-1:

Population Pyramid showing Age Distribution : 1997-98

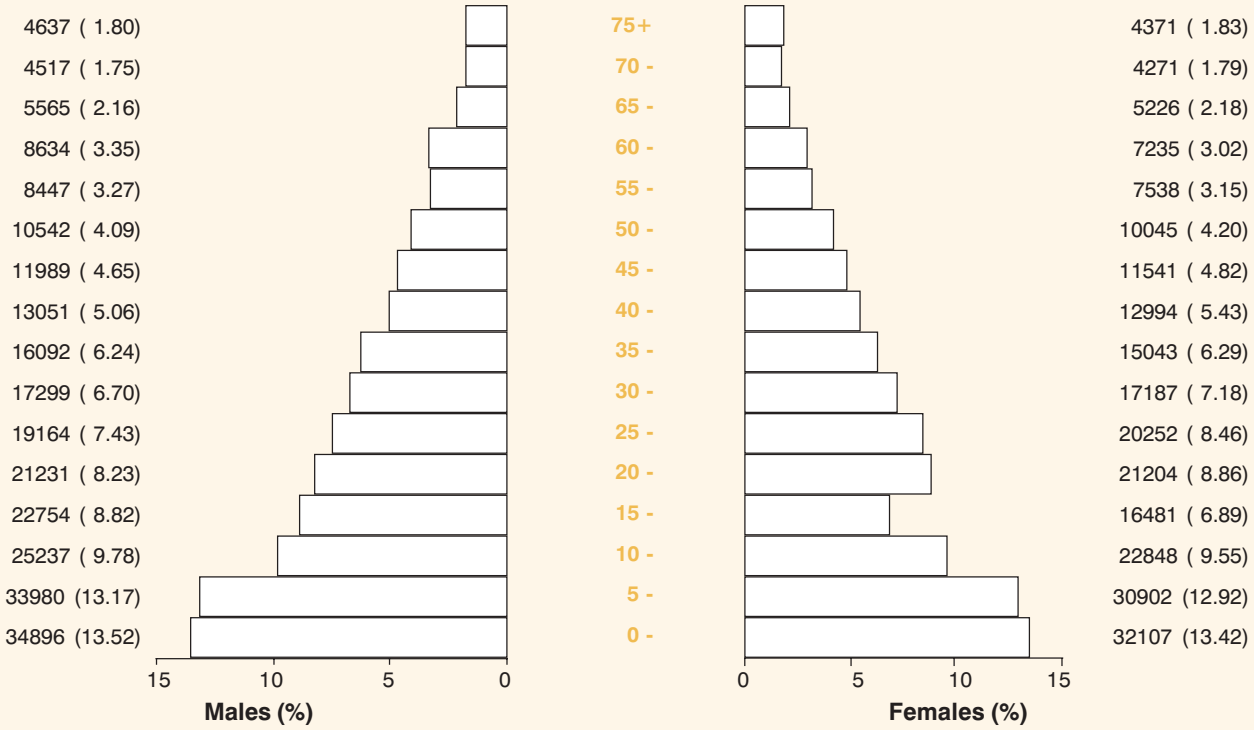

TABLE BRS-1:

Main Sources* of Registration of Incident Cases of Cancer in Barshi - 1997-1998

Name of the Institution	Number	%
Barshi Cancer Hospital	245	60.6
Jagadale Mama	28	6.9
Hiremath	24	5.9
Camp	16	4.0
Dr.A.S.Kothare	11	2.7
TMH-Mumbai	9	2.2
Civil Hospital	8	2.0
Siddeshwara	5	1.2
Dr.Yadav Hospital	4	1.0
NH/H Ahmednagar	4	1.0
Others	50	12.4
Total All Sources	**404**	**100**

** 1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 1997-98.*

** 2. The numbers and proportion listed are the minimum number of cases. Institutions could have registered / reported more cases, since duplicate registrations and non-resident/registry cases are not included.*

TABLE BRS-2(a): Number of Incident Cancers by Five Year Age Group and Site (ICD-9): 1997–1998 – Males

%= Relative Proportion of Cancers of All Sites.

Barshi

ICD-9	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	Total	%
140	Lip	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.52
141	Tongue	0	0	0	0	0	0	0	0	1	0	0	0	2	0	2	0	5	2.59
142	Salivary Gland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
143	Gum	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	5	2.59
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
145	Other Mouth	0	0	0	0	0	0	1	1	2	1	1	0	1	0	0	1	8	4.15
146	Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.52
147	Nasopharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
148	Hypopharynx	0	0	0	0	0	0	1	1	1	1	0	2	2	3	5	4	20	10.36
149	Pharynx etc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
150	Oesophagus	0	0	0	0	0	0	0	1	2	3	2	1	4	0	2	2	17	8.81
151	Stomach	0	0	0	0	0	0	0	1	0	0	2	1	1	1	0	0	6	3.11
152	Small Inte	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
153	Colon	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	4	2.07
154	Rectum	0	0	0	0	1	0	1	0	0	1	1	4	1	2	1	1	13	6.74
155	Liver	0	0	0	0	0	0	1	0	1	3	0	2	5	2	2	4	20	10.36
156	Gall Bladder	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.52
157	Pancreas	0	0	0	0	0	0	0	1	0	0	1	0	1	1	1	0	5	2.59
158	Retroperit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
159	Other Dig	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
160	Nasal Cavity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
161	Larynx	0	0	0	0	0	0	1	0	0	0	0	0	2	1	0	1	5	2.59
162	Lung	0	0	0	0	0	0	1	0	0	1	1	2	0	1	0	1	7	3.63
163	Pleura	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.52
164	Thymus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
170	Bone	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	1.04
171	Connective	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.52
172	Skin Melan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
173	Skin Other	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	1	5	2.59
175	Breast Mal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
185	Prostate	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3	1.55
186	Testis	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	3	1.55
187	Penis etc.	0	0	0	0	0	0	1	0	0	0	0	0	2	2	1	3	9	4.66
188	Uri Bladder	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	0	5	2.59
189	Kidney	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1.04
190	Eye	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
191	Brain	0	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	4	2.07
192	Nervous Sy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
193	Thyroid Gland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.52
194	Oth Endo Gland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
195	Ill Def Si	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.52
196	Sec Lymph	0	0	0	0	0	0	1	0	1	0	0	1	2	2	0	0	7	3.63
197	Sec Res Et	0	0	0	0	0	0	0	0	0	0	2	0	3	3	1	4	13	6.74
198	Sec Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
199	Prim Unk	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.52
200	Lymphosarc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
201	Hodgkins D	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.52
202	Oth Lympho	0	1	0	0	0	0	0	0	0	1	0	1	0	2	0	0	5	2.59
203	Mult Myelo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
204	Leuk Lymph	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	1.04
205	Leuk Myelo	0	0	1	1	0	0	0	2	1	0	1	0	0	1	1	0	8	4.15
206	Leuk Monoc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
207	Leuk other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk Uns	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.52
	TOTAL	**1**	**3**	**2**	**3**	**2**	**1**	**9**	**7**	**13**	**11**	**14**	**18**	**33**	**31**	**19**	**26**	**193**	
	%	*0.5*	*1.5*	*1.0*	*1.5*	*1.0*	*0.5*	*4.6*	*3.6*	*6.7*	*5.7*	*7.2*	*9.3*	*17.1*	*16.0*	*9.8*	*13.4*	*100.0*	

TABLE BRS-2(b): Number of Incident Cancers by Five Year Age Group and Site (ICD-9): 1997–1998 – Females

%= Relative Proportion of Cancers of All Sites.

Barshi

ICD-9	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	Total	%
140	Lip	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.47
141	Tongue	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	0.95
142	Salivary Gland	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.47
143	Gum	0	0	0	0	0	0	0	0	0	0	0	2	1	0	1	0	4	1.9
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	Other Mouth	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	1.42
146	Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
147	Nasopharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	Hypopharynx	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.47
149	Pharynx etc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	Oesophagus	0	0	0	0	0	0	0	0	0	0	1	0	5	2	1	1	10	4.74
151	Stomach	0	0	0	0	0	0	1	1	1	0	0	0	1	0	1	0	5	2.37
152	Small Inte	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153	Colon	0	0	0	0	0	0	0	0	1	0	1	0	0	2	0	0	4	1.9
154	Rectum	0	0	0	0	0	0	0	1	1	0	0	1	2	1	1	0	7	3.32
155	Liver	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.47
156	Gall Bladder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
157	Pancreas	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.47
158	Retroperit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	Other Dig.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	Nasal Cavity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	Larynx	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0.95
162	Lung	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	4	1.9
163	Pleura	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.47
164	Thymus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	Bone	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2	0.95
171	Connective	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	Skin Melan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	Skin Other	0	0	0	0	0	0	1	0	0	0	2	0	0	0	1	0	4	1.9
174	Breast Fem	0	0	0	0	0	0	1	1	4	9	5	4	2	4	0	2	32	15.2
179	Uterine Un	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
180	Cervix Ute	0	0	0	0	1	1	6	8	11	13	10	9	14	9	5	2	89	42.2
181	Placenta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
182	Body Uterus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
183	Ovary	0	0	0	0	0	2	0	1	2	0	2	1	1	0	0	0	9	4.27
184	Vagina	0	0	0	0	0	0	0	0	0	0	2	0	1	1	1	0	5	2.37
188	Uri Bladder	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0.95
189	Kidney	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
190	Eye	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.47
191	Brain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
192	Nervous Sy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
193	Thyroid Gland	0	0	1	0	0	0	0	1	0	2	0	0	0	0	0	0	4	1.9
194	Oth Endo Gland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	Ill Def Si	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.47
196	Sec Lymph	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0.95
197	Sec Res etc.	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	0	4	1.9
198	Sec Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
199	Prim Unk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200	Lymphosarc	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.47
201	Hodgkins D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
202	Oth Lympho	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	3	1.42
203	Mult Myelo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	Leuk Lymph	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.47
205	Leuk Myelo	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0.95
206	Leuk Monoc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
207	Leuk other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	Leuk Uns	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0.95
	TOTAL	**2**	**2**	**2**	**1**	**4**	**4**	**10**	**15**	**25**	**30**	**26**	**18**	**29**	**23**	**14**	**6**	**211**	
	%	*0.9*	*0.9*	*0.9*	*0.4*	*1.9*	*1.9*	*4.7*	*7.1*	*11.8*	*14.2*	*12.3*	*8.5*	*13.7*	*10.9*	*6.6*	*2.8*	*100*	

TABLE BRS-3(a):
Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error (SE)) and Truncated (35-64 Yrs) (TR) Incidence Rate per 100,000 population: 1997-1998 - Males
Barshi

ICD-9	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	CR	AAR	SE	TR
140	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	**0.00**	0.15	0.00
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	11.6	0.0	22.1	0.0	0.97	**1.13**	0.51	2.24
142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	5.9	5.8	9.0	0.0	10.8	0.97	**1.20**	0.53	2.27
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
145	0.0	0.0	0.0	0.0	0.0	0.0	2.9	3.1	7.7	4.2	4.7	0.0	5.8	0.0	0.0	10.8	1.55	**1.76**	0.62	4.41
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0	0.0	0.0	0.19	**0.23**	0.23	0.75
147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
148	0.0	0.0	0.0	0.0	0.0	0.0	2.9	3.1	3.8	4.2	0.0	11.8	11.6	27.0	55.3	43.1	3.88	**4.55**	1.02	5.17
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	7.7	12.5	9.5	5.9	23.2	0.0	22.1	21.6	3.29	**3.92**	0.95	9.79
151	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	9.5	5.9	5.8	9.0	0.0	0.0	1.16	**1.41**	0.57	3.64
152	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
153	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0	5.8	9.0	0.0	0.0	0.78	**0.96**	0.48	2.24
154	0.0	0.0	0.0	0.0	2.4	0.0	2.9	0.0	0.0	4.2	4.7	23.7	5.8	18.0	11.1	10.8	2.52	**3.01**	0.84	5.38
155	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	3.8	12.5	0.0	11.8	29.0	18.0	22.1	43.1	3.88	**4.62**	1.04	8.42
156	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	**0.23**	0.23	0.74
157	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.0	4.7	0.0	5.8	9.0	11.1	0.0	0.97	**1.15**	0.52	2.11
158	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
160	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
161	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	11.6	9.0	0.0	10.8	0.97	**1.12**	0.51	1.50
162	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	4.2	4.7	11.8	0.0	9.0	0.0	10.8	1.36	**1.62**	0.62	3.09
163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	0.0	0.19	**0.22**	0.22	0.00
164	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
170	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39	**0.40**	0.28	0.00
171	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.19	**0.24**	0.24	0.76
172	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
173	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.8	18.0	0.0	10.8	0.97	**1.23**	0.55	1.51
175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
185	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	21.6	0.58	**0.70**	0.41	0.00
186	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0	5.8	9.0	0.0	0.0	0.58	**0.74**	0.43	1.51
187	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	11.6	18.0	11.1	32.3	1.74	**2.04**	0.69	1.50
188	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	5.8	18.0	11.1	0.0	0.97	**1.23**	0.55	1.51
189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	11.1	0.0	0.39	**0.49**	0.35	0.00
190	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
191	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	3.8	0.0	4.7	0.0	5.8	0.0	0.0	0.0	0.78	**0.87**	0.44	2.25
192	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
193	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8	0.19	**0.22**	0.22	0.00
194	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
195	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	**0.00**	0.15	0.00
196	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	3.8	0.0	0.0	5.9	11.6	18.0	0.0	0.0	1.36	**1.64**	0.63	3.00
197	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	0.0	17.4	27.0	11.1	43.1	2.52	**3.07**	0.85	3.78
198	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	0.0	0.0	0.19	**0.27**	0.27	0.00
200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
201	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	**0.18**	0.18	0.00
202	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	5.9	0.0	18.0	0.0	0.0	0.97	**1.03**	0.54	1.57
203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
204	1.4	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.39	**0.50**	0.26	0.00
205	0.0	0.0	2.0	2.2	0.0	0.0	0.0	6.2	3.8	0.0	4.7	0.0	0.0	9.0	11.1	0.0	1.55	**1.71**	0.61	2.70
206	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
208	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	**0.21**	0.21	0.00
All	**1.4**	**4.5**	**4.0**	**6.6**	**4.8**	**2.6**	**26.1**	**21.7**	**49.7**	**46.0**	**66.1**	**106.3**	**191.4**	**279.0**	**210.4**	**280.4**	**37.3**	**43.9**	**3.19**	**71.8**

TABLE BRS-3(b):

Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error (SE)) and Truncated (35-64 Yrs) (TR) Incidence Rate per 100,000 population: 1997-1998 - Females Barshi

ICD-9	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	CR	AAR	SE	TR
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0	0.21	**0.29**	0.29	0.00
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	11.7	0.0	0.42	**0.49**	0.35	0.83
142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	**0.23**	0.23	0.74
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.3	6.9	0.0	11.7	0.0	0.84	**1.04**	0.52	2.61
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.7	5.0	0.0	0.0	0.0	0.0	0.0	0.63	**0.77**	0.44	2.49
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	**0.23**	0.23	0.74
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	34.6	19.1	11.7	11.4	2.09	**2.66**	0.85	5.27
151	0.0	0.0	0.0	0.0	0.0	0.0	2.9	3.3	3.8	0.0	0.0	0.0	6.9	0.0	11.7	0.0	1.04	**1.11**	0.50	2.27
152	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
153	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	5.0	0.0	0.0	19.1	0.0	0.0	0.84	**1.05**	0.53	1.55
154	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	3.8	0.0	0.0	6.6	13.8	9.6	11.7	0.0	1.46	**1.76**	0.67	4.01
155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0	0.21	**0.29**	0.29	0.00
156	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
157	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	**0.19**	0.19	0.00
158	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
160	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
161	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	**0.42**	0.30	0.74
162	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	9.6	11.7	11.4	0.84	**0.98**	0.49	0.74
163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	0.0	0.0	0.21	**0.29**	0.29	0.00
164	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
170	0.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0	0.0	0.0	0.42	**0.53**	0.38	0.85
171	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
172	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
173	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	10.0	0.0	0.0	0.0	11.7	0.0	0.84	**0.90**	0.46	1.61
174	0.0	0.0	0.0	0.0	0.0	0.0	2.9	3.3	15.4	39.0	24.9	26.5	13.8	38.3	0.0	22.9	6.69	**8.10**	1.44	20.39
179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
180	0.0	0.0	0.0	0.0	2.4	2.5	17.5	26.6	42.3	56.3	49.8	59.7	96.8	86.1	58.5	22.9	18.60	**21.92**	2.34	52.46
181	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
182	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
183	0.0	0.0	0.0	0.0	0.0	4.9	0.0	3.3	7.7	0.0	10.0	6.6	6.9	0.0	0.0	0.0	1.88	**2.09**	0.70	5.48
184	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	6.9	9.6	11.7	0.0	1.04	**1.30**	0.58	2.50
188	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	5.0	0.0	0.0	0.0	0.0	0.0	0.42	**0.51**	0.36	1.64
189	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
190	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	**0.17**	0.17	0.00
191	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
192	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
193	0.0	0.0	2.2	0.0	0.0	0.0	0.0	3.3	0.0	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.84	**0.92**	0.46	2.32
194	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
195	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	**0.20**	0.20	0.64
196	1.6	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	**0.54**	0.27	0.00
197	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	5.0	0.0	6.9	0.0	11.7	0.0	0.84	**1.02**	0.51	2.53
198	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	**0.20**	0.20	0.64
201	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
202	0.0	1.6	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	0.0	0.0	0.0	0.63	**0.48**	0.38	0.89
203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
204	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	**0.00**	0.16	0.00
205	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	**0.43**	0.30	0.74
206	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
208	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.42	**0.61**	0.32	0.83
All	**3.2**	**3.2**	**4.4**	**3.0**	**9.6**	**9.9**	**29.1**	**49.7**	**95.8**	**129.9**	**129.7**	**119.3**	**200.4**	**220.2**	**163.8**	**68.6**	**44.1**	**51.7**	**6.86**	**115.5**

TABLE BRS-4(a): Cumulative Rate (Cu.Rate%) & Cumulative Risk (Cu. Risk) of Individual Sites (ICD-9) Based on Age Specific Rates (from 0–64 Years and from 0–74 Years) 1997-1998: Males - Barshi

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu. Rate %	Cu. Risk	Cu. Rate%	Cu. Risk
140	Lip	0.01	0.01	0.01	0.01
141	Tongue	0.08	0.08	0.19	0.19
142	Salivary Gland	0.00	0.00	0.00	0.00
143	Gum	0.13	0.13	0.13	0.13
144	Floor of Mouth	0.00	0.00	0.00	0.00
145	Other Mouth	0.14	0.14	0.14	0.14
146	Oropharynx	0.03	0.03	0.03	0.03
147	Nasopharynx	0.00	0.00	0.00	0.00
148	Hypopharynx	0.32	0.32	0.60	0.60
149	Pharynx Etc.	0.00	0.00	0.00	0.00
150	Oesophagus	0.31	0.31	0.42	0.42
151	Stomach	0.17	0.17	0.17	0.17
152	Small Intestine	0.00	0.00	0.00	0.00
153	Colon	0.11	0.11	0.11	0.11
154	Rectum	0.31	0.31	0.36	0.36
155	Liver	0.39	0.39	0.50	0.50
156	Gall Bladder	0.02	0.02	0.02	0.02
157	Pancreas	0.11	0.11	0.17	0.17
158	Retroperitoneum	0.00	0.00	0.00	0.00
159	Other Dig Sys	0.00	0.00	0.00	0.00
160	Nasal Cavity	0.00	0.00	0.00	0.00
161	Larynx	0.12	0.12	0.12	0.12
162	Lung	0.16	0.16	0.16	0.16
163	Pleura	0.00	0.00	0.06	0.06
164	Thymus	0.00	0.00	0.00	0.00
165	Other Resp	0.00	0.00	0.00	0.00
170	Bone	0.02	0.02	0.02	0.02
171	Conn Tissue	0.03	0.03	0.03	0.03
172	Skin Melanoma	0.00	0.00	0.00	0.00
173	Skin Other	0.15	0.15	0.15	0.15
175	Breast Male	0.00	0.00	0.00	0.00
185	Prostate	0.05	0.04	0.05	0.04
186	Testis	0.10	0.10	0.10	0.10
187	Penis Etc	0.16	0.16	0.22	0.22
188	Uri Bladder	0.15	0.15	0.20	0.20
189	Kidney	0.05	0.04	0.10	0.10
190	Eye	0.00	0.00	0.00	0.00
191	Brain	0.09	0.09	0.09	0.09
192	Nervous Sys	0.00	0.00	0.00	0.00
193	Thyroid Gland	0.00	0.00	0.00	0.00
194	Oth Endo Gland	0.00	0.00	0.00	0.00
195	Ill Def Sites	0.01	0.01	0.01	0.01
196	Sec Lymph Node	0.21	0.21	0.21	0.21
197	Sec Res Etc	0.27	0.27	0.33	0.32
198	Sec Other	0.00	0.00	0.00	0.00
199	Primary Unk	0.05	0.04	0.05	0.04
200	Lymphosarcoma	0.00	0.00	0.00	0.00
201	Hodgkins Dis	0.01	0.01	0.01	0.01
202	Oth Lymph Node	0.15	0.15	0.15	0.15
203	Mult Myeloma	0.00	0.00	0.00	0.00
204	Leuk Lymphatic	0.02	0.02	0.02	0.02
205	Leuk Myelocytic	0.14	0.14	0.20	0.19
206	Leuk Monocytic	0.00	0.00	0.00	0.00
207	Leuk Misc	0.00	0.00	0.00	0.00
208	Leuk Uns	0.01	0.01	0.01	0.01
	ALL SITES	**4.05**	**3.97**	**5.10**	**4.97**

TABLE BRS-4(b): Cumulative Rate (Cu.Rate%) & Cumulative Risk (Cu. Risk) of Individual Sites (ICD-9) Based on Age Specific Rates (from 0–64 Years and from 0–74 Years) 1997-1998: Females - Barshi

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu. Rate %	Cu. Risk	Cu. Rate%	Cu. Risk
140	Lip	0.05	0.05	0.05	0.05
141	Tongue	0.02	0.02	0.08	0.08
142	Salivary Gland	0.02	0.02	0.02	0.02
143	Gum	0.10	0.10	0.16	0.16
144	Floor of Mouth	0.00	0.00	0.00	0.00
145	Other Mouth	0.07	0.07	0.07	0.07
146	Oropharynx	0.00	0.00	0.00	0.00
147	Nasopharynx	0.00	0.00	0.00	0.00
148	Hypopharynx	0.02	0.02	0.02	0.02
149	Pharynx Etc	0.00	0.00	0.00	0.00
150	Oesophagus	0.29	0.29	0.35	0.35
151	Stomach	0.08	0.08	0.14	0.14
152	Small Intestine	0.00	0.00	0.00	0.00
153	Colon	0.14	0.14	0.14	0.14
154	Rectum	0.19	0.19	0.24	0.24
155	Liver	0.05	0.05	0.05	0.05
156	Gall Bladder	0.00	0.00	0.00	0.00
157	Pancreas	0.01	0.01	0.01	0.01
158	Retroperitoneum	0.00	0.00	0.00	0.00
159	Other Dig Sys	0.00	0.00	0.00	0.00
160	Nasal Cavity	0.00	0.00	0.00	0.00
161	Larynx	0.03	0.03	0.03	0.03
162	Lung	0.07	0.07	0.13	0.13
163	Pleura	0.05	0.05	0.05	0.05
164	Thymus	0.00	0.00	0.00	0.00
165	Other Resp	0.00	0.00	0.00	0.00
170	Bone	0.05	0.05	0.05	0.05
171	Conn Tissue	0.00	0.00	0.00	0.00
172	Skin Melanoma	0.00	0.00	0.00	0.00
173	Skin Other	0.06	0.06	0.12	0.12
174	Breast Female	0.82	0.82	0.82	0.82
179	Uterine Un	0.00	0.00	0.00	0.00
180	Cervix Uteri	2.20	2.18	2.49	2.46
181	Placenta	0.00	0.00	0.00	0.00
182	Body Uterus	0.00	0.00	0.00	0.00
183	Ovary	0.20	0.20	0.20	0.20
184	Vagina	0.13	0.13	0.19	0.19
188	Uri Bladder	0.05	0.05	0.05	0.05
189	Kidney	0.00	0.00	0.00	0.00
190	Eye	0.01	0.01	0.01	0.01
191	Brain	0.00	0.00	0.00	0.00
192	Nervous System	0.00	0.00	0.00	0.00
193	Thyroid Gland	0.07	0.07	0.07	0.07
194	Oth Endo Gland	0.00	0.00	0.00	0.00
195	Ill Def Sites	0.02	0.02	0.02	0.02
196	Sec Lymph Node	0.02	0.02	0.02	0.02
197	Sec Res Etc	0.08	0.08	0.14	0.14
198	Sec Other	0.00	0.00	0.00	0.00
199	Primary Unk	0.00	0.00	0.00	0.00
200	Lymphosarcoma	0.02	0.02	0.02	0.02
201	Hodgkins Dis	0.00	0.00	0.00	0.00
202	Oth Lymphoma	0.05	0.05	0.05	0.05
203	Mult Myeloma	0.00	0.00	0.00	0.00
204	Leuk Lymphatic	0.01	0.01	0.01	0.01
205	Leuk Myelocytic	0.03	0.03	0.03	0.03
206	Leuk Monocytic	0.00	0.00	0.00	0.00
207	Leuk Misc	0.00	0.00	0.00	0.00
208	Leuk Uns	0.03	0.03	0.03	0.03
	ALL SITES	**5.04**	**4.91**	**5.86**	**5.69**

POPULATION BASED CANCER REGISTRY, BHOPAL
Gandhi Medical College, Bhopal

Dr V.K. Bharadwaj, Professor and Head of Pathology and Principal Investigator, PBCR
Dr S. Kanhere, Ex-Principal Investigator
Dr S. Surange, Research Officer
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Mr A. Shrivastava, Research Officer

A special Population Based Cancer Registry was established by the Indian Council of Medical Research in the Department of Pathology, Gandhi Medical College, Bhopal in the aftermath of the gas tragedy in December 1984. The registry started functioning from January 1986 with the objective of registration of all cancer cases residing in Bhopal urban area. Long term objective of this special registry is to study the Methyl Iso Cyanate gas exposed population of Bhopal for possible carcinogenic effects. Estimated population of Bhopal registry area as on July 1, 1991 is 561582 in males and 502980 in females. Approximately 57% residents are literate in Bhopal.

