

NATIONAL CANCER REGISTRY PROGRAMME

Consolidated Report of the Population Based Cancer Registries 1990-96

Incidence and Distribution of Cancer



Indian Council of Medical Research

New Delhi

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Consolidated Report of the Population Based Cancer Registries Incidence and Distribution of Cancer: 1990-96

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Coordinating Unit, Bangalore

August 2001

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August 2001

The Population for the areas covered by the six registries for each of the years 1990-1996 has been estimated, based on 1981 and 1991 censuses by Dr V. Sreenivas, Assistant Director General, ICMR, New Delhi. Earlier estimates of the population were based on post-censal population estimates based on 1971 and 1981 censuses since the 1991 five year age group populations of the 1991 census was available only in 1996. The incidence rates for all the registry centres have been computed with these new estimates of the population. Therefore there could be some slight variation in the incidence rates published for the same years in earlier NCRP reports. The incident data of the registries have also been updated and revised following rigorous checks for the preparation of this report.

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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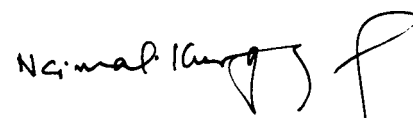
The publication of the Consolidated Report of the population based cancer registries for the years 1990-96 has brought about a requirement that has been pending for some time. The report is the result of efforts made by registries under the National Cancer Registry Programme (NCRP) of the Council. It includes data from five urban and one rural cancer registry under the NCRP.

The reports of the NCRP have established 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, knowing the severity of the problem and determining thrust areas for cancer control.

As in the previous reports, the emphasis is on incidence and patterns of cancer. The format and almost all the statistical tables of the previous reports have been retained. In addition, information on cancers of individual sites has been summarised in greater detail. The items dealt here, besides numbers and incidence, include male female ratio, trends over time, anatomical sub-site, histologic type, results of survival studies and international comparisons with graphic representation on the facing page. This gives a comprehensive account of a particular cancer in our country vis-à-vis internationally. In this report childhood cancers are classified according to a special internationally followed scheme that relies principally on the cell of origin of the tumour. As before, individual registry reports and the detailed tabulations comprise the latter half of the book.

It is hoped that this publication will serve as a ready reference manual on cancer incidence in India for researchers, clinicians, health administrators and any one interested in this field. Since the report covers a seven-year period the information made available is exhaustive, nonetheless made simple and clear.

To collate, make checks on data and produce tabulations and reports so as to meet international standards takes time. With advances in electronic information and computer technology it is expected that in the coming years, the gap between calendar year of data and year of report publication will narrow. The registries and all of their staff, deserve thanks for the work they have put in and making available their data.



Prof. N. K. Ganguly,
Director General, ICMR

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The consolidated report is dedicated to the memory of four distinguished personalities who have contributed to the success of the National Cancer Registry Programme of the Indian Council of Medical Research.

Dr Calum S. Muir (1931-1995)

Chief, Unit of Descriptive Epidemiology, IARC, Lyon – 1967-86; Deputy Director, IARC 1986-1990; Director, Cancer Registration in Scotland 1991-95

As WHO Consultant Dr Muir was associated with the National Cancer Registry Programme since its inception in 1982. Continued to be Consultant till 1991 and was instrumental in holding the 1994 Annual Meeting of the International Association of Cancer Registries in Bangalore, which in fact was his last meeting in India.

Dr Takeshi Hirayama (1927-1995)

Director, Institute of Preventive Oncology, Tokyo, Japan

Along with Dr Calum Muir, was WHO Consultant for the National Cancer Registry Programme from 1982. His last meeting was also the 1994 meeting in Bangalore, India.

Dr D.J. Jussawalla (1915-1999)

Director, Tata Memorial Centre (1973-80); Founder Member and Managing Trustee – Indian Cancer Society (1952-1999)

Dr Jussawalla commenced the first cancer registry in India and was the Chairman of the first task force of the National Cancer Registry Programme convened by the Indian Council of Medical Research in 1981, that recommended the setting up of cancer registries under the NCRP. He was the Principal Investigator of the Bombay Cancer Registry till his death in 1999.

Professor V. Ramalingaswami (1921-2001)

Director General, Indian Council of Medical Research (1979-1986)

It was under the stewardship of Professor Ramalingaswami that the National Cancer Registry Programme was started. His contribution towards medical science and research in general and the field of cancer in particular will be revered for a long time to come.

“Growth for the Sake of Growth is the Ideology of the Cancer Cell.”

Edward Abbey

“The Scientific Temperament feels much more comfortable when it is breaking down a complex phenomenon into simpler parts than when it is trying to pull together a series of diverse facts into a unity of relationship. For a solution of the ultimate riddles, however, synthesis is more important than analysis... It is not an understanding of units that we now seek, but of unity.”

*An address by Edmund Sinnott quoted by Lynd, R.S.
In “Knowledge for What?”, Princeton, 1939, p 245.*

“Cancer Control is the reduction of cancer incidence, morbidity and mortality through an orderly sequence from research on intervention and their impact in defined populations to the broad, systematic application of the research results.”

Greenwald and Cullen, 1985.

EXECUTIVE SUMMARY

The present consolidated report of the population based cancer registries covers the seven-year data for the years 1990-1996. The registries covered in this data include all the population based cancer registries under the National Cancer Registry Programme (NCRP) of the Indian Council of Medical Research. These include the five urban registries at Bangalore, Bhopal, Chennai, Delhi and Mumbai and the rural registry at Barshi.

The main emphasis of this report is on cancer incidence and patterns of cancer. The overall aim and objective is to provide incidence data that are not only comparable among the cancer registries reported, but also with cancer registries in different parts of the world. It attempts to give clues about the burden and patterns 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.

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 97.8 to 121.9 in urban males and overall is slightly higher in females. Incidence rates in the rural registry of Barshi have been consistently considerably lower. The urban incident rates are similar to that seen in Indians in Singapore, but lower than the rates observed in the registries of the developed countries in the west and Oceania or Japan. However, a different picture emerges when this is examined for certain specific sites of cancer.

Overall, among males 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 Bangalore and Chennai 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. Based on currently available data, in registries in all continents, males in Bhopal have the highest incidence rate of cancer of the tongue. Similarly the rates of cancer of the oral cavity in both males and females are among the highest in the world. The incidence rate of oesophageal cancer in women in Bangalore is again the highest. The above underscores the role of tobacco in cancer causation.

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. Though this site of cancer is less common in females, than in males, Chennai women have this site as the most important cancer next only to cancer of the cervix and breast.

In women, cancers of the cervix and breast together account for over 40% of cancers in urban women and over 65% of cancers in the rural registry in Barshi. There is a decline in the rates of cervical cancer especially in Chennai (which has the highest rate among the six registries). This requires careful evaluation, because screening as such is not widely practiced. One school of thought is that one is perhaps dealing with cohorts of women who have an increasing age at marriage. The same analogy applies to the rather increasing trend in breast cancer rates.

One of the sites of cancer that has been brought to sharp focus in this report is that of cancer of the gall bladder, especially in females in Delhi and Bhopal. This is important not only because the age adjusted incidence rate of cancer of the gall bladder in Delhi women is one of the highest in the world, being several fold that seen in Caucasian women, but, more because there is a statistically significant increase in the incidence over the years. The NCRP has undertaken a case control investigation on this site of cancer in Delhi and this is presently in progress.

An observation of a related anatomical site, is, that intra-hepatic cholangiocarcinoma comprised 46% and 39% of all liver tumours in females in Bhopal and Delhi respectively. Normally these cholangiocarcinomas account for about 15% or less (as also noticed in other registries under study) of hepatic cancers worldwide, except in Khon Khaen in Thailand wherein they constitute 90 and 94% of liver cancers in males and females respectively. In this region, intra-hepatic cholangiocarcinomas have been associated with chronic infection with liver fluke – *Opisthorchis viverrini* (Parkin *et al*, 1991, 1993).

Among the other sites of cancer one needs to closely monitor the somewhat rising trends of cancer of the lung and ovary in women and cancer of the prostate in men. The rates of colo-rectal cancers in our country are not as high as that seen in the west but the trends would require careful observation.

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.

Chapter 5 of the report briefly deals with mortality data. In our country 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. In order to assess the completeness of coverage of the cancer cases, a population based cancer survey was carried out in the three earlier registries at Bangalore, Chennai and Mumbai. Survey of the representative sample showed that the estimate of coverage was around 72% in Bangalore, 100% in Chennai and 78% in Mumbai. Apart from the above 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.

The cancer registry is central to any rational programme on cancer control (Muir, C.S., 1986). To this end the registries under the NCRP have provided baseline parameters with data of high quality and scientific validity. Systematic collation of cancer information albeit in a few centers, has given pointers to the burden and patterns of cancers amenable to cancer control measures. The population based survival studies conducted by the registries, for the first time in the context of a developing country have made known additional factors in the form of age and stage specific survival and mortality.

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 generate 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.

The report and the data also stress the need for further expansion of the NCRP in several areas of the country where there is a paucity of organized information on cancer. It gives a stimulus to embark on studies that would combine laboratory components with epidemiologic design. Last, but by no means the least, the age of electronic information and computer technology needs to be utilized in its full, so that rapid strides could be made in the aforesaid areas.

Data collation, analysis and reporting howsoever meticulously done cannot be perfect and certain limitations remain. Timeliness of reporting has not always been practiced. The fact that some registries had to subsequently add substantial number of cases of earlier years as 'late registrations' suggests difficulties in completeness of coverage in time. The high proportion of cancer cases with unknown primary anatomical site indicates lack of complete work-up of patients and the weaknesses associated with the system of registration of death and certifying the cause of death. The latter also accounts for the relatively lower mortality rates in a few urban registries. Despite the above shortcomings, the data presented in the report are of high quality and immensely useful.

1

NATIONAL CANCER REGISTRY PROGRAMME – AN OVERVIEW

The Indian Council of Medical Research initiated a network of cancer registries across the country under the National Cancer Registry Programme (NCRP) in December 1981. This move followed the recognition that there was an urgent need for strengthening the existing cancer registries and organization of new cancer registries in different regions of the country.

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 rates in different regions of the country including incidence rates 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 studies in the form of case control or cohort studies based on observations of registry data;
3. Provide research 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 (PBCRs) at Bangalore, Chennai and Mumbai, and also in the hospital based cancer registries (HBCRs) at Chandigarh, Dibrugarh and Thiruvananthapuram. 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. In order to extend the assessment of cancer patient care, hospital based cancer registries were also started at Bangalore, Chennai and Mumbai in 1984.

NATIONAL CANCER REGISTRY PROGRAMME

(Indian Council of Medical Research)



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. The Chief of the Division is the Director of the Programme with a Project officer who coordinates the activities through the Coordinating Unit. Dr Usha K. Luthra who was the then Chief of the Division and Dr L.D. Sanghvi who was the first Project Officer were the founder members. 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 is active in that 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. 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 for one year) in the area in all hospitals and copy all death certificates in which cancer is mentioned.

Cancer registries collect information on cancers reported in a prescribed format with specified guidelines and the data so collected is entered on a computer. All registries are required to register all malignant neoplasms coded as per the International Classification of Diseases for Oncology (ICD-O) with a behaviour code /3 (WHO, 1975,76). Besides identifying information and duration of stay at the permanent place of residence they also collect information on educational status, religion, language spoken, method of arriving at a final diagnosis of cancer, extent of disease at the time of diagnosis and mode of treatment(s) given upto six months of diagnosis.

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 back to the respective registries by the Coordinating Unit. Individual registries go through the records/reports of such cases again 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 tables 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 of all 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. Recently a population based cancer survey was done in selected defined divisions within the registry areas in Bangalore, Chennai and Mumbai. The results revealed that the proportion of coverage of cancer cases by the registry was 71.8% in Bangalore, 100% in Chennai and 78% in Mumbai (NCRP Report, 1999).

An inter-registry panel of pathologists was constituted to study histological features that correlate with prognosis in cancer of the breast. This was completed and the results showed that Clinical Extent of Disease, Vascular Invasion and Involvement of Nipple/Areola/Skin of breast were the factors that significantly influenced survival (NCRP Report 2000).

To determine the association, if any, between a history of vasectomy and cancer of the prostate, a multi-registry case control study is underway and collection of data on cases and controls is just complete. A case control study on cancer of the gall bladder in Delhi is also going on. The WHO has recently cleared a project on Development of an Atlas of Cancer in India, through networking of pathology departments of medical colleges and major hospitals across the country.

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. The NCRP and the registries also regularly contribute to the succeeding volumes of Cancer Incidence in Five Continents published by the International Agency for Research on Cancer, which is the cancer research arm of the World Health Organization. Among the more important contributions from the registries are the exercise on population based survival in selected sites of cancer. This was published for the first time in the context of a developing country.

INTRODUCTION TO CONSOLIDATED REPORT - PBCR's: 1990-1996

With the control of infectious diseases and increased longevity of the growing population in a country like India the spectrum of disease changes and the burden of cancer is on the increase. Of the ten million new cases of cancer diagnosed every year over half are from the developing world. It is estimated that by the year 2020, over 10 million people worldwide would die of cancer every year and that 70 percent of these would be from the developing world.

Cancer patterns vary not only throughout the world but also between different population groups within the same country. The preliminary and subsequent reports of the National Cancer Registry Programme (NCRP) have shown, cancer of the stomach as 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 Bhopal and Delhi, but is hardly seen in Bangalore and Chennai.

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.

Cancer Registration is the process of systematically and continuously collecting information on malignant neoplasms reported. Broadly there are two types of cancer registries - Hospital Based (HBCR) and Population Based (PBCR).

Hospital based cancer registries collect information of cancers reported in a given hospital, regardless of where that person with cancer resides. Hospital based registries help in assessing cancer patient care in a given hospital and aid in hospital administration including the individual hospital's cancer control programmes. The items of patient information collected by a hospital registry are slightly different from those collected by a population registry, though all of the items collected by it are normally also collected by the hospital registry. Therefore, the additional items that a hospital registry collects pertain to clinical stage, treatment and follow-up which would include disease status – whether a given patient is disease free, has a recurrence or has widespread disease. Hospital registries help in planning and monitoring survival studies and clinical trials. Hospital registries contribute cases to the population based cancer registry in the area.

Population based cancer registries collect information of all new cancer cases reported from the population residing in a defined geographic area. Under the NCRP, the period of residence in the geographic area is for a minimum period of one year, at the time of diagnosis of cancer. Population cancer registries are concerned with providing information on cancer incidence and mortality, trends over time and constitute a base for carrying out research studies on cancer etiology through epidemiologic studies. Population based cancer registries provide reliable data on the magnitude of the cancer problem and also about the patterns of cancer – the types and changes in the rates of these cancers over time. To initiate, establish and sustain population based cancer registries as per international standards requires meticulous planning, cooperation of medical institutions in the area, dedicated 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 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.

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.

The previous report of the NCRP that was published (Biennial Report, 1992) was for the years 1988-89. The present consolidated report of the population based cancer registries is 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 emphasis of this report is on cancer incidence and patterns of cancer. The overall aim and objective of this report is to provide comparable data on the incidence of cancer in the available different regions of the country. 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.

India is a vast country with diverse life-styles and therefore varying cancer patterns and incidence rates. Until the 1980's cancer rates were available only from Mumbai. Only with the commencement of the NCRP by the Indian Council of Medical Research in 1982, diversity in cancer rates became evident in different urban centres. As regards rural India, the registry at Barshi has given cancer rates for that region of rural India. Such rural registries as at Barshi in different regions of the country can only provide a clear picture of cancer in rural India. Since 70-80% of India's population, reside in rural areas, and as the currently available data are mainly from urban registries (except the one in Barshi), no attempt has been made to estimate the load of cancer in India.

The write-up of each of the registries and the detailed tabulation of the respective registries' data are given in the latter part of the report.

3

CANCER INCIDENCE AND LEADING SITES

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. For the data of the seven-year (1990-1996) period the average annual rates are calculated. The definitions and details of these calculations are given in Chapter 7.

Area covered and population at risk

The geographic area covered by the six population based registries and the average estimated population for the seven year period (1990-1996) are given below (Table 3.1):

TABLE 3.1: Area Covered and Population at Risk (1990-1996)

Registry	Area (sq.km.)	Males	Females	Total Population
Bangalore	276.4	23,38,641	21,13,793	44,52,434
Barshi	3713.4	2,40,725	2,25,812	4,66,537
Bhopal	284.9	6,36,782	5,73,044	12,09,826
Chennai	170.0	20,66,275	19,30,251	39,96,526
Delhi	685.3	50,59,769	42,26,684	92,86,453
Mumbai	603.0	56,76,033	47,38,442	104,14,475

Cancer Incidence - All sites (ICD-9: 140-208)

The number of cases registered by each of the registries during the seven-year period from 1990 to 1996 is given below (Table 3.2):

TABLE 3.2: Total number of cases registered (1990-1996)

Registry	Males	Females	Total Cases
Bangalore	10240	11740	21980
Barshi	638	766	1404
Bhopal	2539	2250	4789
Chennai	11366	12355	23721
Delhi	26218	25861	52079
Mumbai	28953	27091	56044
All Registries	79954	80063	160017

The crude (CR), age adjusted (AAR) and truncated (TR) incidence rates for all sites are given in Table 3.3 and Figure 3.1.

TABLE 3.3: Crude (CR), Age Adjusted (AAR), and Truncated (TR) Incidence Rate per 100,000 (1990–1996)

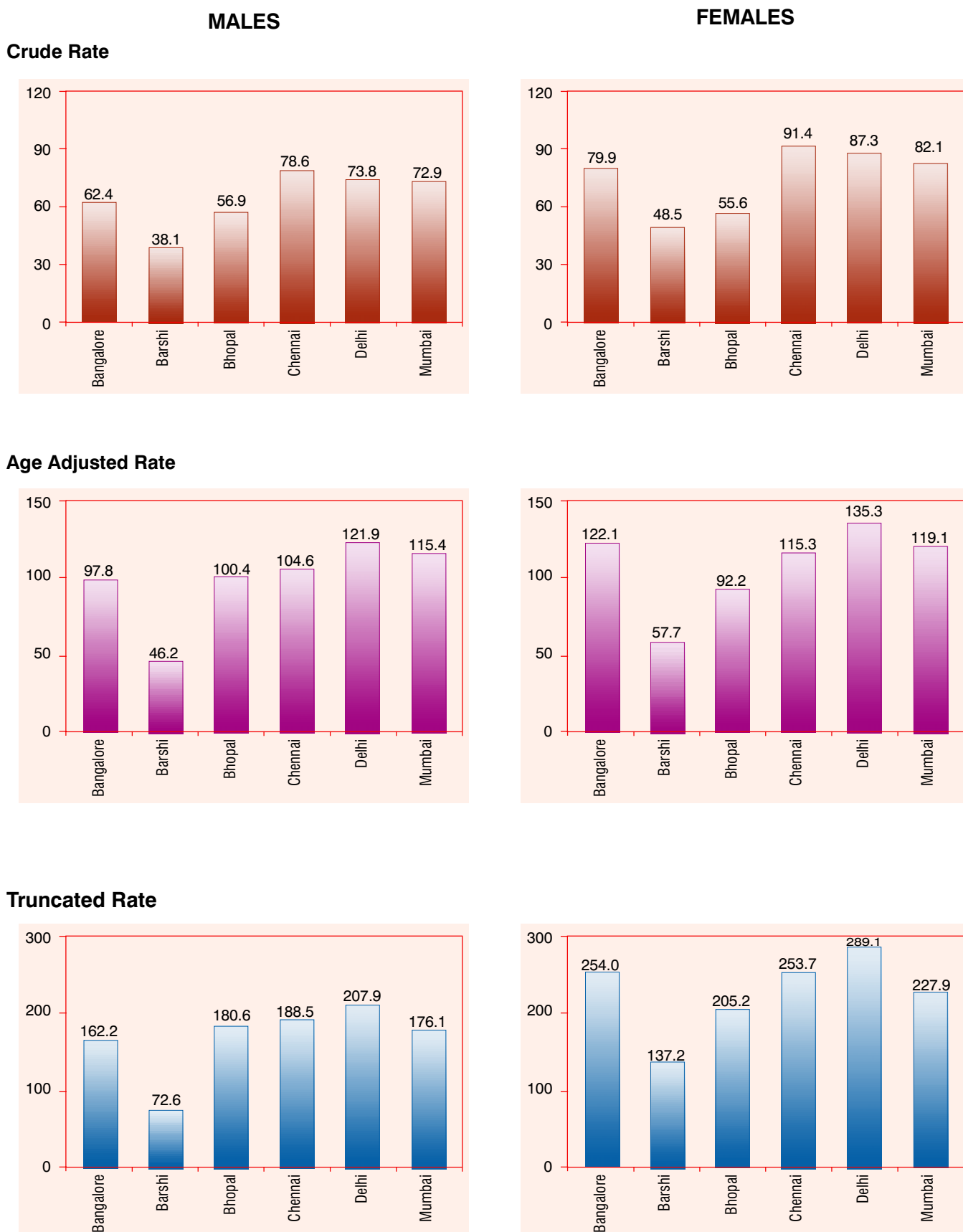
Registry	Males			Females		
	CR	AAR	TR	CR	AAR	TR
Bangalore	62.4	97.8	162.2	79.9	122.1	254.0
Barshi	38.1	46.2	72.6	48.5	57.7	137.2
Bhopal	56.9	100.4	180.6	55.6	92.2	205.2
Chennai	78.6	104.6	188.5	91.4	115.3	253.7
Delhi	73.8	121.9	207.9	87.3	135.3	289.1
Mumbai	72.9	115.4	176.1	82.1	119.1	227.9

The *crude incidence rate* refers to the number of new cases of cancer that occur in the total population of that area per year per 100,000 persons. The *age adjusted incidence rate*, also denoted as the *age standardised incidence rate*, means that the rate is adjusted to the five-year age population distribution of the world standard population. The method and calculation are given in Chapter 7.

The age adjusted rates of the urban registries, especially those of the metropolitan cities, show slight variations. The incidence rates of cancer in the rural registry of Barshi have been consistently lower over the years compared to the urban centres (Biennial Report, ICMR, 1992). The capital of the country has the highest age adjusted rate in both sexes. Except in Bhopal, the rates are higher in females than in males. The male female (M:F) ratio of cancers of all sites varies from 0.8 in Bangalore and Barshi to 1.1 in Bhopal.

While mentioning the various rates in the description of cancer incidence and mortality, one would like to note that crude rate and age adjusted rate are two indices with different purposes. The decision to use any one of them depends on the information that the investigator is trying to obtain or impart. Crude rates represent the actual burden of illness in the country and changes in it over time. It is especially valuable to health managers and programme managers. However, it can be confounded by changes in the population structure by age and sex, and is therefore unsatisfactory for studying epidemiological trends. The age adjusted rate corrects for this by applying age specific rates in each age group to a constant Standard

Fig. 3.1: Average Annual Crude, Age Adjusted and Truncated Incidence Rates: 1990-1996
All Sites of Cancer: ICD 140 - 208



Population (in this case the World Population) and allows for valid comparisons between groups or over time. However, the absolute value of the age adjusted rate is less meaningful, since it has been statistically constructed based on the choice of a standard population (Hennekens and Buring, 1987).

In this report, a combination of crude, age adjusted, age specific and truncated rates are used. Depending on the type of information that may be required, the appropriate rate needs to be read.

A higher AAR for all sites of cancers among females as compared to males has been reported in some of the countries in Central and South America. A M:F ratio of 0.79 is reported in Peru, Trujillo and this ratio is the lowest among all cancer registries in the world. Kuwaitis in Kuwait and the Indian population of Singapore have a M:F ratio of the AAR of 0.83 and 0.86 respectively (Parkin *et al*, 1997).

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. This is along the lines of that observed in the other five registries.

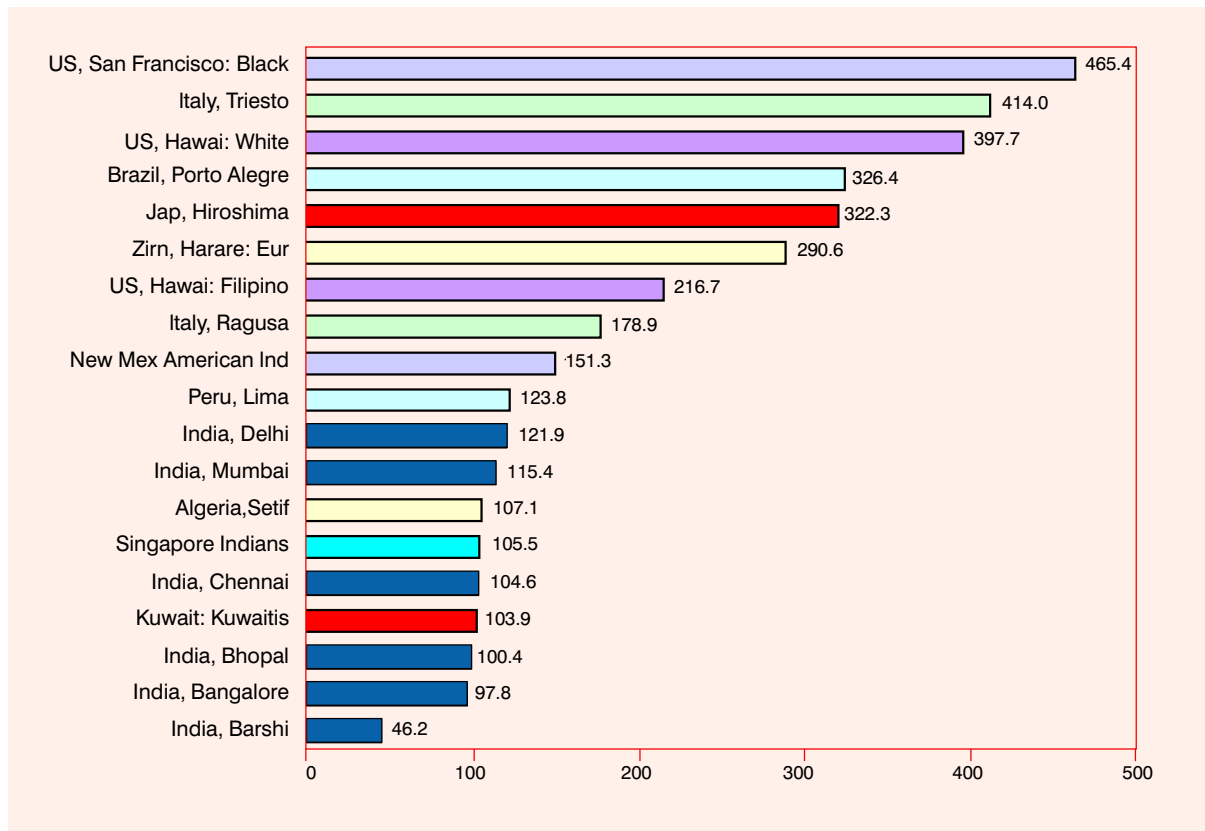
International Comparisons of Age Adjusted Incidence Rates (All Sites)

Figure 3.2 shows the highest and lowest AAR in all the continents, viz., Africa, Asia, Central & South America, Europe, North America and Oceania (Parkin *et al*, 1997). Besides, the rates of Indians in Singapore are compared with that of the registries in India.

The highest AAR among either sex is seen in the male Black population of San Francisco in USA. Among females, the Maori population of New Zealand have the highest AAR. In both males and females the highest rates seen in other continents are substantially higher than the AAR observed in the registries here. The lowest rates seen in the Americas, Europe and Oceania are also higher. However, the rates from India are comparable with the AAR of the Indian population of Singapore. Moreover, one needs to compare the AAR of individual anatomical sites for better and more meaningful interpretation.

Fig. 3.2: International Comparisons of Age Adjusted Cancer Incidence Rates (ALL-SITES)

MALES



FEMALES

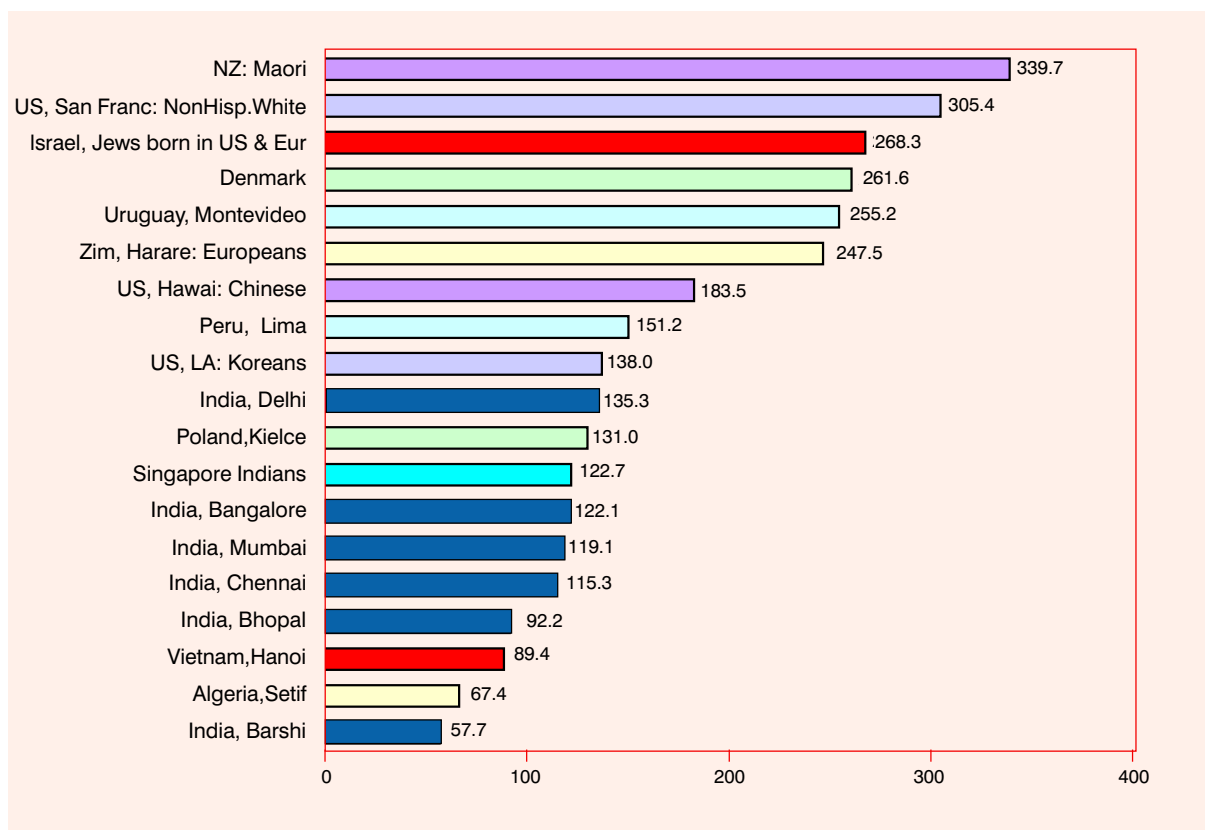


Fig. 3.3(a): Average Annual Age Specific Cancer Incidence - All Sites of Cancer - MALES

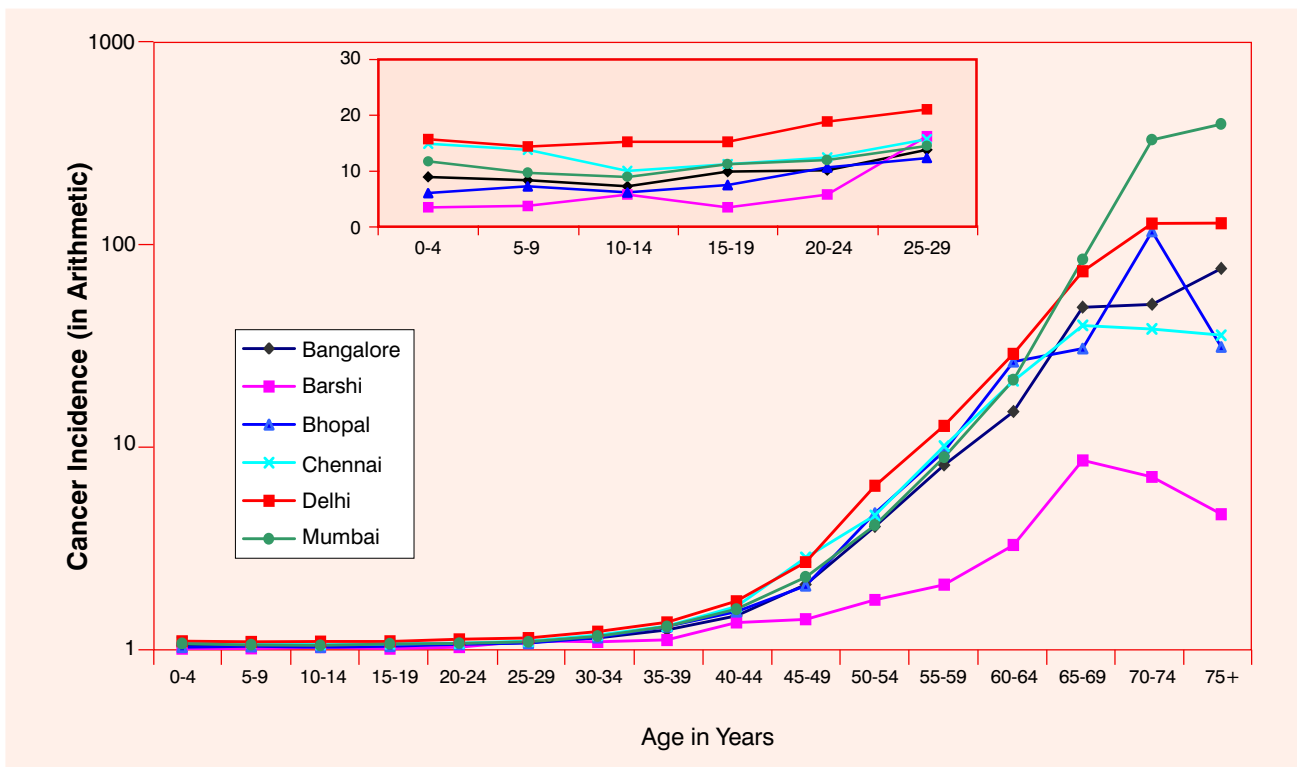
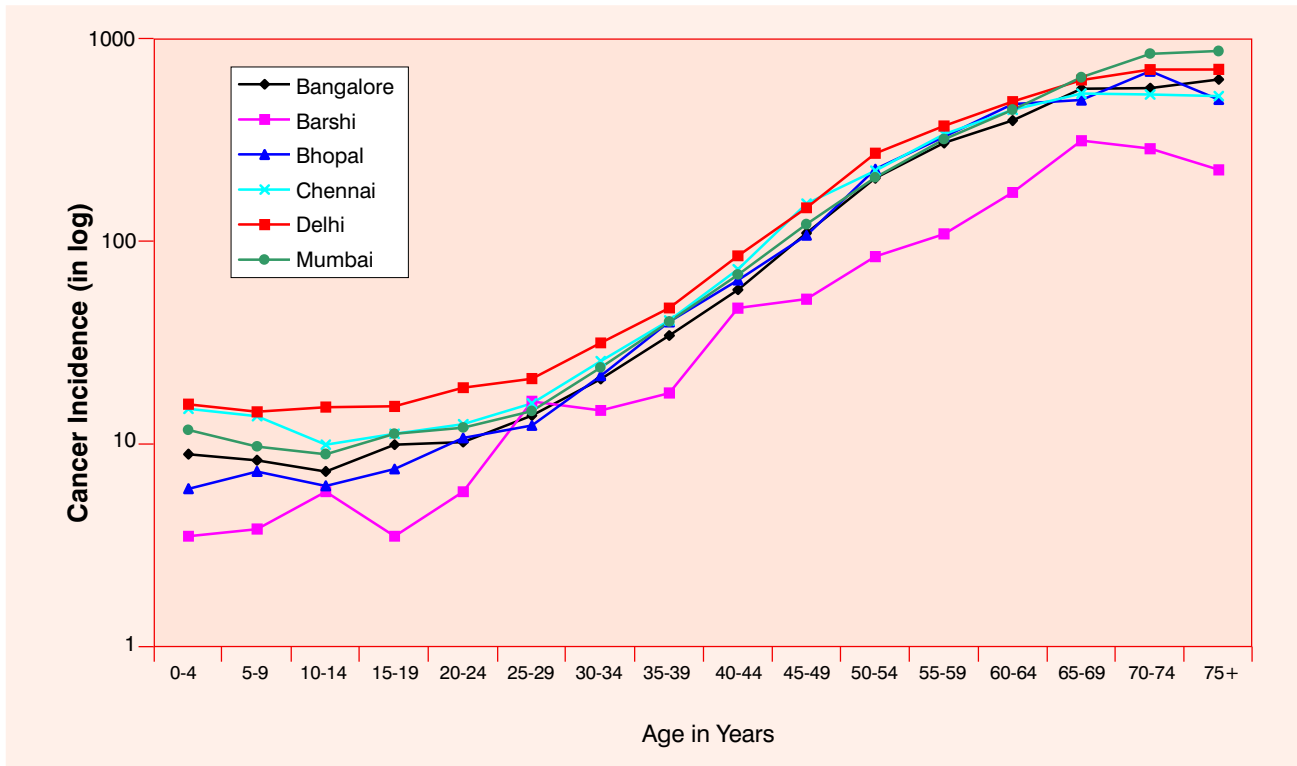
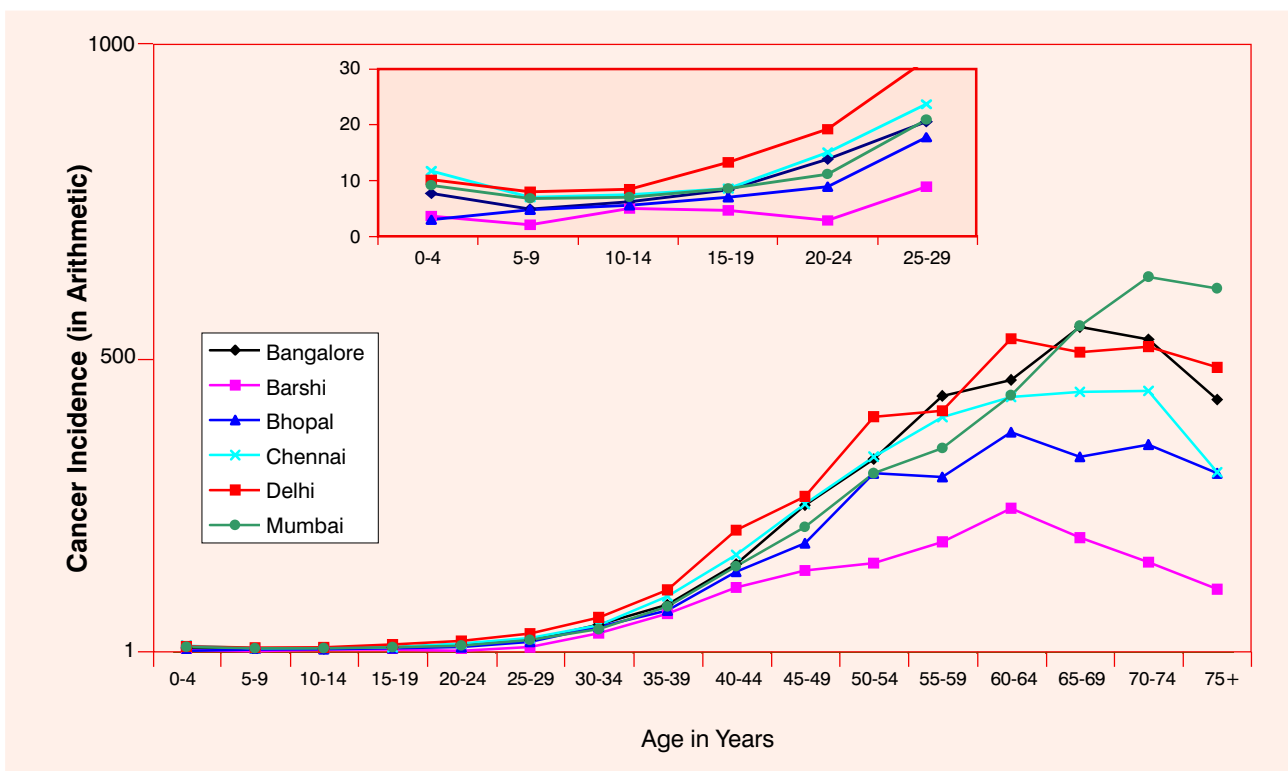
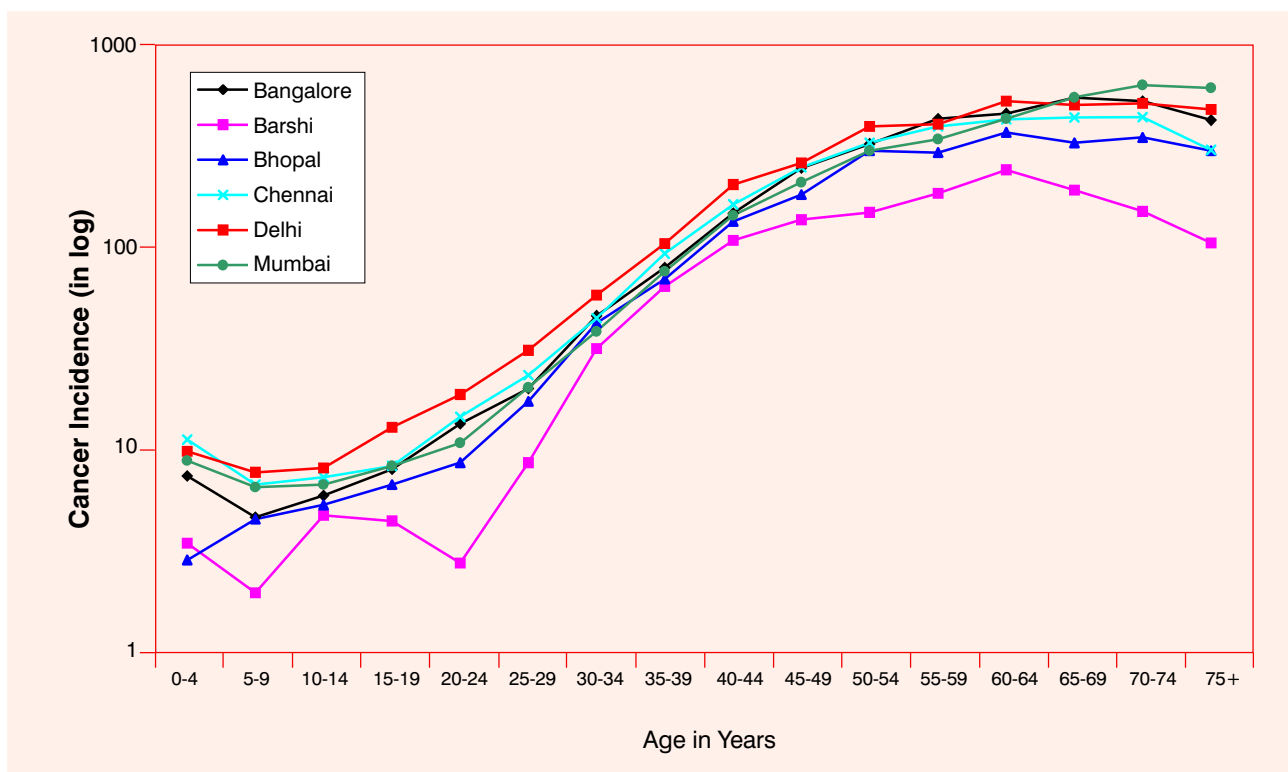


Fig. 3.3(b): Average Annual Age Specific Cancer Incidence - All Sites of Cancer - FEMALES



Age Specific Incidence Rates

Figure 3.3 illustrates the average, annual age specific, incidence rates, for all sites of cancer, in the six registries for males (Fig. 3.3 (a)) and females (Fig. 3.3 (b)) in both arithmetic and logarithmic 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. The smooth rise in age specific incidence rates in all the registries, are also an index of completeness of coverage, suggesting that there has been no under-ascertainment of cases among older age groups.

Cumulative Incidence Rate and Risk

Population based cancer registries have provided age specific cancer incidence rates in the different registry areas. Through these rates it is possible to arrive at or estimate the risk of the particular population in developing cancer during their lifetime. This could be estimated by sex and for any specific site of cancer. This is known as the cumulative incidence rate or risk. 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 3.4 (a) and Table 3.4 (b). Table 3.4 (c) provides the cumulative incidence rate in selected population based registries across the world (Parkin *et al*, 1997). Except for Indians in Singapore, the cumulative incidence rates of cancer in all other represented centres of the world 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 1990-1996 are sustained, and there is no other competing cause of death, one could estimate that, on an average one in about nine men and one in about eight women in the urban centres could develop cancer in their lifetime.

TABLE 3.4: Cumulative Incidence Rate, Cumulative Risk & Possibility of one in number of persons developing cancer of all sites (ICD9: 140-208)*(a) Calculation based on age specific rates from 0-64 years of age*

Registry	Cumulative Rate (%)		Cumulative Risk (%)		Possibility of One in No. of persons developing Cancer	
	Males	Females	Males	Females	Males	Females
Bangalore	5.92	8.84	5.75	8.46	17	12
Barshi	2.68	4.67	2.64	4.56	38	22
Bhopal	6.57	7.11	6.36	6.86	16	15
Chennai	6.87	8.76	6.64	8.37	15	12
Delhi	7.70	10.09	7.41	9.60	13	10
Mumbai	6.46	7.92	6.26	7.61	16	13

(b) Calculation based on age specific rates from 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
Bangalore	11.60	14.12	10.95	13.17	9	8
Barshi	5.68	6.36	5.52	6.16	18	16
Bhopal	12.50	10.44	11.75	9.91	9	10
Chennai	12.05	12.98	11.49	12.23	9	8
Delhi	14.34	15.10	13.36	14.02	7	7
Mumbai	13.89	13.73	12.97	12.83	8	8

(c) Cumulative incidence rates in selected registries across the world

Registry	Cumulative Incidence Rate (0-74 years)	
	Males	Females
Singapore – Indians	12.08	14.67
US: SEER		
White	44.16	32.26
Black	55.78	31.43
Japan	30 – 38	16 – 22
Canada	34 – 40	25 – 30
United Kingdom	27 – 36	24 – 29
Australia	33 – 37	25 – 28

The cumulative rate and risk based on both 0-64 years and 0-74 years for specific sites of cancer are given in the tabulations under individual registries.

Leading Sites of Cancer

The bar charts in Figure 3.4 give the leading sites of cancer in the six registries in males (Fig. 3.4 (a)) and females (Fig. 3.4 (b)). The leading sites of cancer were decided on the basis of crude incidence rates.

While certain similarities exist among the registries, major differences in leading sites are also observed. 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 other urban registries of Bhopal, Delhi and Mumbai, wherein it constituted around 10% of cancers of all sites. Cancer of the lung was the second and third leading site of cancer in Bangalore and Chennai respectively. Cancer of the oesophagus was the second leading site of cancer in Bangalore, Barshi and Mumbai; the third leading site in Chennai and fourth in Bhopal.

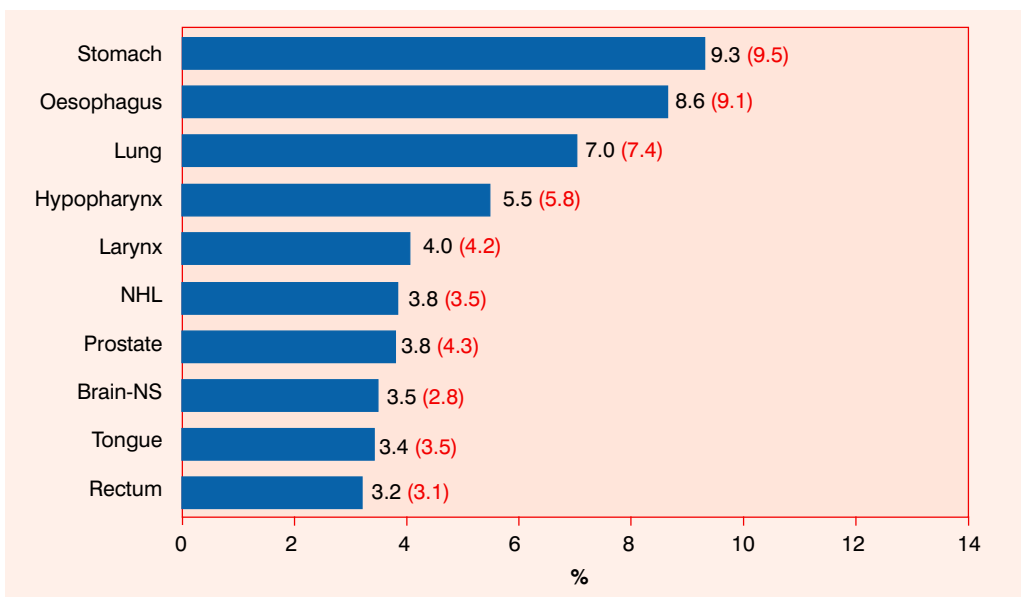
Among females, cancer of the cervix was the leading site in Bangalore, Barshi, Bhopal and Chennai; and cancer of breast was the leading site in Delhi and Mumbai. These two sites together constituted over 40% of cancers of all sites in females in the urban registries and over 65% of cancers in the rural registry at Barshi. As in males, cancer of the oesophagus was an important leading site of cancer in females also. In Chennai and Bangalore cancer of stomach was seen as the third and sixth leading site of cancer respectively. Cancer of the gall bladder was the fourth common site in Delhi and the eighth in Bhopal, but this was not seen among the ten leading sites of cancer in other registries.

Apart from the above, cancer of the prostate is a leading site in all urban registries. While cancer of the penis was not seen as a leading site in the urban registries, it was the third leading site in Barshi. Similarly cancer of the brain and nervous system was the third and sixth leading site in males and females respectively in the capital and one of ten leading sites in males in all other urban registries. In females also, cancer of the lung was one of ten leading sites in four of the six registries at Bhopal, Chennai, Delhi and Mumbai.

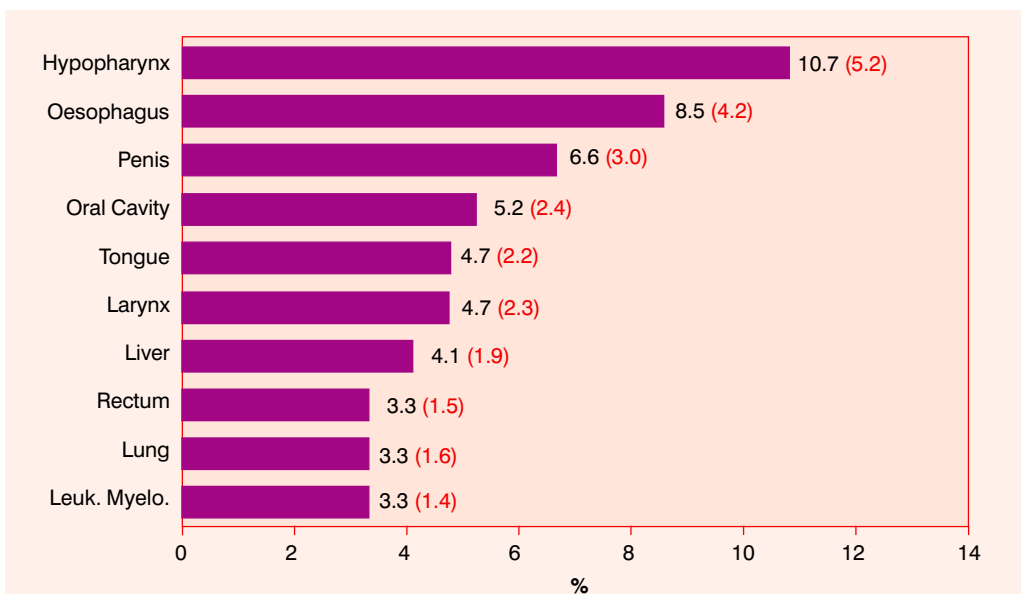
Further details of individual sites are spelt out in the next chapter.

Fig. 3.4(a): Ten Leading Sites of Cancer - Males
Age Adjusted Rates given in parentheses

BANGALORE



BARSHI



BHOPAL

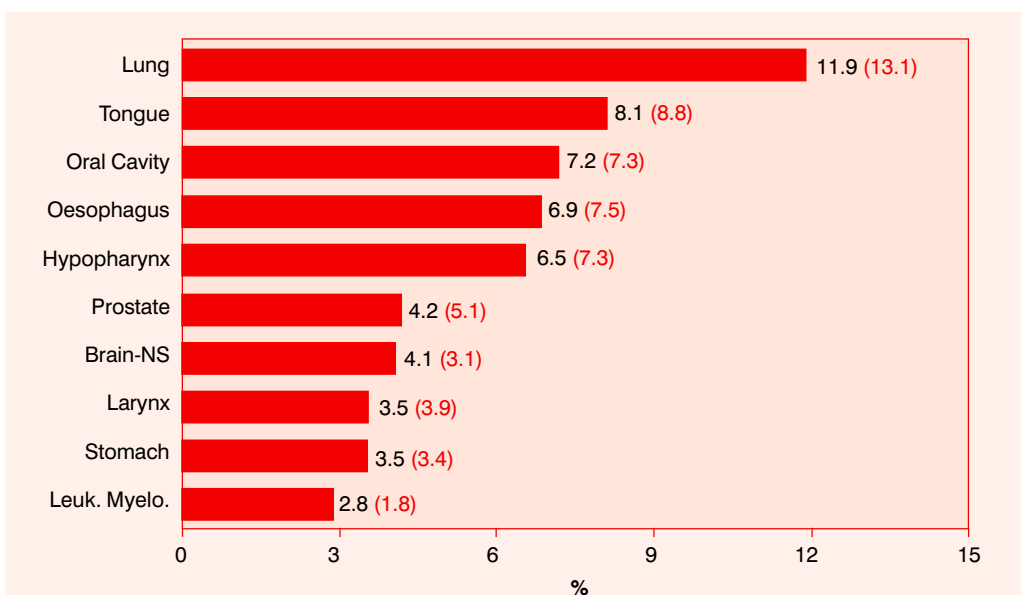
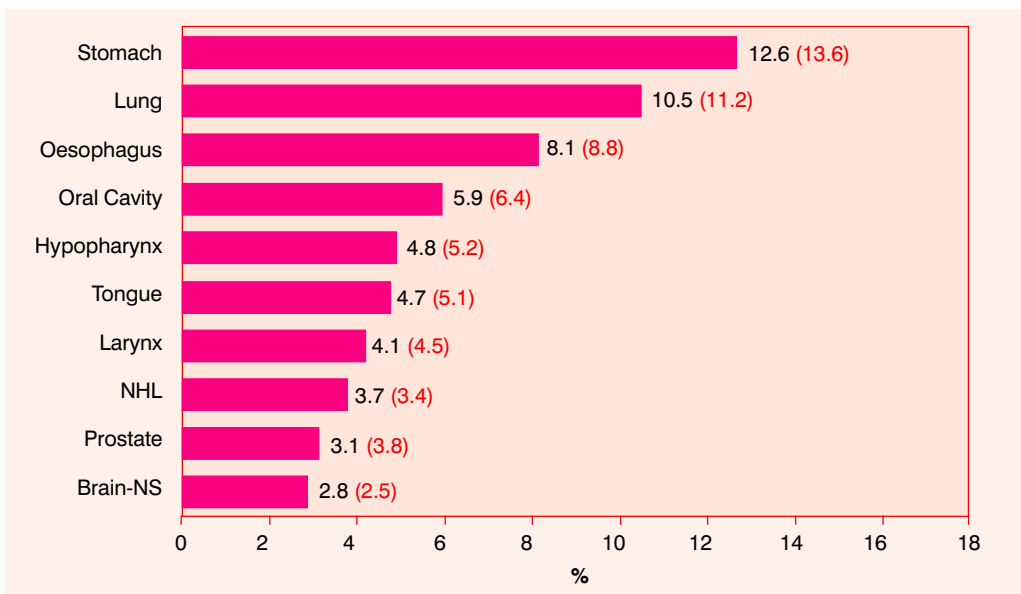


Fig. 3.4(a): Ten Leading Sites of Cancer - Males (Contd...)