The registry collects information from 63 medical centres, dispensaries and primary health centres as well as pathological laboratories. Attempts have been made to study the effects of gas exposure at Bhopal on risk of cancer. The studies have been undertaken to know the attributable risk in population of Bhopal. The results of these studies were published in International Journals.

Death registration system in Bhopal is far from adequate. Efforts are in progress to obtain reliable estimates of mortality rates in this population.

Publications

1. Cancer Pattern of lung, oropharynx and oral cavity in relation to gas exposure at Bhopal (1999). R. Dikshit, S.Kanhere, Cancer Cause and Control 10:627-636.

2. Tobacco habits and risk of lung, oropharynx and oral cancer, a population based case-control study in Bhopal, India, (2000), R. Dikshit, S.Kanhere, International Journal of Epidemiology 29:609-614.

Other Staff of Population Based Cancer Registry, Bhopal

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Mrs Sushma Shrivastava	:	Social Investigator
Miss Shubhra Trivedi	:	Social Investigator
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Mr Jagannathan Nair	:	Messenger

FIGURE BHP-1:

Population Pyramid showing Age Distribution : 1997-98

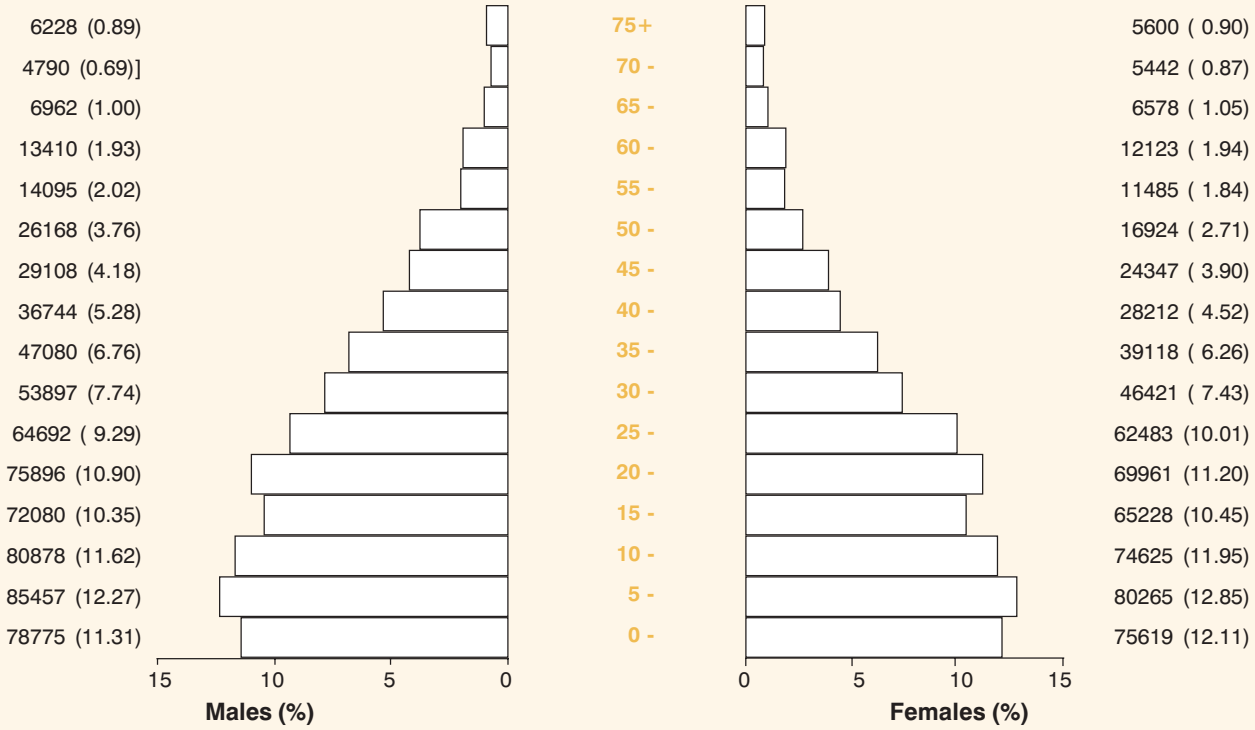

TABLE BHP-1:

Main Sources* of Registration of Incident Cases of Cancer in Bhopal - 1997-1998

Name of the Institution	Number	%
J.N.Cancer Hospital	979	59.4
Hamidia Hospital	395	24.0
Kasturba Hospital	75	4.5
TMH-Mumbai	66	4.0
Sultania Hospital	56	3.4
DCO's	30	1.8
Parulkar Clinic	23	1.4
Navodaya	17	1.0
Indore Cancer Hospital	4	0.2
Others	4	0.2
Total All Sources	**1649**	**100.0**

** 1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 1997-98.*

** 2. The numbers and proportion listed are the minimum number of cases. Institutions could have registered / reported more cases, since duplicate registrations and non-resident/registry cases are not included.*

TABLE BHP-2(a): Number of Incident Cancers by Five Year Age Group and Site (ICD-9): 1997–1998 – Males

%= Relative Proportion of Cancers of All Sites.

Bhopal

ICD-9	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	Total	%
140	Lip	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0	4	0.46
141	Tongue	0	0	0	0	0	1	2	1	3	6	8	11	13	6	12	7	70	8.04
142	Salivary Gland	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	3	0.34
143	Gum	0	0	0	0	0	0	0	1	0	0	2	2	2	1	1	1	10	1.15
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.11
145	Other Mouth	0	0	0	0	0	4	6	4	9	5	9	10	10	5	5	4	71	8.15
146	Oropharynx	0	0	0	0	0	0	0	0	1	2	2	2	3	4	3	0	17	1.95
147	Nasopharynx	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	4	0.46
148	Hypopharynx	0	0	0	0	0	0	0	0	4	6	9	6	5	11	4	5	50	5.74
149	Pharynx etc.	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0.23
150	Oesophagus	0	0	0	0	0	0	1	2	5	5	11	11	9	14	8	4	70	8.04
151	Stomach	0	0	0	0	0	0	1	1	3	5	2	3	2	5	4	0	26	2.99
152	Small Intestine	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.11
153	Colon	0	0	0	0	0	1	0	4	1	4	2	2	6	3	4	0	27	3.1
154	Rectum	0	0	0	0	1	0	1	2	2	1	2	1	1	2	1	4	18	2.07
155	Liver	0	0	0	0	0	1	1	1	2	1	2	1	3	4	0	4	20	2.3
156	Gall Bladder	0	0	0	0	0	0	1	0	2	1	2	2	2	0	2	0	12	1.38
157	Pancreas	0	0	0	0	0	0	0	0	0	1	3	3	2	3	1	1	14	1.61
158	Retroperit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
159	Other Dig	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.11
160	Nasal Cavity	1	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	8	0.92
161	Larynx	0	0	0	0	0	0	0	1	5	5	7	7	10	1	4	4	44	5.05
162	Lung	0	0	0	0	0	0	2	0	6	3	15	24	19	14	12	9	104	11.94
163	Pleura	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.11
164	Thymus	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.11
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	Bone	0	0	1	2	2	1	0	0	1	0	0	2	2	0	0	0	11	1.26
171	Connective	0	1	1	0	1	2	1	2	1	0	1	1	1	0	0	0	12	1.38
172	Skin Melan	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	3	0.34
173	Skin Other	0	0	0	0	1	0	0	1	3	2	3	2	0	0	0	2	14	1.61
175	Breast Mal	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	0.34
185	Prostate	0	0	0	0	0	0	0	1	1	2	5	5	5	8	13	9	49	5.63
186	Testis	1	1	0	1	1	2	2	2	1	0	0	0	1	0	0	0	12	1.38
187	Penis etc.	0	0	0	0	0	0	0	1	1	1	2	1	1	0	1	0	8	0.92
188	Uri Bladder	0	0	0	1	0	0	0	1	1	0	6	1	9	2	7	5	33	3.79
189	Kidney	0	0	0	0	1	0	1	0	0	2	1	1	4	0	2	1	13	1.49
190	Eye	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	0.46
191	Brain	0	1	2	1	1	1	1	6	2	2	1	2	2	0	0	1	23	2.64
192	Nervous Sy	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0.23
193	Thyroid Gland	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2	0.23
194	Oth Endo Gland	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	0.23
195	Ill Def Sites	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.11
196	Sec Lymph	0	0	0	0	1	0	0	0	1	1	0	0	1	2	0	2	8	0.92
197	Sec Res Et	0	0	0	0	0	0	0	1	1	0	2	0	2	2	0	0	8	0.92
198	Sec Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
199	Prim Unk	0	0	0	0	0	0	0	1	1	1	1	2	2	2	0	1	11	1.26
200	Lymphosarc	2	2	0	0	0	0	0	0	0	0	1	0	0	0	0	1	6	0.69
201	Hodgkins D	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0	0	4	0.46
202	Oth Lympho	0	0	2	3	1	1	3	1	1	1	1	2	0	5	2	2	25	2.87
203	Mult Myelo	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0.23
204	Leuk Lymph	0	1	1	3	0	0	0	0	2	1	0	0	0	0	0	0	8	0.92
205	Leuk Myelo	0	1	0	2	4	0	1	7	4	2	2	2	0	1	0	0	26	2.99
206	Leuk Monoc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
207	Leuk other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	Leuk Uns	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0.23
	TOTAL	**7**	**8**	**9**	**14**	**15**	**15**	**26**	**44**	**68**	**63**	**104**	**113**	**122**	**101**	**93**	**69**	**871**	
	%	*0.8*	*0.9*	*1*	*1.6*	*1.7*	*1.7*	*2.9*	*5*	*7.8*	*7.2*	*11.9*	*12.9*	*14*	*11.6*	*10.6*	*7.9*	*100*	

TABLE BHP-2(b): Number of Incident Cancers by Five Year Age Group and Site (ICD-9): 1997–1998 – Females

%= Relative Proportion of Cancers of All Sites.

Bhopal

ICD-9	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	Total	%
140	Lip	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.13
141	Tongue	0	0	0	0	0	0	0	1	1	0	4	2	3	2	1	0	14	1.80
142	Salivary Gland	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	3	0.39
143	Gum	0	0	0	0	0	0	0	0	1	1	2	1	3	2	1	0	11	1.41
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
145	Other Mouth	0	0	0	0	0	1	1	1	4	4	8	4	5	3	2	3	36	4.63
146	Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.13
147	Nasopharynx	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	3	0.39
148	Hypopharynx	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	4	0.51
149	Pharynx etc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
150	Oesophagus	0	0	0	0	0	0	1	0	0	3	4	3	7	6	1	3	28	3.60
151	Stomach	1	0	0	0	0	0	0	4	0	1	2	1	2	2	0	1	14	1.80
152	Small Intestine	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	0.26
153	Colon	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	4	0.51
154	Rectum	0	0	0	0	0	1	1	1	0	1	2	2	1	2	2	1	14	1.80
155	Liver	0	0	0	0	0	0	0	0	1	1	0	1	2	2	0	1	8	1.03
156	Gall Bladd	0	0	0	0	0	0	0	2	0	2	3	3	7	2	0	5	24	3.08
157	Pancreas	0	0	0	0	0	0	0	0	0	1	0	2	2	3	0	0	8	1.03
158	Retroperit	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0.26
159	Other Dig.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
160	Nasal Cavity	0	0	0	0	0	0	1	1	0	0	3	0	0	0	1	0	6	0.77
161	Larynx	0	0	0	0	0	0	1	0	0	0	2	0	0	1	1	0	5	0.64
162	Lung	0	0	0	0	1	0	0	0	0	2	3	0	3	1	2	3	15	1.93
163	Pleura	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
164	Thymus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
170	Bone	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0.39
171	Connective	1	0	1	0	2	0	0	0	1	2	2	0	1	1	1	0	12	1.54
172	Skin Melan	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	0.26
173	Skin Other	0	0	0	1	0	0	0	1	0	0	2	0	0	1	0	1	6	0.77
174	Breast Fem	0	0	0	1	1	4	6	18	26	34	23	22	24	12	6	2	179	23.01
179	Uterine Un	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.13
180	Cervix Uteri	0	0	0	0	0	2	11	16	22	26	25	30	17	8	12	4	173	22.24
181	Placenta	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	0.39
182	Body Uterus	0	0	0	0	0	0	0	0	4	2	3	1	1	1	0	1	13	1.67
183	Ovary	2	0	2	3	0	3	1	6	5	4	8	5	3	2	2	0	46	5.91
184	Vagina	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	3	0.39
188	Uri Bladder	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	1	5	0.64
189	Kidney	1	0	0	0	1	0	0	2	0	0	0	0	1	0	0	0	5	0.64
190	Eye	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.13
191	Brain	0	0	1	1	0	1	2	0	0	2	3	3	1	0	0	0	14	1.80
192	Nervous Sy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
193	Thyroid Gland	0	0	0	1	4	1	0	2	0	0	5	0	0	2	0	2	17	2.19
194	Oth Endo Gland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
195	Ill Def Sites	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
196	Sec Lymph	0	1	0	0	0	1	0	0	0	0	3	1	0	1	0	1	8	1.03
197	Sec Res Et	0	0	0	0	0	0	0	0	0	1	1	1	0	1	2	1	7	0.90
198	Sec Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
199	Prim Unk	0	0	0	0	0	1	0	1	4	2	1	0	1	3	1	1	15	1.93
200	Lymphosarc	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	3	0.39
201	Hodgkins D	0	0	0	0	1	1	1	0	0	0	0	0	1	0	0	0	4	0.51
202	Oth Lympho	0	1	0	1	0	1	1	2	0	2	2	2	2	4	2	0	20	2.57
203	Mult Myelo	0	0	0	0	0	0	0	1	0	0	1	0	1	0	2	1	6	0.77
204	Leuk Lymph	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	7	0.90
205	Leuk Myelo	0	1	2	2	1	2	3	3	2	1	1	0	3	0	0	0	21	2.70
206	Leuk Monoc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
207	Leuk other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk Uns	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.13
	TOTAL	**8**	**7**	**9**	**11**	**13**	**21**	**35**	**64**	**73**	**93**	**115**	**89**	**97**	**64**	**43**	**36**	**778**	
	%	*1.0*	*0.9*	*1.1*	*1.4*	*1.6*	*2.7*	*4.5*	*8.2*	*9.3*	*11.9*	*14.7*	*11.4*	*12.4*	*8.2*	*5.5*	*4.6*	*100.0*	

TABLE BHP-3(a):
Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error (SE)) and Truncated (35-64 Yrs) (TR) Incidence Rate per 100,000 population: 1997-1998 - Males
Bhopal

ICD-9	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	CR	AAR	SE	TR
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	7.2	20.9	0.0	0.29	**0.74**	0.38	0.33
141	0.0	0.0	0.0	0.0	0.0	0.8	1.9	1.1	4.1	10.3	15.3	39.0	48.5	43.1	125.2	56.2	5.03	**10.29**	1.29	16.75
142	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	10.4	0.0	0.22	**0.34**	0.23	0.41
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	3.8	7.1	7.5	7.2	10.4	8.0	0.72	**1.43**	0.47	2.71
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0	0.07	**0.14**	0.14	0.45
145	0.0	0.0	0.0	0.0	0.0	3.1	5.6	4.2	12.2	8.6	17.2	35.5	37.3	35.9	52.2	32.1	5.10	**8.62**	1.11	16.99
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	3.4	3.8	7.1	11.2	28.7	31.3	0.0	1.22	**2.69**	0.69	3.91
147	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	3.7	7.2	10.4	0.0	0.29	**0.68**	0.35	0.81
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	10.3	17.2	21.3	18.6	79.0	41.7	40.1	3.59	**7.39**	1.10	10.96
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	**0.16**	0.12	0.52
150	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.1	6.8	8.6	21.0	39.0	33.6	100.5	83.5	32.1	5.03	**10.39**	1.31	16.15
151	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.1	4.1	8.6	3.8	10.6	7.5	35.9	41.7	0.0	1.87	**3.71**	0.78	5.61
152	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	**0.07**	0.06	0.21
153	0.0	0.0	0.0	0.0	0.0	0.8	0.0	4.2	1.4	6.9	3.8	7.1	22.4	21.5	41.7	0.0	1.94	**3.65**	0.76	6.84
154	0.0	0.0	0.0	0.0	0.7	0.0	0.9	2.1	2.7	1.7	3.8	3.5	3.7	14.4	10.4	32.1	1.29	**2.26**	0.58	2.80
155	0.0	0.0	0.0	0.0	0.0	0.8	0.9	1.1	2.7	1.7	3.8	3.5	11.2	28.7	0.0	32.1	1.44	**2.72**	0.65	3.57
156	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	2.7	1.7	3.8	7.1	7.5	0.0	20.9	0.0	0.86	**1.50**	0.47	3.35
157	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	5.7	10.6	7.5	21.5	10.4	8.0	1.01	**2.12**	0.59	3.59
158	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4	0.0	0.07	**0.21**	0.21	0.00
160	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	1.7	0.0	3.5	3.7	7.2	10.4	8.0	0.57	**1.19**	0.42	1.53
161	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	6.8	8.6	13.4	24.8	37.3	7.2	41.7	32.1	3.16	**5.84**	0.92	13.36
162	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	8.2	5.2	28.7	85.1	70.8	100.5	125.2	72.3	7.47	**15.55**	1.59	27.35
163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.07	**0.15**	0.15	0.48
164	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	**0.05**	0.05	0.00
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
170	0.0	0.0	0.6	1.4	1.3	0.8	0.0	0.0	1.4	0.0	0.0	7.1	7.5	0.0	0.0	0.0	0.79	**1.00**	0.33	2.16
171	0.0	0.6	0.6	0.0	0.7	1.5	0.9	2.1	1.4	0.0	1.9	3.5	3.7	0.0	0.0	0.0	0.86	**0.88**	0.29	1.92
172	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	3.7	7.2	0.0	0.0	0.22	**0.51**	0.30	0.93
173	0.0	0.0	0.0	0.0	0.7	0.0	0.0	1.1	4.1	3.4	5.7	7.1	0.0	0.0	0.0	16.1	1.01	**1.46**	0.41	3.50
175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	3.7	0.0	0.0	0.0	0.22	**0.43**	0.25	1.40
185	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.4	3.4	9.6	17.7	18.6	57.5	135.7	72.3	3.52	**8.17**	1.21	7.37
186	0.6	0.6	0.0	0.7	0.7	1.5	1.9	2.1	1.4	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.86	**0.84**	0.26	1.16
187	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.4	1.7	3.8	3.5	3.7	0.0	10.4	0.0	0.57	**0.94**	0.35	2.35
188	0.0	0.0	0.0	0.7	0.0	0.0	0.0	1.1	1.4	0.0	11.5	3.5	33.6	14.4	73.1	40.1	2.37	**4.95**	0.90	7.12
189	0.0	0.0	0.0	0.0	0.7	0.0	0.9	0.0	0.0	3.4	1.9	3.5	14.9	0.0	20.9	8.0	0.93	**1.73**	0.51	3.34
190	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4	0.0	0.29	**0.50**	0.24	0.00
191	0.0	0.6	1.2	0.7	0.7	0.8	0.9	6.4	2.7	3.4	1.9	7.1	7.5	0.0	0.0	8.0	1.65	**1.92**	0.45	4.62
192	0.0	0.0	0.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	**0.11**	0.08	0.00
193	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	7.2	0.0	0.0	0.14	**0.27**	0.22	0.00
194	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	3.5	0.0	0.0	0.0	0.0	0.14	**0.24**	0.17	0.76
195	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	**0.13**	0.07	0.00
196	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	1.4	1.7	0.0	0.0	3.7	14.4	0.0	16.1	0.57	**1.14**	0.43	1.08
197	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.4	0.0	3.8	0.0	7.5	14.4	0.0	0.0	0.57	**1.07**	0.41	2.06
198	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
199	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.4	1.7	1.9	7.1	7.5	14.4	0.0	8.0	0.79	**1.52**	0.48	3.01
200	1.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	8.0	0.43	**0.55**	0.23	0.31
201	0.0	0.0	0.0	0.0	0.7	0.0	0.9	0.0	0.0	0.0	0.0	3.5	0.0	7.2	0.0	0.0	0.29	**0.47**	0.27	0.45
202	0.0	0.0	1.2	2.1	0.7	0.8	2.8	1.1	1.4	1.7	1.9	7.1	0.0	35.9	20.9	16.1	1.80	**3.04**	0.69	2.04
203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	8.0	0.14	**0.26**	0.19	0.31
204	0.0	0.6	0.6	2.1	0.0	0.0	0.0	0.0	2.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.57	**0.50**	0.21	0.85
205	0.0	0.6	0.0	1.4	2.6	0.0	0.9	7.4	5.4	3.4	3.8	7.1	0.0	7.2	0.0	0.0	1.87	**2.04**	0.45	4.67
206	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
208	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	**0.14**	0.10	0.27
All	**4.4**	**4.8**	**5.4**	**9.8**	**10.2**	**11.7**	**24.0**	**47.0**	**92.9**	**107.9**	**198.5**	**400.2**	**455.0**	**725.5**	**970.2**	**553.8**	**62.5**	**116.7**	**4.25**	**190.3**

TABLE BHP-3(b):
Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error (SE)) and Truncated (35-64 Yrs) (TR) Incidence Rate per 100,000 population: 1997-1998 - Females
Bhopal

ICD-9	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	CR	AAR	SE	TR
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.08	**0.16**	0.16	0.53
141	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.8	0.0	11.8	8.7	12.4	15.2	9.2	0.0	1.12	**2.27**	0.62	5.22
142	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	8.2	0.0	0.0	0.0	0.24	**0.40**	0.24	1.06
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.1	5.9	4.4	12.4	15.2	9.2	0.0	0.88	**1.86**	0.57	3.88
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
145	0.0	0.0	0.0	0.0	0.0	0.8	1.1	1.3	7.1	8.2	23.6	17.4	20.6	22.8	18.4	26.8	2.88	**5.42**	0.93	11.93
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.08	**0.16**	0.16	0.53
147	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	9.2	0.0	0.24	**0.35**	0.22	0.35
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	9.2	17.9	0.32	**0.72**	0.36	0.57
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
150	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	6.2	11.8	13.1	28.9	45.6	9.2	26.8	2.24	**4.80**	0.93	8.52
151	0.7	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	2.1	5.9	4.4	8.2	15.2	0.0	8.9	1.12	**2.04**	0.56	3.98
152	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	4.4	0.0	0.0	0.0	0.0	0.16	**0.31**	0.21	0.98
153	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	4.1	7.6	9.2	0.0	0.32	**0.72**	0.37	1.01
154	0.0	0.0	0.0	0.0	0.0	0.8	1.1	1.3	0.0	2.1	5.9	8.7	4.1	15.2	18.4	8.9	1.12	**2.16**	0.60	3.26
155	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.1	0.0	4.4	8.2	15.2	0.0	8.9	0.64	**1.39**	0.50	2.39
156	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	4.1	8.9	13.1	28.9	15.2	0.0	44.6	1.92	**3.89**	0.81	8.15
157	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	8.7	8.2	22.8	0.0	0.0	0.64	**1.49**	0.53	2.59
158	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	4.1	0.0	0.0	0.0	0.16	**0.31**	0.22	1.01
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
160	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.3	0.0	0.0	8.9	0.0	0.0	0.0	9.2	0.0	0.48	**0.78**	0.33	1.69
161	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	5.9	0.0	0.0	7.6	9.2	0.0	0.40	**0.78**	0.37	0.95
162	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	4.1	8.9	0.0	12.4	7.6	18.4	26.8	1.20	**2.40**	0.63	3.83
163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
164	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
170	0.0	0.6	0.7	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24	**0.13**	0.11	0.00
171	0.7	0.0	0.7	0.0	1.4	0.0	0.0	0.0	1.8	4.1	5.9	0.0	4.1	7.6	9.2	0.0	0.96	**1.55**	0.46	2.62
172	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	8.9	0.16	**0.29**	0.21	0.35
173	0.0	0.0	0.0	0.8	0.0	0.0	0.0	1.3	0.0	0.0	5.9	0.0	0.0	7.6	0.0	8.9	0.48	**0.86**	0.37	1.20
174	0.0	0.0	0.0	0.8	0.7	3.2	6.5	23.0	46.1	69.8	67.9	95.8	99.0	91.2	55.1	17.9	14.33	**24.51**	1.92	62.96
179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.08	**0.18**	0.18	0.57
180	0.0	0.0	0.0	0.0	0.0	1.6	11.8	20.5	39.0	53.4	73.9	130.6	70.1	60.8	110.3	35.7	13.85	**24.06**	1.91	59.68
181	0.0	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24	**0.19**	0.11	0.00
182	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	4.1	8.9	4.4	4.1	7.6	0.0	8.9	1.04	**1.88**	0.53	4.70
183	1.3	0.0	1.3	2.3	0.0	2.4	1.1	7.7	8.9	8.2	23.6	21.8	12.4	15.2	18.4	0.0	3.68	**5.74**	0.88	13.02
184	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.9	0.24	**0.32**	0.20	0.25
188	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.7	0.0	7.6	9.2	8.9	0.40	**0.94**	0.42	1.12
189	0.7	0.0	0.0	0.0	0.7	0.0	0.0	2.6	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.40	**0.53**	0.22	1.03
190	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	**0.15**	0.08	0.00
191	0.0	0.0	0.7	0.8	0.0	0.8	2.2	0.0	0.0	4.1	8.9	13.1	4.1	0.0	0.0	0.0	1.12	**1.70**	0.49	4.45
192	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
193	0.0	0.0	0.0	0.8	2.9	0.8	0.0	2.6	0.0	0.0	14.8	0.0	0.0	15.2	0.0	17.9	1.36	**2.08**	0.56	2.89
194	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
195	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
196	0.0	0.6	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	8.9	4.4	0.0	7.6	0.0	8.9	0.64	**1.10**	0.43	2.01
197	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	3.0	4.4	0.0	7.6	18.4	8.9	0.56	**1.24**	0.47	1.46
198	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
199	0.0	0.0	0.0	0.0	0.0	0.8	0.0	1.3	7.1	4.1	3.0	0.0	4.1	22.8	9.2	8.9	1.20	**2.17**	0.60	3.42
200	0.0	0.0	0.7	0.0	0.0	0.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.24	**0.20**	0.12	0.25
201	0.0	0.0	0.0	0.0	0.7	0.8	1.1	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.32	**0.35**	0.20	0.53
202	0.0	0.6	0.0	0.8	0.0	0.8	1.1	2.6	0.0	4.1	5.9	8.7	8.2	30.4	18.4	0.0	1.60	**2.87**	0.70	4.42
203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	3.0	0.0	4.1	0.0	18.4	8.9	0.48	**0.94**	0.39	1.26
204	1.3	1.2	0.7	0.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.56	**0.48**	0.18	0.00
205	0.0	0.6	1.3	1.5	0.7	1.6	3.2	3.8	3.5	2.1	3.0	0.0	12.4	0.0	0.0	0.0	1.68	**1.86**	0.45	3.91
206	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
208	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	**0.00**	0.06	0.00
All	**5.4**	**4.2**	**6.1**	**8.6**	**9.2**	**16.8**	**37.9**	**82.2**	**129.6**	**191.3**	**340.1**	**388.0**	**399.7**	**486.4**	**395.4**	**321.2**	**62.2**	**108.7**	**4.10**	**234.5**