Age Adjusted Rates given in parentheses

CHENNAI



DELHI



MUMBAI

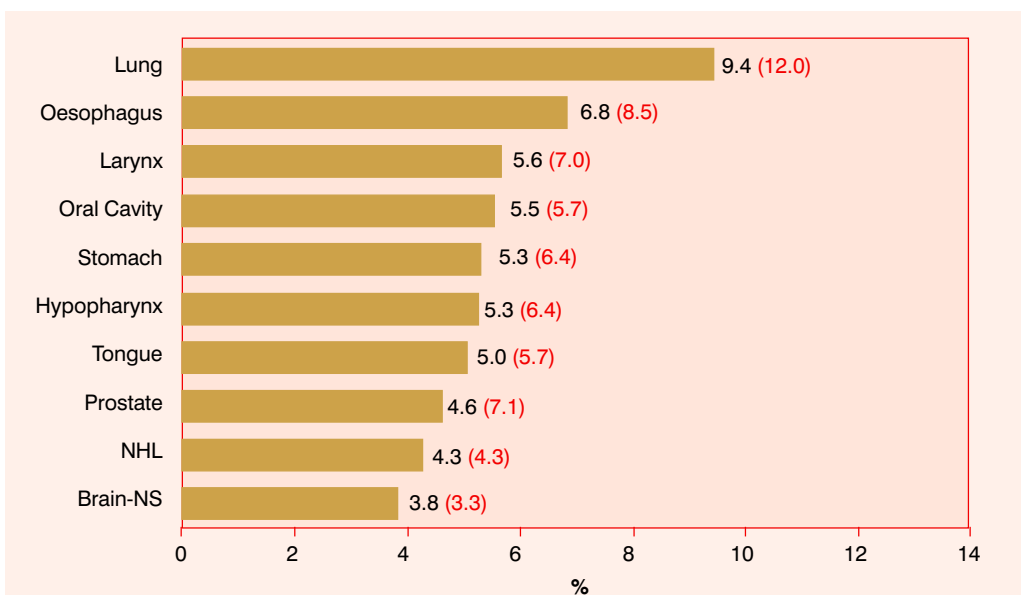
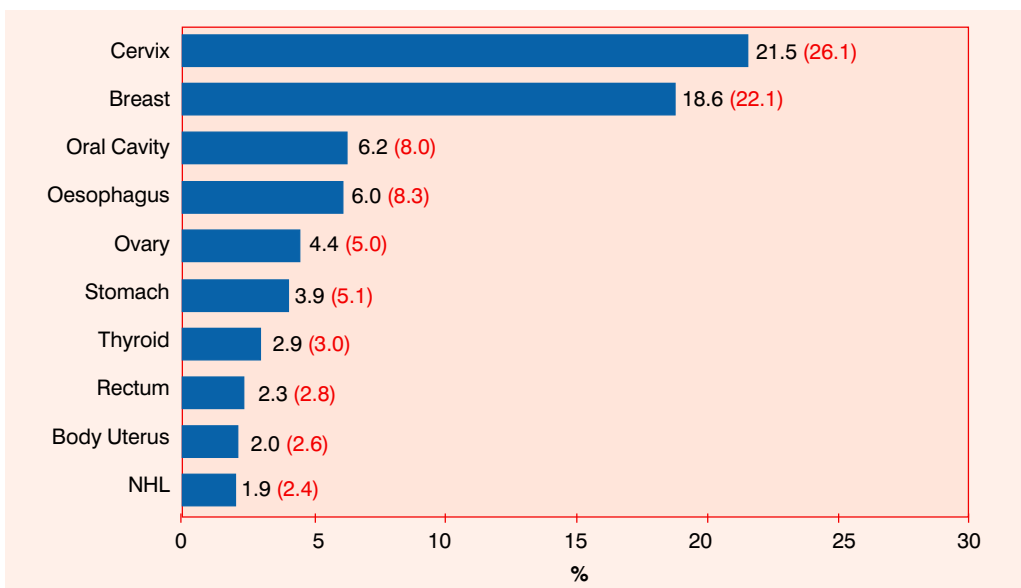


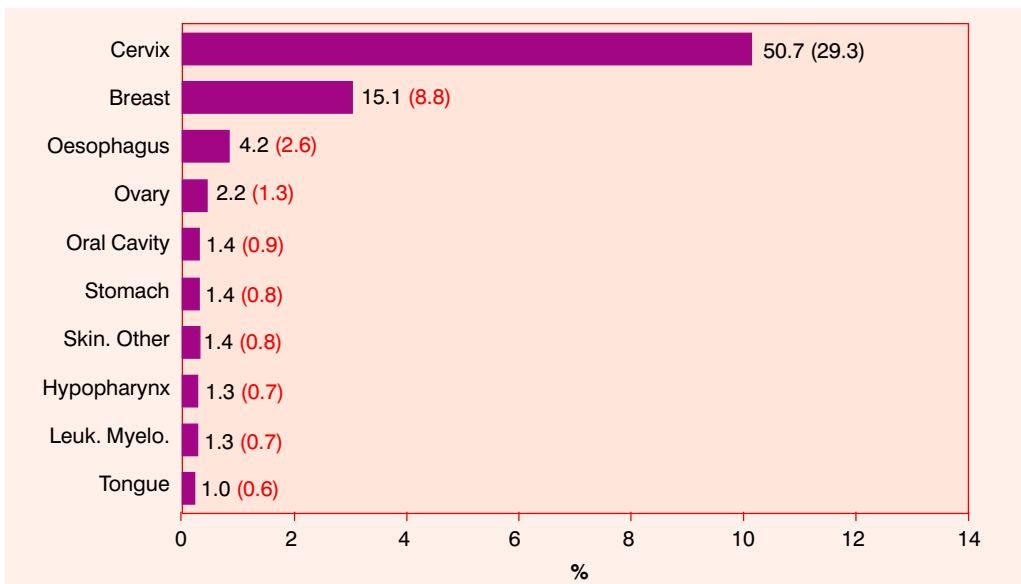
Fig. 3.4(b): Ten Leading Sites of Cancer - Females

Age Adjusted Rates given in parentheses

BANGALORE



BARSHI



BHOPAL

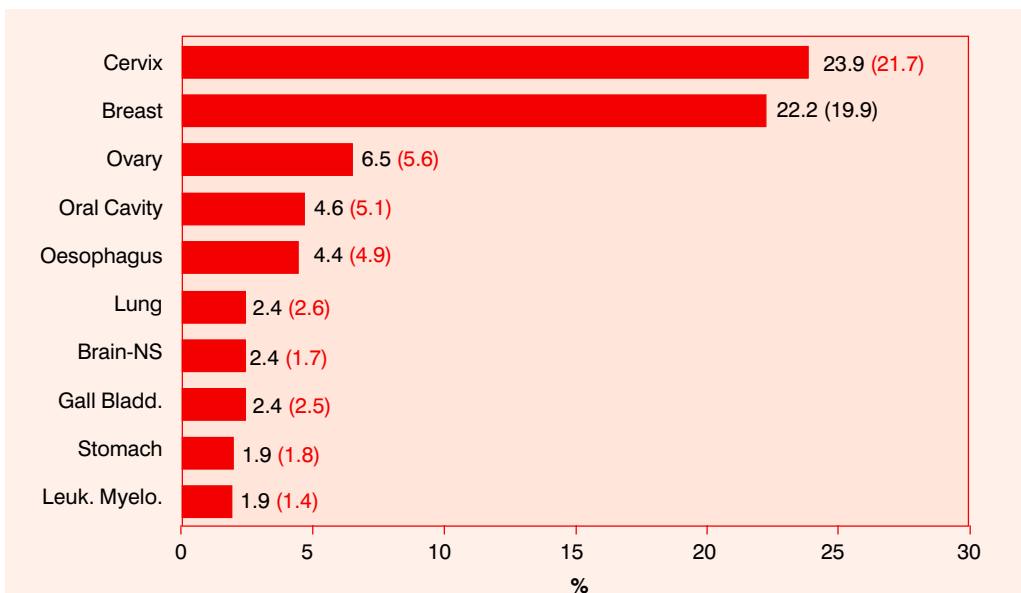
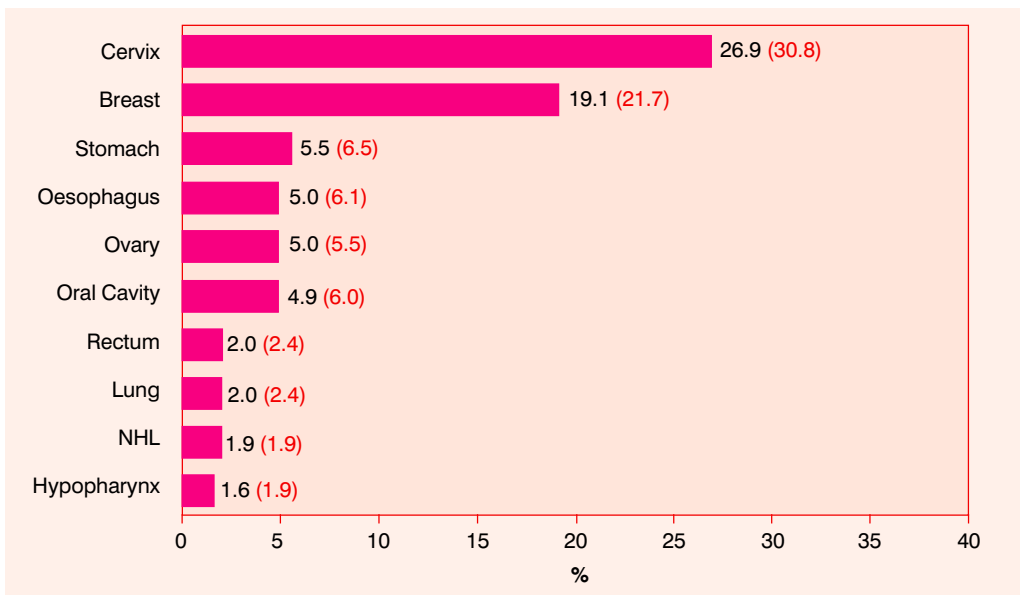


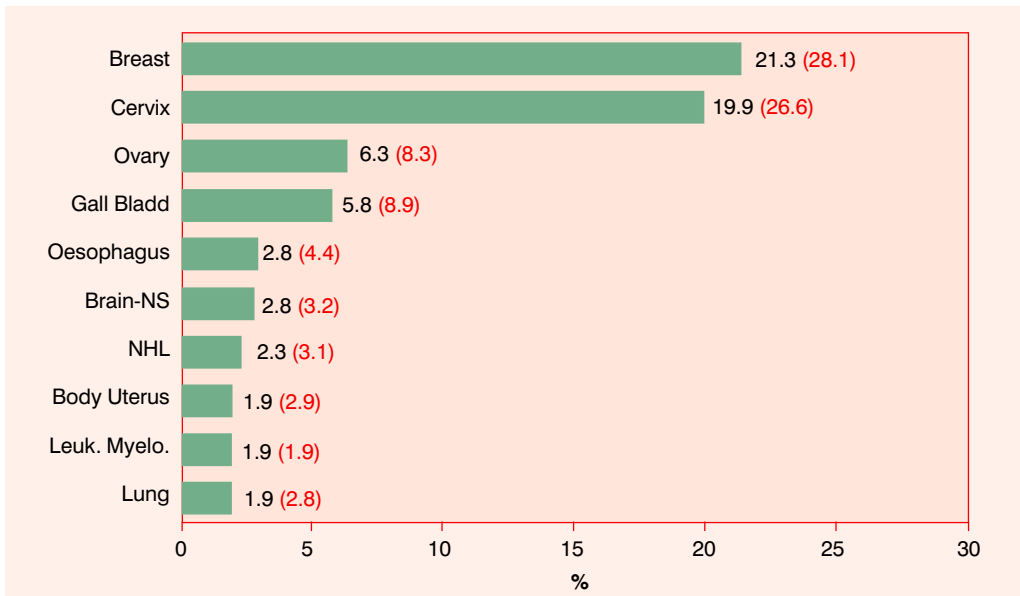
Fig. 3.4(b): Ten Leading Sites of Cancer - Females (Contd...)

Age Adjusted Rates given in parentheses

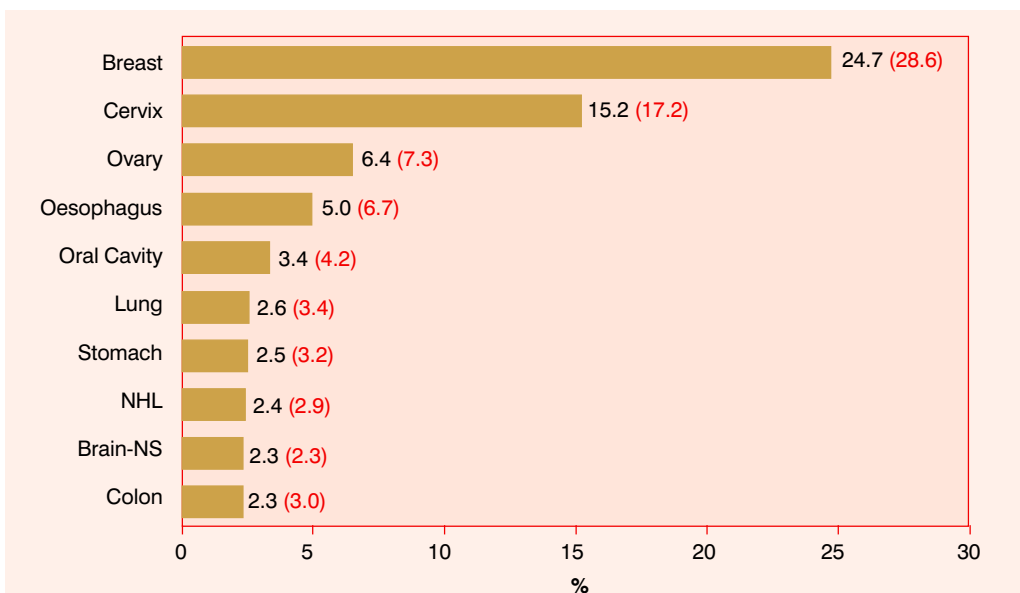
CHENNAI



DELHI



MUMBAI



Cancers in Childhood

Cancers in childhood (by WHO definition: 0-14 year age-group) constitute one of the most important group of tumours. This is 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, many of the childhood cancers have gained a remarkable potency for cure.

Table 3.5 gives the relative proportion of specific 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.

The number and relative proportions of detailed types of childhood cancer are given with the tabulations of individual registries.

Cancers of Sites associated with use of Tobacco

Sites of cancer that have been associated with use of tobacco (Tobacco Related Cancers – TRCs) include 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 3.5. In males this proportion varies from 35.6% in Bangalore to 50% in Bhopal, whereas in females Bangalore has the highest proportion of 17.3%. The relative proportion of different anatomical sites (listed above) of cancer that constitute TRCs is also depicted in the second portion of Figure 3.5. Besides cancer of the oral cavity, cancers of pharynx and lung are more common in males, but in females, cancer of the oesophagus constitutes as much proportion as cancer of the oral cavity and between them account for 80% of all TRCs in females.

TABLE 3.5: Relative Proportion (%) of Types of Childhood Cancer:1990-1996**MALES**

Type of Childhood Cancer	Bangalore %	Barshi %	Bhopal %	Chennai %	Delhi %	Mumbai %
Leukaemias	27.4	51.9	32.3	37.5	31.2	33.2
Lymphomas	17.1	11.1	13.1	25.1	18.2	15.8
C.N.S.Tumours	11.3	11.1	16.2	10.2	13.3	17.0
S.N.S.Tumours	4.5	0.0	5.1	2.7	3.8	4.1
Retinoblastoma	2.9	0.0	5.1	4.9	4.6	3.9
Renal Tumours	6.8	3.7	8.1	4.1	3.9	4.2
Hepatic Tumours	2.9	0.0	2.0	1.6	1.3	2.2
Bone Tumours	5.5	3.7	4.0	2.7	5.4	4.2
Soft Tissue Sarcoma	5.3	14.8	7.1	4.1	3.6	5.3
Germ Cell Tumours	0.8	0.0	3.0	2.7	1.8	2.4
Other Carcinomas	6.6	0.0	1.0	3.3	5.9	4.7
Others	9.0	3.7	3.0	1.6	6.9	2.8
All Types	100	100	100	100	100	100

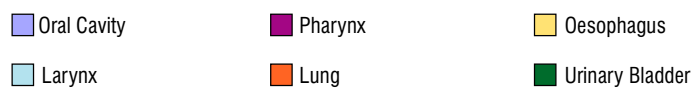
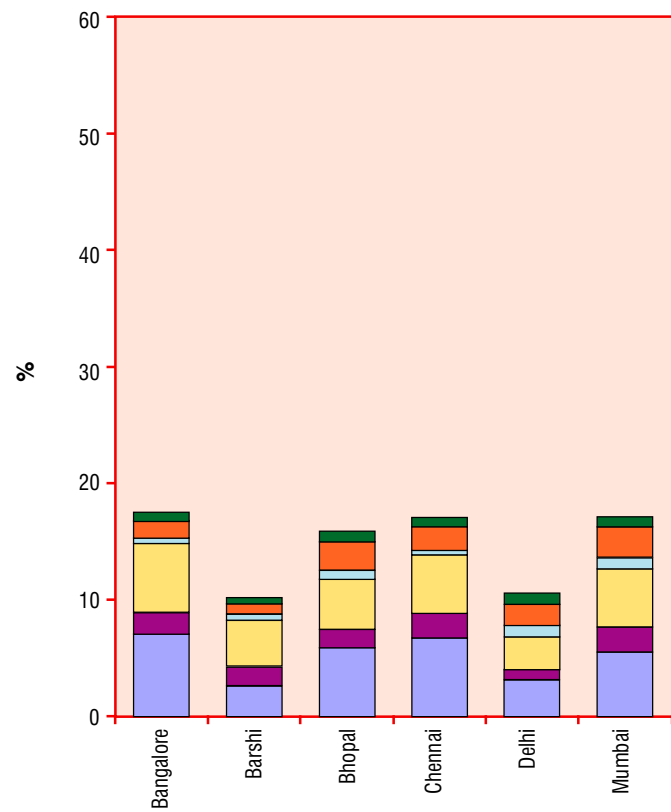
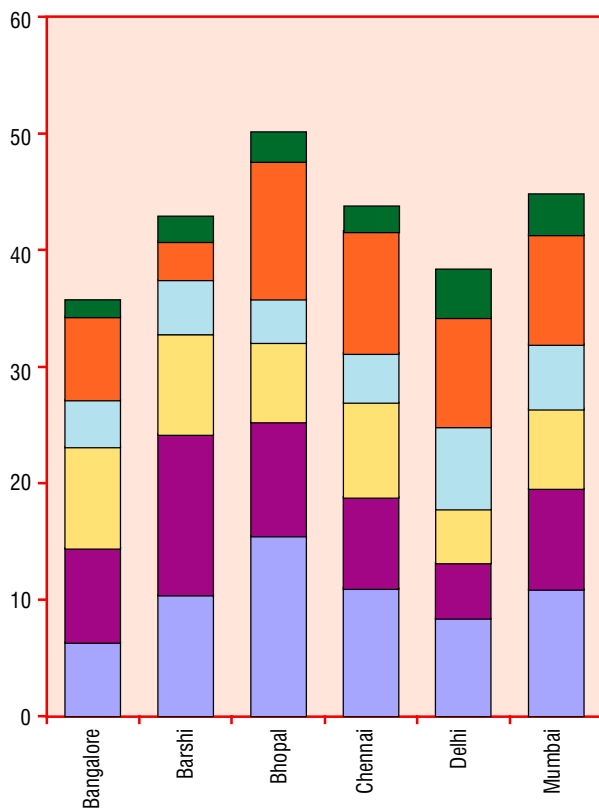
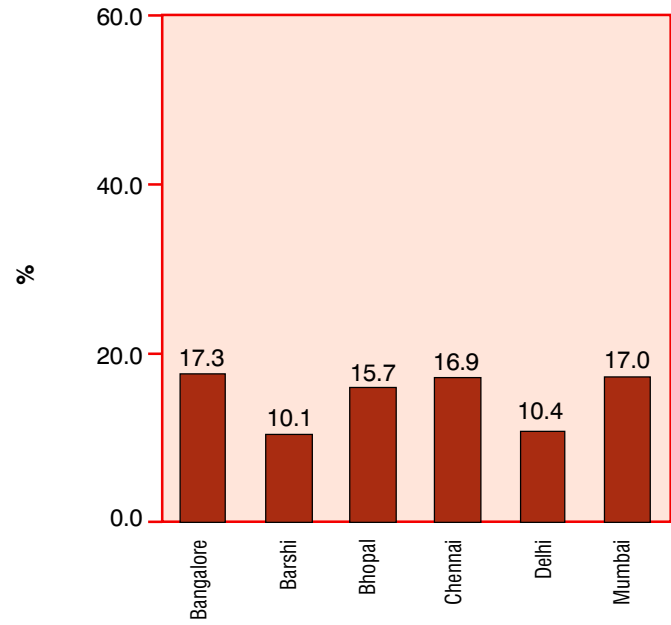
FEMALES

Type of Childhood Cancer	Bangalore %	Barshi %	Bhopal %	Chennai %	Delhi %	Mumbai %
Leukaemias	26.9	52.6	19.1	28.8	26.9	31.2
Lymphomas	5.5	5.3	11.1	15.9	8.8	10.3
C.N.S.Tumours	14.4	5.3	25.4	12.6	15.0	17.4
S.N.S.Tumours	4.8	10.5	0.0	5.0	4.6	5.1
Retinoblastoma	5.5	10.5	3.2	8.6	5.2	3.9
Renal Tumours	3.3	0.0	11.1	4.3	7.5	5.1
Hepatic Tumours	1.9	0.0	0.0	2.7	1.3	2.3
Bone Tumours	10.0	0.0	7.9	4.6	6.2	6.3
Soft Tissue Sarcoma	3.7	0.0	9.5	5.3	4.6	5.1
Germ Cell Tumours	5.9	0.0	4.8	6.0	4.4	5.6
Other Carcinomas	8.9	10.5	1.6	3.6	7.7	5.1
Others	9.2	5.3	6.4	2.7	7.7	2.9
All Types	100	100	100	100	100	100

Fig. 3.5: Proportion (%) of Tobacco Related Cancers relative to all sites

MALES

FEMALES



Trends in Incidence Rates

A common question of interest is “Is Cancer on the Rise?” Cancer is known to be a disease that increases in incidence with increasing age. Control of communicable diseases, has increased life expectancy and therefore exposed more of the population towards the development of cancer. The increase in population due to growth also contributes to the increase in the number of cancer cases. Improved literacy, greater consciousness about health in general and awareness about cancer in particular makes more and more people seek medical advice at an earlier stage. Availability of sophisticated and improved diagnostic techniques aid in detection of tumours that would have been missed at earlier times. The question is whether cancer is on the increase after accounting for these factors and whether that rise is of any statistical significance.

One measure of determining such an increase would be to examine the age adjusted incidence rates (AAR) over time. This may or may not take into account all of the factors mentioned above, nonetheless would give some indication of the trends in the disease. Cancer being a chronic disease (and unlike infectious diseases) with generally a long latent period and rather prolonged clinical phase year to year variations are slight. Therefore, in assessing time trends in AAR, the normal practice in registries across the world is to look at five yearly rates over decades. This would give a more definitive indication of the course of the disease.

Data for the years 1982-1989 were obtained from the earlier report of the NCRP (Biennial Report, ICMR, 1992). Three-year moving averages have been used in drawing the trend lines. The graphs for the registries at Bangalore, Chennai and Mumbai show the AAR from 1982 and for Barshi, Bhopal and Delhi from 1988. Therefore, the data from the former that are for fifteen years would be relatively more stable for interpreting such time trends. To assess the significance of trends of AAR, linear regression lines of fit were used according to Boyle and Parkin, 1991.

Table 3.6 provides the crude and AAR for all sites of cancer by gender for each of the years from 1990 to 1996. The trend graphs of the Crude incidence rate and AAR of all sites of cancer have been depicted in Figure 3.6 (a - f). The trend graphs for all sites of cancer do not show any remarkable change over the years in any of the registries and in both males and females. However, individual sites do show changes and these can be observed in the next chapter, as well as in the detailed tabulations under individual registries.

A thorough study of trends in rates over time incorporating both crude and age adjusted rates, using different statistical methodologies and models will be separately reported.

TABLE 3.6: Crude and Age Adjusted incidence rates per 100,000 population in different PBCRs: 1990-1996 (ALL SITES)**Crude Rates**

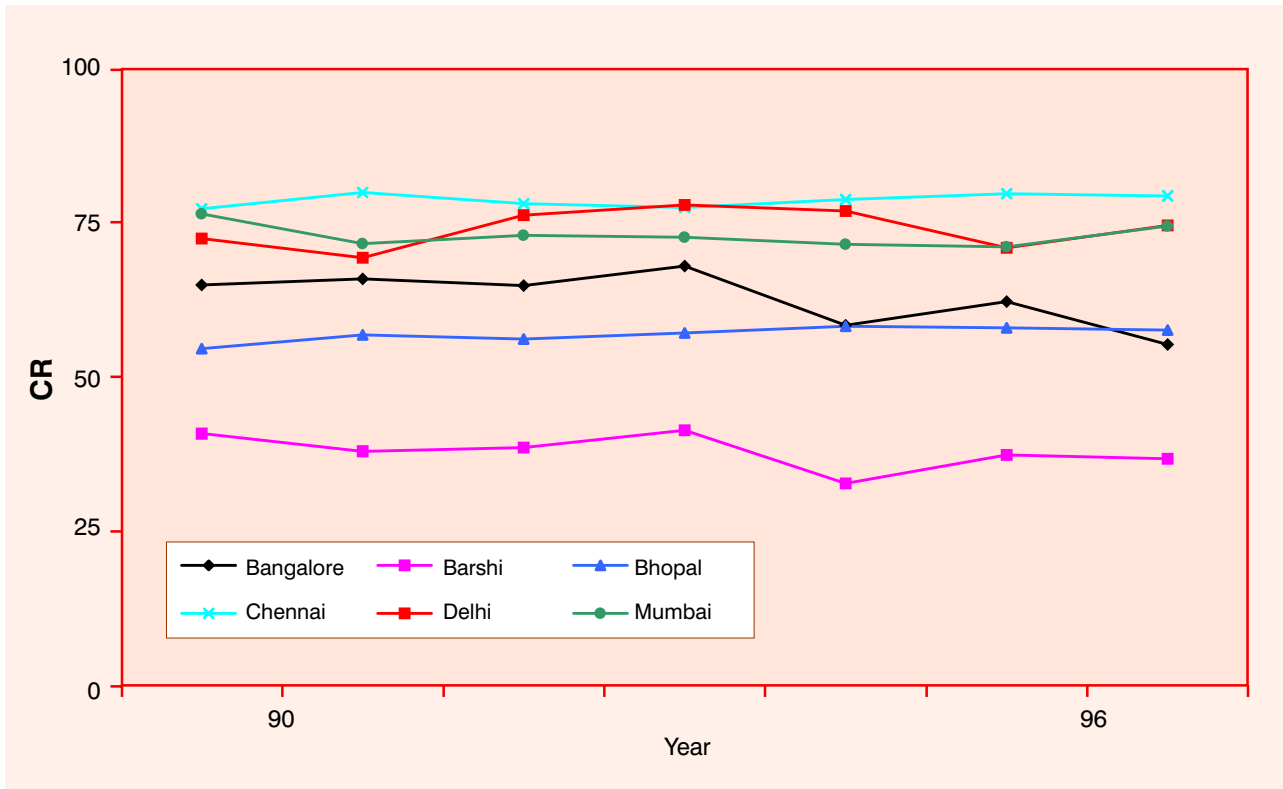
Registry	Year of Registration						
	1990	1991	1992	1993	1994	1995	1996
MALES							
Bangalore	64.9	65.8	64.7	67.9	58.3	62.2	55.2
Barshi	40.8	37.9	38.6	41.3	32.7	37.4	36.7
Bhopal	54.5	56.8	56.1	57.1	58.2	57.9	57.6
Chennai	77.2	79.8	78.0	77.4	78.7	79.6	79.3
Delhi	72.4	69.3	76.2	77.8	76.8	70.9	74.5
Mumbai	76.4	71.5	72.9	72.6	71.5	71.0	74.4
FEMALES							
Bangalore	83.5	86.6	79.5	86.4	74.0	76.5	70.6
Barshi	47.3	53.0	50.9	46.5	49.7	47.7	44.4
Bhopal	57.7	56.0	57.6	56.8	57.3	52.7	55.3
Chennai	94.8	92.0	90.0	91.9	90.1	90.9	92.1
Delhi	88.6	84.1	88.7	92.4	87.6	86.8	84.0
Mumbai	80.8	83.0	84.8	83.5	80.6	81.1	81.5

Age Adjusted Rates

Registry	Year of Registration						
	1990	1991	1992	1993	1994	1995	1996
MALES							
Bangalore	102.1	103.9	102.4	105.8	90.4	95.2	85.6
Barshi	51.0	48.0	47.7	51.8	39.0	44.6	43.6
Bhopal	98.1	101.4	99.8	100.3	100.6	100.1	100.9
Chennai	103.4	105.7	104.9	103.0	103.7	105.4	103.1
Delhi	121.1	114.6	125.7	127.6	127.0	116.6	122.7
Mumbai	124.8	115.8	115.9	115.6	113.2	110.7	114.5
FEMALES							
Bangalore	128.6	133.5	121.0	132.6	113.8	119.5	106.3
Barshi	56.4	63.3	61.5	55.1	58.1	56.8	52.4
Bhopal	92.4	92.2	95.7	93.5	94.0	88.8	92.1
Chennai	121.5	116.9	115.2	114.7	111.3	112.0	115.4
Delhi	137.4	130.7	137.5	143.5	135.5	135.6	128.1
Mumbai	119.2	121.1	123.5	121.0	117.1	116.1	116.7

Fig. 3.6(a): Trends in Crude Rates (CR) in different PBCRs

MALES



FEMALES

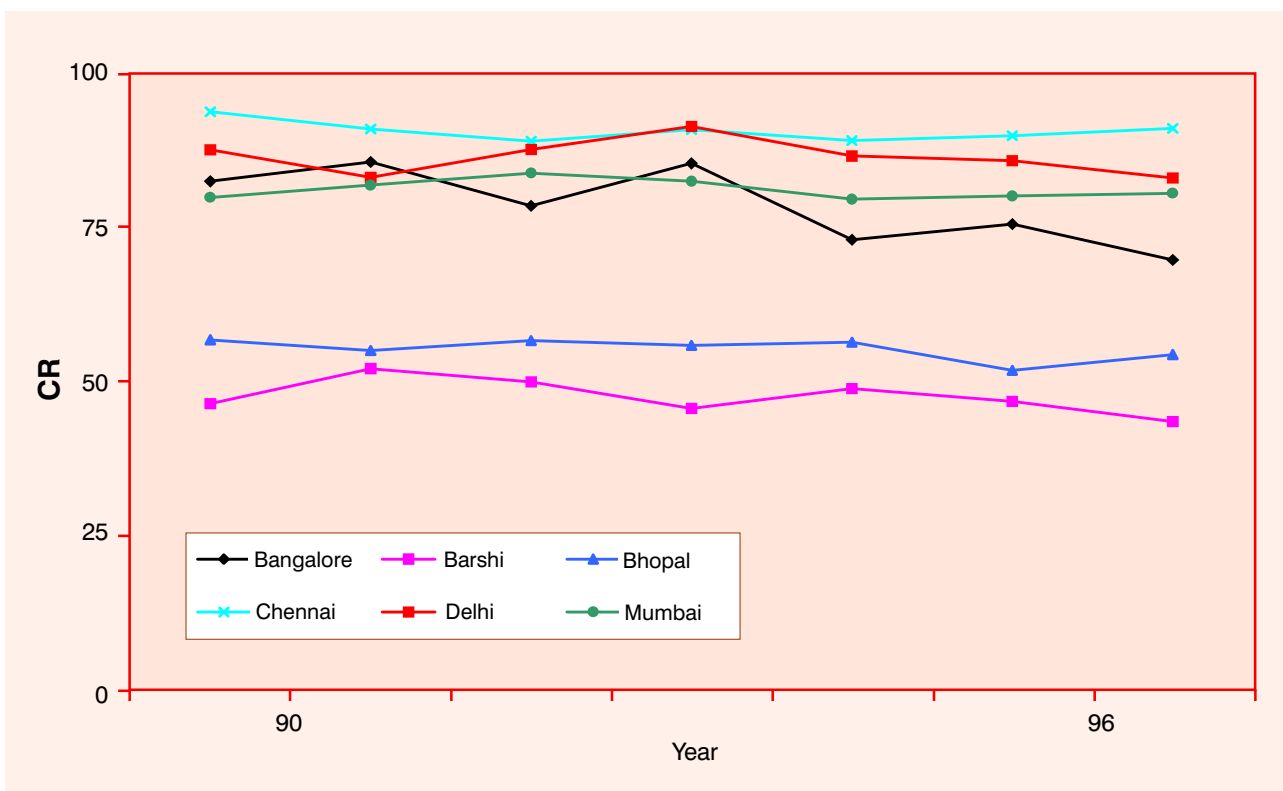
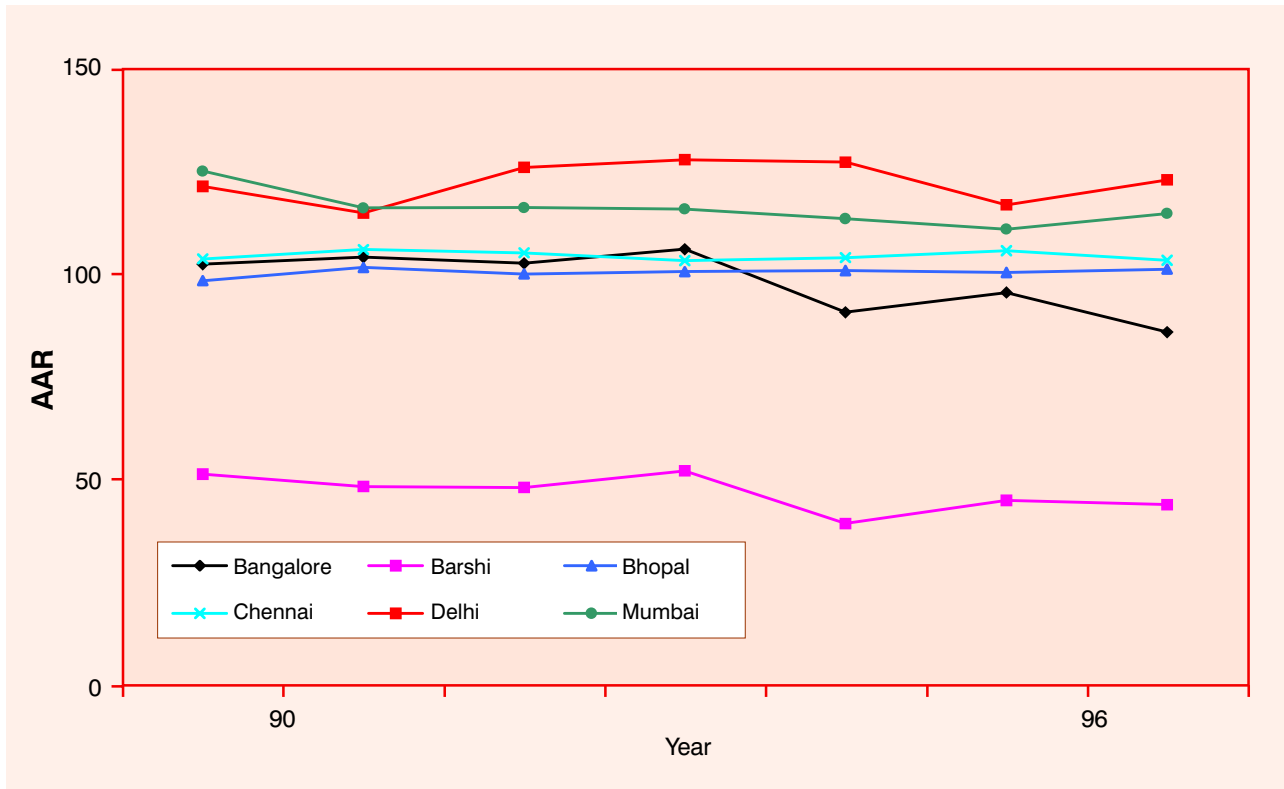
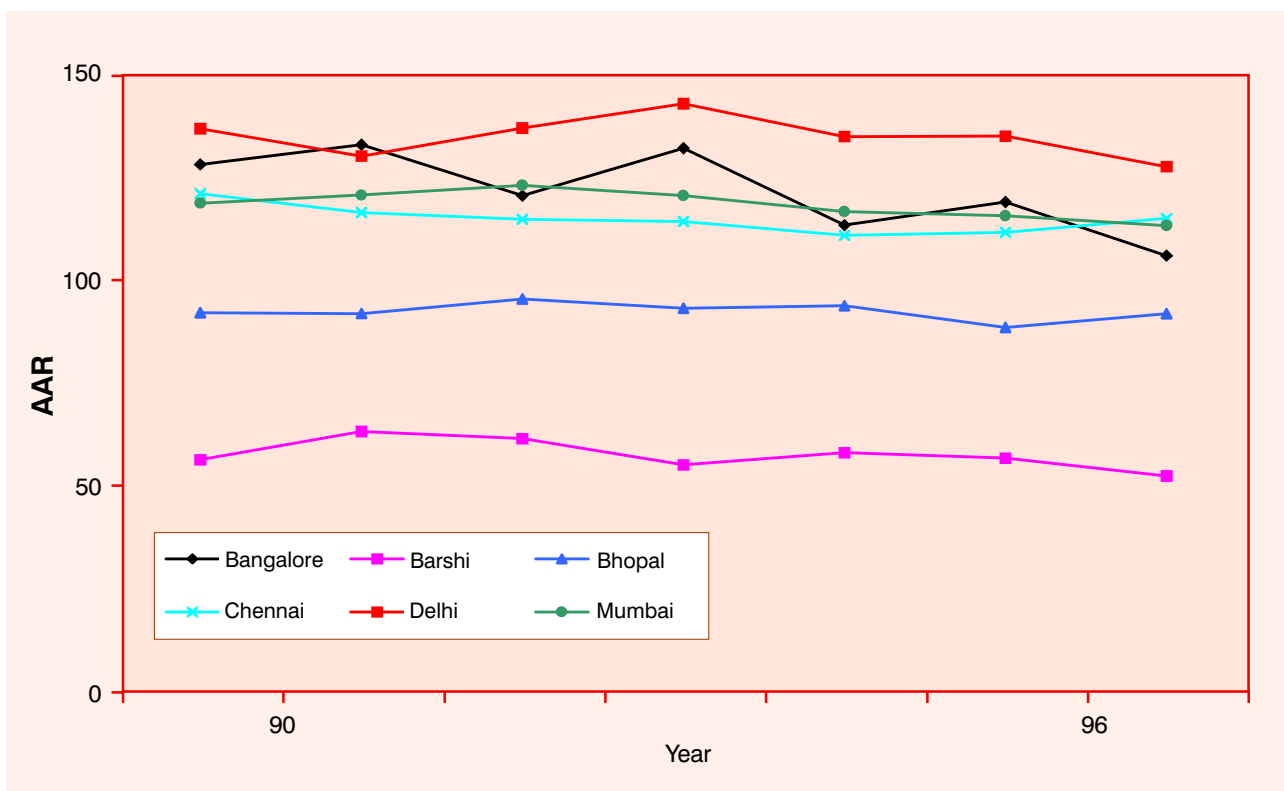


Fig. 3.6(b): Trends in Age Adjusted Incidence Rates (AAR) in different PBCRs

MALES



FEMALES



4

SUMMARY OF SELECTED INDIVIDUAL SITES

The following pages provide a summary of some statistical and scientific details on individual sites of cancer. The sites are as per the International Classification of Diseases (ICD-9) and not grouped by system, mainly because of easy comparability of data with registries across the world.

The details provided, pertains to the actual number (No.) of cancers seen in the six registries in the seven year period (1990-1996) and their proportion or percent (%) relative to all sites of cancer for that gender. It includes the order or rank (R) of the site of cancer, among all sites of cancer in that gender and is based on the crude rate. The Age Adjusted Rate (AAR) per 100,000 population is also provided. Wherever, applicable the male: female ratio based on actual numbers in each sex is given. The age distribution graph based on age specific incidence rates according to five-year age group is shown. A graph indicating trends over time is depicted. These graphs are based on three-year moving averages of the AAR from 1982 to 1996 for the PBCRs at Bangalore, Chennai and Mumbai and from 1988 to 1996 for the registries at Barshi, Bhopal and Delhi.

The predominant morphologic type of cancer and its relative proportion (relative to all microscopically diagnosed cases) encountered in the six registries is indicated. Depending on the anatomical site of cancer, the sub-site distribution (of the available information) is commented upon. Some of the registries have conducted population based survival studies for selected sites. The figures of relative survival for relevant sites are given (Sankarnarayanan *et al*, 1998).

A bar chart showing international comparisons is presented. The reference manual is the Volume VII (the most recent available publication) of Cancer Incidence in Five Continents (Parkin *et al*, 1997) which has published the data of cancer registries all over the world for data for the years 1987-92. Registries with some of the highest and lowest age adjusted incidence rates for that particular site are compared with the AAR of the six registries from India. One other population group that comes close to be comparable with the population in India is the Indian community living in Singapore. The data from the Singapore Cancer Registry as pertaining to this group is also compared. Besides, the summarized rates of the Surveillance Epidemiology and End Results Program (SEER) of the United States with which the NCRP has similarities and the rates of the registry in Oxford, United Kingdom are also compared. Mention is also made of previously reported higher AAR.

TONGUE (ICD-9: 141)

Numbers and Incidence

Registry	MALES				FEMALES				M:F Ratio
	No.	%	R	AAR	No.	%	R	AAR	
Bangalore	348	3.4	9	3.5	88	0.8	>15	1.0	4.0
Barshi	30	4.7	5	2.2	8	1.0	10	0.6	3.8
Bhopal	206	8.1	2	8.8	26	1.2	>15	1.3	7.9
Chennai	535	4.7	6	5.1	176	1.4	13	1.8	3.0
Delhi	1242	4.7	4	6.0	334	1.3	>15	1.9	3.7
Mumbai	1456	5.0	7	5.7	488	1.8	15	2.3	3.0

In males cancer of the tongue is one of ten leading sites of cancer in all registries. However, in females it does not fall within the ten leading sites of cancer in any of the registries and constitutes about 1-2% of cancers of all sites in females. The male : female ratio varies between 3 and 4 in all registries except Bhopal, which has a high male female ratio of almost eight. Base tongue cancers accounted for over 80% of cancers of tongue in males in Bangalore, Barshi, Bhopal and Delhi with a slightly lower proportion in Chennai and Mumbai.

Age Distribution - Males (Fig. 4.1 (a))

The incidence of cancer of the tongue starts rising as early as the third or fourth decade and reaches a peak at about 55 years of age. In females the rates are lower and the onset is at a slightly later age than in males

Time Trends - Males (Fig. 4.1 (b))

There appears to be fluctuation in the AAR over the years with a decline in the rates in Bhopal. However, an increasing trend is not observed from these data in any registration area.

Histological Type

The predominant histological type was squamous cell carcinoma in all registries in both sexes.

International Comparisons - Males (Fig. 4.1(c))

The highest recorded AAR of 16.3 has been reported earlier in Bermuda-Blacks, but based on current data Bhopal has the highest AAR of 8.9. A high rate of this cancer is also seen in France.

Comment

Chennai registry has reported a five-year relative survival (both sexes combined) of 25.8% (Shanta *et al*, 1998). This is one of the sites of cancer associated with use of tobacco in both its common forms of usage, viz., chewing and smoking – the latter being more commonly attributed to cancers of the base of the tongue.

TONGUE (ICD-9: 141) - MALES

Figure 4.1

Fig. 4.1(a) : Age Specific Incidence Rate

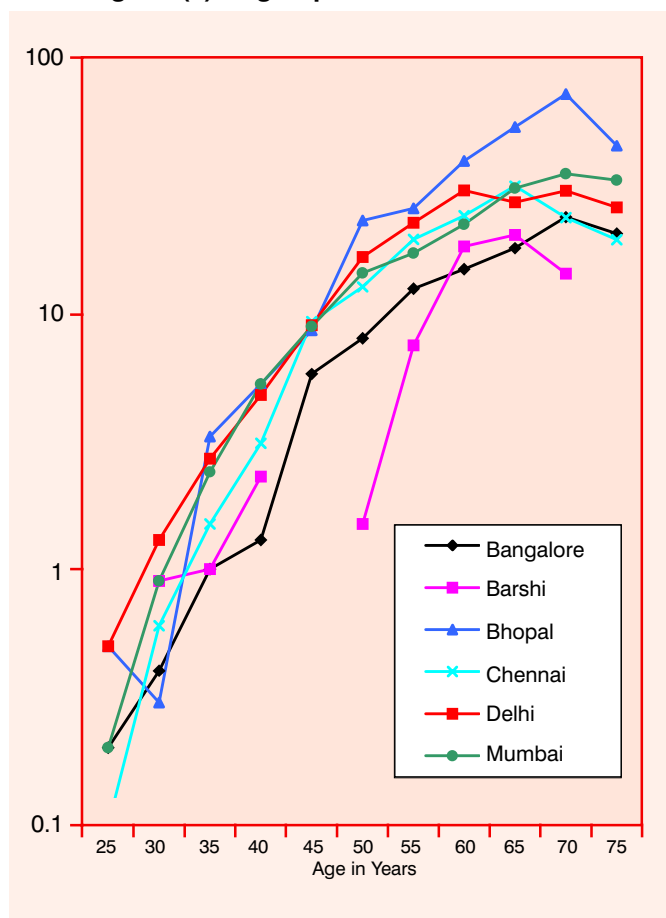


Fig. 4.1(b) : Trends in AAR

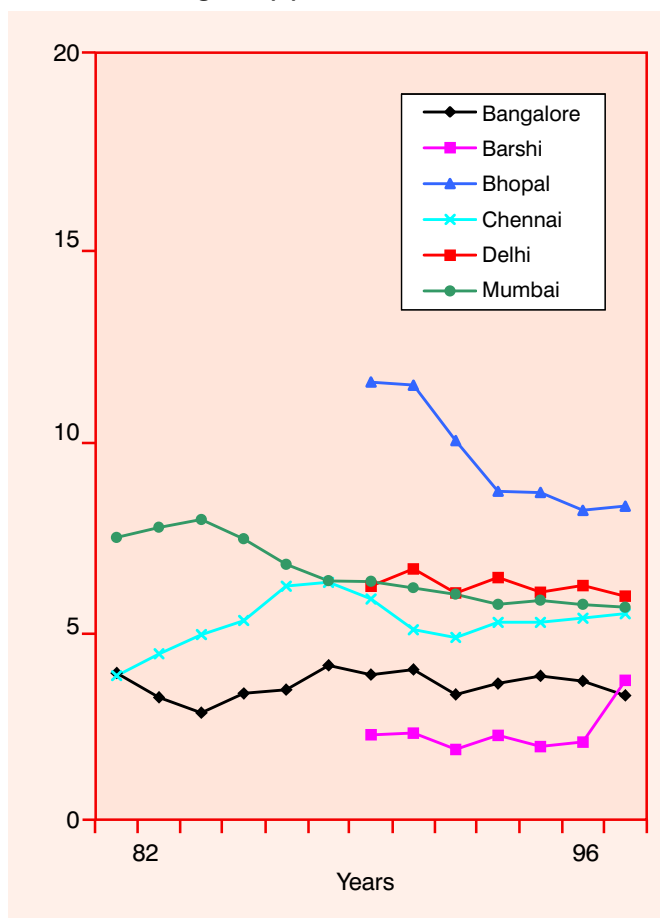
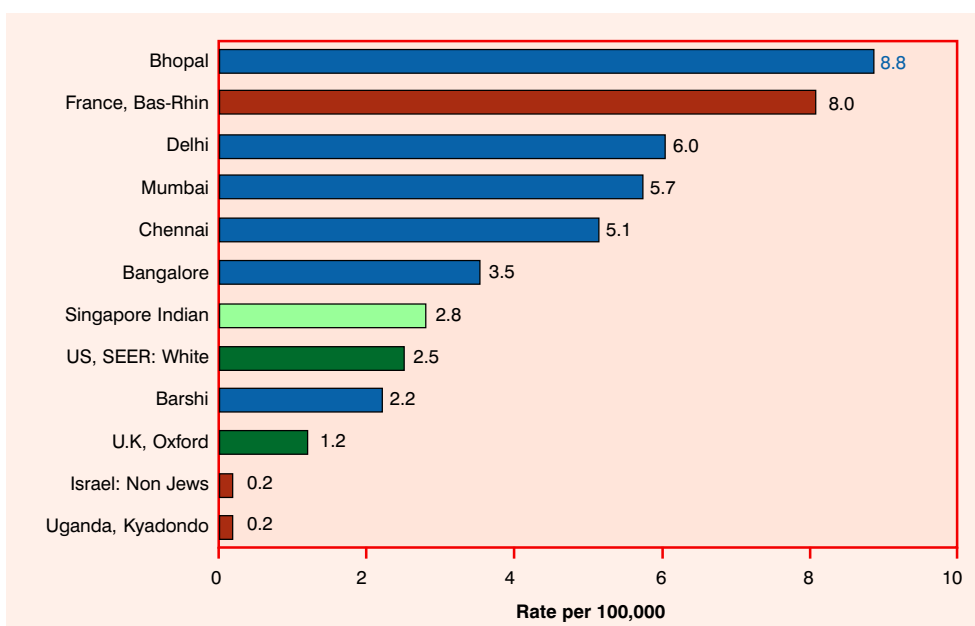


Fig. 4.1(c) : International Comparisons - AAR



ORAL CAVITY (ICD-9: 143-145) - MALES

This includes ICD sites 143 (Gum), 144 (Floor of Mouth) and 145 (Other and Unspecified parts of Mouth).

Numbers and Incidence

Registry	No.	%	R	AAR	M:F Ratio
Bangalore	284	2.9	12	2.7	0.4
Barshi	33	5.2	4	2.4	3.0
Bhopal	182	7.2	3	7.3	1.8
Chennai	671	5.9	4	6.4	1.1
Delhi	854	3.3	9	4.1	2.0
Mumbai	1601	5.5	4	5.7	1.7

Except in Bangalore and Delhi cancer of the oral cavity is one of the five leading sites of cancer in males. Unlike cancer of the tongue the male female ratio is much less being 0.4 in Bangalore and almost equal in Chennai. The higher ratio in Barshi could be due to smaller numbers.

Age Distribution (Fig. 4.2 (a))

The age distribution is similar to most adult cancers with the rise in rates commencing from the third decade and peaking at about the seventh or eighth decade. The graph shows that age for age the rates in Bangalore males are lower compared to the other registries in direct contrast to that seen in Bangalore females (see next page).

Time Trends (Fig. 4.2 (b))

The trend lines of the earlier registries suggest a decline; the drop in Barshi could be due to small numbers.

Histological Type

The predominant histologic type is squamous cell carcinoma in all registries in both sexes.

International Comparisons (Fig. 4.2 (c))

Except for the registry in Bas Rhin, the registries in India have some of the highest rates in the world. The rates in Indians in Singapore and even the SEER, White rates are lower than that in the three metros.

Comment

Chennai registry has reported a five-year relative survival of 31.7% (Shanta *et al*, 1998).

ORAL CAVITY (ICD-9: 143-145) - MALES

Figure 4.2

Fig. 4.2(a) : Age Specific Incidence Rate

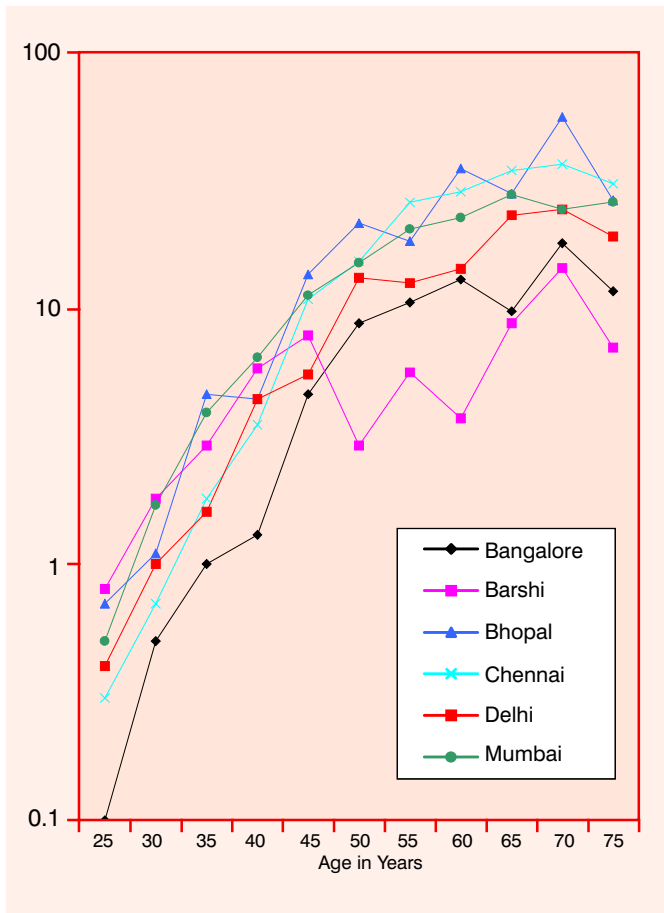


Fig. 4.2 (b) : Trends in AAR

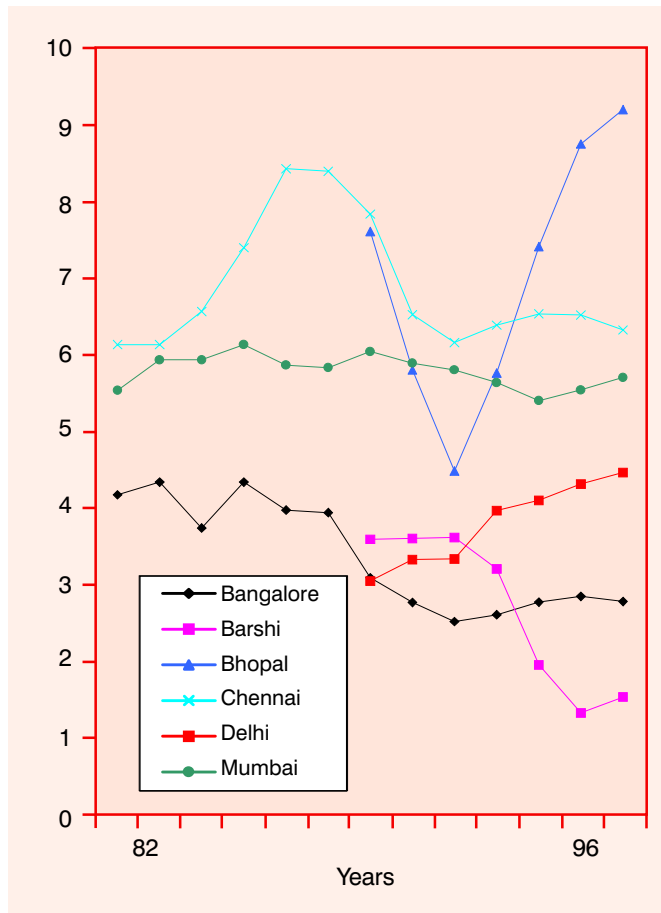
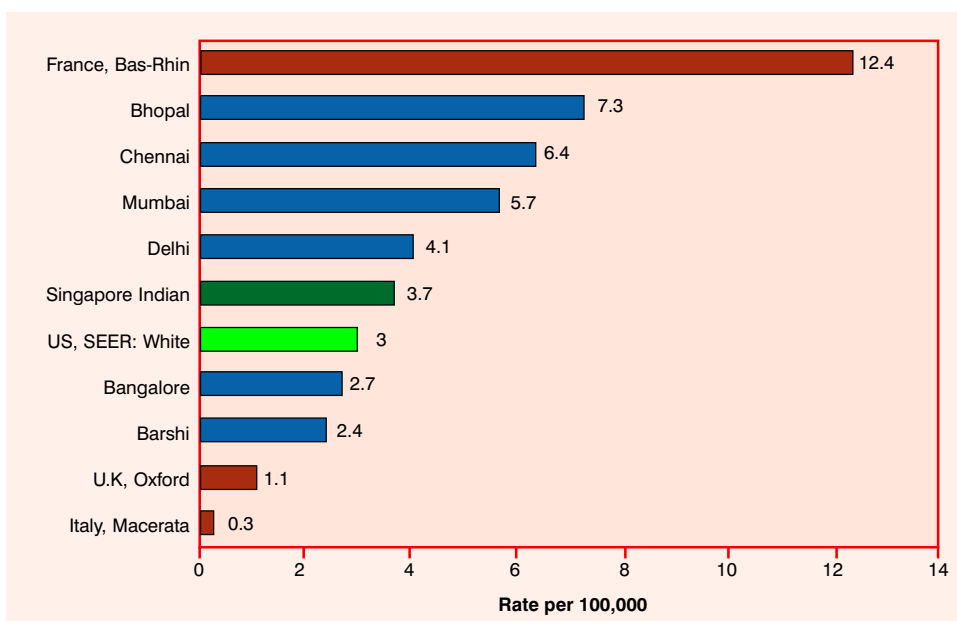


Fig. 4.2(c) : International Comparisons - AAR



ORAL CAVITY (ICD-9: 143-145) - FEMALES

This includes ICD sites 143 (Gum), 144 (Floor of Mouth) and 145 (Other and Unspecified parts of Mouth).

Numbers and Incidence

Registry	No.	%	R	AAR
Bangalore	726	6.2	3	8.1
Barshi	11	1.4	5	0.9
Bhopal	104	4.6	4	5.1
Chennai	610	4.9	6	6.0
Delhi	427	1.7	13	2.5
Mumbai	919	3.4	5	4.2

Except in Delhi cancers of the oral cavity fall within the first five or six leading sites of cancer. The differences in rank and rates among males and females in Bangalore are particularly striking.

Age Distribution (Fig. 4.3 (a))

The rise in age specific rates especially in Bangalore commences in the early twenties and reaches a peak in the seventh decade.