TABLE BHP-4(a): Cumulative Rate (Cu.Rate%) & Cumulative Risk (Cu. Risk) of Individual Sites (ICD-9) Based on Age Specific Rates (from 0–64 Years and from 0–74 Years) 1997-1998: Males - Bhopal

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu. Rate %	Cu. Risk	Cu. Rate%	Cu. Risk
140	Lip	0.04	0.04	0.15	0.15
141	Tongue	0.82	0.82	1.45	1.44
142	Salivary Gland	0.01	0.01	0.06	0.06
143	Gum	0.13	0.13	0.19	0.19
144	Floor of Mouth	0.02	0.02	0.02	0.02
145	Other Mouth	0.80	0.79	1.06	1.05
146	Oropharynx	0.28	0.28	0.43	0.43
147	Nasopharynx	0.06	0.06	0.12	0.11
148	Hypopharynx	0.76	0.76	0.97	0.96
149	Pharynx Etc.	0.01	0.01	0.01	0.01
150	Oesophagus	1.06	1.06	1.48	1.47
151	Stomach	0.36	0.36	0.57	0.57
152	Small Intestine	0.01	0.01	0.01	0.01
153	Colon	0.34	0.34	0.55	0.55
154	Rectum	0.17	0.17	0.22	0.22
155	Liver	0.27	0.27	0.27	0.27
156	Gall Bladder	0.12	0.12	0.22	0.22
157	Pancreas	0.24	0.23	0.29	0.29
158	Retroperitoneum	0.00	0.00	0.00	0.00
159	Other Dig Sys	0.00	0.00	0.05	0.05
160	Nasal Cavity	0.09	0.09	0.14	0.14
161	Larynx	0.50	0.49	0.70	0.70
162	Lung	1.50	1.49	2.13	2.11
163	Pleura	0.02	0.02	0.02	0.02
164	Thymus	0.00	0.00	0.00	0.00
165	Other Resp	0.00	0.00	0.00	0.00
170	Bone	0.10	0.10	0.10	0.10
171	Conn Tissue	0.08	0.08	0.08	0.08
172	Skin Melanoma	0.07	0.07	0.07	0.07
173	Skin Other	0.11	0.11	0.11	0.11
175	Breast Male	0.05	0.05	0.05	0.05
185	Prostate	0.55	0.55	1.23	1.22
186	Testis	0.07	0.07	0.07	0.07
187	Penis Etc	0.08	0.08	0.13	0.13
188	Uri Bladder	0.33	0.33	0.70	0.69
189	Kidney	0.13	0.13	0.23	0.23
190	Eye	0.01	0.01	0.06	0.06
191	Brain	0.17	0.17	0.17	0.17
192	Nervous Sys	0.01	0.01	0.01	0.01
193	Thyroid Gland	0.04	0.04	0.04	0.04
194	Oth Endo Gland	0.03	0.03	0.03	0.03
195	Ill Def Sites	0.00	0.00	0.00	0.00
196	Sec Lymph Node	0.11	0.11	0.11	0.11
197	Sec Res Etc	0.14	0.14	0.14	0.14
198	Sec Other	0.00	0.00	0.00	0.00
199	Primary Unk	0.18	0.18	0.18	0.18
200	Lymphosarcoma	0.02	0.02	0.02	0.02
201	Hodgkins Dis	0.06	0.06	0.06	0.06
202	Oth Lymph Node	0.28	0.28	0.39	0.39
203	Mult Myeloma	0.01	0.01	0.01	0.01
204	Leuk Lymphatic	0.04	0.04	0.04	0.04
205	Leuk Myelocytic	0.20	0.20	0.20	0.20
206	Leuk Monocytic	0.00	0.00	0.00	0.00
207	Leuk Misc	0.00	0.00	0.00	0.00
208	Leuk Uns	0.01	0.01	0.01	0.01
	ALL SITES	**10.49**	**9.96**	**15.34**	**14.22**

TABLE BHP-4(b): Cumulative Rate (Cu.Rate%) & Cumulative Risk (Cu. Risk) of Individual Sites (ICD-9) Based on Age Specific Rates (from 0–64 Years and from 0–74 Years) 1997-1998: Females - Bhopal

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu. Rate %	Cu. Risk	Cu. Rate%	Cu. Risk
140	Lip	0.01	0.01	0.02	0.02
141	Tongue	0.12	0.12	0.30	0.30
142	Salivary Gland	0.02	0.02	0.05	0.05
143	Gum	0.19	0.19	0.26	0.25
144	Floor of Mouth	0.01	0.01	0.00	0.00
145	Other Mouth	0.50	0.50	0.61	0.60
146	Oropharynx	0.05	0.05	0.02	0.02
147	Nasopharynx	0.02	0.02	0.06	0.06
148	Hypopharynx	0.15	0.15	0.07	0.07
149	Pharynx Etc	0.01	0.01	0.00	0.00
150	Oesophagus	0.64	0.63	0.58	0.58
151	Stomach	0.50	0.50	0.21	0.21
152	Small Intestine	0.01	0.01	0.03	0.03
153	Colon	0.15	0.15	0.12	0.12
154	Rectum	0.26	0.25	0.29	0.29
155	Liver	0.10	0.10	0.16	0.16
156	Gall Bladder	0.11	0.11	0.36	0.36
157	Pancreas	0.03	0.03	0.21	0.21
158	Retroperitoneum	0.04	0.04	0.04	0.04
159	Other Dig Sys	0.01	0.01	0.00	0.00
160	Nasal Cavity	0.04	0.04	0.10	0.10
161	Larynx	0.05	0.05	0.12	0.12
162	Lung	0.20	0.20	0.26	0.26
163	Pleura	0.04	0.04	0.00	0.00
164	Thymus	0.00	0.00	0.00	0.00
165	Other Resp	0.00	0.00	0.00	0.00
170	Bone	0.06	0.06	0.01	0.01
171	Conn Tissue	0.04	0.04	0.18	0.18
172	Skin Melanoma	0.01	0.01	0.01	0.01
173	Skin Other	0.12	0.12	0.08	0.08
174	Breast Female	2.32	2.29	2.80	2.76
179	Uterine Un	0.06	0.06	0.02	0.02
180	Cervix Uteri	2.23	2.20	2.86	2.82
181	Placenta	0.00	0.00	0.02	0.02
182	Body Uterus	0.36	0.36	0.18	0.18
183	Ovary	0.48	0.48	0.62	0.62
184	Vagina	0.12	0.12	0.01	0.01
188	Uri Bladder	0.06	0.06	0.13	0.13
189	Kidney	0.05	0.05	0.04	0.04
190	Eye	0.01	0.01	0.00	0.00
191	Brain	0.14	0.14	0.17	0.17
192	Nervous System	0.01	0.01	0.00	0.00
193	Thyroid Gland	0.23	0.23	0.19	0.19
194	Oth Endo Gland	0.00	0.00	0.00	0.00
195	Ill Def Sites	0.03	0.03	0.00	0.00
196	Sec Lymph Node	0.08	0.08	0.11	0.11
197	Sec Res Etc	0.12	0.12	0.18	0.18
198	Sec Other	0.06	0.06	0.00	0.00
199	Primary Unk	0.34	0.34	0.26	0.26
200	Lymphosarcoma	0.05	0.05	0.01	0.01
201	Hodgkins Dis	0.06	0.06	0.03	0.03
202	Oth Lymphoma	0.18	0.18	0.41	0.41
203	Mult Myeloma	0.08	0.08	0.13	0.13
204	Leuk Lymphatic	0.03	0.03	0.02	0.02
205	Leuk Myelocytic	0.14	0.14	0.17	0.17
206	Leuk Monocytic	0.00	0.00	0.00	0.00
207	Leuk Misc	0.00	0.00	0.00	0.00
208	Leuk Uns	0.03	0.03	0.00	0.00
	ALL SITES	**10.80**	**10.24**	**12.50**	**11.75**

POPULATION BASED CANCER REGISTRY, CHENNAI
Cancer Institute (WIA), Adyar, Chennai

Dr V. Shanta, Principal Investigator

Dr R. Swaminathan, Co-Investigator

Ms M. Kavitha, Statistical Assistant

The Madras Metropolitan Tumour Registry (MMTR), a Population Based Cancer Registry, was established at the Cancer Institute (W.I.A) in 1981 in the network of National Cancer Registry Programme (NCRP) of Indian Council of Medical Research (ICMR), New Delhi, to study the pattern and trend of Cancer incidence and mortality in Chennai City (formerly Madras). The data collection commenced from 1st January 1982.

The Chennai city is situated at sea level on the eastern coast of peninsular India at latitude 13.04° N and longitude 80.17°E. The MMTR caters to an area of 170 km^2 and a population (entirely urban) of 4.2 millions (951 Females to 1000 Males) as on 1st March 2001 constituting 0.4% and 6.8% of total population of India and state of Tamil Nadu respectively. The decadal population growth rate during 1991-2001 was 9.76% and the population density was estimated to be 24,231 persons/km^2. The literacy rate is 80% (M: 85%; F: 75%) and the predominantly spoken language is Tamil. The majority are Hindus (84%) followed by Muslims (9%), Christians (6%) and the rest belonging to the other religious groups (1%).

General health care, including cancer diagnostic and treatment facilities, are provided by the government health services, the Cancer Institute (WIA), which is a Regional Cancer Centre recognised by the Ministry of Health and Family Welfare, Government of India and supplemented by private practitioners and hospitals. The Radiation Oncology division at the Cancer Institute (WIA), is one of the best equipped centres in India. Radiation facilities are also available in four Government and four private hospitals. Surgical and Chemotherapeutic services are offered in government and private hospitals and nursing homes.

Cancer is not a notifiable disease in India. Therefore registration of cases is done by active method. The registry continues to enjoy good cooperation from all health care facilities in and around Chennai with more than 200 sources of registration till date: government and private hospitals, nursing homes, clinics, consultants, pathology laboratories, imaging centres and hospices. The principal criterion for the inclusion of cases in the registry is that the cases should have been residing in Chennai for at least a year at the time of first diagnosis of cancer. The Social Scientists of the registry visit the collaborating hospitals regularly and collect data on cancer by interviewing the cases wherever possible and/or from medical records. Deficient medical records are updated by the linkage of data collected from various departments within a hospital for completeness of details. Mortality information on all deaths occurring in the city, irrespective of the stated cause of death in the death certificate, is collected from the Vital Statistics Division (VSD) of the Corporation of Chennai. The completeness of registration of cancer

cases in MMTR is estimated to be 96%. Management of data has been progressively computerized to minimize the manual work resulting in the enhancement of data quality. Reliability of data and quality of registration are constantly monitored with emphasis on re-abstraction and coding on a random sample of cases and validity checks using IARC and other in-house developed computer programs.

The MMTR, has been the first among the registries of NCRP in carrying out many new registry activities: in undertaking systematic trace-back of cancer cases first identified through a death certificate, in the form of visits to houses and relevant hospitals since 1983; in collecting information on the vital status (alive/dead) of the cases for selected cancer sites by active follow up since 1985; in collecting information on all deaths (cancer or not as the cause of death) from VSD since 1992.

The achievements based on such activities are plentiful. Survival analysis of the top ten cancers was first made available by MMTR among all other registries in NCRP. The availability of mortality information of incident cancer cases was "doubled" leading to an enhancement in the mortality to incidence ratio. The dissemination of cancer information is done by publishing periodic reports on cancer incidence and mortality highlighting the trends and patterns. A descriptive study of the pattern of common cancers among both genders in India supplemented by the risk estimates with respect to age and religion for Chennai, special studies giving the significant features of survival and mortality data have been published in international scientific journals and monograph.

MMTR also provides data on non-residents for the ICMR project on "Development of an Atlas of Cancer in India" and follow up for the IARC project on survival from top ten cancers in Chennai. A WHO project on "Awareness and early detection of cancers of cervix, breast and oral cavity" is also underway.

Staff of Population Based Cancer Registry, Chennai

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Mr Sivakumar.S.	:	Social Investigator
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Mr Dharmadurai.V.	:	Field Investigator
Mr Sivakumar.M.	:	Field Investigator
Mr Gandeeban .D.	:	Field Investigator
Ms Chandrakala.T.	:	Typist

FIGURE CHN-1:

Population Pyramid showing Age Distribution : 1997-98

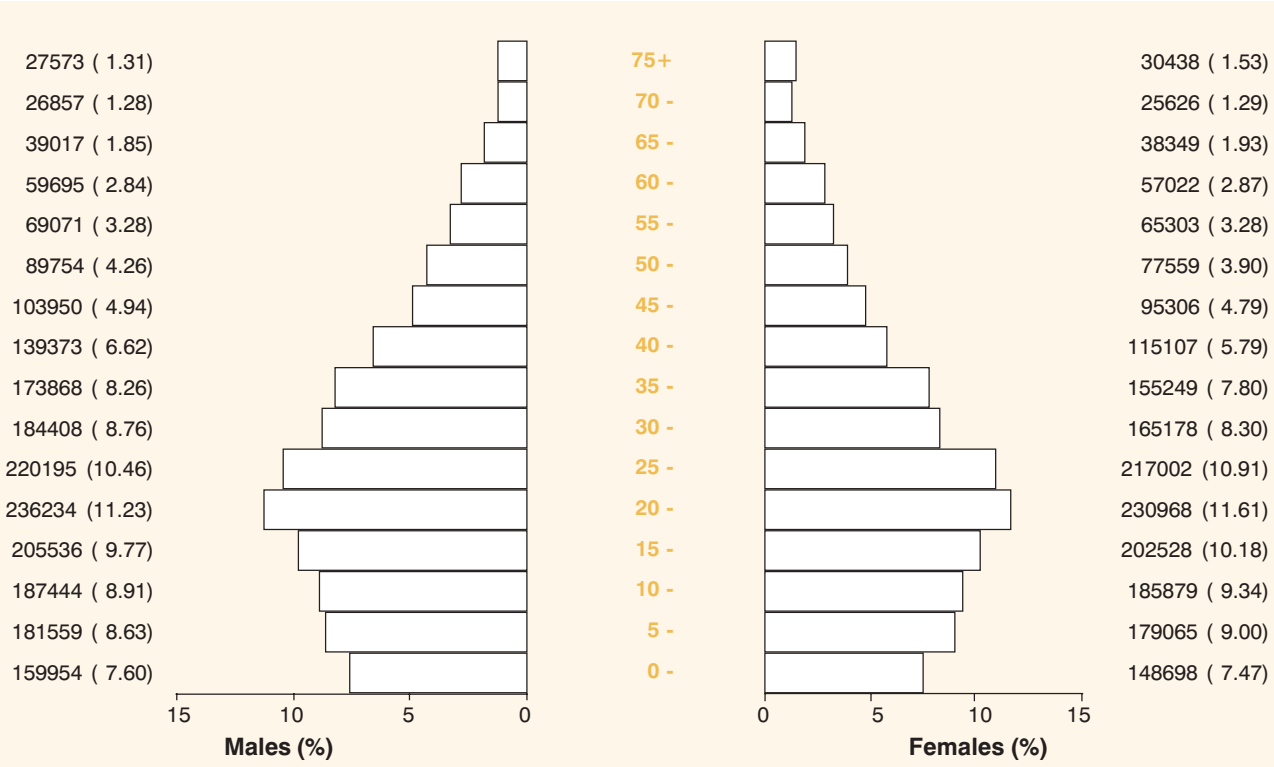

TABLE CHN-1:

Main Sources* of Registration of Incident Cases of Cancer in Chennai - 1997-1998

Name of the Institution	Number	%
Cancer Institute (WIA)	1382	18.0
Govt. General Hospital	1220	15.9
Apollo Hospital	671	8.7
Govt. Stanley Hospital	639	8.3
Dr. Rai's	583	7.6
Govt. Royapettah Hospital	489	6.4
Govt. Women & Child Hospital	371	4.8
Corporation of Chennai	224	2.9
Govt. Kilpauk MC	141	1.8
S. Rly. Hospital	127	1.7
Peripheral Hospital	116	1.5
Sundaram Medical Foundation	102	1.3
St. Isabel's Hospital	94	1.2
Govt. R.S.R.M. Hospital	91	1.2
Govt. Kasturba G.H.	89	1.2
VHS	88	1.1
Vijaya Hospital	75	1.0
C. Ramana Surgicals	74	1.0
All Others	1104	14.4
Total All Sources	**7678**	**100.0**

** 1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 1997-98.*

** 2. The numbers and proportion listed are the minimum number of cases. Institutions could have registered / reported more cases, since duplicate registrations and non-resident/registry cases are not included.*

TABLE CHN-2(a): Number of Incident Cancers by Five Year Age Group and Site (ICD-9): 1997–1998 – Males

%= Relative Proportion of Cancers of All Sites.

Chennai

ICD-9	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	Total	%
140	Lip	0	0	0	0	0	0	0	1	1	1	1	3	2	1	0	0	10	0.27
141	Tongue	0	0	0	0	0	0	3	5	13	22	32	39	26	22	19	11	192	5.26
142	Salivary Gland	0	0	0	0	1	1	1	2	0	3	3	1	7	2	0	0	21	0.58
143	Gum	0	0	0	0	0	0	0	1	1	3	1	5	3	4	6	5	29	0.79
144	Floor of Mouth	0	0	0	0	0	0	2	1	2	4	7	2	3	1	1	1	24	0.66
145	Other Mouth	0	0	0	0	0	0	4	3	10	12	17	22	26	25	10	8	137	3.75
146	Oropharynx	0	0	0	0	0	0	0	1	6	6	19	7	11	14	11	5	80	2.19
147	Nasopharynx	0	0	1	1	2	1	0	1	2	8	4	4	4	3	0	1	32	0.88
148	Hypopharynx	0	0	1	0	0	2	1	6	6	19	31	30	27	20	9	15	167	4.57
149	Pharynx Etc.	0	0	0	0	0	0	0	2	2	4	1	2	1	3	1	2	18	0.49
150	Oesophagus	0	0	0	0	1	1	5	5	14	26	50	44	56	43	32	18	295	8.08
151	Stomach	0	0	0	0	0	1	12	16	32	44	46	71	75	53	51	25	426	11.66
152	Small Intestine	0	0	0	1	1	1	0	0	0	1	0	1	0	0	0	0	5	0.14
153	Colon	0	0	0	0	2	1	1	2	3	6	5	11	8	6	7	6	58	1.59
154	Rectum	0	0	0	2	3	6	5	4	8	9	11	20	15	20	13	11	127	3.48
155	Liver	0	0	0	0	0	1	2	4	8	11	10	18	15	17	10	6	102	2.79
156	Gall Bladder	0	0	0	0	0	0	0	1	3	3	1	0	4	5	8	5	30	0.82
157	Pancreas	0	0	0	0	0	0	2	3	2	6	9	6	7	6	6	8	55	1.51
158	Retroperitoneum	0	0	0	0	0	1	1	1	1	0	0	2	1	0	1	1	9	0.25
159	Other Dig Sys	0	0	0	0	0	0	0	1	0	1	0	0	1	1	1	0	5	0.14
160	Nasal Cavity	1	0	0	0	0	1	0	1	3	4	1	3	4	6	3	4	31	0.85
161	Larynx	0	0	0	0	1	0	1	3	13	12	20	25	34	19	20	17	165	4.52
162	Lung	0	0	0	0	2	0	8	15	13	44	58	64	70	55	19	22	370	10.13
163	Pleura	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0.05
164	Thymus	1	0	0	0	0	0	0	1	1	1	3	0	0	1	0	0	8	0.22
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
170	Bone	0	2	4	7	5	3	5	5	0	4	2	4	2	0	1	2	46	1.26
171	Conn Tissue	0	0	2	4	1	4	4	3	4	6	4	4	3	1	1	2	43	1.18
172	Skin Melanoma	0	0	0	0	0	0	1	0	0	2	2	0	0	1	1	0	7	0.19
173	Skin Other	0	0	3	0	0	0	1	1	3	3	5	7	5	7	8	7	50	1.37
175	Breast Male	0	0	0	0	0	0	0	0	0	1	1	1	2	0	1	1	7	0.19
185	Prostate	0	0	0	0	0	0	0	0	0	2	2	10	22	21	27	63	147	4.03
186	Testis	0	0	0	0	3	5	5	8	1	2	2	0	0	0	2	1	29	0.79
187	Penis etc.	0	0	0	0	1	2	2	1	3	4	8	12	7	9	3	4	56	1.53
188	Uri Bladder	0	0	0	0	0	0	0	2	3	3	6	7	12	16	13	22	84	2.30
189	Kidney	4	1	0	0	0	0	2	1	2	6	3	6	6	5	7	6	49	1.34
190	Eye	9	0	1	0	0	2	1	0	0	0	0	0	1	0	0	0	14	0.38
191	Brain	3	7	6	6	5	11	5	13	8	9	13	7	10	9	3	0	115	3.15
192	Nervous Sys	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
193	Thyroid Gland	0	0	0	0	3	0	2	3	3	6	7	6	5	4	3	3	45	1.23
194	Oth Endo Gland	1	0	0	2	1	0	1	1	0	0	0	0	0	1	0	0	7	0.19
195	Ill Def Sites	1	0	0	0	0	0	1	1	0	0	1	2	2	1	2	0	11	0.30
196	Sec Lymph Node	0	0	0	1	0	0	2	2	5	7	8	7	14	7	5	5	63	1.73
197	Sec Res Etc	0	0	0	0	1	0	1	5	4	8	16	15	14	9	9	5	87	2.38
198	Sec Other	0	0	0	0	0	0	0	1	3	4	0	5	3	2	3	4	25	0.68
199	Primary Unk	0	0	0	1	0	0	3	3	1	3	1	2	3	3	2	6	28	0.77
200	Lymphosarcoma	0	1	0	0	1	0	1	1	2	1	3	1	0	2	1	1	15	0.41
201	Hodgkins Dis	0	4	5	3	4	3	1	5	3	2	0	1	1	1	0	1	34	0.93
202	Oth Lymph Node	4	8	2	2	3	4	5	16	10	10	13	13	15	14	3	3	125	3.42
203	Mult Myeloma	0	0	0	0	0	0	0	0	2	2	5	7	2	2	3	2	25	0.68
204	Leuk Lymphatic	9	12	12	7	3	2	2	2	3	1	1	2	0	5	0	0	61	1.67
205	Leuk Myelocytic	0	1	3	6	3	4	7	9	4	4	2	4	4	8	2	1	62	1.70
206	Leuk Monocytic	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.03
207	Leuk Misc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk Uns	4	1	0	2	1	1	0	1	1	1	1	0	0	3	1	1	18	0.49
	TOTAL	**37**	**37**	**40**	**45**	**49**	**58**	**100**	**164**	**209**	**341**	**436**	**504**	**533**	**458**	**330**	**311**	**3652**	
	%	*1.0*	*1.0*	*1.1*	*1.2*	*1.3*	*1.5*	*2.7*	*4.4*	*5.7*	*9.3*	*11.9*	*13.8*	*14.5*	*12.5*	*9.0*	*8.5*	*100.0*	

TABLE CHN-2(b): Number of Incident Cancers by Five Year Age Group and Site (ICD-9): 1997–1998 – Females

%= Relative Proportion of Cancers of All Sites.