Time Trends (Fig. 4.3 (b))

Both Bangalore and Chennai appear to show a decline in the rates of this cancer since the time of commencement of the registries in 1982.

International Comparisons (Fig. 4.3 (c))

Despite the apparent decline, among women, India has the highest rates of cancer of the mouth in the world. The four registries at Bangalore, Chennai, Bhopal and Mumbai in that order have a higher AAR than the Indians in Singapore who have the highest AAR among registries outside India.

Comment

Chennai registry has reported a five-year relative survival of 33.8% (Shanta *et al*, 1998). The major difference in rates between males and females in Bangalore could be attributed to the differences in practices of tobacco habits. In a case control study (Nandakumar *et al*, 1990) of the oral cavity, it was found (among controls) that compared to 39% chewers among women there were only 9.6% among men, whereas 63% of males were smokers but less than 1% among women controls smoked.

ORAL CAVITY (ICD-9: 143-145) - FEMALES

Figure 4.3

Fig. 4.3 (a) : Age Specific Incidence Rate

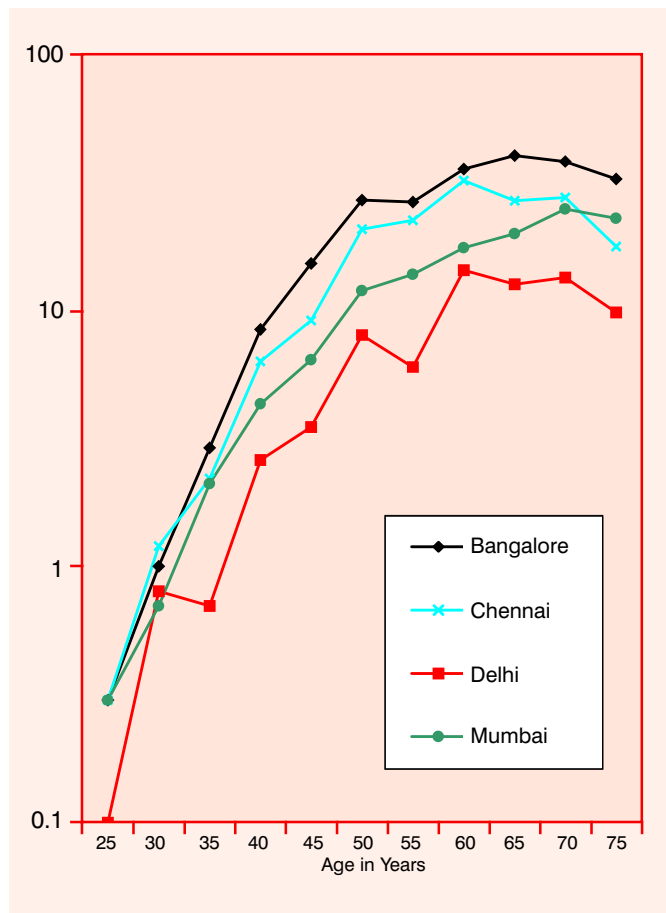


Fig. 4.3(b) : Trends in AAR

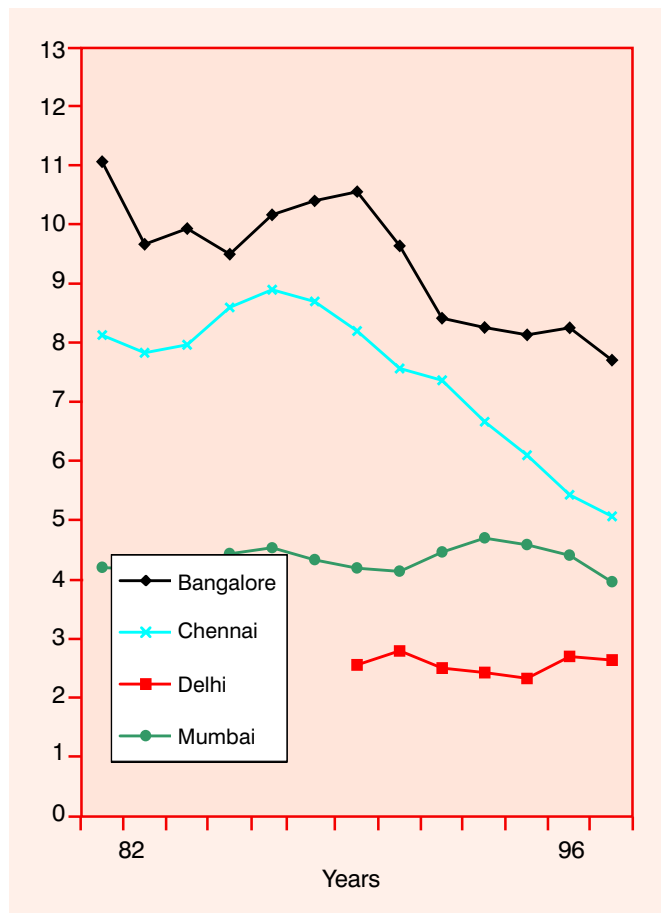
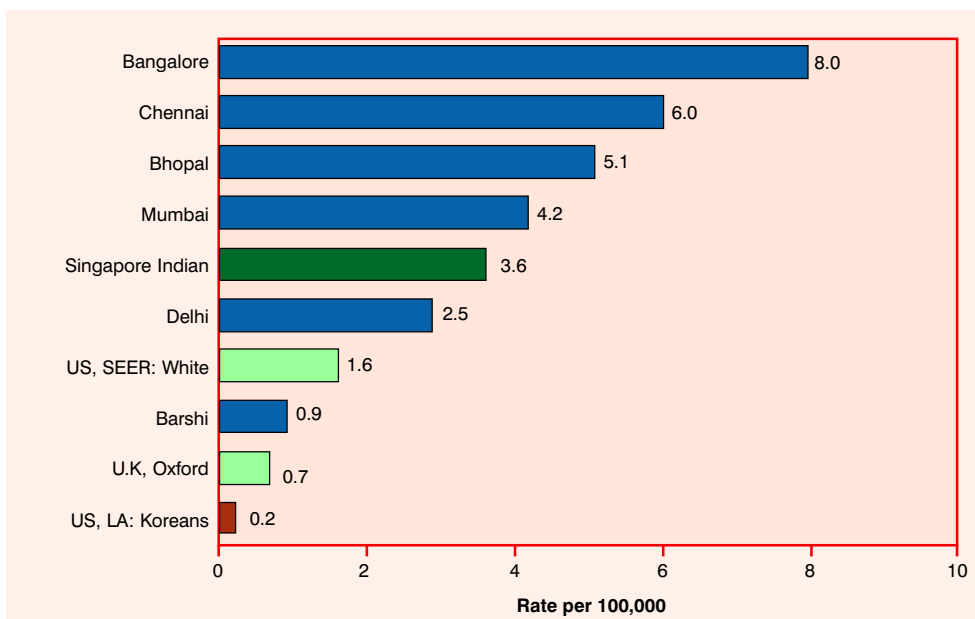


Fig. 4.3(c) : International Comparisons - AAR



HYPOPHARYNX (ICD-9: 148) - MALES

Numbers and Incidence

Registry	No.	%	R	AAR	M:F Ratio
Bangalore	560	5.5	4	5.8	4.7
Barshi	68	10.7	1	5.2	6.8
Bhopal	166	6.5	5	7.3	8.3
Chennai	550	4.8	5	5.1	2.7
Delhi	555	2.1	>15	2.8	5.3
Mumbai	1519	5.3	6	6.3	3.7

Other than in Delhi cancer of the hypopharynx is one of five or six leading sites of cancer constituting 5-10% of cancers in males.

Age Distribution (Fig. 4.4 (a))

The increase in this site of cancer commences in the third or fourth decade and reaches a peak in the seventh decade.

Male Female Ratio

Like cancer of the tongue the male female ratio is high and varies from 2.7 in Chennai to 8.3 in Bhopal.

Time Trends (Fig. 4.4 (b))

Mumbai appears to show a decline in this site of cancer.

Histological Type

This was predominantly squamous cell carcinoma in all the registries.

International Comparisons (Fig. 4.4 (c))

France has some of the highest recorded incidence rates of cancers of the hypopharynx. Compared to the rates of the registries in India. Indians in Singapore have a low rate almost identical to that seen in the United States' SEER registries.

Comment

Chennai and Mumbai registries have reported a five-year relative survival of 16.0% and 29.1% respectively (Shanta *et al*, 1998; Yeole *et al*, 2000). Cancer of the hypopharynx is one of the sites of cancer associated with tobacco smoking and in our country more specifically attributed to the widely prevalent habit of bidi smoking in contrast to cigarette smoking.

HYPOPHARYNX (ICD-9: 148) - MALES

Figure 4.4

Fig. 4.4 (a) : Age Specific Incidence Rate

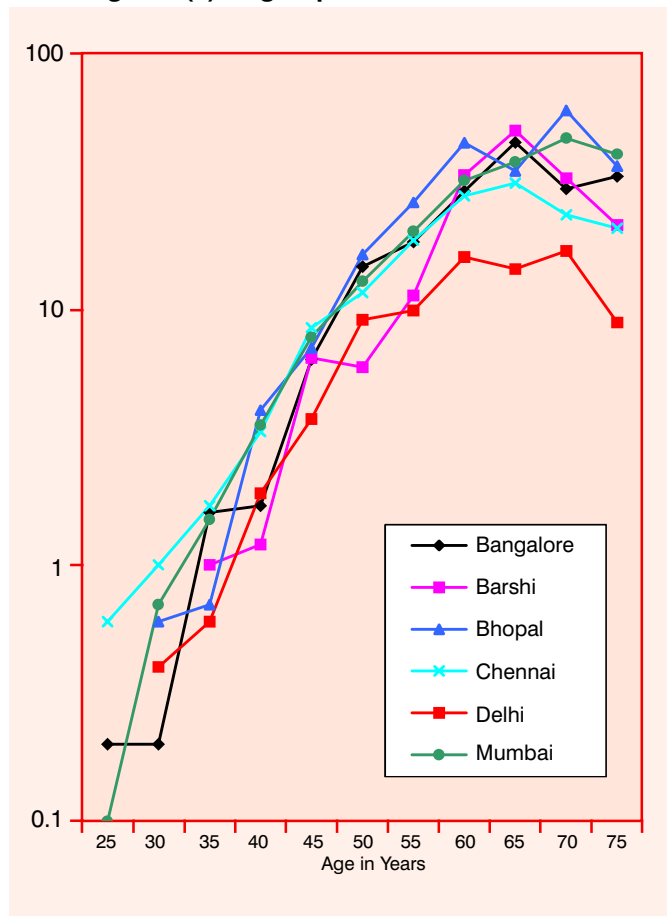


Fig. 4.4 (b) : Trends in AAR

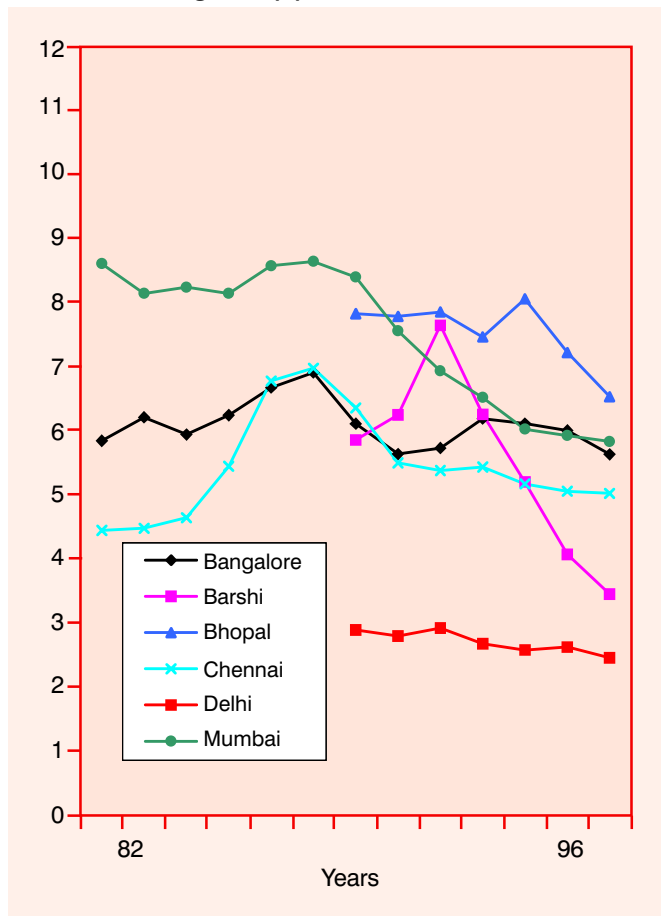
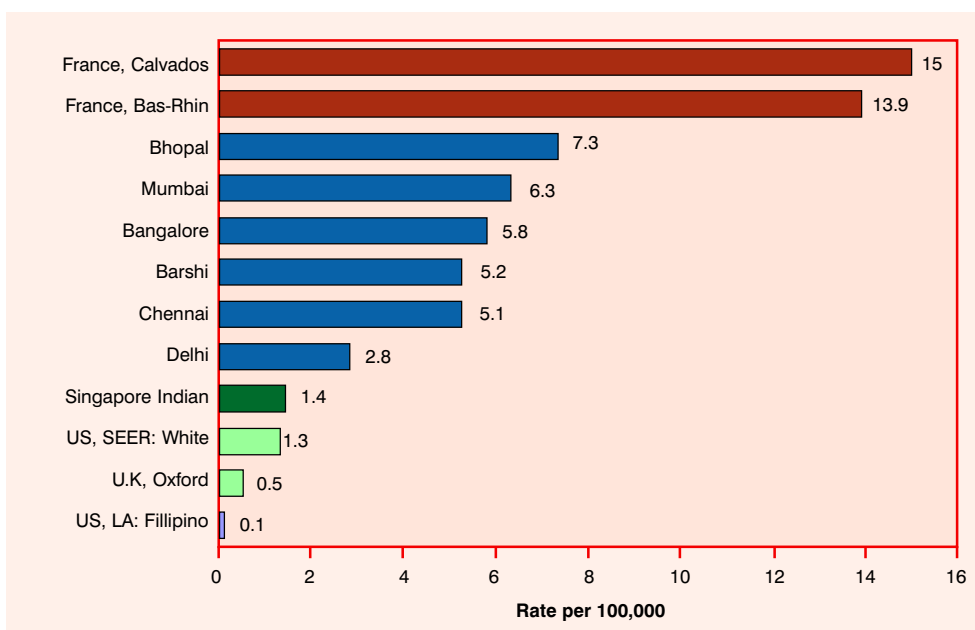


Fig. 4.4 (c) : International Comparisons - AAR



OESOPHAGUS (ICD-9: 150) - MALES

Numbers and Incidence

Registry	No.	%	R	AAR	M:F Ratio
Bangalore	884	8.6	2	9.1	1.3
Barshi	54	8.5	2	4.2	1.7
Bhopal	174	6.9	4	7.5	1.7
Chennai	920	8.1	3	8.8	1.5
Delhi	1208	4.6	6	6.2	1.6
Mumbai	1962	6.8	2	8.5	1.4

Cancer of the oesophagus is one of the most important leading sites of cancer in our country and one of the few sites of cancer that has comparatively lower male female ratio. Overall about 9-20% of cancers of the oesophagus were from the upper one-third. All registries except Mumbai had a higher proportion of lower third cancers than middle third oesophageal cancers.

Age Distribution (Fig. 4.5 (a))

The rise in oesophageal cancer commences in the late twenties and peaks in the seventh and eighth decade.

Time Trends (Fig. 4.5 (b))

There appears to be a decline in the rates or flattening of curves in Mumbai and Barshi.

Morphological Type

The predominant histomorphology was squamous cell carcinoma. Mumbai had 2.5% adenocarcinomas while Delhi accounted for 12% of this type. All the other four registries had 7% of oesophageal cancers in males as adenocarcinomas.

International Comparisons (Fig. 4.5 (c))

The highest AAR of oesophageal cancer has been reported in the Caspian Region of Iran with an AAR of 165.3, but currently Africans in Harare, Zimbabwe have the highest AAR of 30.4. Non-Jews in Israel have the lowest AAR of 0.5.

Comment

Chennai registry has reported a five-year relative survival of 6.8% (Shanta *et al*, 1998). Like that of tongue, cancer of the oesophagus is also associated with the use of tobacco in both its forms of usage, viz., chewing and smoking, and the anatomical sub-site of oesophageal cancer has been correlated with the risk of these habits either singly or in combination (Nandakumar *et al*, 1996).

OESOPHAGUS (ICD-9: 150) - MALES

Figure 4.5

Fig. 4.5 (a) : Age Specific Incidence Rate

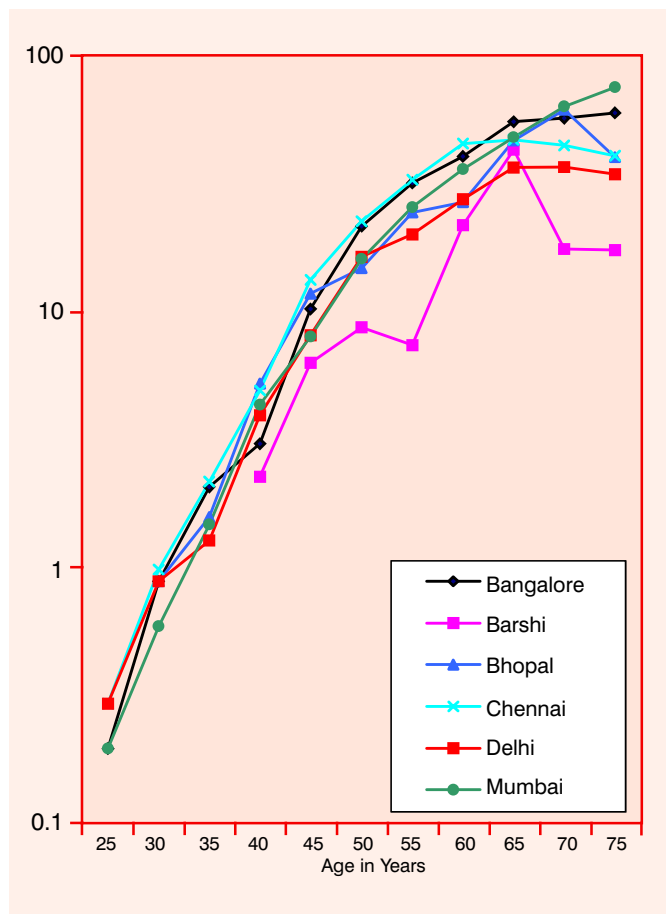


Fig. 4.5 (b) : Trends in AAR

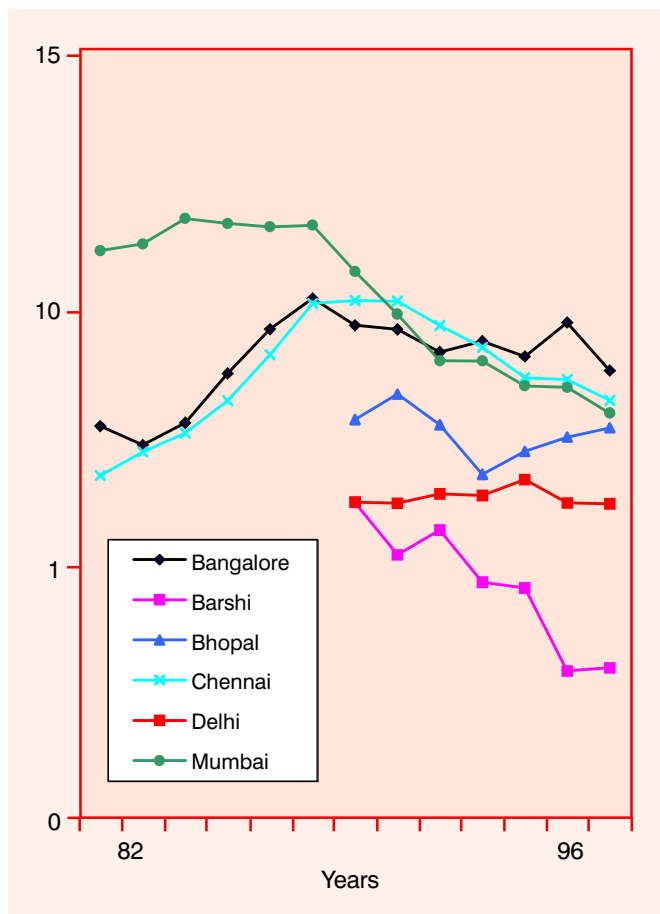
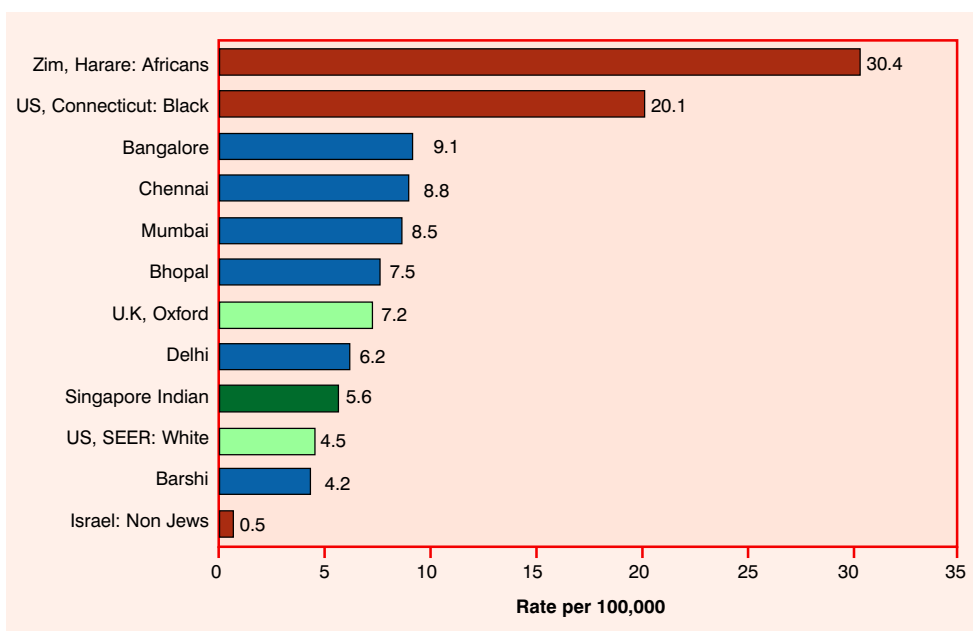


Fig. 4.5 (c) : International Comparisons - AAR



OESOPHAGUS (ICD-9: 150) - FEMALES

Numbers and Incidence

Registry	No.	%	R	AAR
Bangalore	703	6.0	4	8.3
Barshi	32	4.2	3	2.6
Bhopal	100	4.4	5	4.9
Chennai	613	5.0	4	6.1
Delhi	733	2.8	5	4.4
Mumbai	1354	5.0	4	6.7

Cancer of the oesophagus in females is one of five leading sites of cancer in all the registries constituting about 3 to 6% of all cancers in that sex.

Age Distribution (Fig. 4.6 (a))

The rise in oesophageal cancer in females commences around the age group 40-44 and reaches a peak around 65-74 years of age.

Time Trends (Fig. 4.6 (b))

There appears to be some decline in the rate of this cancer in Mumbai, but seems to be less definitive than that seen in males.

Histological Type

Like in males the predominant morphologic type is squamous cell carcinoma. The proportion of adenocarcinomas are less than that seen in males.

International Comparisons (Fig. 4.6 (c))

As in cancer of the mouth among females, the registries in India have some of the highest rates of oesophageal cancer in the world. The AAR in Bangalore is almost the same as that seen in Uganda in Africa, which has the highest reported incidence of oesophageal cancer in the world. Indians in Singapore have a comparatively lesser rate.

Comment

Chennai registry has reported a five-year relative survival of 6.1% (Shanta *et al*, 1998).

OESOPHAGUS (ICD-9: 150) - FEMALES

Figure 4.6

Fig. 4.6 (a) : Age Specific Incidence Rate

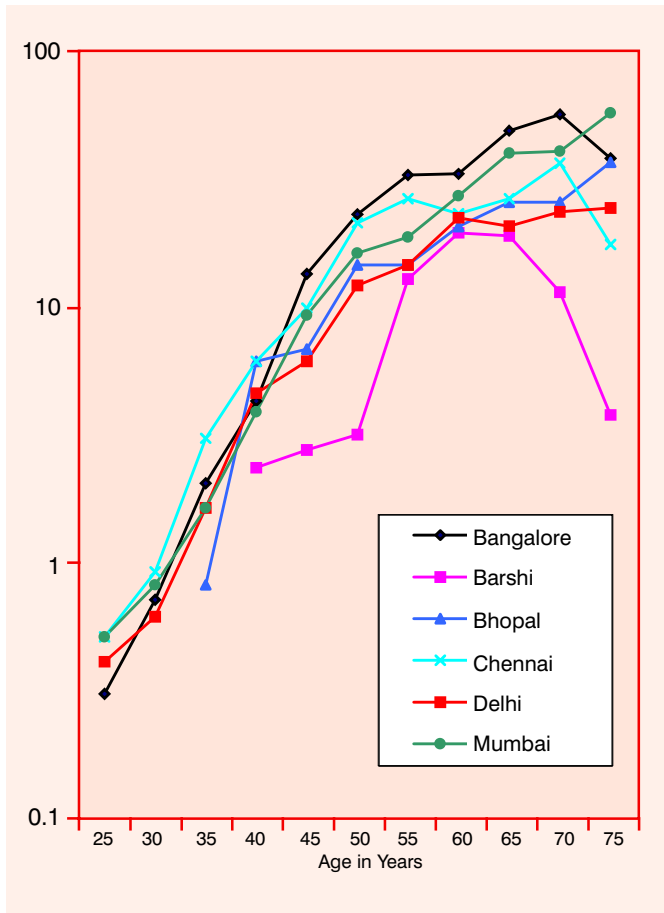


Fig. 4.6 (b) : Trends in AAR

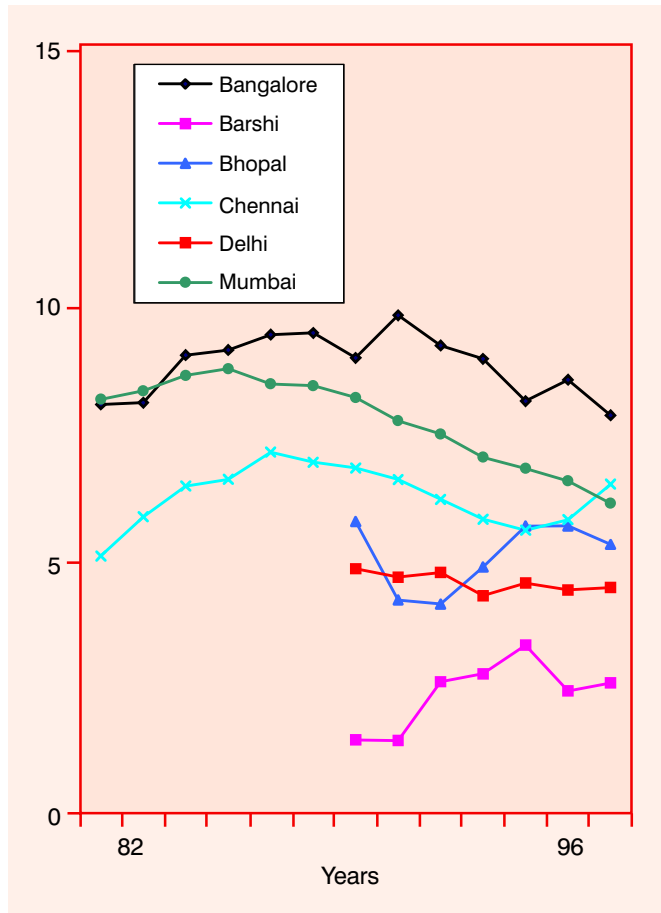
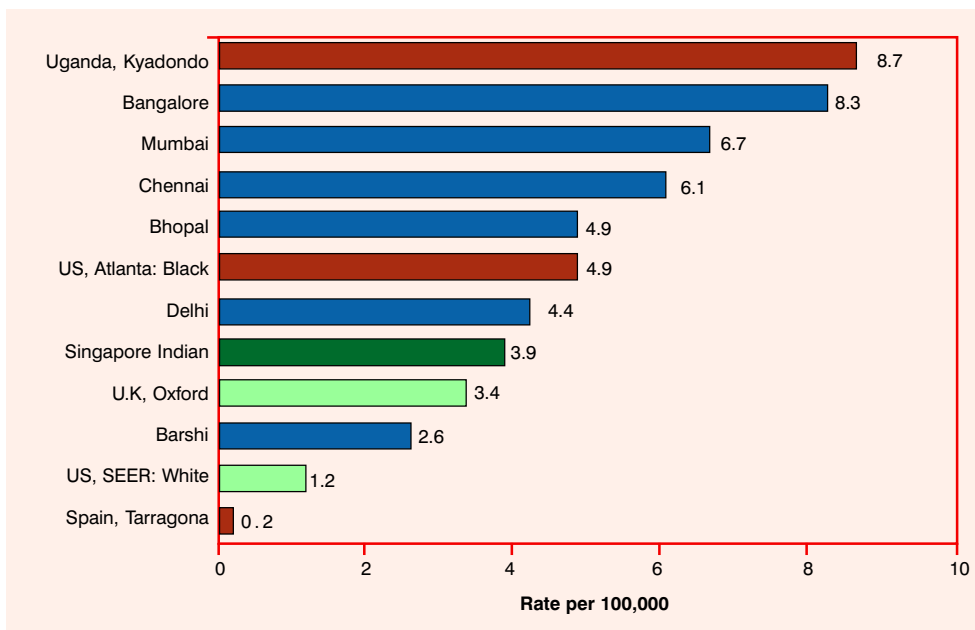


Fig. 4.6 (c) : International Comparisons - AAR



STOMACH (ICD-9: 151)

Numbers and Incidence

Registry	MALES				FEMALES				M:F Ratio
	No.	%	R	AAR	No.	%	R	AAR	
Bangalore	951	9.3	1	9.5	460	3.9	6	5.1	2.1
Barshi	16	2.5	15	1.2	11	1.4	6	0.8	1.5
Bhopal	88	3.5	9	3.4	43	1.9	9	1.8	2.0
Chennai	1437	12.7	1	13.6	677	5.5	3	6.5	2.1
Delhi	804	3.1	10	3.9	439	1.7	12	2.5	1.8
Mumbai	1527	5.3	5	6.4	681	2.5	7	3.2	2.2

Both Bangalore and Chennai have consistently shown this site to be the number one cancer in males since 1982. Though this site of cancer is less common than in males, Chennai women have this site as the most important cancer next only to cancer of the cervix and breast. They have twice the AAR seen in Mumbai and over two and a half times the rate seen in Delhi. All urban registries (as elsewhere in most parts of the world) have a uniform male female ratio of around 2. In either sex in Chennai 55% of cancers of the stomach arise in the pyloric antrum while this is 27% in Bangalore and much less in the other four registries.