Chennai

ICD-9	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	Total	%
140	Lip	0	0	0	0	0	0	0	0	0	3	0	0	0	0	4	0	7	0.17
141	Tongue	0	0	0	0	0	0	1	1	5	8	9	5	6	10	4	3	52	1.29
142	Salivary Gland	0	0	0	0	1	1	0	1	1	2	2	0	1	0	1	0	10	0.25
143	Gum	0	0	0	0	0	0	0	1	2	2	5	7	6	2	4	3	32	0.79
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0.05
145	Other Mouth	0	0	0	0	1	0	0	7	10	11	17	17	18	26	16	9	132	3.28
146	Oropharynx	0	0	0	0	0	0	0	1	1	1	2	3	2	2	2	2	16	0.40
147	Nasopharynx	0	0	2	0	1	0	2	1	1	1	1	0	1	1	0	1	12	0.30
148	Hypopharynx	0	0	0	0	1	1	3	3	3	7	10	11	6	1	8	5	59	1.47
149	Pharynx Etc	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	3	0.07
150	Oesophagus	0	0	0	0	3	1	5	2	16	24	29	38	23	23	14	17	195	4.84
151	Stomach	0	0	0	1	4	3	12	16	16	18	41	28	35	26	15	10	225	5.59
152	Small Intestine	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	3	0.07
153	Colon	0	0	0	1	0	3	1	4	9	8	7	5	11	7	6	8	70	1.74
154	Rectum	0	0	1	1	2	1	1	10	10	8	6	10	13	14	12	8	97	2.41
155	Liver	0	0	0	0	1	0	1	2	1	3	3	2	7	2	2	3	27	0.67
156	Gall Bladder	0	0	0	0	0	0	0	2	1	3	2	4	4	4	4	2	26	0.65
157	Pancreas	0	0	0	0	0	0	1	1	1	5	1	4	8	4	3	0	28	0.70
158	Retroperitoneum	1	0	0	0	0	0	1	0	0	0	0	1	1	2	0	0	6	0.15
159	Other Dig Sys	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.02
160	Nasal Cavity	0	0	0	0	0	0	1	0	2	1	2	2	2	6	0	0	16	0.40
161	Larynx	0	0	0	0	0	0	0	2	3	2	3	4	3	1	2	0	20	0.50
162	Lung	0	0	0	0	1	2	2	4	5	7	8	10	13	9	8	4	73	1.81
163	Pleura	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
164	Thymus	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0.05
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
170	Bone	0	0	3	6	3	5	0	2	1	1	1	1	1	2	0	1	27	0.67
171	Conn Tissue	3	0	1	2	5	3	0	0	3	4	0	3	6	2	3	1	36	0.89
172	Skin Melanoma	0	0	1	0	0	1	1	2	0	0	4	1	4	1	0	1	16	0.40
173	Skin Other	0	0	0	0	0	0	0	3	0	3	2	4	6	4	3	5	30	0.75
174	Breast Female	0	0	0	1	2	20	44	79	100	134	103	114	95	84	55	47	878	21.81
179	Uterine Un	0	0	0	0	0	1	0	1	3	3	3	3	1	1	3	1	20	0.50
180	Cervix Uteri	0	0	0	0	2	11	32	66	118	152	155	120	162	85	37	39	979	24.32
181	Placenta	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	3	0.07
182	Body Uterus	0	0	0	0	0	0	0	1	8	6	16	12	16	14	7	9	89	2.21
183	Ovary	0	0	4	5	7	6	15	18	11	31	29	22	22	17	11	10	208	5.17
184	Vagina	0	0	0	0	0	1	1	2	0	8	9	5	7	5	3	5	46	1.14
188	Uri Bladder	0	0	0	0	0	1	0	1	3	3	1	2	3	6	9	8	37	0.92
189	Kidney	8	1	0	0	0	2	0	1	1	3	1	4	0	4	2	2	29	0.72
190	Eye	7	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	8	0.20
191	Brain	1	6	3	5	5	8	2	7	5	10	4	5	8	3	4	0	76	1.89
192	Nervous System	0	0	0	0	0	0	0	1	0	1	1	2	0	1	0	0	6	0.15
193	Thyroid Gland	0	0	2	0	3	7	8	4	7	9	4	7	8	1	4	2	66	1.64
194	Oth Endo Gland	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	1	9	0.22
195	Ill Def Sites	1	0	0	0	1	0	1	0	0	1	2	1	1	1	1	1	11	0.27
196	Sec Lymph Node	0	0	0	0	1	1	0	2	2	2	6	5	3	0	2	2	26	0.65
197	Sec Res Etc	0	0	0	1	1	0	0	5	4	2	8	7	11	6	3	0	48	1.19
198	Sec Other	0	0	0	0	0	0	0	0	0	0	4	1	2	5	3	1	16	0.40
199	Primary Unk	0	0	0	0	1	1	1	1	1	2	3	4	2	2	5	1	24	0.60
200	Lymphosarcoma	1	1	0	0	1	2	0	0	2	1	3	2	0	0	2	2	17	0.42
201	Hodgkins Dis	0	1	1	2	3	1	0	1	1	0	1	1	1	0	0	1	14	0.35
202	Oth Lymphoma	1	1	3	3	4	1	4	5	3	6	7	11	9	9	4	4	75	1.86
203	Mult Myeloma	0	0	0	0	0	0	0	0	3	0	2	3	5	5	2	2	22	0.55
204	Leuk Lymphatic	9	10	2	3	1	1	1	1	1	1	0	1	1	2	0	0	34	0.84
205	Leuk Myelocytic	0	2	2	6	2	6	7	1	4	3	0	3	6	1	2	3	48	1.19
206	Leuk Monocytic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
207	Leuk Misc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk Uns	1	1	1	1	1	0	0	0	2	1	1	1	0	1	1	2	14	0.35
	TOTAL	**36**	**27**	**27**	**38**	**60**	**91**	**149**	**262**	**371**	**502**	**520**	**496**	**543**	**402**	**273**	**229**	**4026**	
	%	*0.8*	*0.6*	*0.6*	*0.9*	*1.4*	*2.2*	*3.7*	*6.5*	*9.2*	*12.4*	*12.9*	*12.3*	*13.4*	*9.9*	*6.7*	*5.6*	*100.0*	

TABLE CHN-3(a):
Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error (SE)) and Truncated (35-64 Yrs) (TR) Incidence Rate per 100,000 population: 1997-1998 - Males
Chennai

ICD-9	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	CR	AAR	SE	TR
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.5	0.6	2.2	1.7	1.3	0.0	0.0	0.24	**0.30**	0.09	0.84
141	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.4	4.7	10.6	17.8	28.2	21.8	28.2	35.4	19.9	4.56	**5.90**	0.43	12.55
142	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.6	0.0	1.4	1.7	0.7	5.9	2.6	0.0	0.0	0.50	**0.62**	0.13	1.51
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	1.4	0.6	3.6	2.5	5.1	11.2	9.1	0.69	**0.94**	0.18	1.29
144	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.7	1.9	3.9	1.4	2.5	1.3	1.9	1.8	0.57	**0.68**	0.14	1.70
145	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.9	3.6	5.8	9.5	15.9	21.8	32.0	18.6	14.5	3.25	**4.30**	0.37	8.38
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.2	2.9	10.6	5.1	9.2	17.9	20.5	9.1	1.90	**2.55**	0.29	4.61
147	0.0	0.0	0.3	0.2	0.4	0.2	0.0	0.3	0.7	3.8	2.2	2.9	3.4	3.8	0.0	1.8	0.76	**0.91**	0.16	2.10
148	0.0	0.0	0.3	0.0	0.0	0.5	0.3	1.7	2.2	9.1	17.3	21.7	22.6	25.6	16.8	27.2	3.97	**5.16**	0.40	11.03
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.7	1.9	0.6	1.4	0.8	3.8	1.9	3.6	0.43	**0.53**	0.13	1.01
150	0.0	0.0	0.0	0.0	0.2	0.2	1.4	1.4	5.0	12.5	27.9	31.9	46.9	55.1	59.6	32.6	7.01	**9.30**	0.55	18.33
151	0.0	0.0	0.0	0.0	0.0	0.2	3.3	4.6	11.5	21.2	25.6	51.4	62.8	67.9	94.9	45.3	10.12	**13.16**	0.65	26.08
152	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.5	0.0	0.7	0.0	0.0	0.0	0.0	0.12	**0.12**	0.05	0.19
153	0.0	0.0	0.0	0.0	0.4	0.2	0.3	0.6	1.1	2.9	2.8	8.0	6.7	7.7	13.0	10.9	1.38	**1.79**	0.24	3.23
154	0.0	0.0	0.0	0.5	0.6	1.4	1.4	1.2	2.9	4.3	6.1	14.5	12.6	25.6	24.2	19.9	3.02	**3.83**	0.35	6.10
155	0.0	0.0	0.0	0.0	0.0	0.2	0.5	1.2	2.9	5.3	5.6	13.0	12.6	21.8	18.6	10.9	2.42	**3.15**	0.32	6.03
156	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.1	1.4	0.6	0.0	3.4	6.4	14.9	9.1	0.71	**1.01**	0.19	1.08
157	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.9	0.7	2.9	5.0	4.3	5.9	7.7	11.2	14.5	1.31	**1.69**	0.23	2.99
158	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.4	0.0	0.0	1.4	0.8	0.0	1.9	1.8	0.21	**0.25**	0.08	0.42
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.0	0.0	0.8	1.3	1.9	0.0	0.12	**0.16**	0.07	0.26
160	0.3	0.0	0.0	0.0	0.0	0.2	0.0	0.3	1.1	1.9	0.6	2.2	3.4	7.7	5.6	7.3	0.74	**1.04**	0.18	1.46
161	0.0	0.0	0.0	0.0	0.2	0.0	0.3	0.9	4.7	5.8	11.1	18.1	28.5	24.3	37.2	30.8	3.92	**5.23**	0.41	10.01
162	0.0	0.0	0.0	0.0	0.4	0.0	2.2	4.3	4.7	21.2	32.3	46.3	58.6	70.5	35.4	39.9	8.79	**11.41**	0.60	24.58
163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	1.9	0.0	0.05	**0.07**	0.05	0.09
164	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.5	1.7	0.0	0.0	1.3	0.0	0.0	0.19	**0.27**	0.08	0.51
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
170	0.0	0.6	1.1	1.7	1.1	0.7	1.4	1.4	0.0	1.9	1.1	2.9	1.7	0.0	1.9	3.6	1.09	**1.03**	0.16	1.41
171	0.0	0.0	0.5	1.0	0.2	0.9	1.1	0.9	1.4	2.9	2.2	2.9	2.5	1.3	1.9	3.6	1.02	**1.08**	0.17	2.04
172	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	1.0	1.1	0.0	0.0	1.3	1.9	0.0	0.17	**0.22**	0.08	0.37
173	0.0	0.0	0.8	0.0	0.0	0.0	0.3	0.3	1.1	1.4	2.8	5.1	4.2	9.0	14.9	12.7	1.19	**1.59**	0.23	2.19
175	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.7	1.7	0.0	1.9	1.8	0.17	**0.24**	0.09	0.51
185	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.1	7.2	18.4	26.9	50.3	114.2	3.49	**5.25**	0.43	3.67
186	0.0	0.0	0.0	0.0	0.6	1.1	1.4	2.3	0.4	1.0	1.1	0.0	0.0	0.0	3.7	1.8	0.69	**0.61**	0.12	0.90
187	0.0	0.0	0.0	0.0	0.2	0.5	0.5	0.3	1.1	1.9	4.5	8.7	5.9	11.5	5.6	7.3	1.33	**1.72**	0.23	3.25
188	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.1	1.4	3.3	5.1	10.1	20.5	24.2	39.9	2.00	**2.86**	0.31	3.09
189	1.3	0.3	0.0	0.0	0.0	0.0	0.5	0.3	0.7	2.9	1.7	4.3	5.0	6.4	13.0	10.9	1.16	**1.68**	0.23	2.23
190	2.8	0.0	0.3	0.0	0.0	0.5	0.3	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.33	**0.74**	0.12	0.10
191	0.9	1.9	1.6	1.5	1.1	2.5	1.4	3.7	2.9	4.3	7.2	5.1	8.4	11.5	5.6	0.0	2.73	**2.86**	0.29	5.01
192	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
193	0.0	0.0	0.0	0.0	0.6	0.0	0.5	0.9	1.1	2.9	3.9	4.3	4.2	5.1	5.6	5.4	1.07	**1.28**	0.20	2.66
194	0.3	0.0	0.0	0.5	0.2	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.17	**0.22**	0.07	0.06
195	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.6	1.4	1.7	1.3	3.7	0.0	0.26	**0.38**	0.10	0.56
196	0.0	0.0	0.0	0.2	0.0	0.0	0.5	0.6	1.8	3.4	4.5	5.1	11.7	9.0	9.3	9.1	1.50	**1.94**	0.25	4.03
197	0.0	0.0	0.0	0.0	0.2	0.0	0.3	1.4	1.4	3.8	8.9	10.9	11.7	11.5	16.8	9.1	2.07	**2.66**	0.29	5.64
198	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.1	1.9	0.0	3.6	2.5	2.6	5.6	7.3	0.59	**0.78**	0.16	1.42
199	0.0	0.0	0.0	0.2	0.0	0.0	0.8	0.9	0.4	1.4	0.6	1.4	2.5	3.8	3.7	10.9	0.67	**0.81**	0.16	1.12
200	0.0	0.3	0.0	0.0	0.2	0.0	0.3	0.3	0.7	0.5	1.7	0.7	0.0	2.6	1.9	1.8	0.36	**0.41**	0.11	0.66
201	0.0	1.1	1.3	0.7	0.8	0.7	0.3	1.4	1.1	1.0	0.0	0.7	0.8	1.3	0.0	1.8	0.81	**0.67**	0.14	0.86
202	1.3	2.2	0.5	0.5	0.6	0.9	1.4	4.6	3.6	4.8	7.2	9.4	12.6	17.9	5.6	5.4	2.97	**3.38**	0.32	6.52
203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.0	2.8	5.1	1.7	2.6	5.6	3.6	0.59	**0.77**	0.16	1.66
204	2.8	3.3	3.2	1.7	0.6	0.5	0.5	0.6	1.1	0.5	0.6	1.4	0.0	6.4	0.0	0.0	1.45	**1.60**	0.22	0.71
205	0.0	0.3	0.8	1.5	0.6	0.9	1.9	2.6	1.4	1.9	1.1	2.9	3.4	10.3	3.7	1.8	1.47	**1.53**	0.21	2.13
206	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	**0.02**	0.02	0.00
207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
208	1.3	0.3	0.0	0.5	0.2	0.2	0.0	0.3	0.4	0.5	0.6	0.0	0.0	3.8	1.9	1.8	0.43	**0.67**	0.13	0.34
All	**11.6**	**10.3**	**10.7**	**10.9**	**10.0**	**13.1**	**27.5**	**47.6**	**75.6**	**164.0**	**243.3**	**364.5**	**446.7**	**586.8**	**614.9**	**563.8**	**86.7**	**111.3**	**1.88**	**199.5**

TABLE CHN-3(b):

Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error (SE)) and Truncated (35-64 Yrs) (TR) Incidence Rate per 100,000 population: 1997-1998 - Females Chennai

ICD-9	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	CR	AAR	SE	TR
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	7.8	0.0	0.18	**0.26**	0.10	0.31
141	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	2.2	4.2	5.8	3.8	5.3	13.0	7.8	4.9	1.31	**1.72**	0.24	3.41
142	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.3	0.4	1.0	1.3	0.0	0.9	0.0	2.0	0.0	0.25	**0.29**	0.09	0.66
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	1.0	3.2	5.4	5.3	2.6	7.8	4.9	0.80	**1.06**	0.19	2.32
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	1.6	0.05	**0.06**	0.04	0.10
145	0.0	0.0	0.0	0.0	0.2	0.0	0.0	2.3	4.3	5.8	11.0	13.0	15.8	33.9	31.2	14.8	3.32	**4.41**	0.39	7.89
146	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.5	1.3	2.3	1.8	2.6	3.9	3.3	0.40	**0.53**	0.13	0.98
147	0.0	0.0	0.5	0.0	0.2	0.0	0.6	0.3	0.4	0.5	0.6	0.0	0.9	1.3	0.0	1.6	0.30	**0.32**	0.09	0.46
148	0.0	0.0	0.0	0.0	0.2	0.2	0.9	1.0	1.3	3.7	6.4	8.4	5.3	1.3	15.6	8.2	1.48	**1.83**	0.24	3.95
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	2.0	1.6	0.08	**0.11**	0.06	0.12
150	0.0	0.0	0.0	0.0	0.6	0.2	1.5	0.6	7.0	12.6	18.7	29.1	20.2	30.0	27.3	27.9	4.90	**6.30**	0.46	13.29
151	0.0	0.0	0.0	0.2	0.9	0.7	3.6	5.2	7.0	9.4	26.4	21.4	30.7	33.9	29.3	16.4	5.66	**7.01**	0.48	15.16
152	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.0	0.9	0.0	0.0	0.0	0.08	**0.10**	0.06	0.32
153	0.0	0.0	0.0	0.2	0.0	0.7	0.3	1.3	3.9	4.2	4.5	3.8	9.6	9.1	11.7	13.1	1.76	**2.18**	0.27	4.27
154	0.0	0.0	0.3	0.2	0.4	0.2	0.3	3.2	4.3	4.2	3.9	7.7	11.4	18.3	23.4	13.1	2.44	**3.07**	0.32	5.35
155	0.0	0.0	0.0	0.0	0.2	0.0	0.3	0.6	0.4	1.6	1.9	1.5	6.1	2.6	3.9	4.9	0.68	**0.86**	0.17	1.80
156	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.4	1.6	1.3	3.1	3.5	5.2	7.8	3.3	0.65	**0.88**	0.17	1.57
157	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.4	2.6	0.6	3.1	7.0	5.2	5.9	0.0	0.70	**0.93**	0.18	2.04
158	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.8	0.9	2.6	0.0	0.0	0.15	**0.24**	0.08	0.22
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.03	**0.03**	0.03	0.00
160	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.9	0.5	1.3	1.5	1.8	7.8	0.0	0.0	0.40	**0.53**	0.14	0.90
161	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.3	1.0	1.9	3.1	2.6	1.3	3.9	0.0	0.50	**0.62**	0.14	1.61
162	0.0	0.0	0.0	0.0	0.2	0.5	0.6	1.3	2.2	3.7	5.2	7.7	11.4	11.7	15.6	6.6	1.83	**2.35**	0.28	4.70
163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
164	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	2.0	0.0	0.05	**0.08**	0.05	0.12
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
170	0.0	0.0	0.8	1.5	0.6	1.2	0.0	0.6	0.4	0.5	0.6	0.8	0.9	2.6	0.0	1.6	0.68	**0.66**	0.13	0.62
171	1.0	0.0	0.3	0.5	1.1	0.7	0.0	0.0	1.3	2.1	0.0	2.3	5.3	2.6	5.9	1.6	0.90	**1.19**	0.18	1.64
172	0.0	0.0	0.3	0.0	0.0	0.2	0.3	0.6	0.0	0.0	2.6	0.8	3.5	1.3	0.0	1.6	0.40	**0.48**	0.12	1.09
173	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.6	1.3	3.1	5.3	5.2	5.9	8.2	0.75	**1.00**	0.18	1.79
174	0.0	0.0	0.0	0.2	0.4	4.6	13.3	25.4	43.4	70.3	66.4	87.3	83.3	109.5	107.3	77.2	22.07	**26.68**	0.92	59.65
179	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3	1.3	1.6	1.9	2.3	0.9	1.3	5.9	1.6	0.50	**0.64**	0.14	1.35
180	0.0	0.0	0.0	0.0	0.4	2.5	9.7	21.3	51.3	79.7	99.9	91.9	142.1	110.8	72.2	64.1	24.61	**30.35**	0.99	75.79
181	0.0	0.0	0.0	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	**0.05**	0.03	0.00
182	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.5	3.1	10.3	9.2	14.0	18.3	13.7	14.8	2.24	**2.99**	0.32	6.00
183	0.0	0.0	1.1	1.2	1.5	1.4	4.5	5.8	4.8	16.3	18.7	16.8	19.3	22.2	21.5	16.4	5.23	**6.14**	0.44	12.88
184	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.6	0.0	4.2	5.8	3.8	6.1	6.5	5.9	8.2	1.16	**1.49**	0.22	3.15
188	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3	1.3	1.6	0.6	1.5	2.6	7.8	17.6	13.1	0.93	**1.25**	0.21	1.25
189	2.7	0.3	0.0	0.0	0.0	0.5	0.0	0.3	0.4	1.6	0.6	3.1	0.0	5.2	3.9	3.3	0.73	**1.23**	0.19	0.95
190	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	**0.55**	0.11	0.08
191	0.3	1.7	0.8	1.2	1.1	1.8	0.6	2.3	2.2	5.2	2.6	3.8	7.0	3.9	7.8	0.0	1.91	**1.94**	0.25	3.70
192	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.6	1.5	0.0	1.3	0.0	0.0	0.15	**0.18**	0.07	0.45
193	0.0	0.0	0.5	0.0	0.6	1.6	2.4	1.3	3.0	4.7	2.6	5.4	7.0	1.3	7.8	3.3	1.66	**1.81**	0.23	3.76
194	1.0	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.23	**0.28**	0.10	0.00
195	0.3	0.0	0.0	0.0	0.2	0.0	0.3	0.0	0.0	0.5	1.3	0.8	0.9	1.3	2.0	1.6	0.28	**0.39**	0.11	0.53
196	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.6	0.9	1.0	3.9	3.8	2.6	0.0	3.9	3.3	0.65	**0.79**	0.16	1.94
197	0.0	0.0	0.0	0.2	0.2	0.0	0.0	1.6	1.7	1.0	5.2	5.4	9.6	7.8	5.9	0.0	1.21	**1.51**	0.22	3.61
198	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.8	1.8	6.5	5.9	1.6	0.40	**0.58**	0.14	0.75
199	0.0	0.0	0.0	0.0	0.2	0.2	0.3	0.3	0.4	1.0	1.9	3.1	1.8	2.6	9.8	1.6	0.60	**0.76**	0.16	1.27
200	0.3	0.3	0.0	0.0	0.2	0.5	0.0	0.0	0.9	0.5	1.9	1.5	0.0	0.0	3.9	3.3	0.43	**0.52**	0.13	0.77
201	0.0	0.3	0.3	0.5	0.6	0.2	0.0	0.3	0.4	0.0	0.6	0.8	0.9	0.0	0.0	1.6	0.35	0.32	0.09	0.46
202	0.3	0.3	0.8	0.7	0.9	0.2	1.2	1.6	1.3	3.1	4.5	8.4	7.9	11.7	7.8	6.6	1.89	**2.26**	0.27	3.99
203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.3	2.3	4.4	6.5	3.9	3.3	0.55	**0.77**	0.16	1.33
204	3.0	2.8	0.5	0.7	0.2	0.2	0.3	0.3	0.4	0.5	0.0	0.8	0.9	2.6	0.0	0.0	0.85	**1.05**	0.18	0.46
205	0.0	0.6	0.5	1.5	0.4	1.4	2.1	0.3	1.7	1.6	0.0	2.3	5.3	1.3	3.9	4.9	1.21	**1.20**	0.19	1.68
206	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
208	0.3	0.3	0.3	0.2	0.2	0.0	0.0	0.0	0.9	0.5	0.6	0.8	0.0	1.3	2.0	3.3	0.35	**0.43**	0.11	0.47
All	**11.9**	**7.7**	**7.3**	**9.0**	**12.5**	**20.7**	**44.9**	**83.9**	**160.9**	**262.9**	**334.8**	**380.1**	**476.6**	**523.8**	**533.3**	**375.5**	**101.2**	**125.2**	**0.86**	**262.9**

TABLE CHN-4(a): Cumulative Rate (Cu.Rate%) & Cumulative Risk (Cu. Risk) of Individual Sites (ICD-9) Based on Age Specific Rates (from 0–64 Years and from 0–74 Years) 1997-1998: Males - Chennai