Age Distribution - Males (Fig. 4.7 (a))

In males the rise in the age specific rate of this site of cancer commences in the third or fourth decade and peaks in the eighth decade in males and slightly earlier in females.

Time Trends - Males (Fig. 4.7 (b))

The rate at Chennai seems to have shown a tendency to rise in the early 80s, but has flattened or shown a slight decline thereafter but was not found to be statistically significant. The same is observed for the rather declining lines seen for Bangalore and Mumbai where women also have shown some decline in rates over the years.

Histological Type

The majority of cancers of the stomach are adenocarcinomas with mucin producing adenocarcinomas accounting for about 5-15% and signet ring cell 1-10% of all microscopically diagnosed stomach cancers.

International Comparisons - Males (Fig. 4.7 (c))

Chennai registry has reported a five-year relative survival of 7.8% (both sexes) (Shanta *et al*, 1998). Numerically and in both sexes combined cancer stomach is one of the most common cancers in the world with an estimated 760-800,000 cancers reported annually (Parkin *et al*, 1999). Japanese rates of stomach cancer have always been highest. Yamagata in Japan has consistently recorded the highest AAR for this site in males.

STOMACH (ICD-9: 151) - MALES

Figure 4.7

Fig. 4.7 (a) : Age Specific Incidence Rate

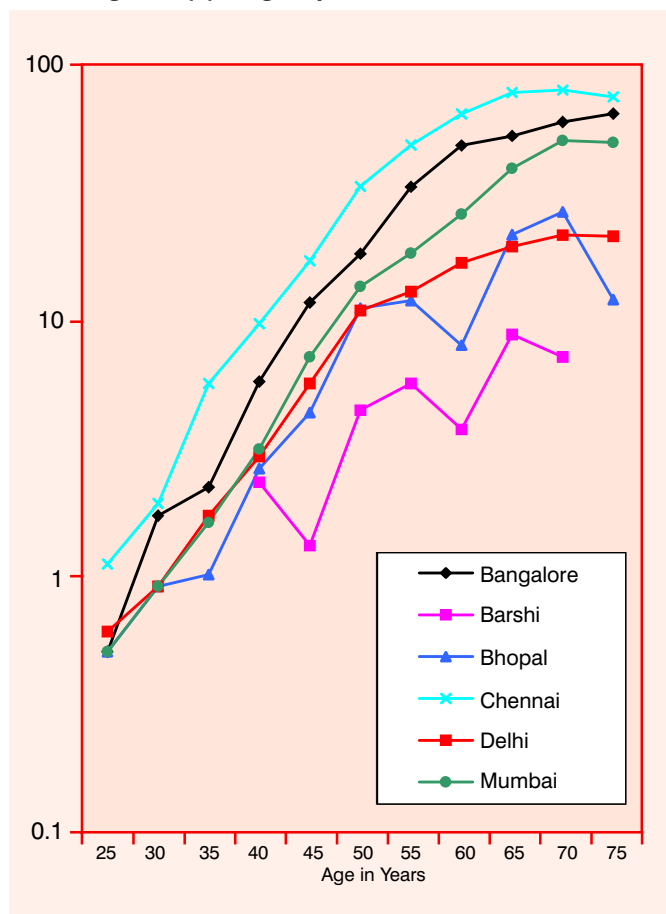


Fig. 4.7 (b) : Trends in AAR

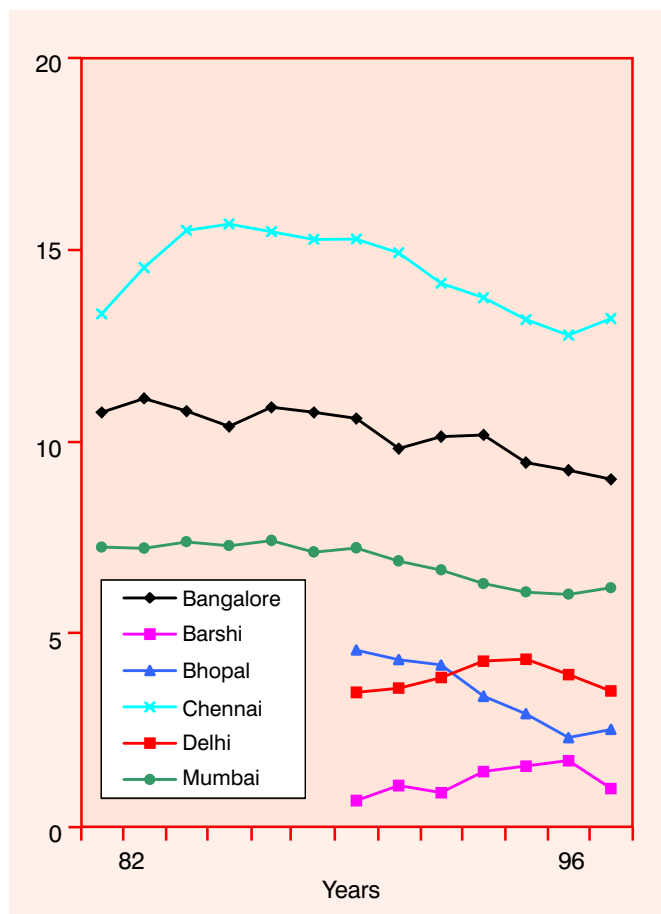
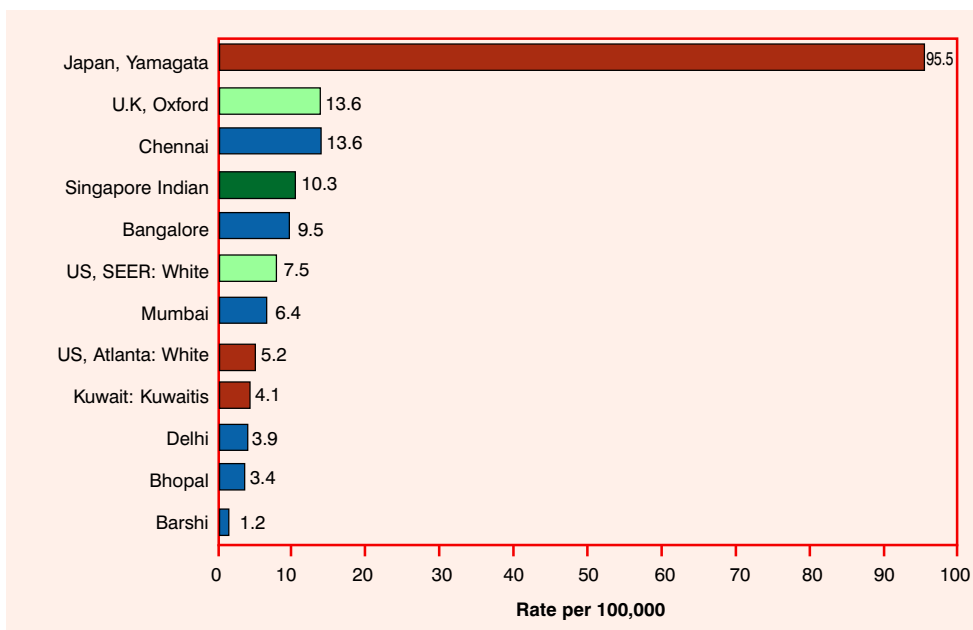


Fig. 4.7(c) : International Comparisons - AAR



COLON (ICD-9: 153)

Numbers and Incidence

Registry	MALES				FEMALES				M:F Ratio
	No.	%	R	AAR	No.	%	R	AAR	
Bangalore	244	2.4	15	2.4	179	1.5	13	2.0	1.4
Barshi	9	1.4	> 15	0.6	7	0.9	>15	0.6	1.3
Bhopal	55	2.2	15	2.2	27	1.2	>15	1.2	2.0
Chennai	194	1.7	>15	1.7	150	1.2	>15	1.5	1.3
Delhi	543	2.1	>15	2.5	357	1.4	15	2.0	1.5
Mumbai	845	2.9	12	3.3	623	2.3	10	3.0	1.4

As of 1996 cancer of the colon is not within the ten leading sites of cancer in both males and females though the Mumbai registry does record colon as the tenth leading site of cancer in women. The male female ratio shows that males have about one and a half times that in females. About 21-30% of colon cancers arise from the sigmoid colon. In Delhi the caecum and ascending colon constitute 56% of colon cancers in either sex.

Age Distribution - Males (Fig. 4.8 (a))

The rise in the incidence of colon cancer commences in the fourth decade and reaches a peak in almost all registries round the seventh or eighth decade in either sex.

Time Trends - Males (Fig. 4.8 (b))

There appears to be a slight upward trend in the occurrence of this cancer in males in Mumbai, Delhi and Bhopal and in females in Mumbai, though this is not statistically significant.

Histological Type

While the majority are adenocarcinomas about 12-18 percent of these are mucin secreting adenocarcinomas.

International Comparisons - Males (Fig. 4.8 (c))

Among men Blacks in the United States have the highest incidence of this site of cancer and in women the non-Maori population of New Zealand have the highest rates. Indians in Singapore have a higher incidence than that seen in the Indian registries.

Comment

As of 1996 it has been estimated that 875,000 new case of cancer colon occur annually (Potter, 1999) accounting for 8.5% of all cancers worldwide and majority of these are from the economically developed countries. Mumbai registry has reported a five year relative survival of 36.6% (Yeole *et al*, 2001).

COLON (ICD-9: 153) - MALES

Figure 4.8

Fig. 4.8 (a) : Age Specific Incidence Rate

Fig. 4.8 (b) : Trends in AAR

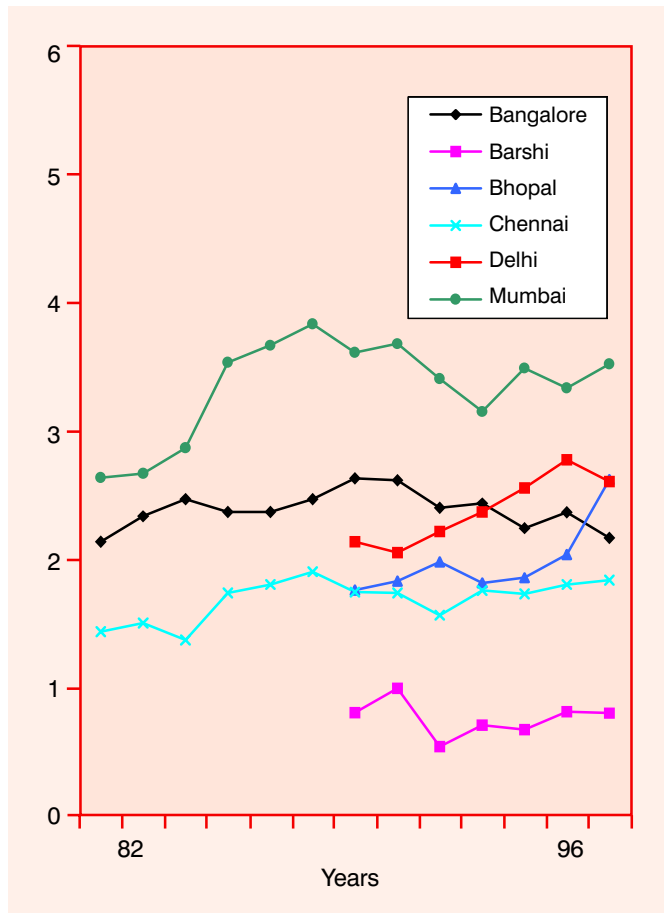
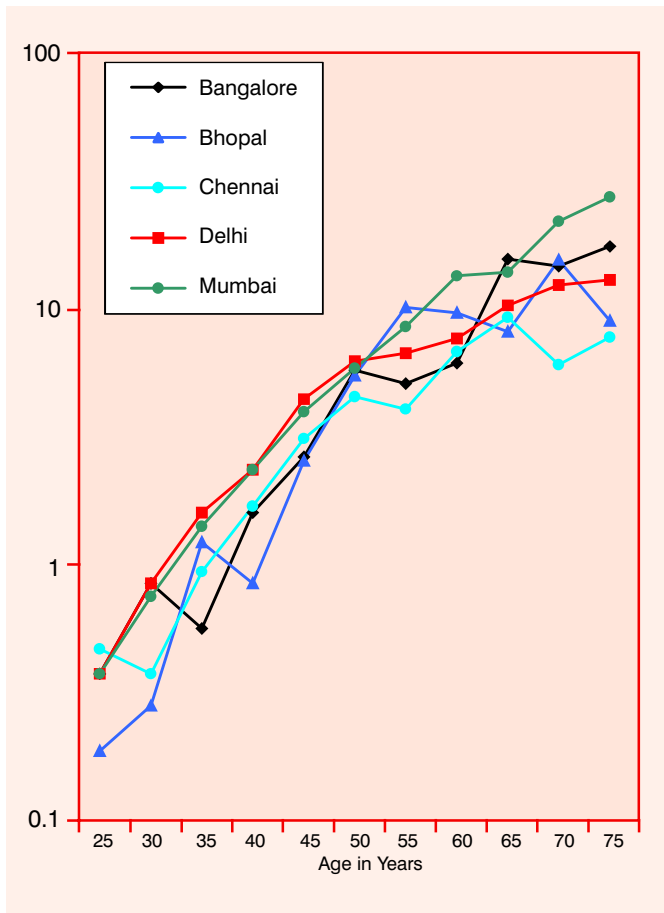
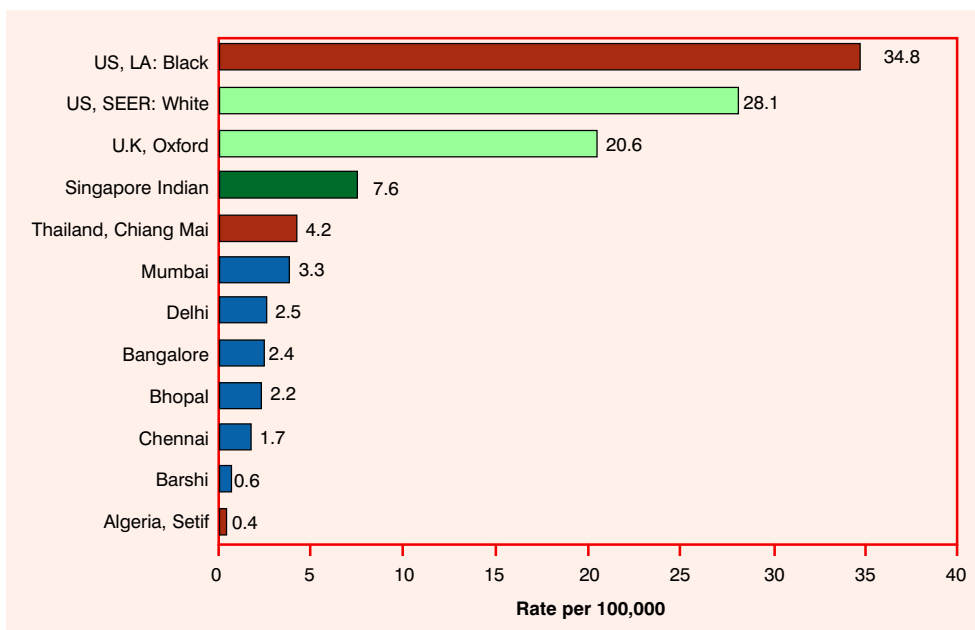


Fig. 4.8 (c) : International Comparisons - AAR



RECTUM (ICD-9: 154)

Numbers and Incidence

Registry	MALES				FEMALES				M:F Ratio
	No.	%	R	AAR	No.	%	R	AAR	
Bangalore	327	3.2	10	3.1	267	2.3	8	2.8	1.2
Barshi	21	3.3	8	1.5	8	1.0	11	0.6	2.6
Bhopal	46	1.8	>15	1.8	36	1.6	12	1.6	1.3
Chennai	329	2.9	11	3.0	249	2.0	7	2.3	1.3
Delhi	649	2.5	14	3.0	367	1.4	14	2.0	1.8
Mumbai	832	2.9	13	3.3	522	1.9	13	2.4	1.6

Unlike in most parts of the world, the AAR of cancer of the rectum in the Indian registries (except in Bhopal) is higher than that of the colon in either sex and therefore assumes importance. The male female ratio is slightly higher than that seen in colon cancer. The proportion of cancers of the rectum that have their origin in the anal canal varies from 8% in Bangalore to 25% in Delhi in males. Among females, this proportion is slightly more in Bangalore and Chennai.

Age Distribution - Males (Fig. 4.9 (a))

The age distribution is similar to that of colon, though the age specific rates are slightly higher than that observed for that site.

Time Trends - Males (Fig. 4.9 (b))

There appears to be a slightly increasing trend of this cancer in Delhi in both males and females.

Histological Type

While the majority are adenocarcinomas about 10% in males and about 15% among females are squamous cell carcinomas. Mucin secreting adenocarcinomas constituted 10% and 7% of rectal cancers in males and females respectively. Malignant Melanoma of the rectum also accounts for 2-4% of cancers of the rectum.

International Comparisons - Males (Fig. 4.9 (c))

The Czech Republic and the Yukon province in Canada, have the highest AAR of 24.3 and 14.4 in males and females respectively. The incidence rates among the Indian registries are lower and lower than that observed in the Indian population of Singapore.

Comment

Mumbai registry has reported a five year relative survival of 42.2% (Yeole *et al*, 2001).

RECTUM (ICD-9: 154)

Figure 4.9

Fig. 4.9 (a) : Age Specific Incidence Rate

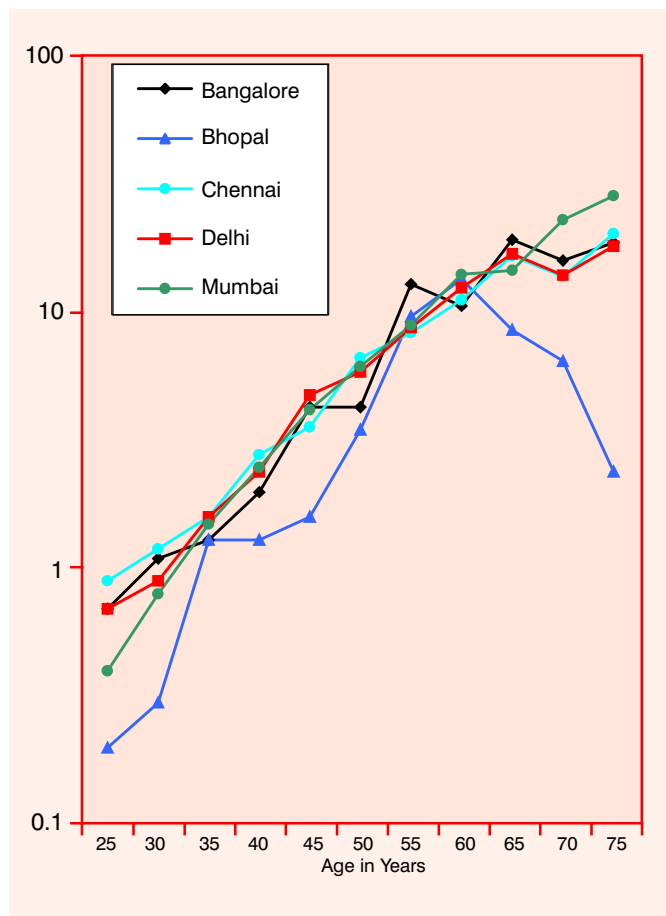


Fig. 4.9 (b) : Trends in AAR

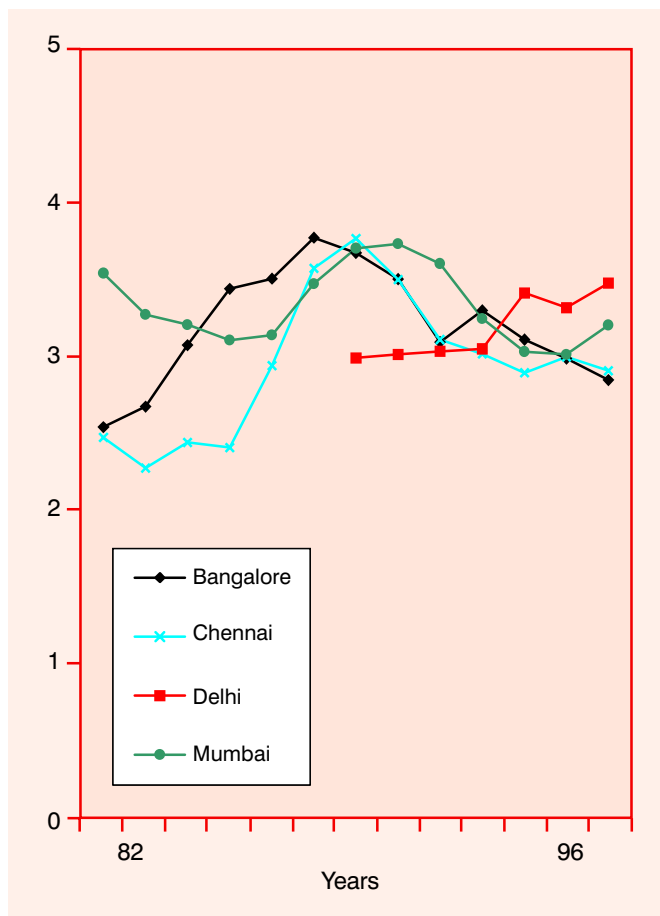
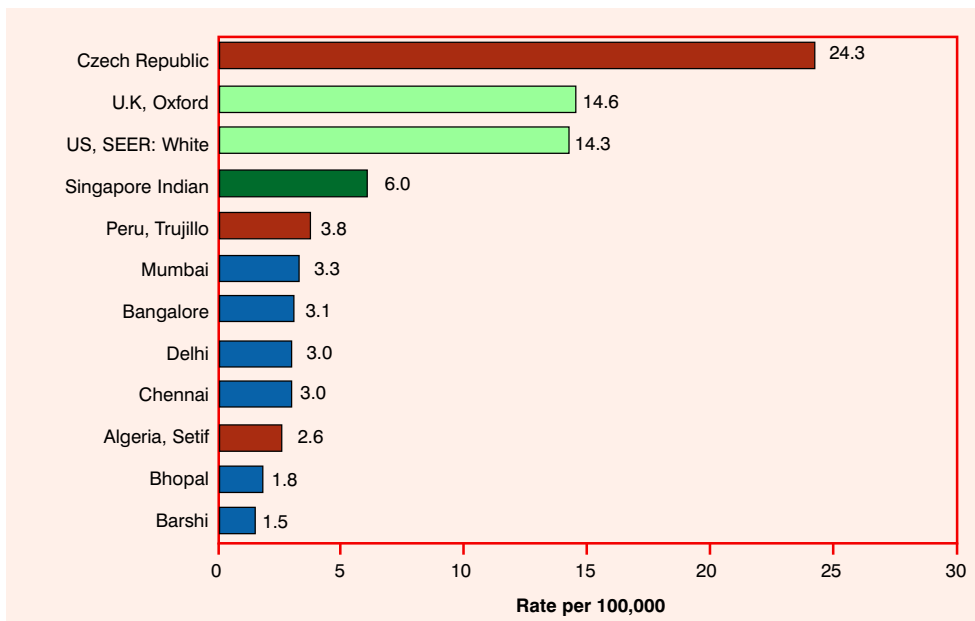


Fig. 4.9 (c) : International Comparisons - AAR



LIVER (ICD-9: 155) - MALES

Numbers and Incidence

Registry	No.	%	R	AAR	M:F Ratio
Bangalore	281	2.7	13	2.8	2.4
Barshi	26	4.1	7	1.9	4.3
Bhopal	51	2.0	>15	2.0	2.1
Chennai	253	2.2	13	2.4	3.2
Delhi	465	1.8	>15	2.2	2.1
Mumbai	798	2.8	14	3.4	2.3

Cancer of the liver constitutes 2-3% of cancers in males, and except in Barshi does not fall within the ten leading sites of cancer in either sex. The AAR do not show much variation between the registries.

Age Distribution (Fig. 4.10 (a))

Cancer of the liver is seen in childhood as hepatoblastoma, and therefore the graphs of age specific rates do show up in the 0-14 age group as well.

Time Trends (Fig. 4.10 (b))

The trend graphs are not particularly remarkable with slight fluctuations observed over the years.

Histological Type

Hepatoblastomas account for 3-5% of all liver cancer in either sex. The proportion of intra-hepatic cholangiocarcinomas or peripheral bile duct carcinomas in the registries were as follows: Bhopal: Males (M) 17%, Females (F) 46%; Delhi: M -14%, F – 39%; Chennai - F & Mumbai– F 14%; Bangalore: F 6% with the remainder being less than 5%.

International Comparisons (Fig. 4.10 (c))

Khon Kaen in Thailand has the highest recorded age adjusted incidence rates of 97.4 in males and 39 in females. Rates in other centers around the world are considerably lower. Indians in Singapore have almost twice the rates of their counterparts in India.

Comment

Intra-hepatic cholangiocarcinoma normally constitutes no more than 15% of hepatic cancers worldwide, except in Khon Khaen in Thailand wherein they constitute 90% and 94% of liver cancers in males and females respectively. In that region this cancer has been associated with chronic infection with liver fluke – *Opisthorchis viverrini* (Parkin *et al* 1991, 1993). This becomes important in the context of what is seen in Bhopal and Delhi.