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu. Rate %	Cu. Risk	Cu. Rate%	Cu. Risk
140	Lip	0.04	0.03	0.04	0.03
141	Tongue	0.57	0.57	0.74	0.74
142	Salivary Gland	0.07	0.07	0.07	0.07
143	Gum	0.07	0.07	0.13	0.13
144	Floor of Mouth	0.06	0.06	0.07	0.07
145	Other Mouth	0.45	0.45	0.55	0.54
146	Oropharynx	0.24	0.24	0.34	0.34
147	Nasopharynx	0.09	0.09	0.09	0.09
148	Hypopharynx	0.51	0.51	0.59	0.59
149	Pharynx Etc.	0.05	0.05	0.06	0.06
150	Oesophagus	0.91	0.91	1.21	1.20
151	Stomach	1.24	1.23	1.72	1.70
152	Small Intestine	0.01	0.01	0.01	0.01
153	Colon	0.15	0.15	0.22	0.22
154	Rectum	0.36	0.35	0.48	0.48
155	Liver	0.32	0.32	0.41	0.41
156	Gall Bladder	0.07	0.07	0.14	0.14
157	Pancreas	0.14	0.14	0.20	0.20
158	Retroperitoneum	0.02	0.02	0.03	0.03
159	Other Dig Sys	0.01	0.01	0.02	0.02
160	Nasal Cavity	0.09	0.09	0.12	0.12
161	Larynx	0.47	0.47	0.66	0.65
162	Lung	1.20	1.20	1.38	1.37
163	Pleura	0.00	0.00	0.01	0.01
164	Thymus	0.02	0.02	0.02	0.02
165	Other Resp	0.00	0.00	0.00	0.00
170	Bone	0.08	0.08	0.09	0.09
171	Conn Tissue	0.09	0.09	0.10	0.10
172	Skin Melanoma	0.02	0.02	0.03	0.03
173	Skin Other	0.13	0.12	0.20	0.20
175	Breast Male	0.02	0.02	0.03	0.03
185	Prostate	0.27	0.27	0.52	0.52
186	Testis	0.04	0.04	0.06	0.06
187	Penis Etc	0.18	0.18	0.20	0.20
188	Uri Bladder	0.21	0.21	0.33	0.33
189	Kidney	0.12	0.12	0.18	0.18
190	Eye	0.02	0.02	0.02	0.02
191	Brain	0.27	0.27	0.30	0.30
192	Nervous Sys	0.00	0.00	0.00	0.00
193	Thyroid Gland	0.12	0.12	0.15	0.15
194	Oth Endo Gland	0.01	0.01	0.01	0.01
195	Ill Def Sites	0.03	0.03	0.05	0.05
196	Sec Lymph Node	0.18	0.18	0.23	0.23
197	Sec Res Etc	0.25	0.25	0.33	0.33
198	Sec Other	0.06	0.06	0.09	0.09
199	Primary Unk	0.06	0.06	0.08	0.08
200	Lymphosarcoma	0.04	0.04	0.05	0.05
201	Hodgkins Dis	0.06	0.06	0.06	0.06
202	Oth Lymph Node	0.34	0.34	0.37	0.36
203	Mult Myeloma	0.07	0.07	0.10	0.10
204	Leuk Lymphatic	0.12	0.12	0.12	0.12
205	Leuk Myelocytic	0.15	0.15	0.17	0.17
206	Leuk Monocytic	0.00	0.00	0.00	0.00
207	Leuk Misc	0.00	0.00	0.00	0.00
208	Leuk Uns	0.04	0.04	0.05	0.05
	ALL SITES	**10.11**	**9.62**	**13.19**	**12.35**

TABLE CHN-4(b): Cumulative Rate (Cu.Rate%) & Cumulative Risk (Cu. Risk) of Individual Sites (ICD-9) Based on Age Specific Rates (from 0–64 Years and from 0–74 Years) 1997-1998: Females - Chennai

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu. Rate %	Cu. Risk	Cu. Rate%	Cu. Risk
140	Lip	0.01	0.01	0.05	0.05
141	Tongue	0.17	0.17	0.21	0.21
142	Salivary Gland	0.02	0.02	0.03	0.03
143	Gum	0.09	0.09	0.13	0.13
144	Floor of Mouth	0.00	0.00	0.00	0.00
145	Other Mouth	0.43	0.43	0.59	0.59
146	Oropharynx	0.05	0.05	0.07	0.07
147	Nasopharynx	0.03	0.03	0.03	0.03
148	Hypopharynx	0.14	0.14	0.22	0.22
149	Pharynx Etc	0.00	0.00	0.01	0.01
150	Oesophagus	0.60	0.60	0.74	0.74
151	Stomach	0.70	0.69	0.84	0.84
152	Small Intestine	0.01	0.01	0.01	0.01
153	Colon	0.19	0.19	0.25	0.25
154	Rectum	0.27	0.27	0.39	0.39
155	Liver	0.08	0.08	0.10	0.10
156	Gall Bladder	0.08	0.08	0.12	0.12
157	Pancreas	0.10	0.10	0.13	0.13
158	Retroperitoneum	0.02	0.02	0.02	0.02
159	Other Dig Sys	0.00	0.00	0.00	0.00
160	Nasal Cavity	0.07	0.07	0.07	0.07
161	Larynx	0.06	0.06	0.08	0.08
162	Lung	0.22	0.22	0.30	0.30
163	Pleura	0.00	0.00	0.00	0.00
164	Thymus	0.00	0.00	0.01	0.01
165	Other Resp	0.00	0.00	0.00	0.00
170	Bone	0.05	0.05	0.05	0.05
171	Conn Tissue	0.09	0.09	0.12	0.12
172	Skin Melanoma	0.05	0.05	0.05	0.05
173	Skin Other	0.09	0.09	0.12	0.12
174	Breast Female	2.52	2.49	3.06	3.01
179	Uterine Un	0.05	0.05	0.08	0.08
180	Cervix Uteri	3.05	3.00	3.41	3.35
181	Placenta	0.00	0.00	0.00	0.00
182	Body Uterus	0.29	0.29	0.36	0.36
183	Ovary	0.57	0.57	0.68	0.67
184	Vagina	0.14	0.14	0.17	0.17
188	Uri Bladder	0.08	0.08	0.17	0.17
189	Kidney	0.07	0.07	0.09	0.09
190	Eye	0.01	0.01	0.01	0.01
191	Brain	0.17	0.17	0.21	0.21
192	Nervous System	0.02	0.02	0.02	0.02
193	Thyroid Gland	0.15	0.15	0.19	0.19
194	Oth Endo Gland	0.01	0.01	0.01	0.01
195	Ill Def Sites	0.03	0.03	0.04	0.04
196	Sec Lymph Node	0.07	0.07	0.09	0.09
197	Sec Res Etc	0.16	0.16	0.19	0.19
198	Sec Other	0.06	0.06	0.09	0.09
199	Primary Unk	0.06	0.06	0.11	0.11
200	Lymphosarcoma	0.03	0.03	0.05	0.05
201	Hodgkins Dis	0.02	0.02	0.02	0.02
202	Oth Lymphoma	0.21	0.21	0.25	0.25
203	Mult Myeloma	0.08	0.08	0.10	0.10
204	Leuk Lymphatic	0.07	0.07	0.07	0.07
205	Leuk Myelocytic	0.10	0.09	0.11	0.11
206	Leuk Monocytic	0.00	0.00	0.00	0.00
207	Leuk Misc	0.00	0.00	0.00	0.00
208	Leuk Uns	0.03	0.03	0.04	0.04
	ALL SITES	**11.69**	**11.03**	**14.35**	**13.37**

POPULATION BASED CANCER REGISTRY, DELHI
Institute Rotary Cancer Hospital,
All India Institute of Medical Sciences, New Delhi

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The Population Based Cancer Registry at Dr. B.R. Ambedkar Institute Rotary Cancer Hospital, AIIMS, Delhi covers an area of 685.34 square kms as per 1991 census. The sources for the morbidity and mortality data on cancer are 159 major government hospital/centres/Institutions, more than 255 private hospitals/nursing homes and the Department of Vital Statistics of New Delhi Municipal Committee Corporation of Delhi and Delhi Cantonment Board.

There has been no change in cancer registration system, methodology, diagnostic criteria and working of the registry from the previous years.

Population Estimates

Taking 1991 and 2001 census figures as base, the population of Delhi UT urban area for the years 1997 and 1998 are estimated as 11.01 million (Males: 6.03; Females: 4.97) and 11.47 million (Males: 6.29; Females: 5.18) respectively.

Highlights

During 1997-98 the crude incidence rate (CR) for all cancer sites for males and females are 73.1 and 86.8 respectively. The world age adjusted incidence rates (AAR) are 120.9 and 134.8 among males and females respectively. The truncated incidence rate (TCR) for ages 35-64 years for males and females are 200.5 and 273.1 respectively. All these three rates are higher in females as compared to males.

In males, lung was the predominant site followed by larynx, prostate, brain and Non-Hodgkin's Lymphoma.

Among females breast was the leading site followed by cervix uteri, ovary, gall bladder and body uterus.

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FIGURE DEL-1:

Population Pyramid showing Age Distribution : 1997-98

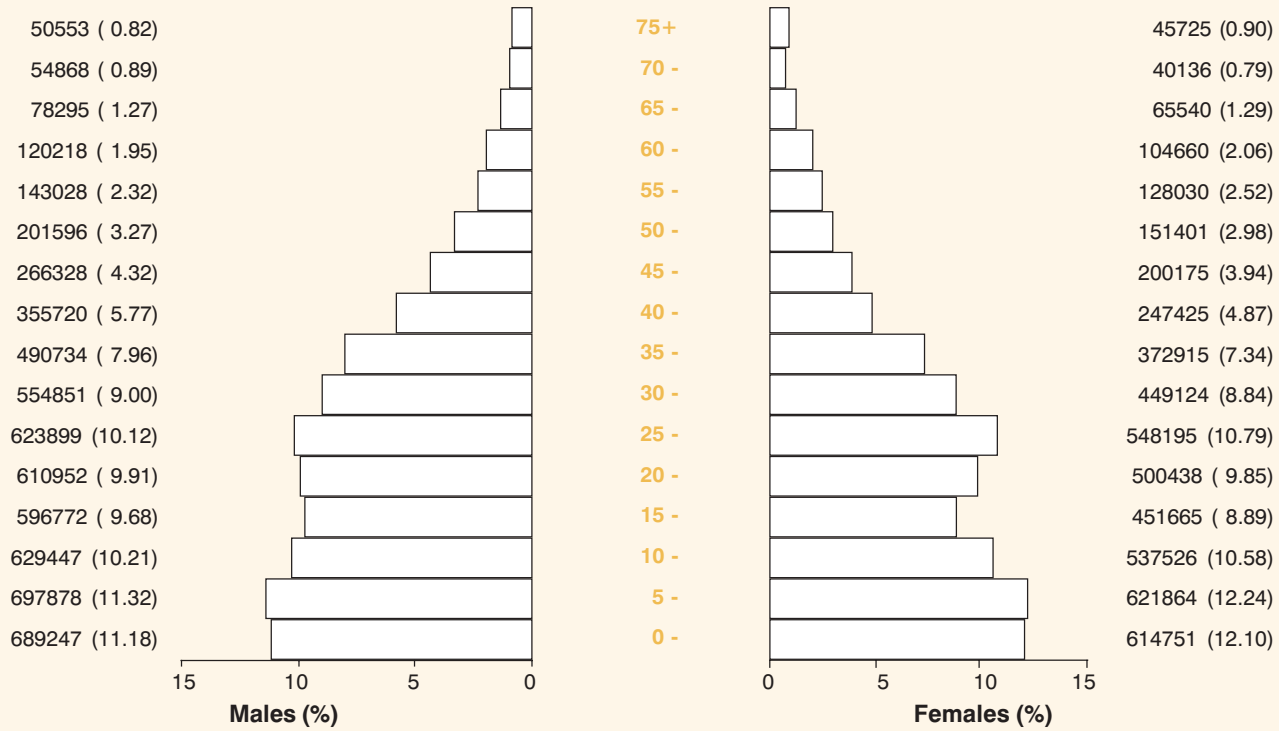

TABLE DEL-1:

Main Sources* of Registration of Incident Cases of Cancer in Delhi - 1997-1998

Name of the Institution	Number	%
IRCH / AIIMS	3397	19.1
Rajiv Gandhi Cancer Hospital	2397	13.4
ICPO/MAMC/LNJP	2205	12.4
Safdarjang	1903	10.7
Gangaram	1077	6.0
MCA	940	5.3
RML	810	4.5
Dharmashila	688	3.9
Batra	629	3.5
NDMC	514	2.9
LHMC	495	2.8
GB Pant	369	2.1
Anand Hospital	260	1.5
UCMS	253	1.4
ESI	239	1.3
Holy Family Hospital	219	1.2
St.Stephen's	217	1.2
Apollo Hospital	205	1.1
All Others	1011	5.7
Total All Sources	**17828**	**100.0**

** 1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 1997-98.*

** 2. The numbers and proportion listed are the minimum number of cases. Institutions could have registered / reported more cases, since duplicate registrations and non-resident/registry cases are not included.*

TABLE DEL-2(a): Number of Incident Cancers by Five Year Age Group and Site (ICD-9): 1997–1998 – Males

%= Relative Proportion of Cancers of All Sites.

Delhi

ICD-9	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	Total	%
140	Lip	0	0	0	0	1	0	0	4	1	1	4	3	5	4	0	1	24	0.27
141	Tongue	3	1	0	0	1	2	11	15	32	58	55	45	72	38	24	27	384	4.26
142	Salivary Gland	1	0	1	0	0	3	2	3	6	8	8	5	10	7	7	5	66	0.73
143	Gum	0	1	0	0	0	1	2	3	9	14	10	11	12	7	2	8	80	0.89
144	Floor of Mouth	0	0	0	0	0	0	0	1	0	1	1	0	3	0	0	1	7	0.08
145	Other Mouth	0	1	0	0	2	7	14	11	24	35	28	34	43	16	17	14	246	2.73
146	Oropharynx	0	0	0	0	0	2	5	9	21	27	39	25	38	21	15	10	212	2.35
147	Nasopharynx	0	0	0	3	0	2	3	4	6	4	3	2	1	5	5	1	39	0.43
148	Hypopharynx	1	0	0	1	0	0	1	2	14	18	33	23	38	28	22	12	193	2.14
149	Pharynx Etc.	0	0	0	0	0	0	2	1	1	4	4	6	9	4	4	2	37	0.41
150	Oesophagus	0	0	1	1	3	1	5	19	29	34	56	56	70	44	35	39	393	4.36
151	Stomach	0	0	0	1	0	1	5	15	19	16	34	40	34	22	23	15	225	2.49
152	Small Intestine	0	0	0	0	0	1	4	4	5	2	1	3	0	3	2	1	26	0.29
153	Colon	0	1	0	1	1	4	14	17	20	13	19	24	26	19	11	15	185	2.05
154	Rectum	0	0	2	4	4	6	14	13	20	26	20	17	20	24	15	22	207	2.29
155	Liver	3	1	0	2	1	3	3	9	4	13	17	17	25	21	6	19	144	1.60
156	Gall Bladder	0	0	0	0	1	6	3	13	19	29	30	43	34	34	30	23	265	2.94
157	Pancreas	0	0	0	0	2	3	2	6	20	12	16	22	20	17	12	9	141	1.56
158	Retroperitoneum	1	0	0	0	1	1	1	1	0	1	2	1	1	3	1	2	16	0.18
159	Other Dig Sys	1	0	0	0	2	0	0	1	1	0	1	2	4	4	2	2	20	0.22
160	Nasal Cavity	2	4	0	0	2	2	3	0	1	4	2	2	1	5	0	0	28	0.31
161	Larynx	0	0	1	2	2	5	5	13	62	64	81	70	94	68	62	46	575	6.37
162	Lung	1	0	0	1	0	5	13	20	54	86	153	117	157	128	97	65	897	9.94
163	Pleura	0	0	0	0	0	0	0	1	0	3	5	1	3	3	4	2	22	0.24
164	Thymus	0	2	0	0	0	0	0	3	2	1	0	0	0	1	0	0	9	0.10
165	Other Resp	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0.02
170	Bone	1	9	21	18	24	10	14	10	11	8	5	5	9	5	4	1	155	1.72
171	Conn Tissue	11	10	4	13	11	20	14	8	9	5	10	8	14	12	7	3	159	1.76
172	Skin Melanoma	0	0	0	1	0	2	3	2	2	0	5	1	5	2	5	4	32	0.35
173	Skin Other	2	1	2	1	8	3	3	3	6	5	8	5	11	11	5	17	91	1.01
175	Breast Male	0	0	0	1	0	2	1	0	3	6	7	6	6	3	5	5	45	0.50
185	Prostate	0	2	0	1	1	0	0	1	2	5	25	41	68	93	95	147	481	5.33
186	Testis	7	0	1	10	10	18	10	10	0	9	6	1	3	1	2	2	90	1.00
187	Penis Etc	1	0	0	0	2	2	3	5	5	10	4	5	10	4	5	10	66	0.73
188	Uri Bladder	2	0	0	2	2	3	7	11	18	20	32	47	55	68	54	61	382	4.23
189	Kidney	21	6	2	1	3	5	1	6	19	19	20	28	33	19	16	6	205	2.27
190	Eye	22	7	2	0	0	0	1	0	1	1	0	0	0	0	1	0	35	0.39
191	Brain	22	24	25	22	31	31	33	34	26	33	25	34	32	22	13	14	421	4.67
192	Nervous Sys	1	4	2	0	0	3	2	0	0	0	1	2	2	0	0	0	17	0.19
193	Thyroid Gland	0	3	1	2	3	1	11	5	15	4	16	7	7	7	5	3	90	1.00
194	Oth Endo Gland	14	2	3	0	0	1	2	1	2	1	1	1	0	0	1	1	30	0.33
195	Ill Def Sites	6	2	1	2	0	4	10	7	14	10	19	11	8	17	10	7	128	1.42
196	Sec Lymph Node	0	0	3	2	0	3	2	6	9	10	25	13	26	14	8	13	134	1.49
197	Sec Res Etc	0	2	0	2	4	1	1	3	7	12	17	18	19	15	11	9	121	1.34
198	Sec Other	1	1	1	0	1	1	4	1	6	6	11	5	9	14	11	6	78	0.86
199	Primary Unk	1	5	4	5	5	9	12	16	27	42	51	56	54	41	46	41	415	4.60
200	Lymphosarcoma	0	1	1	0	1	0	2	1	0	0	1	1	0	0	0	2	10	0.11
201	Hodgkins Dis	4	23	13	12	15	10	18	20	6	8	9	3	7	5	5	6	164	1.82
202	Oth Lymph Node	7	16	16	31	19	24	26	13	29	29	43	36	30	36	23	24	402	4.46
203	Mult Myeloma	0	1	1	0	1	2	1	7	13	12	26	29	29	25	21	12	180	1.99
204	Leuk Lymphatic	49	47	45	32	12	12	6	12	11	11	11	10	14	6	11	12	301	3.34
205	Leuk Myelocytic	4	8	14	18	36	35	20	24	34	23	16	12	9	5	13	10	281	3.11
206	Leuk Monocytic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
207	Leuk Misc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk Uns	8	5	6	7	7	6	2	4	5	3	5	2	5	0	1	1	67	0.74
	TOTAL	**197**	**190**	**174**	**199**	**219**	**263**	**321**	**398**	**651**	**766**	**1021**	**956**	**1185**	**951**	**774**	**758**	**9023**	
	%	*2.1*	*2.1*	*1.9*	*2.2*	*2.4*	*2.9*	*3.5*	*4.4*	*7.2*	*8.4*	*11.3*	*10.6*	*13.1*	*10.5*	*8.5*	*8.4*	*100.0*	

TABLE DEL-2(b): Number of Incident Cancers by Five Year Age Group and Site (ICD-9): 1997–1998 – Females

%= Relative Proportion of Cancers of All Sites.

Delhi

ICD-9	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	Total	%
140	Lip	0	0	0	0	0	0	0	2	1	0	1	1	0	2	0	1	8	0.09
141	Tongue	0	0	1	1	1	1	3	1	7	10	17	13	26	12	11	12	116	1.32
142	Salivary Gland	0	0	1	1	0	3	5	1	4	0	4	1	4	3	3	2	32	0.36
143	Gum	0	0	0	0	1	0	2	1	2	3	8	3	9	4	4	2	39	0.44
144	Floor of Mouth	0	0	0	0	0	1	0	1	0	0	1	0	0	0	3	0	6	0.07
145	Other Mouth	0	0	0	0	0	2	4	10	5	17	11	12	12	14	5	3	95	1.08
146	Oropharynx	0	1	0	0	0	0	1	1	5	5	11	7	7	5	2	1	46	0.52
147	Nasopharynx	0	0	1	0	1	0	1	1	1	3	3	0	0	2	0	0	13	0.15
148	Hypopharynx	0	1	0	0	0	0	1	2	3	3	6	5	6	2	1	1	31	0.35
149	Pharynx Etc	0	0	0	0	0	0	0	0	4	1	2	1	2	0	0	0	10	0.11
150	Oesophagus	0	0	0	0	1	1	4	5	13	24	26	25	28	25	21	21	194	2.20
151	Stomach	1	1	0	2	3	8	11	10	9	13	17	16	11	13	9	9	133	1.51
152	Small Intestine	0	0	0	0	0	1	1	2	1	1	2	0	1	2	1	2	14	0.16
153	Colon	0	0	0	0	5	5	3	7	12	7	15	13	17	14	9	10	117	1.33
154	Rectum	0	0	1	1	3	6	6	12	12	8	14	9	13	8	4	11	108	1.23
155	Liver	2	2	0	0	0	0	4	2	10	7	7	7	10	8	2	5	66	0.75
156	Gall Bladder	0	0	0	0	5	6	19	26	45	72	86	69	93	66	52	30	569	6.46
157	Pancreas	0	0	1	2	1	0	7	5	7	8	10	11	12	8	8	10	90	1.02
158	Retroperitoneum	0	0	0	0	1	0	3	5	3	6	1	1	1	3	4	3	31	0.35
159	Other Dig Sys	0	0	0	0	0	0	0	0	0	1	0	2	1	1	0	2	7	0.08
160	Nasal Cavity	0	0	1	0	2	2	0	1	2	0	2	1	3	0	1	2	17	0.19
161	Larynx	1	1	1	0	2	4	4	4	7	7	9	7	11	7	8	2	75	0.85
162	Lung	0	0	1	1	2	5	3	4	14	10	27	22	34	22	15	12	172	1.95
163	Pleura	0	0	0	0	0	0	0	1	2	4	1	0	1	1	1	2	13	0.15
164	Thymus	0	1	1	1	0	0	0	0	1	0	2	1	0	0	0	0	7	0.08
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
170	Bone	3	3	16	12	13	12	12	4	3	4	3	1	6	4	2	2	100	1.14
171	Conn Tissue	8	2	6	5	14	11	10	11	9	11	8	13	10	6	1	2	127	1.44
172	Skin Melanoma	0	0	0	0	1	1	0	0	1	1	4	1	3	3	3	0	18	0.20
173	Skin Other	2	0	1	1	1	2	3	3	4	8	10	7	7	6	7	7	69	0.78
174	Breast Female	0	0	0	4	24	54	139	215	301	278	285	232	232	137	83	78	2062	23.42
179	Uterine Un	0	0	0	1	1	0	2	2	0	4	9	8	9	6	3	0	45	0.51
180	Cervix Uteri	0	0	0	0	14	33	99	143	197	185	260	149	167	95	58	63	1463	16.62
181	Placenta	0	0	0	1	10	13	5	2	0	0	0	0	0	0	0	0	31	0.35
182	Body Uterus	0	0	0	0	5	6	4	12	15	30	30	22	35	25	17	15	216	2.45
183	Ovary	2	0	6	13	18	26	21	46	95	75	95	64	78	52	31	38	660	7.50
184	Vagina	0	0	0	1	0	2	1	3	2	5	3	7	9	4	7	12	56	0.64
188	Uri Bladder	0	0	0	0	1	1	3	4	4	5	7	14	17	12	14	11	93	1.06
189	Kidney	7	3	2	0	1	5	5	2	5	9	11	8	6	7	2	5	78	0.89
190	Eye	10	2	0	2	1	1	0	1	0	0	1	0	0	1	0	0	19	0.22
191	Brain	9	11	10	10	12	10	27	23	16	13	17	20	19	9	6	4	216	2.45
192	Nervous System	0	0	0	0	0	1	0	1	1	1	1	0	0	0	0	0	5	0.06
193	Thyroid Gland	0	0	1	5	16	19	22	16	10	13	26	12	15	6	4	4	169	1.92
194	Oth Endo Gland	3	3	1	0	3	0	1	3	4	3	2	0	2	0	0	0	25	0.28
195	Ill Def Sites	3	1	3	1	1	2	3	5	4	6	8	6	5	5	6	5	64	0.73
196	Sec Lymph Node	1	0	1	1	1	2	2	2	4	1	9	1	8	6	8	4	51	0.58
197	Sec Res Etc	1	0	0	0	1	1	7	5	7	9	12	10	13	15	9	5	95	1.08
198	Sec Other	0	2	1	0	2	4	3	3	10	4	9	5	4	6	3	2	58	0.66
199	Primary Unk	0	3	1	4	5	8	12	16	30	42	50	38	36	31	29	46	351	3.99
200	Lymphosarcoma	0	1	0	1	0	0	0	0	1	0	0	1	0	0	1	0	5	0.06
201	Hodgkins Dis	2	6	5	5	8	10	1	6	4	2	3	3	3	0	1	4	63	0.72
202	Oth Lymphoma	3	6	3	4	9	8	12	18	11	18	23	15	19	26	4	19	198	2.25
203	Mult Myeloma	0	0	1	1	0	1	2	2	3	8	6	18	17	11	10	7	87	0.99
204	Leuk Lymphatic	34	23	22	8	3	11	5	4	8	3	5	1	8	7	6	5	153	1.74
205	Leuk Myelocytic	5	6	12	13	13	17	21	29	17	15	9	5	8	6	5	2	183	2.08
206	Leuk Monocytic	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0.02
207	Leuk Misc	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	3	0.03
208	Leuk Uns	4	3	5	3	1	2	2	1	0	0	1	0	5	1	1	2	31	0.35
	TOTAL	**101**	**82**	**106**	**106**	**207**	**309**	**506**	**686**	**936**	**963**	**1190**	**889**	**1044**	**709**	**486**	**485**	**8805**	
	%	*1.1*	*0.9*	*1.2*	*1.2*	*2.3*	*3.5*	*5.7*	*7.7*	*10.6*	*10.9*	*13.5*	*10.1*	*11.8*	*8.0*	*5.5*	*5.5*	*100.0*	

TABLE DEL-3(a):
Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error (SE)) and Truncated (35-64 Yrs) (TR) Incidence Rate per 100,000 population: 1997-1998 - Males
Delhi

ICD-9	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	CR	AAR	SE	TR
140	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.4	0.1	0.2	1.0	1.0	2.1	2.6	0.0	1.0	0.19	**0.32**	0.07	0.70
141	0.2	0.1	0.0	0.0	0.1	0.2	1.0	1.5	4.5	10.9	13.6	15.7	29.9	24.3	21.9	26.7	3.11	**5.35**	0.28	11.35
142	0.1	0.0	0.1	0.0	0.0	0.2	0.2	0.3	0.8	1.5	2.0	1.7	4.2	4.5	6.4	4.9	0.54	**0.93**	0.12	1.58
143	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.3	1.3	2.6	2.5	3.8	5.0	4.5	1.8	7.9	0.65	**1.10**	0.13	2.35
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.2	0.0	1.2	0.0	0.0	1.0	0.06	**0.10**	0.04	0.24
145	0.0	0.1	0.0	0.0	0.2	0.6	1.3	1.1	3.4	6.6	6.9	11.9	17.9	10.2	15.5	13.8	2.00	**3.27**	0.22	7.11
146	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.9	3.0	5.1	9.7	8.7	15.8	13.4	13.7	9.9	1.72	**2.93**	0.21	6.46
147	0.0	0.0	0.0	0.3	0.0	0.2	0.3	0.4	0.8	0.8	0.7	0.7	0.4	3.2	4.6	1.0	0.32	**0.49**	0.08	0.63
148	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.2	2.0	3.4	8.2	8.0	15.8	17.9	20.0	11.9	1.57	**2.91**	0.21	5.48
149	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.8	1.0	2.1	3.7	2.6	3.6	2.0	0.30	**0.55**	0.09	1.10
150	0.0	0.0	0.1	0.1	0.2	0.1	0.5	1.9	4.1	6.4	13.9	19.6	29.1	28.1	31.9	38.6	3.19	**5.71**	0.30	10.92
151	0.0	0.0	0.0	0.1	0.0	0.1	0.5	1.5	2.7	3.0	8.4	14.0	14.1	14.0	21.0	14.8	1.82	**3.16**	0.22	6.37
152	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.4	0.7	0.4	0.2	1.0	0.0	1.9	1.8	1.0	0.21	**0.28**	0.06	0.46
153	0.0	0.1	0.0	0.1	0.1	0.3	1.3	1.7	2.8	2.4	4.7	8.4	10.8	12.1	10.0	14.8	1.50	**2.40**	0.19	4.56
154	0.0	0.0	0.2	0.3	0.3	0.5	1.3	1.3	2.8	4.9	5.0	5.9	8.3	15.3	13.7	21.8	1.68	**2.72**	0.20	4.38
155	0.2	0.1	0.0	0.2	0.1	0.2	0.3	0.9	0.6	2.4	4.2	5.9	10.4	13.4	5.5	18.8	1.17	**2.10**	0.18	3.53
156	0.0	0.0	0.0	0.0	0.1	0.5	0.3	1.3	2.7	5.4	7.4	15.0	14.1	21.7	27.3	22.7	2.15	**3.81**	0.24	6.77
157	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.6	2.8	2.3	4.0	7.7	8.3	10.9	10.9	8.9	1.14	**1.97**	0.17	3.82
158	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.2	0.5	0.3	0.4	1.9	0.9	2.0	0.13	**0.25**	0.06	0.23
159	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.1	0.0	0.2	0.7	1.7	2.6	1.8	2.0	0.16	**0.33**	0.07	0.38
160	0.1	0.3	0.0	0.0	0.2	0.2	0.3	0.0	0.1	0.8	0.5	0.7	0.4	3.2	0.0	0.0	0.23	**0.32**	0.06	0.39
161	0.0	0.0	0.1	0.2	0.2	0.4	0.5	1.3	8.7	12.0	20.1	24.5	39.1	43.4	56.5	45.5	4.66	**8.31**	0.36	15.70
162	0.1	0.0	0.0	0.1	0.0	0.4	1.2	2.0	7.6	16.1	37.9	40.9	65.3	81.7	88.4	64.3	7.28	**13.34**	0.46	24.80
163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.6	1.2	0.3	1.2	1.9	3.6	2.0	0.18	**0.34**	0.07	0.52
164	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.2	0.0	0.0	0.0	0.6	0.0	0.0	0.07	**0.07**	0.03	0.16
165	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	**0.02**	0.01	0.02
170	0.1	0.6	1.7	1.5	2.0	0.8	1.3	1.0	1.5	1.5	1.2	1.7	3.7	3.2	3.6	1.0	1.26	**1.32**	0.12	1.66
171	0.8	0.7	0.3	1.1	0.9	1.6	1.3	0.8	1.3	0.9	2.5	2.8	5.8	7.7	6.4	3.0	1.29	**1.66**	0.14	2.08
172	0.0	0.0	0.0	0.1	0.0	0.2	0.3	0.2	0.3	0.0	1.2	0.3	2.1	1.3	4.6	4.0	0.26	**0.44**	0.08	0.60
173	0.1	0.1	0.2	0.1	0.7	0.2	0.3	0.3	0.8	0.9	2.0	1.7	4.6	7.0	4.6	16.8	0.74	**1.26**	0.14	1.51
175	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.4	1.1	1.7	2.1	2.5	1.9	4.6	4.9	0.36	**0.65**	0.10	1.15
185	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.3	0.9	6.2	14.3	28.3	59.4	86.6	145.4	3.90	**8.53**	0.39	6.75
186	0.5	0.0	0.1	0.8	0.8	1.4	0.9	1.0	0.0	1.7	1.5	0.3	1.2	0.6	1.8	2.0	0.73	**0.81**	0.09	0.95
187	0.1	0.0	0.0	0.0	0.2	0.2	0.3	0.5	0.7	1.9	1.0	1.7	4.2	2.6	4.6	9.9	0.54	**0.92**	0.12	1.53
188	0.1	0.0	0.0	0.2	0.2	0.2	0.6	1.1	2.5	3.8	7.9	16.4	22.9	43.4	49.2	60.3	3.10	**6.04**	0.32	7.77
189	1.5	0.4	0.2	0.1	0.2	0.4	0.1	0.6	2.7	3.6	5.0	9.8	13.7	12.1	14.6	5.9	1.66	**2.80**	0.20	5.18
190	1.6	0.5	0.2	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.9	0.0	0.28	**0.42**	0.05	0.06
191	1.6	1.7	2.0	1.8	2.5	2.5	3.0	3.5	3.7	6.2	6.2	11.9	13.3	14.0	11.8	13.8	3.41	**4.33**	0.23	6.86
192	0.1	0.3	0.2	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.2	0.7	0.8	0.0	0.0	0.0	0.14	**0.14**	0.04	0.22
193	0.0	0.2	0.1	0.2	0.2	0.1	1.0	0.5	2.1	0.8	4.0	2.4	2.9	4.5	4.6	3.0	0.73	**1.04**	0.12	1.99
194	1.0	0.1	0.2	0.0	0.0	0.1	0.2	0.1	0.3	0.2	0.2	0.3	0.0	0.0	0.9	1.0	0.24	**0.36**	0.05	0.19
195	0.4	0.1	0.1	0.2	0.0	0.3	0.9	0.7	2.0	1.9	4.7	3.8	3.3	10.9	9.1	6.9	1.04	**1.63**	0.15	2.58
196	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.6	1.3	1.9	6.2	4.5	10.8	8.9	7.3	12.9	1.09	**1.90**	0.17	3.71
197	0.0	0.1	0.0	0.2	0.3	0.1	0.1	0.3	1.0	2.3	4.2	6.3	7.9	9.6	10.0	8.9	0.98	**1.73**	0.16	3.21
198	0.1	0.1	0.1	0.0	0.1	0.1	0.4	0.1	0.8	1.1	2.7	1.7	3.7	8.9	10.0	5.9	0.63	**1.15**	0.13	1.52
199	0.1	0.4	0.3	0.4	0.4	0.7	1.1	1.6	3.8	7.9	12.6	19.6	22.5	26.2	41.9	40.6	3.37	**5.80**	0.30	10.04
200	0.0	0.1	0.1	0.0	0.1	0.0	0.2	0.1	0.0	0.0	0.2	0.3	0.0	0.0	0.0	2.0	0.08	**0.10**	0.04	0.09
201	0.3	1.6	1.0	1.0	1.2	0.8	1.6	2.0	0.8	1.5	2.2	1.0	2.9	3.2	4.6	5.9	1.33	**1.35**	0.13	1.68
202	0.5	1.1	1.3	2.6	1.6	1.9	2.3	1.3	4.1	5.4	10.7	12.6	12.5	23.0	21.0	23.7	3.26	**4.65**	0.25	7.06
203	0.0	0.1	0.1	0.0	0.1	0.2	0.1	0.7	1.8	2.3	6.4	10.1	12.1	16.0	19.1	11.9	1.46	**2.64**	0.20	4.83
204	3.6	3.4	3.6	2.7	1.0	1.0	0.5	1.2	1.5	2.1	2.7	3.5	5.8	3.8	10.0	11.9	2.44	**2.89**	0.18	2.57
205	0.3	0.6	1.1	1.5	2.9	2.8	1.8	2.4	4.8	4.3	4.0	4.2	3.7	3.2	11.8	9.9	2.28	**2.62**	0.17	3.89
206	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
208	0.6	0.4	0.5	0.6	0.6	0.5	0.2	0.4	0.7	0.6	1.2	0.7	2.1	0.0	0.9	1.0	0.54	**0.64**	0.08	0.89
All	**14.4**	**13.6**	**14.2**	**17.0**	**18.2**	**21.3**	**29.8**	**39.9**	**91.4**	**144.2**	**252.6**	**333.2**	**492.5**	**607.3**	**705.3**	**749.8**	**73.1**	**120.9**	**1.34**	**200.5**

TABLE DEL-3(b):
Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error (SE)) and Truncated (35-64 Yrs) (TR) Incidence Rate per 100,000 population: 1997-1998 - Females
Delhi

ICD-9	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	CR	AAR	SE	TR
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.0	0.3	0.4	0.0	1.5	0.0	1.1	0.08	**0.14**	0.05	0.20
141	0.0	0.0	0.1	0.1	0.1	0.1	0.3	0.1	1.4	2.5	5.6	5.1	12.4	9.2	13.7	13.1	1.14	**2.09**	0.20	3.93
142	0.0	0.0	0.1	0.1	0.0	0.3	0.6	0.1	0.8	0.0	1.3	0.4	1.9	2.3	3.7	2.2	0.31	**0.49**	0.09	0.68
143	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.4	0.7	2.6	1.2	4.3	3.1	5.0	2.2	0.38	**0.67**	0.11	1.36
144	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0	3.7	0.0	0.06	**0.11**	0.05	0.07
145	0.0	0.0	0.0	0.0	0.0	0.2	0.4	1.3	1.0	4.2	3.6	4.7	5.7	10.7	6.2	3.3	0.94	**1.54**	0.17	3.18
146	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	1.0	1.2	3.6	2.7	3.3	3.8	2.5	1.1	0.45	**0.75**	0.12	1.80
147	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.2	0.7	1.0	0.0	0.0	1.5	0.0	0.0	0.13	**0.19**	0.05	0.36
148	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.6	0.7	2.0	2.0	2.9	1.5	1.2	1.1	0.31	**0.50**	0.09	1.27
149	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.2	0.7	0.4	1.0	0.0	0.0	0.0	0.10	**0.16**	0.05	0.48
150	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.7	2.6	6.0	8.6	9.8	13.4	19.1	26.2	23.0	1.91	**3.51**	0.26	6.18
151	0.1	0.1	0.0	0.2	0.3	0.7	1.2	1.3	1.8	3.2	5.6	6.2	5.3	9.9	11.2	9.8	1.31	**2.03**	0.19	3.60
152	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.2	0.2	0.7	0.0	0.5	1.5	1.2	2.2	0.14	**0.23**	0.06	0.31
153	0.0	0.0	0.0	0.0	0.5	0.5	0.3	0.9	2.4	1.7	5.0	5.1	8.1	10.7	11.2	10.9	1.15	**1.92**	0.19	3.48
154	0.0	0.0	0.1	0.1	0.3	0.5	0.7	1.6	2.4	2.0	4.6	3.5	6.2	6.1	5.0	12.0	1.06	**1.62**	0.17	3.15
155	0.2	0.2	0.0	0.0	0.0	0.0	0.4	0.3	2.0	1.7	2.3	2.7	4.8	6.1	2.5	5.5	0.65	**1.06**	0.14	2.12
156	0.0	0.0	0.0	0.0	0.5	0.5	2.1	3.5	9.1	18.0	28.4	26.9	44.4	50.4	64.8	32.8	5.60	**9.80**	0.43	19.70
157	0.0	0.0	0.1	0.2	0.1	0.0	0.8	0.7	1.4	2.0	3.3	4.3	5.7	6.1	10.0	10.9	0.89	**1.50**	0.17	2.62
158	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.7	0.6	1.5	0.3	0.4	0.5	2.3	5.0	3.3	0.31	**0.50**	0.09	0.71
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.8	0.5	0.8	0.0	2.2	0.07	**0.12**	0.05	0.20
160	0.0	0.0	0.1	0.0	0.2	0.2	0.0	0.1	0.4	0.0	0.7	0.4	1.4	0.0	1.2	2.2	0.17	**0.26**	0.06	0.44
161	0.1	0.1	0.1	0.0	0.2	0.4	0.4	0.5	1.4	1.7	3.0	2.7	5.3	5.3	10.0	2.2	0.74	**1.18**	0.15	2.21
162	0.0	0.0	0.1	0.1	0.2	0.5	0.3	0.5	2.8	2.5	8.9	8.6	16.2	16.8	18.7	13.1	1.69	**3.02**	0.24	5.76
163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.0	0.3	0.0	0.5	0.8	1.2	2.2	0.13	**0.21**	0.06	0.40
164	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.7	0.4	0.0	0.0	0.0	0.0	0.07	**0.09**	0.03	0.20
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
170	0.2	0.2	1.5	1.3	1.3	1.1	1.3	0.5	0.6	1.0	1.0	0.4	2.9	3.1	2.5	2.2	0.98	**1.07**	0.12	0.99
171	0.7	0.2	0.6	0.6	1.4	1.0	1.1	1.5	1.8	2.7	2.6	5.1	4.8	4.6	1.2	2.2	1.25	**1.59**	0.15	2.86
172	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.2	0.2	1.3	0.4	1.4	2.3	3.7	0.0	0.18	**0.33**	0.08	0.52
173	0.2	0.0	0.1	0.1	0.1	0.2	0.3	0.4	0.8	2.0	3.3	2.7	3.3	4.6	8.7	7.7	0.68	**1.17**	0.15	1.93
174	0.0	0.0	0.0	0.4	2.4	4.9	15.5	28.8	60.8	69.4	94.1	90.6	110.8	104.5	103.4	85.3	20.30	**30.76**	0.71	71.94
179	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.3	0.0	1.0	3.0	3.1	4.3	4.6	3.7	0.0	0.44	**0.76**	0.12	1.68
180	0.0	0.0	0.0	0.0	1.4	3.0	11.0	19.2	39.8	46.2	85.9	58.2	79.8	72.5	72.3	68.9	14.40	**22.13**	0.61	52.02
181	0.0	0.0	0.0	0.1	1.0	1.2	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	**0.25**	0.04	0.06
182	0.0	0.0	0.0	0.0	0.5	0.5	0.4	1.6	3.0	7.5	9.9	8.6	16.7	19.1	21.2	16.4	2.13	**3.66**	0.26	7.20
183	0.2	0.0	0.6	1.4	1.8	2.4	2.3	6.2	19.2	18.7	31.4	25.0	37.3	39.7	38.6	41.6	6.50	**10.18**	0.42	21.64
184	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.4	0.4	1.2	1.0	2.7	4.3	3.1	8.7	13.1	0.55	**1.00**	0.14	1.45
188	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.5	0.8	1.2	2.3	5.5	8.1	9.2	17.4	12.0	0.92	**1.72**	0.18	2.61
189	0.6	0.2	0.2	0.0	0.1	0.5	0.6	0.3	1.0	2.2	3.6	3.1	2.9	5.3	2.5	5.5	0.77	**1.19**	0.14	2.03
190	0.8	0.2	0.0	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.8	0.0	0.0	0.19	**0.27**	0.05	0.07
191	0.7	0.9	0.9	1.1	1.2	0.9	3.0	3.1	3.2	3.2	5.6	7.8	9.1	6.9	7.5	4.4	2.13	**2.65**	0.20	4.92
192	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.05	**0.06**	0.03	0.15
193	0.0	0.0	0.1	0.6	1.6	1.7	2.4	2.1	2.0	3.2	8.6	4.7	7.2	4.6	5.0	4.4	1.66	**2.15**	0.18	4.35
194	0.2	0.2	0.1	0.0	0.3	0.0	0.1	0.4	0.8	0.7	0.7	0.0	1.0	0.0	0.0	0.0	0.25	**0.27**	0.06	0.61
195	0.2	0.1	0.3	0.1	0.1	0.2	0.3	0.7	0.8	1.5	2.6	2.3	2.4	3.8	7.5	5.5	0.63	**1.00**	0.13	1.61
196	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.8	0.2	3.0	0.4	3.8	4.6	10.0	4.4	0.50	**0.91**	0.13	1.27
197	0.1	0.0	0.0	0.0	0.1	0.1	0.8	0.7	1.4	2.2	4.0	3.9	6.2	11.4	11.2	5.5	0.94	**1.62**	0.17	2.79
198	0.0	0.2	0.1	0.0	0.2	0.4	0.3	0.4	2.0	1.0	3.0	2.0	1.9	4.6	3.7	2.2	0.57	**0.84**	0.12	1.65
199	0.0	0.2	0.1	0.4	0.5	0.7	1.3	2.1	6.1	10.5	16.5	14.8	17.2	23.6	36.1	50.3	3.46	**5.91**	0.33	10.41
200	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.0	1.2	0.0	0.05	**0.06**	0.03	0.09
201	0.2	0.5	0.5	0.6	0.8	0.9	0.1	0.8	0.8	0.5	1.0	1.2	1.4	0.0	1.2	4.4	0.62	**0.68**	0.10	0.89
202	0.2	0.5	0.3	0.4	0.9	0.7	1.3	2.4	2.2	4.5	7.6	5.9	9.1	19.8	5.0	20.8	1.95	**2.95**	0.23	4.92
203	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.3	0.6	2.0	2.0	7.0	8.1	8.4	12.5	7.7	0.86	**1.57**	0.17	2.84
204	2.8	1.8	2.0	0.9	0.3	1.0	0.6	0.5	1.6	0.7	1.7	0.4	3.8	5.3	7.5	5.5	1.51	**1.87**	0.16	1.36
205	0.4	0.5	1.1	1.4	1.3	1.6	2.3	3.9	3.4	3.7	3.0	2.0	3.8	4.6	6.2	2.2	1.80	**2.02**	0.16	3.36
206	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.02	**0.04**	0.03	0.11
207	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.03	**0.04**	0.03	0.00
208	0.3	0.2	0.5	0.3	0.1	0.2	0.2	0.1	0.0	0.0	0.3	0.0	2.4	0.8	1.2	2.2	0.31	**0.40**	0.08	0.38
All	**8.3**	**6.7**	**10.1**	**11.4**	**20.7**	**28.4**	**55.6**	**91.7**	**188.6**	**239.3**	**393.0**	**347.3**	**498.8**	**541.3**	**605.1**	**530.8**	**86.7**	**134.8**	**0.46**	**273.1**

TABLE DEL-4(a): Cumulative Rate (Cu.Rate%) & Cumulative Risk (Cu. Risk) of Individual Sites (ICD-9) Based on Age Specific Rates (from 0–64 Years and from 0–74 Years) 1997-1998: Males - Delhi

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu. Rate %	Cu. Risk	Cu. Rate%	Cu. Risk
140	Lip	0.04	0.04	0.04	0.04
141	Tongue	0.51	0.51	0.62	0.62
142	Salivary Gland	0.08	0.08	0.11	0.11
143	Gum	0.10	0.10	0.11	0.11
144	Floor of Mouth	0.01	0.01	0.01	0.01
145	Other Mouth	0.30	0.30	0.38	0.38
146	Oropharynx	0.29	0.29	0.36	0.35
147	Nasopharynx	0.04	0.04	0.06	0.06
148	Hypopharynx	0.28	0.28	0.38	0.38
149	Pharynx Etc.	0.05	0.05	0.07	0.07
150	Oesophagus	0.52	0.52	0.68	0.68
151	Stomach	0.29	0.29	0.40	0.40
152	Small Intestine	0.03	0.03	0.03	0.03
153	Colon	0.22	0.22	0.27	0.27
154	Rectum	0.23	0.23	0.30	0.30
155	Liver	0.19	0.19	0.22	0.22
156	Gall Bladder	0.34	0.34	0.48	0.48
157	Pancreas	0.19	0.19	0.24	0.24
158	Retroperitoneum	0.02	0.02	0.02	0.02
159	Other Dig Sys	0.03	0.03	0.04	0.04
160	Nasal Cavity	0.03	0.03	0.03	0.03
161	Larynx	0.75	0.75	1.04	1.03
162	Lung	1.27	1.26	1.71	1.69
163	Pleura	0.03	0.03	0.04	0.04
164	Thymus	0.01	0.01	0.01	0.01
165	Other Resp	0.00	0.00	0.00	0.00
170	Bone	0.11	0.11	0.13	0.13
171	Conn Tissue	0.14	0.14	0.17	0.17
172	Skin Melanoma	0.03	0.03	0.05	0.05
173	Skin Other	0.10	0.09	0.12	0.12
175	Breast Male	0.05	0.05	0.07	0.07
185	Prostate	0.55	0.55	0.98	0.98
186	Testis	0.05	0.05	0.06	0.06
187	Penis Etc	0.07	0.07	0.09	0.09
188	Uri Bladder	0.50	0.50	0.74	0.74
189	Kidney	0.25	0.25	0.33	0.32
190	Eye	0.01	0.01	0.02	0.02
191	Brain	0.37	0.37	0.43	0.43
192	Nervous Sys	0.01	0.01	0.01	0.01
193	Thyroid Gland	0.10	0.09	0.12	0.12
194	Oth Endo Gland	0.01	0.01	0.02	0.02
195	Ill Def Sites	0.15	0.15	0.19	0.19
196	Sec Lymph Node	0.18	0.17	0.21	0.21
197	Sec Res Etc	0.16	0.16	0.21	0.21
198	Sec Other	0.10	0.10	0.15	0.15
199	Primary Unk	0.49	0.49	0.70	0.70
200	Lymphosarcoma	0.01	0.01	0.01	0.01
201	Hodgkins Dis	0.11	0.11	0.13	0.13
202	Oth Lymph Node	0.40	0.40	0.51	0.51
203	Mult Myeloma	0.25	0.25	0.35	0.34
204	Leuk Lymphatic	0.18	0.18	0.23	0.23
205	Leuk Myelocytic	0.19	0.19	0.25	0.25
206	Leuk Monocytic	0.00	0.00	0.00	0.00
207	Leuk Misc	0.00	0.00	0.00	0.00
208	Leuk Uns	0.05	0.05	0.05	0.05
	ALL SITES	**10.45**	**9.92**	**13.97**	**13.04**

TABLE DEL-4(b): Cumulative Rate (Cu.Rate%) & Cumulative Risk (Cu. Risk) of Individual Sites (ICD-9) Based on Age Specific Rates (from 0–64 Years and from 0–74 Years) 1997-1998: Females - Delhi

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu. Rate %	Cu. Risk	Cu. Rate%	Cu. Risk
140	Lip	0.01	0.01	0.01	0.01
141	Tongue	0.19	0.18	0.25	0.25
142	Salivary Gland	0.04	0.04	0.06	0.06
143	Gum	0.06	0.06	0.09	0.09
144	Floor of Mouth	0.00	0.00	0.02	0.02
145	Other Mouth	0.16	0.16	0.19	0.19
146	Oropharynx	0.08	0.08	0.09	0.09
147	Nasopharynx	0.02	0.02	0.02	0.02
148	Hypopharynx	0.05	0.05	0.06	0.06
149	Pharynx Etc	0.02	0.02	0.02	0.02
150	Oesophagus	0.30	0.30	0.44	0.43
151	Stomach	0.18	0.18	0.24	0.24
152	Small Intestine	0.02	0.02	0.02	0.02
153	Colon	0.18	0.18	0.23	0.23
154	Rectum	0.14	0.14	0.17	0.17
155	Liver	0.10	0.10	0.12	0.12
156	Gall Bladder	0.92	0.91	1.24	1.24
157	Pancreas	0.12	0.12	0.17	0.17
158	Retroperitoneum	0.03	0.03	0.06	0.06
159	Other Dig Sys	0.01	0.01	0.01	0.01
160	Nasal Cavity	0.02	0.02	0.02	0.02
161	Larynx	0.11	0.11	0.16	0.16
162	Lung	0.29	0.29	0.38	0.38
163	Pleura	0.02	0.02	0.02	0.02
164	Thymus	0.01	0.01	0.01	0.01
165	Other Resp	0.00	0.00	0.00	0.00
170	Bone	0.08	0.08	0.09	0.09
171	Conn Tissue	0.14	0.14	0.15	0.15
172	Skin Melanoma	0.03	0.03	0.05	0.05
173	Skin Other	0.09	0.09	0.13	0.13
174	Breast Female	2.91	2.87	3.43	3.37
179	Uterine Un	0.08	0.08	0.10	0.10
180	Cervix Uteri	2.09	2.06	2.45	2.42
181	Placenta	0.02	0.02	0.02	0.02
182	Body Uterus	0.34	0.34	0.45	0.44
183	Ovary	0.93	0.93	1.12	1.12
184	Vagina	0.07	0.07	0.11	0.11
188	Uri Bladder	0.14	0.14	0.23	0.23
189	Kidney	0.10	0.10	0.12	0.12
190	Eye	0.01	0.01	0.01	0.01
191	Brain	0.24	0.24	0.28	0.28
192	Nervous System	0.00	0.00	0.00	0.00
193	Thyroid Gland	0.19	0.19	0.22	0.22
194	Oth Endo Gland	0.02	0.02	0.02	0.02
195	Ill Def Sites	0.08	0.08	0.11	0.11
196	Sec Lymph Node	0.07	0.07	0.12	0.12
197	Sec Res Etc	0.15	0.15	0.21	0.21
198	Sec Other	0.08	0.08	0.10	0.10
199	Primary Unk	0.47	0.47	0.65	0.65
200	Lymphosarcoma	0.00	0.00	0.01	0.01
201	Hodgkins Dis	0.05	0.05	0.05	0.05
202	Oth Lymphoma	0.28	0.28	0.30	0.30
203	Mult Myeloma	0.14	0.14	0.21	0.21
204	Leuk Lymphatic	0.12	0.12	0.15	0.15
205	Leuk Myelocytic	0.17	0.16	0.20	0.20
206	Leuk Monocytic	0.00	0.00	0.00	0.00
207	Leuk Misc	0.00	0.00	0.01	0.01
208	Leuk Uns	0.03	0.03	0.03	0.03
	ALL SITES	**12.21**	**11.49**	**15.23**	**14.13**

POPULATION BASED CANCER REGISTRY, MUMBAI
Indian Cancer Society, Mumbai (Bombay)

Dr M.R. Kamat, Principal Investigator

Dr A.P. Kurkure, Co-Investigator

Dr B.B. Yeole, Deputy Director

The Bombay Cancer Registry was established in June 1963 as a unit of the Indian Cancer Society at Bombay, with the aim of obtaining reliable morbidity and mortality data on cancer from a precisely defined urban population (Greater Bombay). The actual compilation of the data began in 1964. Until then, registration of cancer cases in a population had not been undertaken anywhere in India. Initially the registry functioned in collaboration with Biometry Branch of the National Cancer Institute of USA and also received financial support from the branch till 1975. From 1976 to 1980 financial support was received from the Department of Science and Technology, Government of India and the Indian Cancer Society. Since 1981-82, the registry became part of the National Cancer Registry Programme under the Indian Council of Medical Research.