LIVER (ICD-9: 155) - MALES

Figure 4.10

Fig. 4.10 (a) : Age Specific Incidence Rate

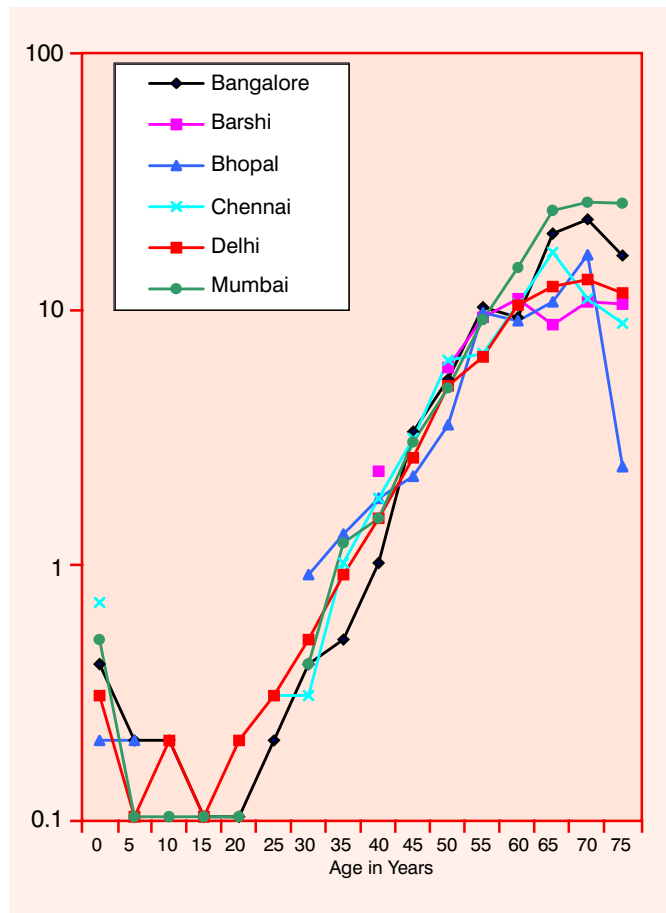


Fig. 4.10 (b) : Trends in AAR

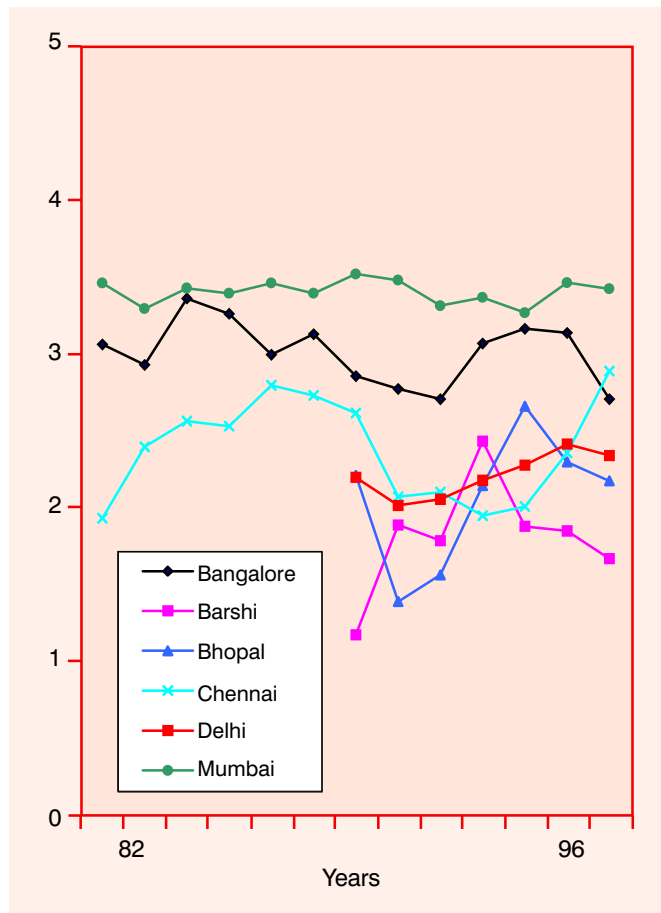
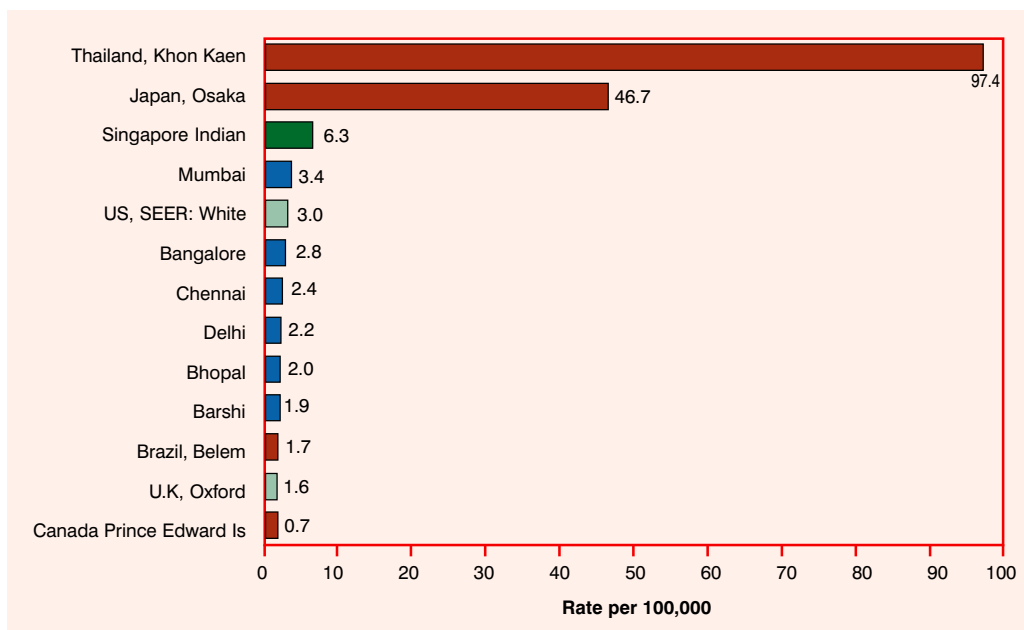


Fig. 4.10 (c) : International Comparisons - AAR



GALL BLADDER (ICD-9: 156)

Numbers and Incidence

Registry	MALES				FEMALES				M:F Ratio
	No.	%	R	AAR	No.	%	R	AAR	
Bangalore	62	0.6	>15	0.6	56	0.5	>15	0.7	1.1
Barshi	2	0.3	>15	0.1	4	0.5	>15	0.3	0.5
Bhopal	35	1.4	>15	1.6	53	2.4	8	2.5	0.7
Chennai	59	0.5	>15	0.5	81	0.7	>15	0.8	0.7
Delhi	717	2.7	11	3.7	1508	5.8	4	8.9	0.5
Mumbai	410	1.4	>15	1.7	540	2.0	11	2.5	0.8

Age Distribution - Females (Fig. 4.11 (a))

Unlike cancer of the liver, cancer of the Gall Bladder is hardly seen below 25 years of age. The peak age specific rate in Delhi is seen in the seventh and eighth decade in either sex. Except in Bangalore cancer of the gall bladder is almost twice as common in women and is generally the pattern seen in registries across the world.

Time Trends - Females (Fig. 4.11 (b))

There is a statistically significant increase of gall bladder cancer in both males and females in Delhi. The rates in Mumbai and Bhopal also show a tendency to increase but not as steeply as is seen in Delhi.

Histological Type

Majority (60-65%) are adenocarcinomas, 7-10% are of the papillary type and 3-5% are mucin secreting.

International Comparisons - Females (Fig. 4.11 (c))

Delhi and particularly females in Delhi have one of the highest AAR in the world. The rates in Delhi in both sexes are way above the rates in Indians in Singapore or the Caucasian reference populations in the United States and United Kingdom.

Comment

This is one of the few sites of cancer that shows marked variation in the incidence rates among the registries under study. This is so especially in women. Such intra-country differences are particularly interesting and challenging from the point of descriptive epidemiology. In order to assess the risk factors associated with this site of cancer the NCRP is at present conducting a case control study.

GALL BLADDER (ICD-9: 156) - FEMALES

Figure 4.11

Fig. 4.11 (a) : Age Specific Incidence Rate

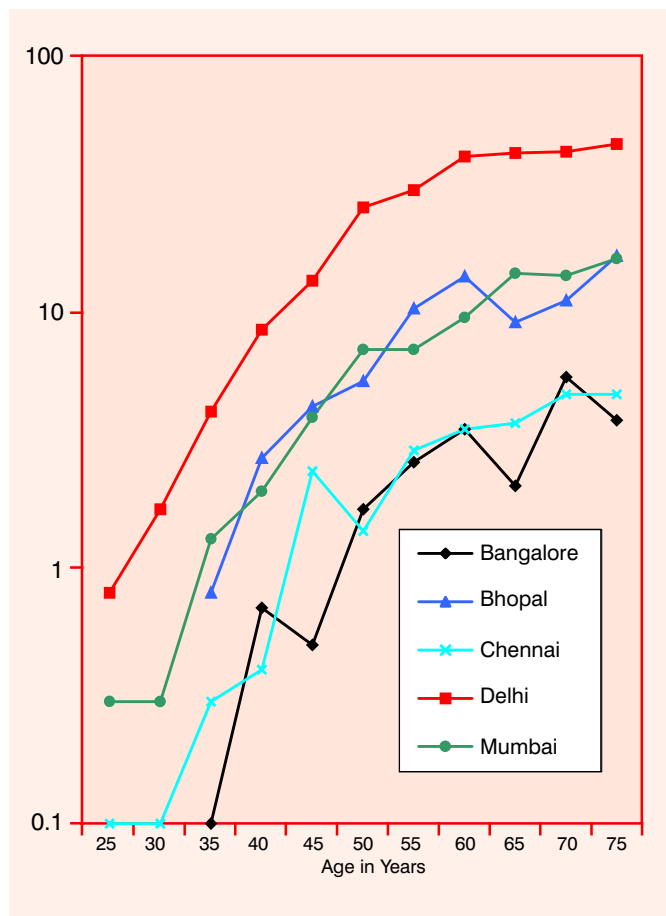


Fig. 4.11 (b) : Trends in AAR

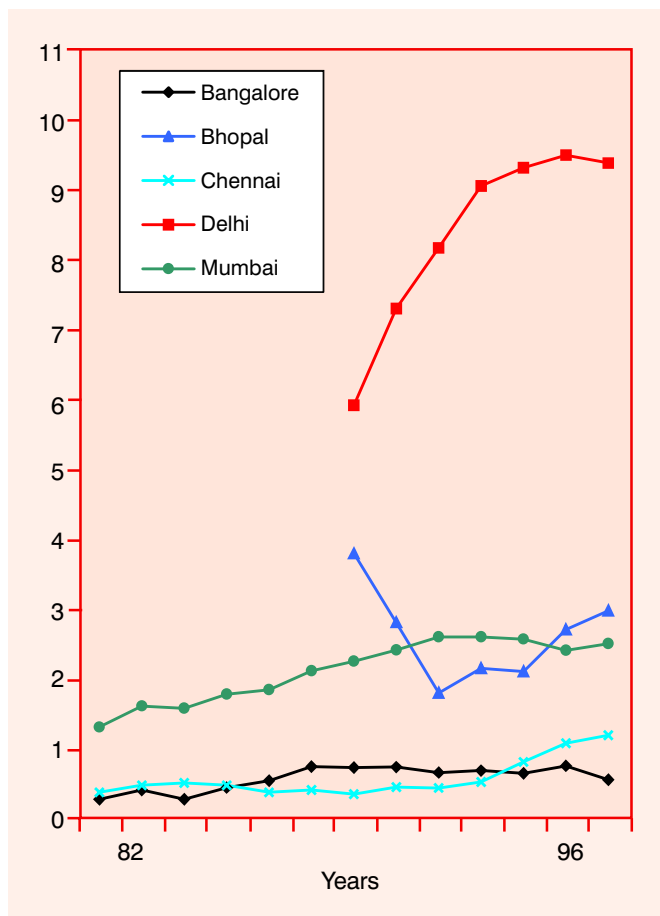
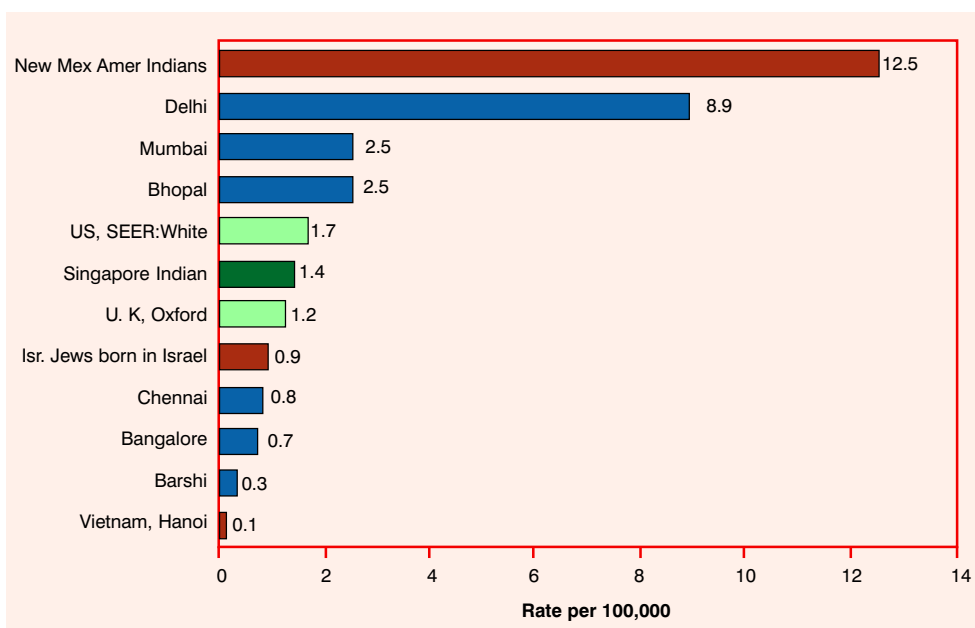


Fig. 4.11 (c) : International Comparisons - AAR



LARYNX (ICD-9: 161) - MALES

Numbers and Incidence

Registry	No.	%	R	AAR	M:F Ratio
Bangalore	414	4.0	5	4.2	7.4
Barshi	30	4.7	6	2.3	10.0
Bhopal	90	3.5	8	3.9	5.6
Chennai	468	4.1	7	4.4	9.1
Delhi	1820	6.9	2	9.3	7.8
Mumbai	1627	5.6	3	6.9	6.2

Cancer of the larynx, especially among males is one of five leading sites of cancer in Bangalore, Delhi and Mumbai and is within the first ten leading sites in the other three registries. In Delhi it is the second leading site of cancer constituting about 7% of all cancers in men. In females, its rank is above 15 in all the registries and constitutes one percent or less of all cancers in women. This is one of the sites of cancer having a fairly high male female ratio.

Age Distribution (Fig. 4.12 (a))

Cancer of the larynx is uncommon before the fourth decade and has the highest age specific rate during the seventh and eighth decades. The outer graph line representing Delhi, indicates that age for age the rates in this city are distinctly higher for this site of cancer.

Time Trends (Fig. 4.12 (b))

There seems to be a fluctuation in the rates in different years.

Histological Type

Over 90% of laryngeal cancers in either sex are squamous cell carcinomas.

International Comparisons (Fig. 4.12 (c))

Basque country in Spain has the highest recorded incidence rate of 18.2. But the age adjusted incidence rate in Delhi males is one and a half times higher than the reference US – White population and twice as higher as that in Oxford, UK. It is almost twice as high as in Indians in Singapore.

Comment

Chennai registry has reported a five-year relative survival of 39.0% (both sexes combined) (Shanta *et al*, 1998). Laryngeal cancer is strongly associated with alcohol consumption and tobacco smoking and is a relatively common cancer among males but extremely rare in females. Variation in the distribution of the tumour at different sub-sites (glottis, supraglottis) within the larynx have been observed (Muir, 1995).

LARYNX (ICD-9: 161) - MALES

Figure 4.12

Fig. 4.12 (a) : Age Specific Incidence Rate

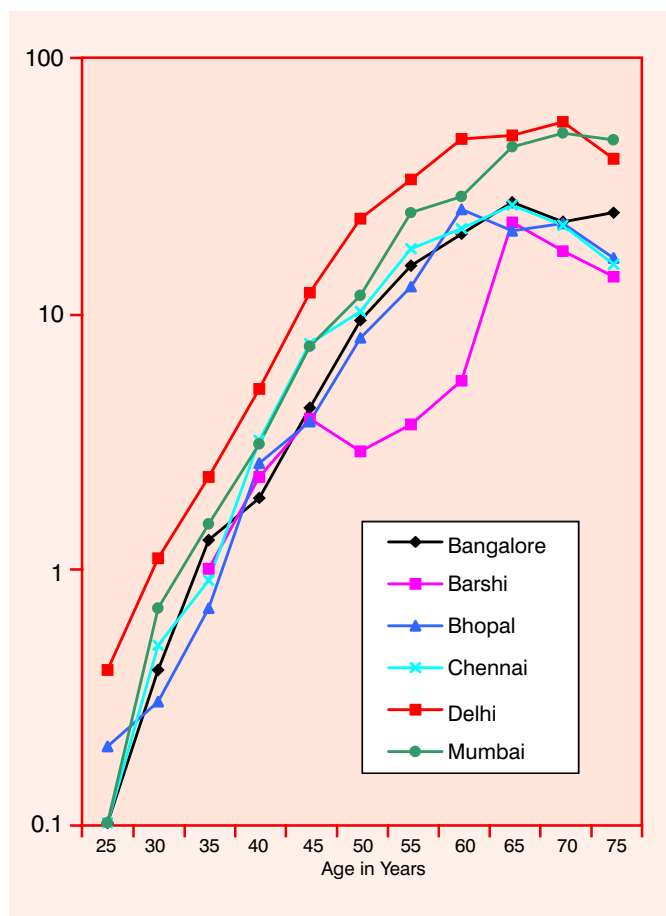


Fig. 4.12 (b) : Trends in AAR

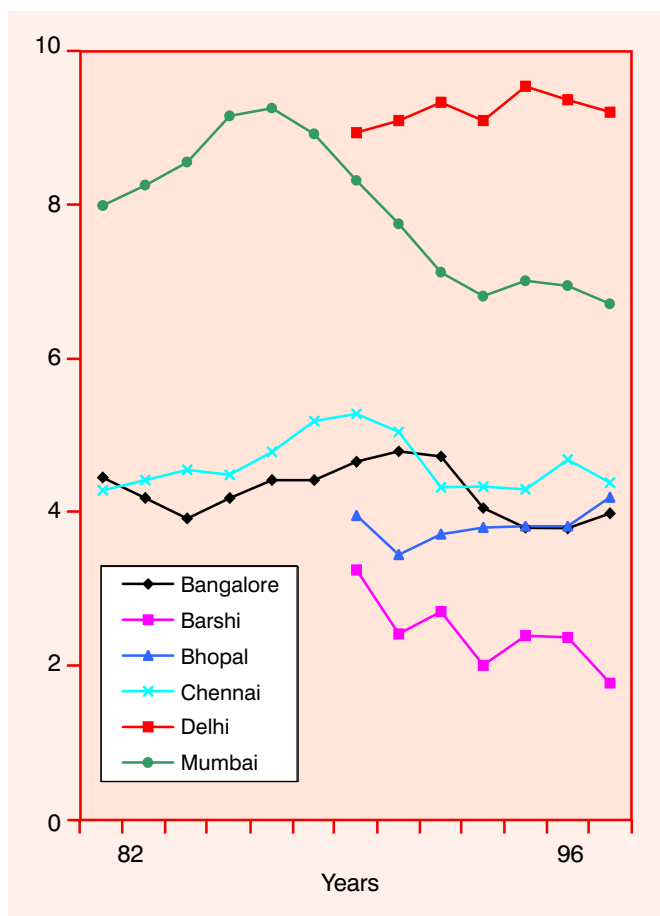
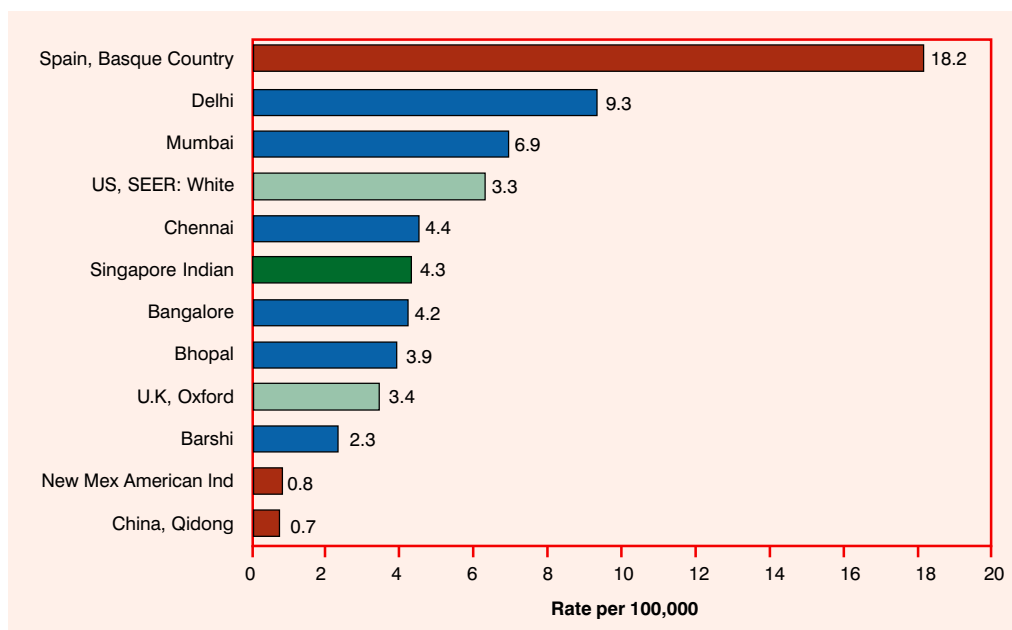


Fig. 4.12 (c) : International Comparisons - AAR



LUNG (ICD-9: 162)

Numbers and Incidence

Registry	MALES				FEMALES				M:F Ratio
	No.	%	R	AAR	No.	%	R	AAR	
Bangalore	718	7.0	3	7.4	165	1.4	14	1.9	4.4
Barshi	21	3.3	9	1.6	8	1.0	12	0.6	2.6
Bhopal	302	11.9	1	13.1	54	2.4	6	2.6	5.6
Chennai	1190	10.5	2	11.2	240	2.0	8	2.4	5.0
Delhi	2463	9.4	1	12.9	478	1.9	10	2.8	5.2
Mumbai	2726	9.4	1	12.0	692	2.6	6	3.4	3.9

Cancer of the lung is the leading site of cancer among males in Bhopal, Delhi and Mumbai and the second and third leading site in Chennai and Bangalore respectively. In females also, except in Bangalore, all the other urban registries have shown this site of cancer to be one of ten leading sites. The male female ratio is around 4-5 in the urban registries.

Age Distribution - Females (Fig. 4.13 (a))

Cases of lung cancer, have been recorded by registries even in the young - 20-24 age group, and the peak age specific rates are seen in the seventh and eighth decades.

Time Trends - Females (Fig. 4.13 (b))

Trends in lung cancer especially in women in Mumbai and Bhopal show an upward trend.

Histological Type

Squamous cell carcinomas or Carcinoma – not otherwise specified account for the vast majority of lung cancers. The proportion of adenocarcinomas varied 12-22% in males and 22-35% among females. Small cell carcinomas constituted 7-15% of lung cancers in males and 2-6% in females.

International Comparisons - Females (Fig. 4.13 (c))

The highest age adjusted incidence rate in men is seen in Blacks in New Orleans in USA with an AAR of 110.8 and in Maori women of New Zealand (AAR=72.9). Indians in Singapore of either sex have AAR comparable with that of the Indian registries in Bhopal, Delhi and Mumbai.

Comment

Chennai registry has reported a five-year relative survival of 7.5% (both sexes combined) (Shanta *et al*, 1998).

LUNG (ICD-9: 162) - FEMALES

Fig. 4.13

Fig. 4.13 (a) : Age Specific Incidence Rate

Fig. 4.13 (b) : Trends in AAR

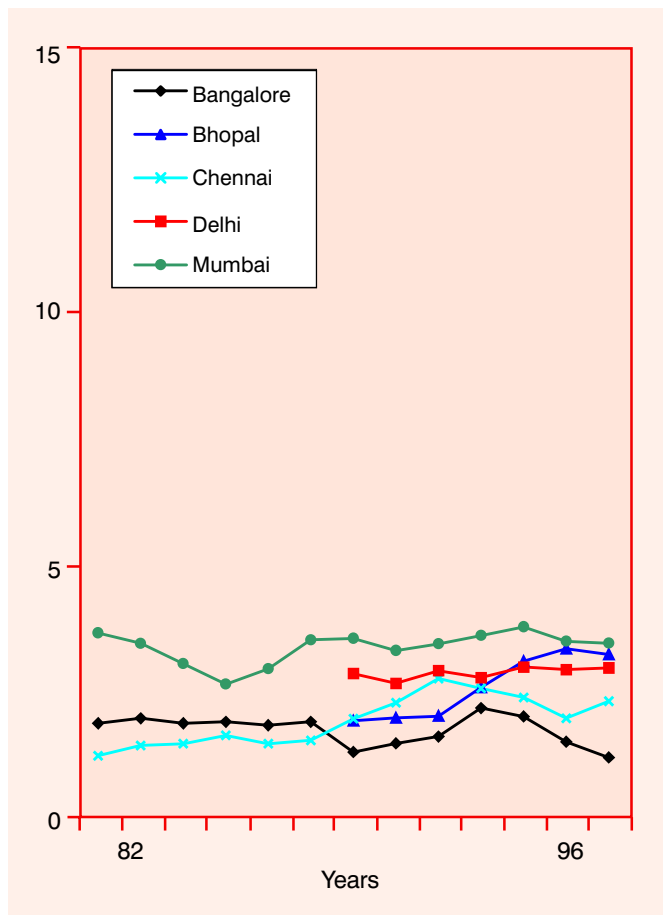
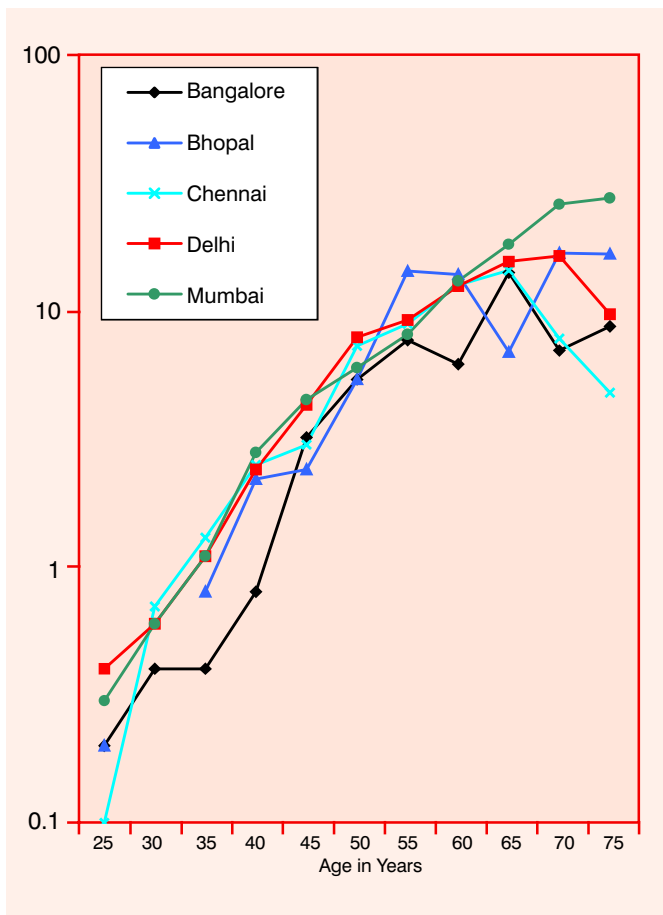
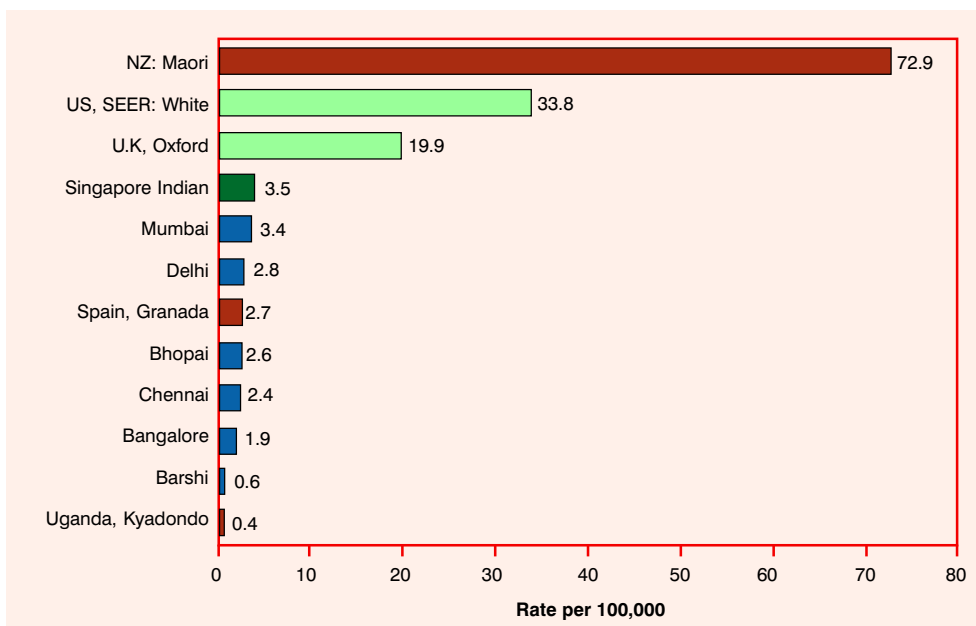


Fig. 4.13 (c) : International Comparisons - AAR



FEMALE BREAST (ICD-9: 174)

Numbers and Incidence

Registry	No.	%	R	AAR
Bangalore	2186	18.6	2	22.1
Barshi	116	15.1	2	8.8
Bhopal	500	22.2	2	19.9
Chennai	2359	19.1	2	21.6
Delhi	5511	21.3	1	28.1
Mumbai	6688	24.7	1	28.6

Cancer of breast was the number one cancer in females in Delhi and Mumbai, that have almost identical rates, while it was the second most common cancer in the other registries.