Information is obtained on all cancer patients diagnosed in 150 government hospitals/institutions and private hospitals/nursing homes in Bombay, which are under the care of specialists, i.e., surgeons, physicians, pathologists, radiologists and gynaecologists. Many hospitals in Bombay are maintained by the Municipal Corporation and the State Government, which are responsible for the organization of public health care and medical services in the city. The major source of the data is the Tata Memorial Centre, which is a postgraduate teaching hospital. The city has seven medical colleges. The diagnosis and treatment of cancer is centralized in certain hospitals. Cancer surgery is undertaken in the bigger hospitals and well-equipped private nursing homes. Facilities for cobalt-60 therapy are available in nine hospitals.

General medical practitioners are not contacted individually as, according to local practice, only specialists assume charge of cancer patients in private hospitals and nursing homes and even the few patients who are not admitted for hospital care are at some stage referred to specialists.

Staff of registry, visit the wards of all collaborating hospitals, at least once a week, to interview each cancer patient as well as those suspected of having cancer. All files maintained by the various departments of these hospitals are also checked. Care is taken to prevent duplication of an entry relating to a patient already registered.

Supplementary information is gleaned from the death records maintained by the Municipal Corporation. This makes it possible to check on missed cases. Every cancer death not traceable to an entry in the files is labelled as unmatched death and is so registered for the corresponding year.

The registry covers the resident population of Greater Bombay, a densely populated metropolis on the west coast of India, occupying an area of 603 square kilometres situated between latitudes 18°54' to 19°16'N, and longitudes 70° 47' to 73°E. Greater Bombay is, in fact, an island, joined to the mainland by bridges, and has a warm, humid climate. Census of the population is taken at regular ten-year intervals, the last being taken in March 2001. At this census 11,914,398 persons were recorded (65,77,902 males and 53,36,496 females). Immigration to Bombay continues unabated and the population now has sizeable numbers of people from every State in the Union. Greater Bombay is the only district in India, having cent percent urban population. It is the industrial heart of India and has a multi-religious and multi-lingual population, representing every state in the Union, approximately 68.0% being Hindus, 16.8% Muslims, 4.5% Christians and 5.6% Neo-Buddhists and 3.6% Jains, 0.8% Parsis (Zoroastrians) and 0.5% Sikhs.

The reliability of the data and the quality of the registration has considerably improved. At present the percentage of microscopic confirmed cases is 79% and the percentage of cases diagnosed through death certificate alone is 6.5%. The ratio of mortality / incidence cases is 52%. Registry collects information on multiple cancers as per the guidelines and definition provided by the International Association of Cancer Registries.

Registry publishes yearly reports regularly. Registry has published more than 100 articles in indexed journals and in monographs. The registry data is also used by public health workers for epidemiologic studies, by Government for cancer control programme, by journalists for public education and by medical companies for promotion of their product. Registry records follow-up information for selected primary sites for the cases registered 1982 onwards.

FIGURE MUM-1:

Population Pyramid showing Age Distribution : 1997-98

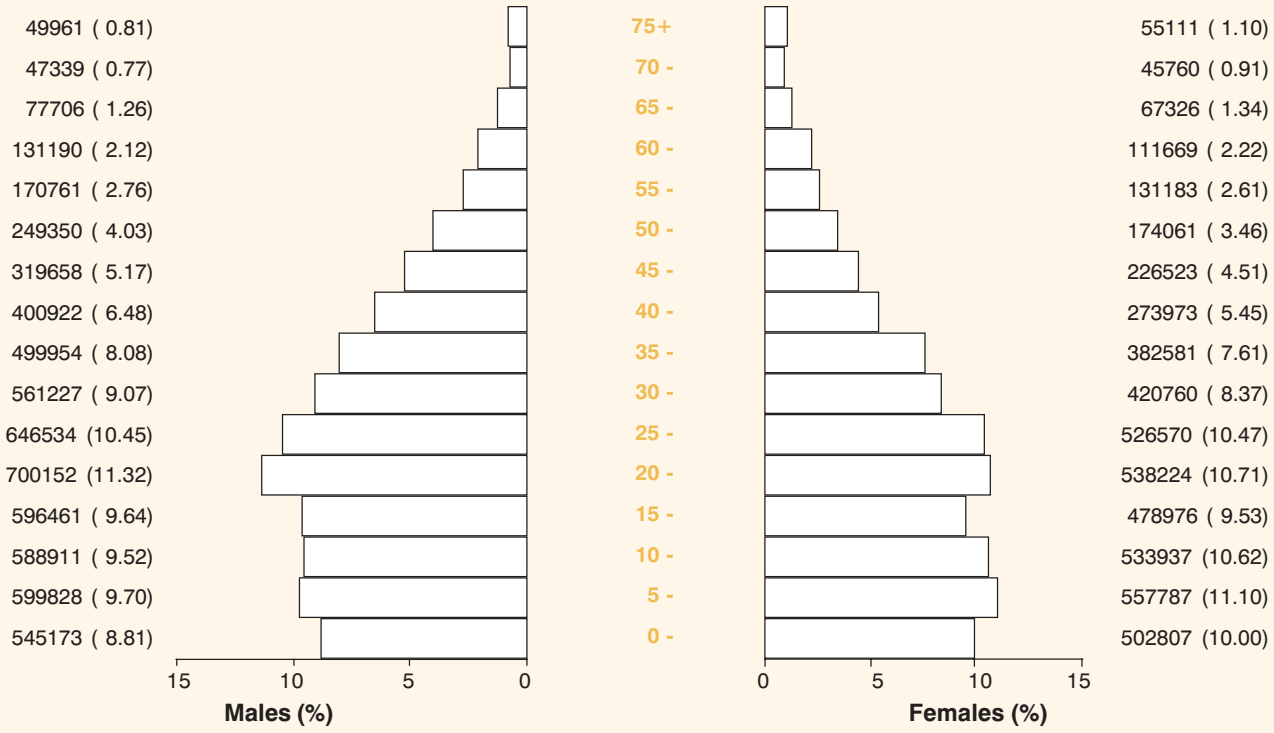

TABLE MUM-1:

Main Sources* of Registration of Incident Cases of Cancer in Mumbai - 1997-1998

Name of the Institution	Number	%
Tata Memorial Hospital	4418	25.8
BMC (DCO's)	1136	6.6
King Edward Hospital	1017	5.9
Small N.Hs	978	5.7
Nanavati Hospital	831	4.9
Bombay Hospital	766	4.5
LTMG Sion Hospital	710	4.1
BYL Nair Hospital	695	4.1
Pvt. Practitioners	636	3.7
Jaslok Hospital	495	2.9
Ismaili GH	428	2.5
National/Hinduja Hospital	377	2.2
JJ Hospitals	350	2.0
Shantiavadena	330	1.9
Breach Candy Hospital	330	1.9
Lady Ratan Tata	276	1.6
Harikrishna Das	253	1.5
Bhatia	223	1.3
Holy Family Hospital	209	1.2
Rajawadi	187	1.1
Sushrusha	163	1.0
All Others	2313	13.5
Total All Sources	**17121**	**100.0**

** 1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 1997-98.*

** 2. The numbers and proportion listed are the minimum number of cases. Institutions could have registered / reported more cases, since duplicate registrations and non-resident/registry cases are not included.*

TABLE MUM-2(a): Number of Incident Cancers by Five Year Age Group and Site (ICD-9): 1997–1998 – Males

%= Relative Proportion of Cancers of All Sites.

Mumbai

ICD-9	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	Total	%
140	Lip	0	0	1	0	0	0	2	2	2	1	5	2	4	2	2	1	24	0.28
141	Tongue	0	0	0	0	1	5	9	13	43	53	54	57	67	60	27	28	417	4.84
142	Salivary Gland	0	1	0	0	1	3	2	2	6	5	7	6	9	6	4	5	57	0.66
143	Gum	0	0	0	2	0	1	3	6	11	25	9	14	13	9	10	11	114	1.32
144	Floor of Mouth	0	0	0	0	0	0	0	5	1	7	5	3	7	4	7	0	39	0.45
145	Other Mouth	0	0	0	1	0	6	16	21	46	41	42	32	35	33	19	15	307	3.56
146	Oropharynx	0	0	0	0	0	2	4	4	13	18	36	22	18	19	16	12	164	1.90
147	Nasopharynx	0	1	2	4	2	2	0	1	2	4	1	1	5	9	4	2	40	0.46
148	Hypopharynx	0	0	0	0	0	0	8	7	30	23	45	54	56	60	45	34	362	4.20
149	Pharynx etc.	0	0	0	0	1	1	4	0	7	9	15	10	11	11	9	14	92	1.07
150	Oesophagus	0	0	0	0	0	2	5	11	38	49	53	65	95	101	61	84	564	6.55
151	Stomach	0	0	0	0	1	7	9	16	25	39	47	49	47	78	50	47	415	4.82
152	Small Intestine	0	0	0	1	2	1	0	0	1	3	2	4	4	3	1	2	24	0.28
153	Colon	0	0	0	0	4	3	9	13	21	25	36	31	31	22	35	38	268	3.11
154	Rectum	0	0	2	1	3	5	7	8	17	20	35	20	31	34	27	28	238	2.76
155	Liver	5	2	2	1	3	4	6	14	13	29	44	39	46	44	44	46	342	3.97
156	Gall Bladder	0	0	0	0	0	1	1	4	9	9	9	9	19	7	15	17	100	1.16
157	Pancreas	0	1	0	0	0	3	1	7	10	17	27	21	32	25	21	25	190	2.20
158	Retroperit	0	0	0	0	2	0	2	0	3	3	1	2	2	3	5	3	26	0.30
159	Other Dig.	0	0	0	0	0	0	0	1	0	0	1	6	5	3	2	4	22	0.26
160	Nasal Cavity	0	0	1	1	0	4	5	6	5	6	11	2	6	5	7	1	60	0.70
161	Larynx	0	0	1	0	0	5	6	13	35	48	60	66	73	81	51	53	492	5.71
162	Lung	1	1	1	0	7	1	6	17	30	52	85	111	132	128	96	115	783	9.09
163	Pleura	0	0	0	0	0	0	0	2	2	0	1	1	2	2	1	3	14	0.16
164	Thymus	0	0	1	2	0	2	0	0	3	3	3	1	0	2	0	0	17	0.20
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
170	Bone	1	2	9	21	6	9	2	3	3	6	6	5	2	3	1	2	81	0.94
171	Connective	6	5	5	3	6	13	12	7	10	8	17	8	6	4	3	11	124	1.44
172	Skin Melan	0	0	1	1	0	0	0	2	2	2	0	3	2	3	1	4	21	0.24
173	Skin Other	2	0	2	3	4	4	4	10	15	12	15	12	7	16	13	16	135	1.57
175	Breast Mal	0	0	0	0	0	0	1	0	2	3	5	5	4	8	5	3	36	0.42
185	Prostate	0	0	0	0	2	1	1	0	0	9	12	30	55	64	101	170	445	5.16
186	Testis	5	0	0	4	8	18	22	17	9	3	3	4	4	2	2	2	103	1.20
187	Penis etc.	0	0	0	0	1	5	3	6	11	8	8	9	14	10	8	11	94	1.09
188	Uri Bladder	0	1	0	0	2	5	1	4	8	20	27	28	39	41	41	60	277	3.21
189	Kidney	13	4	1	4	0	2	7	8	7	17	16	22	21	21	18	15	176	2.04
190	Eye	7	2	1	0	1	0	0	0	0	1	0	0	0	0	0	0	12	0.14
191	Brain	20	29	17	10	27	18	27	24	27	30	29	34	22	14	12	14	354	4.11
192	Nervous Sy	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	3	0.03
193	Thyroid Gland	0	0	1	1	5	7	3	5	4	3	11	3	9	5	6	3	66	0.77
194	Oth Endo Gland	11	2	1	2	3	3	0	3	1	1	2	2	4	2	1	1	39	0.45
195	Ill Def Sites	1	0	1	2	1	0	2	2	2	3	3	3	5	1	1	4	31	0.36
196	Sec Lymph	1	0	0	1	0	4	4	5	6	11	16	22	20	27	21	12	150	1.74
197	Sec Res Et	1	0	3	0	2	1	7	4	7	11	24	15	13	13	7	7	115	1.33
198	Sec Other	0	0	0	0	2	0	2	3	2	5	11	12	10	10	11	3	71	0.82
199	Prim Unk	0	0	1	3	3	0	2	7	4	9	14	12	6	14	8	14	97	1.13
200	Lymphosarc	0	4	4	4	2	0	1	0	2	4	1	3	2	1	2	3	33	0.38
201	Hodgkins D	3	10	5	6	6	6	6	8	8	9	2	6	4	5	1	3	88	1.02
202	Oth Lympho	9	10	15	17	11	15	13	24	19	42	32	35	30	28	26	27	353	4.10
203	Mult Myelo	0	0	0	0	2	1	0	2	3	10	13	13	14	11	12	18	99	1.15
204	Leuk Lymph	18	28	23	24	13	8	6	4	5	1	7	10	13	12	4	11	187	2.17
205	Leuk Myelo	9	5	11	16	10	13	18	13	18	14	15	15	14	8	5	12	196	2.27
206	Leuk Monoc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
207	Leuk other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk Uns	5	3	3	3	6	2	2	3	2	4	6	4	4	6	2	5	60	0.70
	TOTAL	**118**	**111**	**115**	**138**	**150**	**193**	**251**	**337**	**550**	**735**	**930**	**943**	**1075**	**1080**	**872**	**1019**	**8617**	
	%	*1.3*	*1.2*	*1.3*	*1.6*	*1.7*	*2.2*	*2.9*	*3.9*	*6.3*	*8.5*	*10.7*	*10.9*	*12.4*	*12.5*	*10.1*	*11.8*	*100.0*	

TABLE MUM-2(b): Number of Incident Cancers by Five Year Age Group and Site (ICD-9): 1997–1998 – Females

%= Relative Proportion of Cancers of All Sites.

Mumbai

ICD-9	Site	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	Total	%
140	Lip	0	0	0	0	0	0	0	0	1	2	0	1	3	2	2	0	11	0.13
141	Tongue	0	0	0	0	0	1	9	11	14	14	17	19	22	23	23	13	166	1.95
142	Salivary Gland	0	1	0	1	3	3	1	1	0	3	1	2	7	3	2	0	28	0.33
143	Gum	0	0	0	0	2	2	4	3	5	10	12	8	10	16	6	8	86	1.01
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	5	0.06
145	Other Mouth	0	0	0	0	5	2	2	12	17	23	21	24	28	24	16	14	188	2.21
146	Oropharynx	0	0	0	0	0	1	1	1	1	3	4	1	1	2	6	6	27	0.32
147	Nasopharynx	1	0	0	2	2	3	0	1	0	0	3	0	0	0	2	1	15	0.18
148	Hypopharynx	0	0	0	0	0	0	4	2	7	10	8	8	10	5	13	14	81	0.95
149	Pharynx etc.	0	0	0	1	1	1	0	1	2	3	1	3	2	4	4	6	29	0.34
150	Oesophagus	0	0	0	2	2	1	1	16	21	30	59	43	37	49	44	62	367	4.32
151	Stomach	0	0	0	1	3	7	8	10	14	26	32	24	40	22	22	33	242	2.85
152	Small Intestine	0	0	0	0	0	0	1	1	2	1	0	0	1	0	1	4	11	0.13
153	Colon	0	0	0	0	1	4	7	8	12	19	33	13	24	27	26	23	197	2.32
154	Rectum	0	0	1	0	1	7	8	9	15	17	18	19	22	15	11	19	162	1.90
155	Liver	4	0	0	0	0	2	2	6	8	5	12	19	17	24	14	18	131	1.54
156	Gall Bladder	0	0	1	0	1	3	4	8	13	22	14	19	27	20	15	14	161	1.89
157	Pancreas	0	0	0	0	0	2	3	4	10	7	12	16	11	17	13	22	117	1.38
158	Retroperit	1	1	0	3	0	2	2	1	0	6	1	2	3	5	4	1	32	0.38
159	Other Dis	0	0	0	0	0	0	0	0	1	1	3	3	1	3	3	5	20	0.24
160	Nasal Cavity	2	0	0	0	0	0	0	4	1	2	3	2	8	3	2	2	29	0.34
161	Larynx	0	0	0	0	0	0	1	6	6	9	6	9	8	8	11	11	75	0.88
162	Lung	0	0	0	2	0	3	3	10	24	24	27	33	42	34	25	40	267	3.14
163	Pleura	0	0	0	0	0	0	0	1	0	1	2	0	2	4	1	2	13	0.15
164	Thymus	1	0	0	0	0	1	0	1	1	0	0	3	0	0	0	0	7	0.08
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
170	Bone	1	4	11	11	5	3	6	4	3	2	3	2	2	6	3	3	69	0.81
171	Connective	3	2	4	6	6	6	8	8	5	5	11	13	11	8	2	8	106	1.25
172	Skin Melan	0	0	0	0	1	0	1	3	1	2	1	3	3	2	3	4	24	0.28
173	Skin Other	0	0	0	0	1	2	2	1	6	3	6	6	8	7	8	18	68	0.80
174	Breast Fem	0	0	1	4	13	40	112	191	257	312	277	231	212	186	120	167	2123	24.96
179	Uterine Un	0	0	0	0	0	0	2	3	3	9	7	5	11	6	7	11	64	0.75
180	Cervix Uteri	0	0	0	0	4	21	49	121	147	183	179	134	150	111	90	51	1240	14.58
181	Placenta	0	0	1	0	3	5	3	2	0	1	0	0	0	0	0	0	15	0.18
182	Body Uterus	0	0	0	1	0	1	3	10	9	22	21	27	37	23	21	10	185	2.18
183	Ovary	1	1	10	9	18	26	25	35	64	70	85	82	61	47	38	42	614	7.22
184	Vagina	1	0	0	0	1	2	3	3	7	12	7	5	11	7	4	10	73	0.86
188	Uri Bladder	0	0	0	0	0	3	2	2	4	2	6	10	5	12	7	19	72	0.85
189	Kidney	11	1	0	1	1	1	2	4	3	10	6	7	7	10	8	6	78	0.92
190	Eye	6	0	3	0	0	0	0	1	0	0	0	0	0	1	1	1	13	0.15
191	Brain	5	7	12	6	12	9	14	17	14	10	17	19	19	6	13	16	196	2.30
192	Nervous Sy	0	1	0	0	1	0	0	1	1	2	0	0	1	1	0	0	8	0.09
193	Thyroid Gland	0	1	2	6	6	13	21	24	13	11	13	5	16	10	6	13	160	1.88
194	Oth Endo Gland	6	1	4	1	1	0	2	0	1	1	2	1	0	0	1	0	21	0.25
195	Ill Def Sites	1	1	0	1	1	0	0	0	5	2	2	3	9	5	2	5	37	0.44
196	Sec Lymph	1	0	2	0	2	1	3	5	7	2	7	5	7	3	7	4	56	0.66
197	Sec Res Et	0	0	0	0	1	3	4	3	9	10	7	5	4	13	8	15	82	0.96
198	Sec Other	1	1	0	0	0	0	1	3	1	8	4	5	8	8	1	5	46	0.54
199	Prim Unk	1	1	0	0	1	1	2	2	2	8	4	4	4	6	5	17	58	0.68
200	Lymphosarc	1	2	0	0	0	0	1	2	2	2	0	2	1	3	1	2	19	0.22
201	Hodgkins D	0	5	4	1	6	3	3	1	3	2	1	2	1	5	0	1	38	0.45
202	Oth Lympho	2	1	2	5	4	8	10	8	16	14	24	30	20	21	22	18	205	2.41
203	Mult Myelo	0	0	0	0	0	0	0	1	5	4	10	5	14	14	10	14	77	0.91
204	Leuk Lymph	17	15	8	7	3	8	2	6	7	7	3	6	3	6	5	8	111	1.31
205	Leuk Myelo	6	4	2	8	2	9	11	10	12	12	13	6	15	9	8	9	136	1.60
206	Leuk Monoc	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.01
207	Leuk other	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.01
208	Leuk Uns	4	1	0	2	3	4	1	2	2	1	4	1	4	6	1	5	41	0.48
	TOTAL	**77**	**51**	**69**	**81**	**117**	**214**	**354**	**591**	**784**	**968**	**1010**	**895**	**971**	**853**	**668**	**801**	**8504**	
	%	*0.9*	*0.6*	*0.8*	*0.9*	*1.3*	*2.5*	*4.1*	*6.9*	*9.2*	*11.3*	*11.8*	*10.5*	*11.4*	*10.0*	*7.8*	*9.4*	*100.0*	

TABLE MUM-3(a):
Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error (SE)) and Truncated (35-64 Yrs) (TR) Incidence Rate per 100,000 population: 1997-1998 - Males
Mumbai

ICD-9	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	CR	AAR	SE	TR
140	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.2	0.2	0.2	1.0	0.6	1.5	1.3	2.1	1.0	0.19	**0.28**	0.06	0.55
141	0.0	0.0	0.0	0.0	0.1	0.4	0.8	1.3	5.4	8.3	10.8	6.7	25.5	38.6	28.5	28.0	3.37	**5.51**	0.29	10.09
142	0.0	0.1	0.0	0.0	0.1	0.2	0.2	0.2	0.7	0.8	1.4	1.8	3.4	3.9	4.2	5.0	0.46	**0.72**	0.10	1.23
143	0.0	0.0	0.0	0.2	0.0	0.1	0.3	0.6	1.4	3.9	1.8	4.1	5.0	5.8	10.6	11.0	0.92	**1.45**	0.15	2.61
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1	1.1	1.0	0.9	2.7	2.6	7.4	0.0	0.32	**0.54**	0.09	0.96
145	0.0	0.0	0.0	0.1	0.0	0.5	1.4	2.1	5.7	6.4	8.4	9.4	13.3	21.2	20.1	15.0	2.48	**3.65**	0.23	7.03
146	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.4	1.6	2.8	7.2	6.4	6.9	12.2	16.9	12.0	1.33	**2.18**	0.18	3.81
147	0.0	0.1	0.2	0.3	0.1	0.2	0.0	0.1	0.2	0.6	0.2	0.3	1.9	5.8	4.2	2.0	0.32	**0.53**	0.09	0.50
148	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	3.7	3.6	9.0	15.8	21.3	38.6	47.5	34.0	2.93	**5.24**	0.29	7.80
149	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.0	0.9	1.4	3.0	2.9	4.2	7.1	9.5	14.0	0.74	**1.29**	0.14	1.83
150	0.0	0.0	0.0	0.0	0.0	0.2	0.4	1.1	4.7	7.7	10.6	19.0	36.2	65.0	64.4	84.1	4.56	**8.51**	0.38	11.44
151	0.0	0.0	0.0	0.0	0.1	0.5	0.8	1.6	3.1	6.1	9.4	14.3	17.9	50.2	52.8	47.0	3.35	**6.03**	0.31	7.77
152	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.5	0.4	1.2	1.5	1.9	1.1	2.0	0.19	**0.32**	0.07	0.52
153	0.0	0.0	0.0	0.0	0.3	0.2	0.8	1.3	2.6	3.9	7.2	9.1	11.8	14.2	37.0	38.0	2.17	**3.68**	0.24	5.35
154	0.0	0.0	0.2	0.1	0.2	0.4	0.6	0.8	2.1	3.1	7.0	5.9	11.8	21.9	28.5	28.0	1.92	**3.34**	0.23	4.57
155	0.5	0.2	0.2	0.1	0.2	0.3	0.5	1.4	1.6	4.5	8.8	11.4	17.5	28.3	46.5	46.0	2.76	**4.96**	0.28	6.60
156	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	1.1	1.4	1.8	2.6	7.2	4.5	15.8	17.0	0.81	**1.47**	0.16	2.12
157	0.0	0.1	0.0	0.0	0.0	0.2	0.1	0.7	1.2	2.7	5.4	6.1	12.2	16.1	22.2	25.0	1.54	**2.72**	0.21	4.12
158	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.4	0.5	0.2	0.6	0.8	1.9	5.3	3.0	0.21	**0.36**	0.08	0.39
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	1.8	1.9	1.9	2.1	4.0	0.18	**0.35**	0.08	0.53
160	0.0	0.0	0.1	0.1	0.0	0.3	0.4	0.6	0.6	0.9	2.2	0.6	2.3	3.2	7.4	1.0	0.49	**0.68**	0.10	1.14
161	0.0	0.0	0.1	0.0	0.0	0.4	0.5	1.3	4.4	7.5	12.0	19.3	27.8	52.1	53.9	53.0	3.98	**7.04**	0.34	10.57
162	0.1	0.1	0.1	0.0	0.5	0.1	0.5	1.7	3.7	8.1	17.0	32.5	50.3	82.4	101.4	115.1	6.33	**11.88**	0.45	16.04
163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.3	0.8	1.3	1.1	3.0	0.11	**0.19**	0.06	0.25
164	0.0	0.0	0.1	0.2	0.0	0.2	0.0	0.0	0.4	0.5	0.6	0.3	0.0	1.3	0.0	0.0	0.14	**0.18**	0.04	0.32
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
170	0.1	0.2	0.8	1.8	0.4	0.7	0.2	0.3	0.4	0.9	1.2	1.5	0.8	1.9	1.1	2.0	0.65	**0.71**	0.09	0.79
171	0.6	0.4	0.4	0.3	0.4	1.0	1.1	0.7	1.2	1.3	3.4	2.3	2.3	2.6	3.2	11.0	1.00	**1.28**	0.12	1.77
172	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.2	0.2	0.3	0.0	0.9	0.8	1.9	1.1	4.0	0.17	**0.29**	0.07	0.36
173	0.2	0.0	0.2	0.3	0.3	0.3	0.4	1.0	1.9	1.9	3.0	3.5	2.7	10.3	13.7	16.0	1.09	**1.73**	0.16	2.21
175	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.5	1.0	1.5	1.5	5.1	5.3	3.0	0.29	**0.54**	0.09	0.68
185	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	1.4	2.4	8.8	21.0	41.2	106.7	170.1	3.60	**8.19**	0.40	4.51
186	0.5	0.0	0.0	0.3	0.6	1.4	2.0	1.7	1.1	0.5	0.6	1.2	1.5	1.3	2.1	2.0	0.83	**0.88**	0.09	1.08
187	0.0	0.0	0.0	0.0	0.1	0.4	0.3	0.6	1.4	1.3	1.6	2.6	5.3	6.4	8.4	11.0	0.76	**1.23**	0.14	1.92
188	0.0	0.1	0.0	0.0	0.1	0.4	0.1	0.4	1.0	3.1	5.4	8.2	14.9	26.4	43.3	60.0	2.24	**4.38**	0.28	4.72
189	1.2	0.3	0.1	0.3	0.0	0.2	0.6	0.8	0.9	2.7	3.2	6.4	8.0	13.5	19.0	15.0	1.42	**2.45**	0.19	3.22
190	0.6	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.10	**0.16**	0.03	0.04
191	1.8	2.4	1.4	0.8	1.9	1.4	2.4	2.4	3.4	4.7	5.8	10.0	8.4	9.0	12.7	14.0	2.86	**3.45**	0.21	5.34
192	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.0	1.1	0.0	0.02	**0.05**	0.03	0.08
193	0.0	0.0	0.1	0.1	0.4	0.5	0.3	0.5	0.5	0.5	2.2	0.9	3.4	3.2	6.3	3.0	0.53	**0.78**	0.10	1.21
194	1.0	0.2	0.1	0.2	0.2	0.2	0.0	0.3	0.1	0.2	0.4	0.6	1.5	1.3	1.1	1.0	0.32	**0.51**	0.07	0.45
195	0.1	0.0	0.1	0.2	0.1	0.0	0.2	0.2	0.2	0.5	0.6	0.9	1.9	0.6	1.1	4.0	0.25	**0.39**	0.07	0.65
196	0.1	0.0	0.0	0.1	0.0	0.3	0.4	0.5	0.7	1.7	3.2	6.4	7.6	17.4	22.2	12.0	1.21	**2.16**	0.19	2.90
197	0.1	0.0	0.3	0.0	0.1	0.1	0.6	0.4	0.9	1.7	4.8	4.4	5.0	8.4	7.4	7.0	0.93	**1.44**	0.14	2.57
198	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.3	0.2	0.8	2.2	3.5	3.8	6.4	11.6	3.0	0.57	**0.98**	0.13	1.54
199	0.0	0.0	0.1	0.3	0.2	0.0	0.2	0.7	0.5	1.4	2.8	3.5	2.3	9.0	8.4	14.0	0.78	**1.31**	0.14	1.71
200	0.0	0.3	0.3	0.3	0.1	0.0	0.1	0.0	0.2	0.6	0.2	0.9	0.8	0.6	2.1	3.0	0.27	**0.33**	0.07	0.41
201	0.3	0.8	0.4	0.5	0.4	0.5	0.5	0.8	1.0	1.4	0.4	1.8	1.5	3.2	1.1	3.0	0.71	**0.78**	0.10	1.09
202	0.8	0.8	1.3	1.4	0.8	1.2	1.2	2.4	2.4	6.6	6.4	10.2	11.4	18.0	27.5	27.0	2.85	**4.16**	0.24	6.02
203	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.4	1.6	2.6	3.8	5.3	7.1	12.7	18.0	0.80	**1.46**	0.16	2.02
204	1.7	2.3	2.0	2.0	0.9	0.6	0.5	0.4	0.6	0.2	1.4	2.9	5.0	7.7	4.2	11.0	1.51	**1.87**	0.16	1.49
205	0.8	0.4	0.9	1.3	0.7	1.0	1.6	1.3	2.2	2.2	3.0	4.4	5.3	5.1	5.3	12.0	1.58	**2.00**	0.15	2.84
206	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
208	0.5	0.3	0.3	0.3	0.4	0.2	0.2	0.3	0.2	0.6	1.2	1.2	1.5	3.9	2.1	5.0	0.49	**0.73**	0.10	0.75
All	**11.0**	**9.3**	**10.1**	**11.8**	**10.4**	**15.3**	**22.6**	**33.7**	**67.9**	**115.3**	**186.0**	**276.2**	**409.6**	**694.8**	**921.3**	**1019.**	**69.6**	**117.3**	**1.35**	**160.5**

TABLE MUM-3(b):

Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error (SE)) and Truncated (35-64 Yrs) (TR) Incidence Rate per 100,000 population: 1997-1998 - Females Mumbai

ICD-9	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	>75	CR	AAR	SE	TR
140	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.0	0.4	1.3	1.5	2.2	0.0	0.11	**0.19**	0.06	0.34
141	0.0	0.0	0.0	0.0	0.0	0.1	1.1	1.4	2.6	3.1	4.9	7.2	9.9	17.1	25.1	11.8	1.65	**2.70**	0.22	4.37
142	0.0	0.1	0.0	0.1	0.3	0.3	0.1	0.1	0.0	0.7	0.3	0.8	3.1	2.2	2.2	0.0	0.28	**0.39**	0.08	0.71
143	0.0	0.0	0.0	0.0	0.2	0.2	0.5	0.4	0.9	2.2	3.4	3.0	4.5	11.9	6.6	7.3	0.86	**1.38**	0.15	2.20
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.4	0.7	0.0	0.9	0.05	**0.09**	0.04	0.14
145	0.0	0.0	0.0	0.0	0.5	0.2	0.2	1.6	3.1	5.1	6.0	9.1	12.5	17.8	17.5	12.7	1.87	**2.96**	0.22	5.65
146	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.7	1.1	0.4	0.4	1.5	6.6	5.4	0.27	**0.47**	0.09	0.48
147	0.1	0.0	0.0	0.2	0.2	0.3	0.0	0.1	0.0	0.0	0.9	0.0	0.0	0.0	2.2	0.9	0.15	**0.20**	0.05	0.17
148	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	1.3	2.2	2.3	3.0	4.5	3.7	14.2	12.7	0.81	**1.32**	0.15	2.08
149	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.4	0.7	0.3	1.1	0.9	3.0	4.4	5.4	0.29	**0.49**	0.09	0.55
150	0.0	0.0	0.0	0.2	0.2	0.1	0.1	2.1	3.8	6.6	16.9	16.4	16.6	36.4	48.1	56.3	3.65	**6.17**	0.33	9.42
151	0.0	0.0	0.0	0.1	0.3	0.7	1.0	1.3	2.6	5.7	9.2	9.1	17.9	16.3	24.0	29.9	2.41	**3.84**	0.26	6.81
152	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.2	0.0	0.0	0.4	0.0	1.1	3.6	0.11	**0.16**	0.05	0.19
153	0.0	0.0	0.0	0.0	0.1	0.4	0.8	1.0	2.2	4.2	9.5	5.0	10.7	20.1	28.4	20.9	1.96	**3.23**	0.24	4.99
154	0.0	0.0	0.1	0.0	0.1	0.7	1.0	1.2	2.7	3.8	5.2	7.2	9.9	11.1	12.0	17.2	1.61	**2.46**	0.20	4.54
155	0.4	0.0	0.0	0.0	0.0	0.2	0.2	0.8	1.5	1.1	3.4	7.2	7.6	17.8	15.3	16.3	1.30	**2.26**	0.20	3.11
156	0.0	0.0	0.1	0.0	0.1	0.3	0.5	1.0	2.4	4.9	4.0	7.2	12.1	14.9	16.4	12.7	1.60	**2.56**	0.21	4.74
157	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.5	1.8	1.5	3.4	6.1	4.9	12.6	14.2	20.0	1.16	**1.94**	0.19	2.71
158	0.1	0.1	0.0	0.3	0.0	0.2	0.2	0.1	0.0	1.3	0.3	0.8	1.3	3.7	4.4	0.9	0.32	**0.49**	0.09	0.59
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.9	1.1	0.4	2.2	3.3	4.5	0.20	**0.36**	0.08	0.42
160	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.4	0.9	0.8	3.6	2.2	2.2	1.8	0.29	**0.47**	0.09	0.93
161	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8	1.1	2.0	1.7	3.4	3.6	5.9	12.0	10.0	0.75	**1.24**	0.15	1.92
162	0.0	0.0	0.0	0.2	0.0	0.3	0.4	1.3	4.4	5.3	7.8	12.6	18.8	25.3	27.3	36.3	2.66	**4.40**	0.28	7.45
163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.6	0.0	0.9	3.0	1.1	1.8	0.13	**0.24**	0.07	0.28
164	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.07	**0.09**	0.03	0.20
165	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	**0.00**	0.00	0.00
170	0.1	0.4	1.0	1.1	0.5	0.3	0.7	0.5	0.5	0.4	0.9	0.8	0.9	4.5	3.3	2.7	0.69	**0.77**	0.11	0.65
171	0.3	0.2	0.4	0.6	0.6	0.6	1.0	1.0	0.9	1.1	3.2	5.0	4.9	5.9	2.2	7.3	1.05	**1.43**	0.14	2.37
172	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.4	0.2	0.4	0.3	1.1	1.3	1.5	3.3	3.6	0.24	**0.37**	0.08	0.56
173	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	1.1	0.7	1.7	2.3	3.6	5.2	8.7	16.3	0.68	**1.14**	0.14	1.40
174	0.0	0.0	0.1	0.4	1.2	3.8	13.3	25.0	46.9	68.9	79.6	88.0	94.9	138.1	131.1	151.5	21.11	**30.78**	0.70	63.70
179	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.5	2.0	2.0	1.9	4.9	4.5	7.6	10.0	0.64	**1.05**	0.14	1.77
180	0.0	0.0	0.0	0.0	0.4	2.0	5.8	15.8	26.8	40.4	51.4	51.1	67.2	82.4	98.3	46.3	12.33	**18.19**	0.54	39.62
181	0.0	0.0	0.1	0.0	0.3	0.5	0.4	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.15	**0.12**	0.03	0.10
182	0.0	0.0	0.0	0.1	0.0	0.1	0.4	1.3	1.6	4.9	6.0	10.3	16.6	17.1	22.9	9.1	1.84	**3.03**	0.23	5.95
183	0.1	0.1	0.9	0.9	1.7	2.5	3.0	4.6	11.7	15.5	24.4	31.3	27.3	34.9	41.5	38.1	6.11	**8.81**	0.37	17.65
184	0.1	0.0	0.0	0.0	0.1	0.2	0.4	0.4	1.3	2.6	2.0	1.9	4.9	5.2	4.4	9.1	0.73	**1.14**	0.14	2.03
188	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.3	0.7	0.4	1.7	3.8	2.2	8.9	7.6	17.2	0.72	**1.20**	0.15	1.32
189	1.1	0.1	0.0	0.1	0.1	0.1	0.2	0.5	0.5	2.2	1.7	2.7	3.1	7.4	8.7	5.4	0.78	**1.29**	0.14	1.65
190	0.6	0.0	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.7	1.1	0.9	0.13	**0.23**	0.05	0.02
191	0.5	0.6	1.1	0.6	1.1	0.9	1.7	2.2	2.6	2.2	4.9	7.2	8.5	4.5	14.2	14.5	1.95	**2.53**	0.19	4.18
192	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.2	0.4	0.0	0.0	0.4	0.7	0.0	0.0	0.08	**0.09**	0.04	0.19
193	0.0	0.1	0.2	0.6	0.6	1.2	2.5	3.1	2.4	2.4	3.7	1.9	7.2	7.4	6.6	11.8	1.59	**1.99**	0.17	3.30
194	0.6	0.1	0.4	0.1	0.1	0.0	0.2	0.0	0.2	0.2	0.6	0.4	0.0	0.0	1.1	0.0	0.21	**0.29**	0.05	0.23
195	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.9	0.4	0.6	1.1	4.0	3.7	2.2	4.5	0.37	**0.58**	0.10	1.01
196	0.1	0.0	0.2	0.0	0.2	0.1	0.4	0.7	1.3	0.4	2.0	1.9	3.1	2.2	7.6	3.6	0.56	**0.82**	0.11	1.44
197	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.4	1.6	2.2	2.0	1.9	1.8	9.7	8.7	13.6	0.82	**1.29**	0.15	1.62
198	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.4	0.2	1.8	1.1	1.9	3.6	5.9	1.1	4.5	0.46	**0.74**	0.11	1.36
199	0.1	0.1	0.0	0.0	0.1	0.1	0.2	0.3	0.4	1.8	1.1	1.5	1.8	4.5	5.5	15.4	0.58	**0.95**	0.13	1.09
200	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.4	0.0	0.8	0.4	2.2	1.1	1.8	0.19	**0.27**	0.07	0.37
201	0.0	0.4	0.4	0.1	0.6	0.3	0.4	0.1	0.5	0.4	0.3	0.8	0.4	3.7	0.0	0.9	0.38	**0.40**	0.08	0.40
202	0.2	0.1	0.2	0.5	0.4	0.8	1.2	1.0	2.9	3.1	6.9	11.4	9.0	15.6	24.0	16.3	2.04	**3.14**	0.23	5.09
203	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	0.9	2.9	1.9	6.3	10.4	10.9	12.7	0.77	**1.36**	0.16	1.89
204	1.7	1.3	0.7	0.7	0.3	0.8	0.2	0.8	1.3	1.5	0.9	2.3	1.3	4.5	5.5	7.3	1.10	**1.39**	0.14	1.31
205	0.6	0.4	0.2	0.8	0.2	0.9	1.3	1.3	2.2	2.6	3.7	2.3	6.7	6.7	8.7	8.2	1.35	**1.84**	0.17	2.94
206	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	**0.01**	0.01	0.00
207	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	**0.01**	0.01	0.02
208	0.4	0.1	0.0	0.2	0.3	0.4	0.1	0.3	0.4	0.2	1.1	0.4	1.8	4.5	1.1	4.5	0.41	**0.62**	0.10	0.64
All	**7.7**	**4.7**	**6.5**	**8.1**	**11.4**	**20.9**	**42.1**	**76.9**	**143.3**	**213.3**	**290.0**	**340.9**	**434.3**	**633.4**	**729.8**	**726.4**	**84.6**	**127.9**	**0.42**	**230.8**

TABLE MUM-4(a): Cumulative Rate (Cu.Rate%) & Cumulative Risk (Cu. Risk) of Individual Sites (ICD-9) Based on Age Specific Rates (from 0–64 Years and from 0–74 Years) 1997-1998: Males - Mumbai

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu. Rate %	Cu. Risk	Cu. Rate%	Cu. Risk
140	Lip	0.03	0.03	0.04	0.04
141	Tongue	0.54	0.54	0.68	0.68
142	Salivary Gland	0.06	0.06	0.09	0.08
143	Gum	0.12	0.12	0.17	0.17
144	Floor of Mouth	0.04	0.04	0.08	0.08
145	Other Mouth	0.34	0.34	0.44	0.44
146	Oropharynx	0.19	0.19	0.28	0.27
147	Nasopharynx	0.05	0.05	0.07	0.07
148	Hypopharynx	0.47	0.47	0.70	0.70
149	Pharynx Etc.	0.10	0.10	0.15	0.15
150	Oesophagus	0.72	0.72	1.05	1.04
151	Stomach	0.52	0.52	0.78	0.78
152	Small Intestine	0.03	0.03	0.04	0.03
153	Colon	0.26	0.26	0.44	0.44
154	Rectum	0.27	0.27	0.41	0.41
155	Liver	0.38	0.38	0.61	0.61
156	Gall Bladder	0.10	0.10	0.18	0.17
157	Pancreas	0.22	0.22	0.34	0.33
158	Retroperitoneum	0.02	0.02	0.05	0.05
159	Other Dig Sys	0.03	0.03	0.04	0.04
160	Nasal Cavity	0.06	0.06	0.09	0.09
161	Larynx	0.63	0.63	0.90	0.89
162	Lung	0.99	0.98	1.49	1.48
163	Pleura	0.02	0.01	0.02	0.02
164	Thymus	0.02	0.02	0.02	0.02
165	Other Resp	0.00	0.00	0.00	0.00
170	Bone	0.06	0.06	0.06	0.06
171	Conn Tissue	0.09	0.09	0.11	0.11
172	Skin Melanoma	0.02	0.02	0.03	0.03
173	Skin Other	0.13	0.13	0.20	0.20
175	Breast Male	0.05	0.05	0.08	0.08
185	Prostate	0.38	0.37	0.91	0.90
186	Testis	0.06	0.06	0.07	0.07
187	Penis Etc	0.10	0.10	0.14	0.14
188	Uri Bladder	0.30	0.30	0.52	0.52
189	Kidney	0.19	0.19	0.29	0.29
190	Eye	0.01	0.01	0.01	0.01
191	Brain	0.28	0.28	0.34	0.34
192	Nervous Sys	0.00	0.00	0.01	0.01
193	Thyroid Gland	0.06	0.06	0.09	0.09
194	Oth Endo Gland	0.03	0.03	0.04	0.04
195	Ill Def Sites	0.03	0.03	0.03	0.03
196	Sec Lymph Node	0.19	0.19	0.30	0.30
197	Sec Res Etc	0.13	0.13	0.17	0.17
198	Sec Other	0.09	0.09	0.15	0.15
199	Primary Unk	0.11	0.10	0.15	0.15
200	Lymphosarcoma	0.02	0.02	0.03	0.03
201	Hodgkins Dis	0.07	0.07	0.07	0.07
202	Oth Lymph Node	0.32	0.32	0.46	0.46
203	Mult Myeloma	0.11	0.11	0.17	0.17
204	Leuk Lymphatic	0.14	0.14	0.16	0.16
205	Leuk Myelocytic	0.15	0.15	0.18	0.18
206	Leuk Monocytic	0.00	0.00	0.00	0.00
207	Leuk Misc	0.00	0.00	0.00	0.00
208	Leuk Uns	0.06	0.06	0.07	0.07
	ALL SITES	**9.37**	**8.94**	**13.98**	**13.04**

TABLE MUM-4(b): Cumulative Rate (Cu.Rate%) & Cumulative Risk (Cu. Risk) of Individual Sites (ICD-9) Based on Age Specific Rates (from 0–64 Years and from 0–74 Years) 1997-1998: Females - Mumbai

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu. Rate %	Cu. Risk	Cu. Rate%	Cu. Risk
140	Lip	0.02	0.02	0.03	0.03
141	Tongue	0.24	0.24	0.36	0.36
142	Salivary Gland	0.04	0.04	0.05	0.05
143	Gum	0.14	0.14	0.17	0.17
144	Floor of Mouth	0.01	0.01	0.01	0.01
145	Other Mouth	0.28	0.28	0.37	0.37
146	Oropharynx	0.02	0.02	0.06	0.06
147	Nasopharynx	0.01	0.01	0.02	0.02
148	Hypopharynx	0.09	0.09	0.16	0.16
149	Pharynx Etc	0.03	0.03	0.06	0.06
150	Oesophagus	0.50	0.50	0.74	0.73
151	Stomach	0.32	0.32	0.44	0.44
152	Small Intestine	0.01	0.01	0.01	0.01
153	Colon	0.27	0.27	0.41	0.41
154	Rectum	0.22	0.21	0.28	0.27
155	Liver	0.20	0.20	0.28	0.28
156	Gall Bladder	0.24	0.24	0.32	0.32
157	Pancreas	0.16	0.16	0.23	0.23
158	Retroperitoneum	0.04	0.04	0.06	0.06
159	Other Dig Sys	0.03	0.02	0.04	0.04
160	Nasal Cavity	0.04	0.04	0.06	0.05
161	Larynx	0.09	0.09	0.15	0.15
162	Lung	0.38	0.38	0.52	0.52
163	Pleura	0.02	0.02	0.03	0.03
164	Thymus	0.01	0.01	0.01	0.01
165	Other Resp	0.00	0.00	0.00	0.00
170	Bone	0.06	0.06	0.08	0.08
171	Conn Tissue	0.13	0.13	0.14	0.14
172	Skin Melanoma	0.03	0.03	0.04	0.04
173	Skin Other	0.08	0.08	0.12	0.12
174	Breast Female	2.80	2.76	3.46	3.40
179	Uterine Un	0.08	0.08	0.12	0.12
180	Cervix Uteri	1.72	1.70	2.21	2.18
181	Placenta	0.01	0.01	0.01	0.01
182	Body Uterus	0.29	0.29	0.41	0.41
183	Ovary	0.79	0.79	1.00	1.00
184	Vagina	0.10	0.10	0.12	0.12
188	Uri Bladder	0.09	0.09	0.13	0.13
189	Kidney	0.10	0.10	0.14	0.14
190	Eye	0.01	0.01	0.01	0.01
191	Brain	0.19	0.19	0.26	0.26
192	Nervous System	0.01	0.01	0.01	0.01
193	Thyroid Gland	0.17	0.17	0.20	0.20
194	Oth Endo Gland	0.01	0.01	0.02	0.02
195	Ill Def Sites	0.06	0.06	0.07	0.07
196	Sec Lymph Node	0.06	0.06	0.10	0.10
197	Sec Res Etc	0.10	0.10	0.15	0.15
198	Sec Other	0.08	0.08	0.08	0.08
199	Primary Unk	0.06	0.06	0.09	0.09
200	Lymphosarcoma	0.02	0.02	0.03	0.03
201	Hodgkins Dis	0.04	0.04	0.04	0.04
202	Oth Lymphoma	0.27	0.27	0.39	0.39
203	Mult Myeloma	0.12	0.12	0.17	0.17
204	Leuk Lymphatic	0.09	0.09	0.12	0.12
205	Leuk Myelocytic	0.15	0.15	0.19	0.19
206	Leuk Monocytic	0.00	0.00	0.00	0.00
207	Leuk Misc	0.00	0.00	0.00	0.00
208	Leuk Uns	0.05	0.05	0.06	0.06
	ALL SITES	**11.17**	**10.57**	**14.82**	**13.77**

Other Publications of NCRP

1. Annual Report 1982: National Cancer Registry, Indian Council of Medical Research, New Delhi, 1985
2. Annual Report 1983: National Cancer Registry, Indian Council of Medical Research, New Delhi, 1986
3. Annual Report 1984: National Cancer Registry, Indian Council of Medical Research, New Delhi, 1987
4. Annual Report 1985: National Cancer Registry, Indian Council of Medical Research, New Delhi, 1988
5. Annual Report 1986: National Cancer Registry, Indian Council of Medical Research, New Delhi, 1989
6. Annual Report 1987: National Cancer Registry Programme, Indian Council of Medical Research, New Delhi, 1989
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