Age Distribution (Fig. 4.14 (a))

Incidence rates begin to rise in the early thirties in all registries and reach a peak in the 50-64 age group.

Histological Type

In all the registries over 80% of cases of cancer of the breast were diagnosed as infiltrating duct carcinomas. An Inter-registry panel of pathologists under the NCRP looked into the importance of histological parameters in prognosis and found that besides clinical extent of disease, vascular invasion and involvement of nipple/areola were the most important factors that significantly influenced survival.

Time Trends (Fig. 4.14 (b))

A tendency of breast cancer to rise over time is observed especially in Mumbai and also to some extent in Chennai and Bangalore.

International Comparisons (Fig. 4.14 (c))

Globally this is the most common malignancy among women. The AAR among Europeans in Harare, Zimbabwe and non-Hispanic whites in Los Angeles are over 100. The lowest incidence of breast cancer is seen in Kanghwa in Korea. An urban-rural gradient is observed in several European countries.

Comment

The reported five-year relative survival in the registries is as follows: Bangalore: 46.8%; Chennai: 49.5%; Mumbai 55.1% (Nandakumar *et al* 1998; Shanta *et al* 1998; Yeole *et al* 1998). The rising trend is important in terms of undertaking measures towards control.

FEMALE BREAST (ICD-9: 174)

Figure 4.14

Fig. 4.14 (a) : Age Specific Incidence Rate

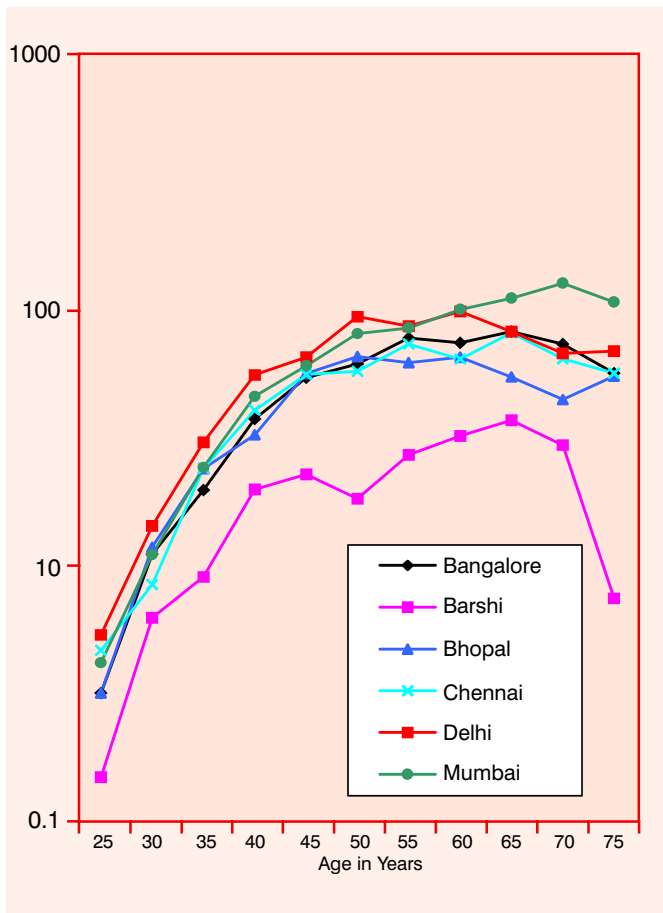


Fig. 4.14 (b) : Trends in AAR

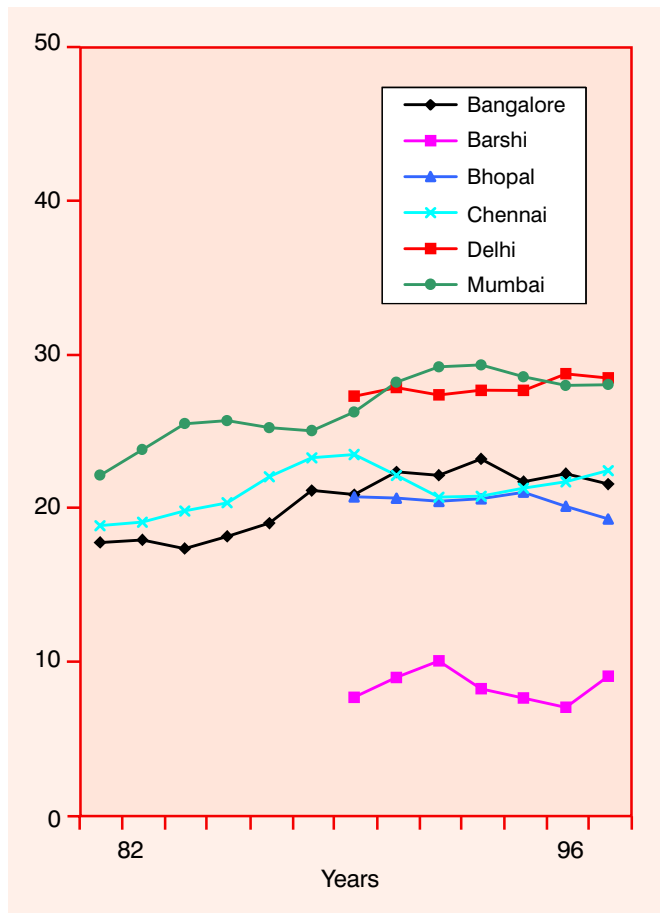
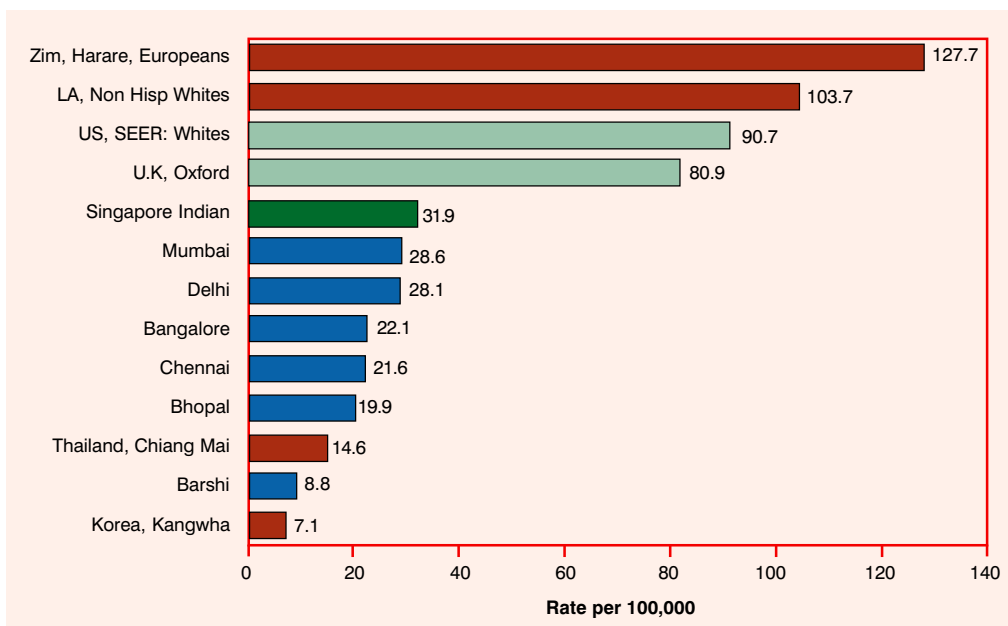


Fig. 4.14 (c) : International Comparisons - AAR



CERVIX (ICD-9: 180)

Numbers and Incidence

Registry	No.	%	R	AAR
Bangalore	2523	21.5	1	26.1
Barshi	388	50.7	1	29.3
Bhopal	537	23.9	1	21.7
Chennai	3320	26.9	1	30.7
Delhi	5153	19.9	2	26.6
Mumbai	4125	15.2	2	17.2

Cancer of cervix is the number one cancer in females in Bangalore, Barshi, Bhopal and Chennai. While over 50% of cancers in females in Barshi were cancers of the cervix, Chennai had the highest AAR of 30.7 per 100,000.

Age Distribution (Fig. 4.15 (a))

Incidence rates begin to rise in the early twenties in all registries and reach a peak in the 50-54 age group and only slowly thereafter.

Time Trends (Fig. 4.15 (b))

The graph gives the time trends in AAR of this site of cancer since 1980s. An overall decline in the incidence rate was observed in all registries.

Histological Type

In all the registries over 90% of cases of cancer of the cervix were squamous cell carcinomas. Adenocarcinomas constituted 2-4% of all cervical cancers.

International Comparisons (Fig. 4.15 (c))

The highest AAR of cancer cervix was seen in Africans in Harare, Zimbabwe, and in Trujillo, Peru. The AAR seen in the registries in India rank on the higher side and is above that seen in developed countries though the overall AAR of all sites of cancer in females is lower than these countries. This is the second most common cancer in women in the world and accounts for 12% of all female cancers, with 80% of the cancers occurring in the developing countries.

Comment

The reported five-year relative survival in the registries is as follows: Bangalore: 40.4%; Barshi: 33.3%; Chennai: 60.0%; Mumbai 50.7% (Nandakumar *et al* 1998; Jayant *et al* 1998; Shanta *et al* 1998; Yeole *et al* 1998). The decreasing trend has to be carefully evaluated, especially because Pap smear screening is not widely practiced in the registration areas.

CERVIX (ICD-9: 180)

Figure 4.15

Fig. 4.15 (a) : Age Specific Incidence Rate

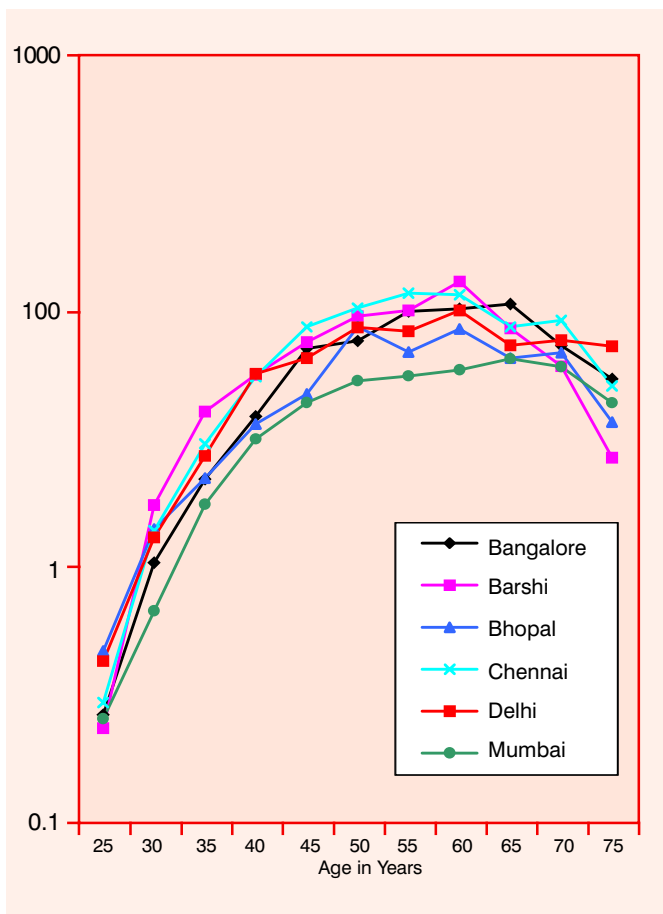


Fig. 4.15 (b) : Trends in AAR

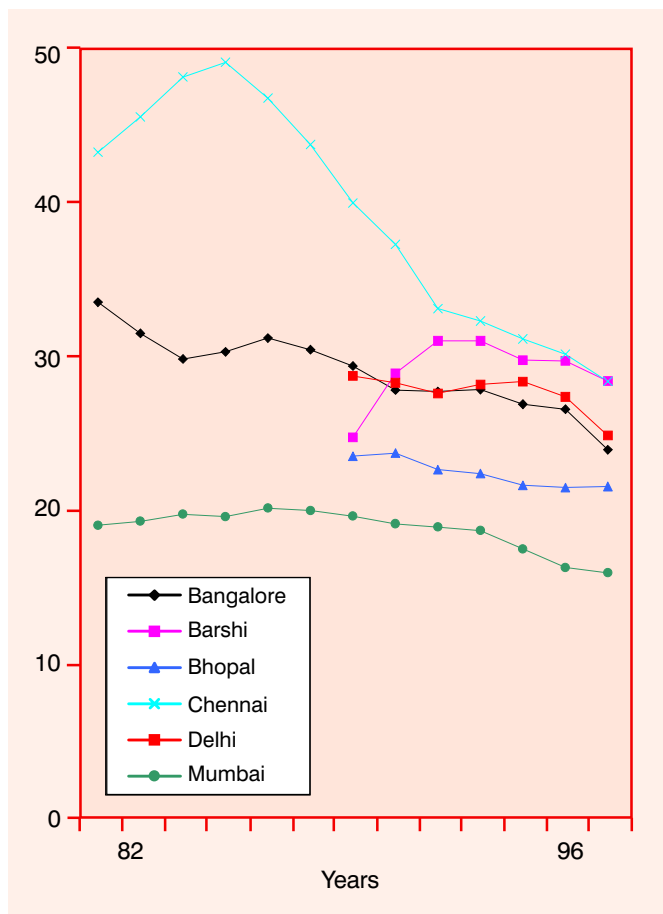
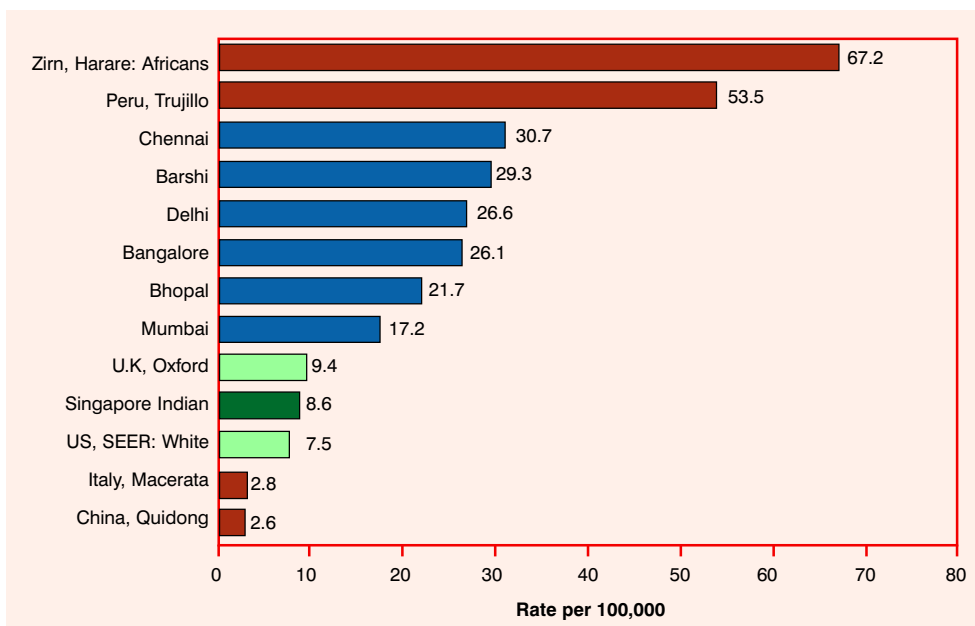


Fig. 4.15 (c) : International Comparisons - AAR



OVARY (ICD-9: 183)

Numbers and Incidence

Registry	No.	%	R	AAR
Bangalore	512	4.4	5	5.0
Barshi	17	2.2	4	1.3
Bhopal	147	6.5	3	5.6
Chennai	613	5.0	5	5.5
Delhi	1636	6.3	3	8.3
Mumbai	1746	6.4	3	7.3

Cancer of the ovary is an important leading site of cancer constituting around 5% of cancers in women. Among the registries, Delhi has the highest age adjusted incidence rate of 8.3.

Age Distribution (Fig. 4.16 (a))

Cancer of the ovary also occurs in children though not as frequently as that seen in adults. The age specific rates are dependent on histologic type of ovarian tumour.

Time Trends (Fig. 4.16 (b))

There is a statistically significant rise in the occurrence of ovarian cancer over the years in the registries at Delhi and Mumbai and also in Bangalore.

Histological Type

Cystadenocarcinomas were the most common, though no specific sub-type was predominant.

International Comparisons (Fig. 4.16 (c))

Compared to several other anatomical sites the range of geographical variation in AAR of ovarian cancer is small. The highest AAR of cancer ovary is seen in the Yukon province of Canada with a rate of 19.9. The rates in UK, Oxford and US, SEER whites are only marginally higher than that seen in Delhi which has a higher rate than the Indian population in Singapore.

Comment

Ovarian cancer is a moderately frequent cancer that represents the most frequent cause of death from gynaecologic malignancy in the western world (Muir, 1995). In a case control investigation in Bangalore, tubectomy as a method of family planning reduced the risk of development of ovarian cancer (Nandakumar *et al*, 1995).

OVARY (ICD-9: 183)

Figure 4.16

Fig. 4.16 (a) : Age Specific Incidence Rate

Fig. 4.16 (b) : Trends in AAR

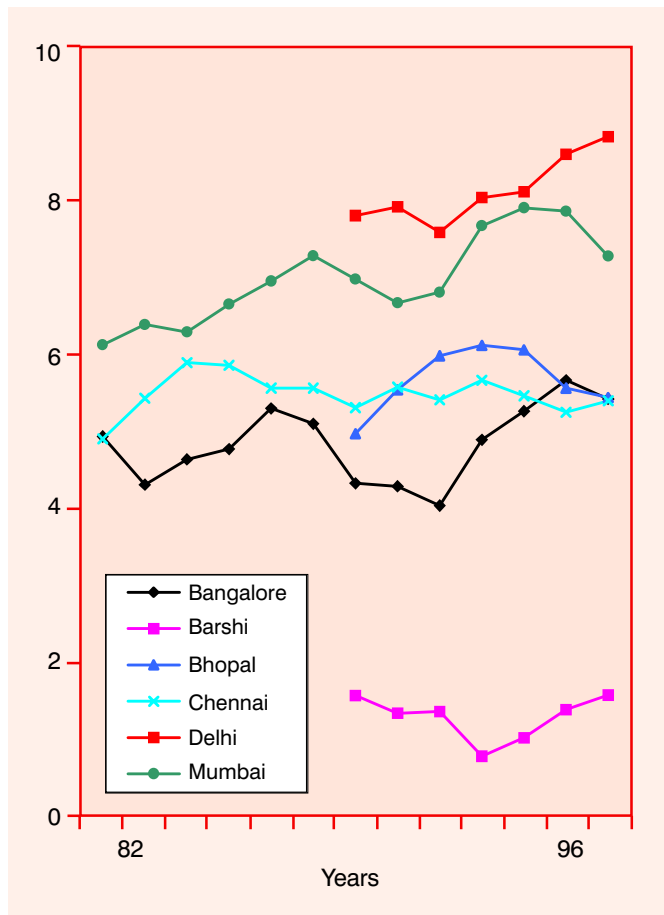
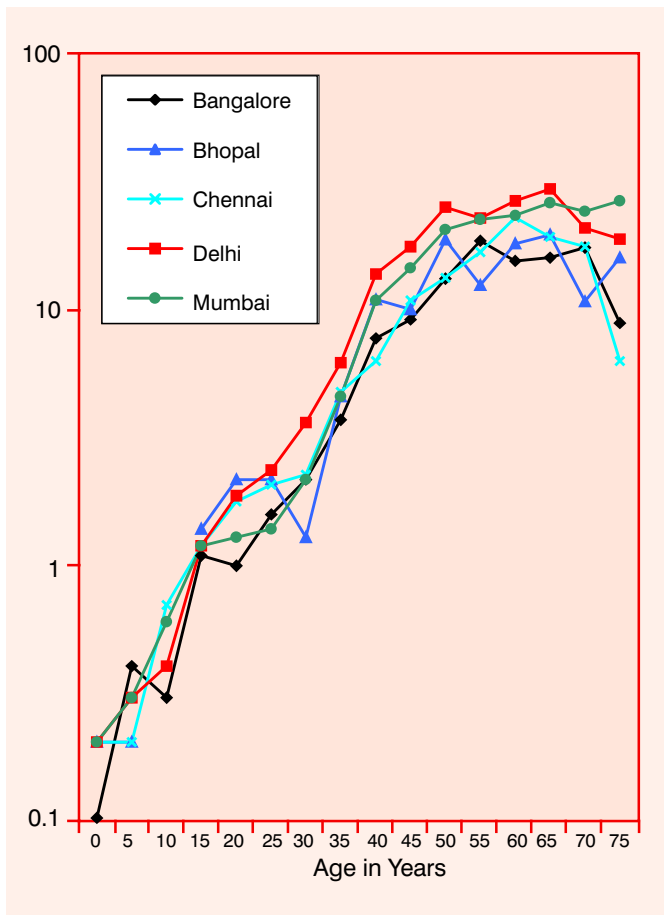
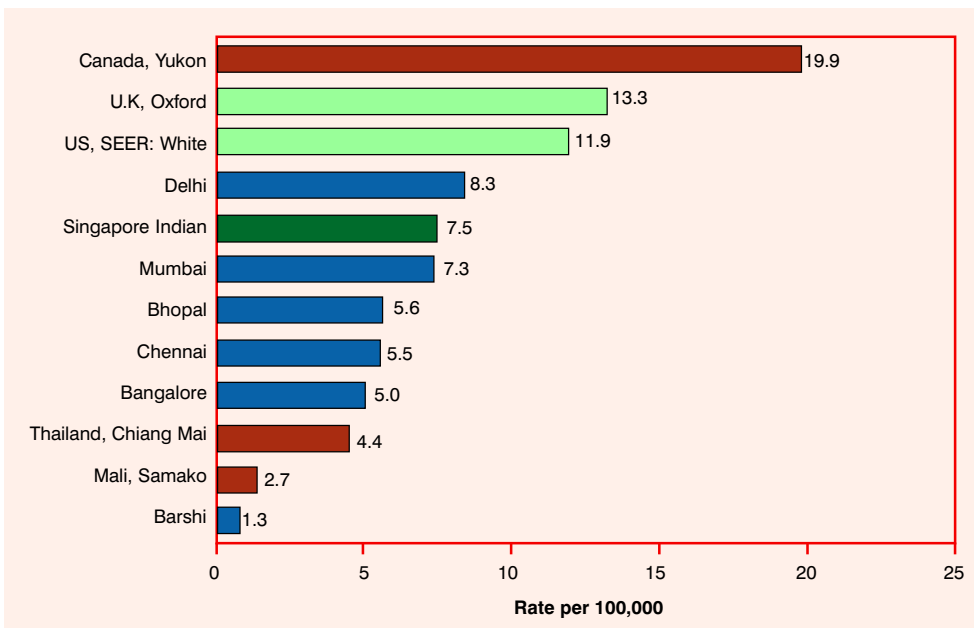


Fig. 4.16 (c) : International Comparisons - AAR



PROSTATE (ICD-9: 185)

Numbers and Incidence

Registry	No.	%	R	AAR
Bangalore	388	3.8	7	4.3
Barshi	20	3.1	11	1.5
Bhopal	106	4.2	6	5.1
Chennai	347	3.1	9	3.8
Delhi	1040	4.0	8	6.5
Mumbai	1325	4.6	8	7.1

Cancer of the prostate is one of ten leading sites of cancer in males in all the urban registries and constitutes about 4% of all cancers in that sex. Among the registries, Mumbai has the highest AAR of 7.1.

Age Distribution (Fig. 4.17 (a))

As elsewhere, cancer of the prostate is uncommon before 50 years of age and the peak age specific rate is seen in the 75+ age group. It is a frequent cancer of older men.

Time Trends (Fig. 4.17 (b))

There appears to be a rise in the occurrence of cancer of the prostate in the registries in Chennai, Delhi and Mumbai.

Histological Type

The majority of prostate cancers are adenocarcinomas.

International Comparisons (Fig. 4.17 (c))

This is one of the few sites of cancer where the difference in incidence rates between that seen in India and the west is enormous.

Comment

The rates in India are less than one-tenth the rates seen in the United States and about one fifth that in UK. However, one needs to closely observe the change in trend in the forthcoming years.

PROSTATE (ICD-9: 185)

Figure 4.17

Fig. 4.17 (a) : Age Specific Incidence Rate

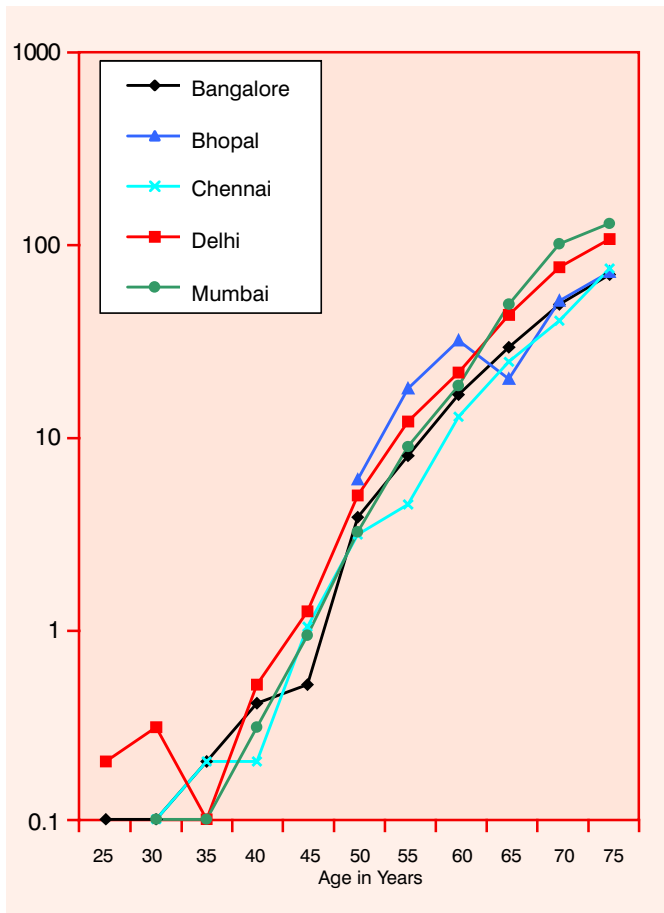


Fig. 4.17 (b) : Trends in AAR

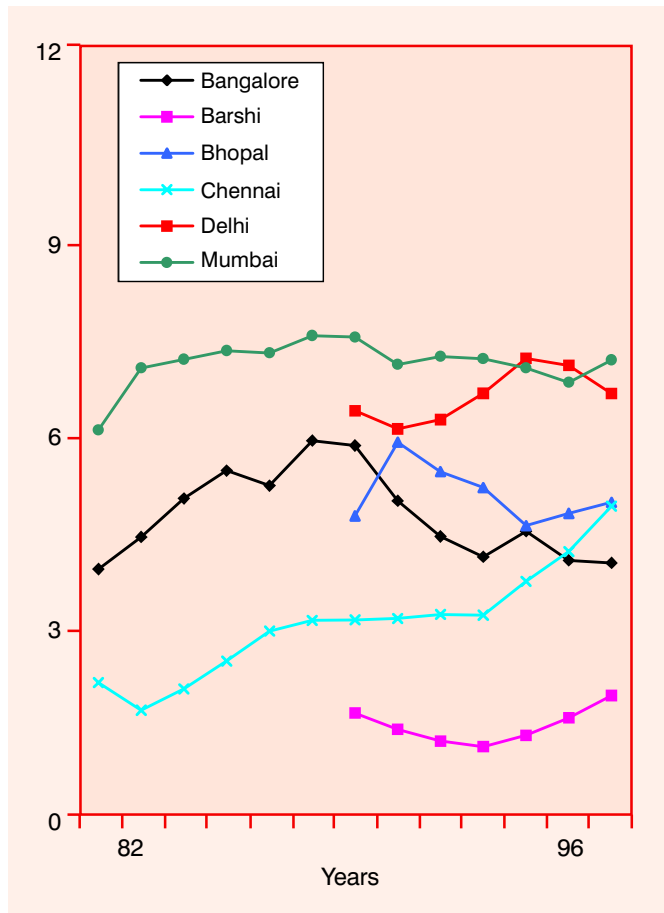
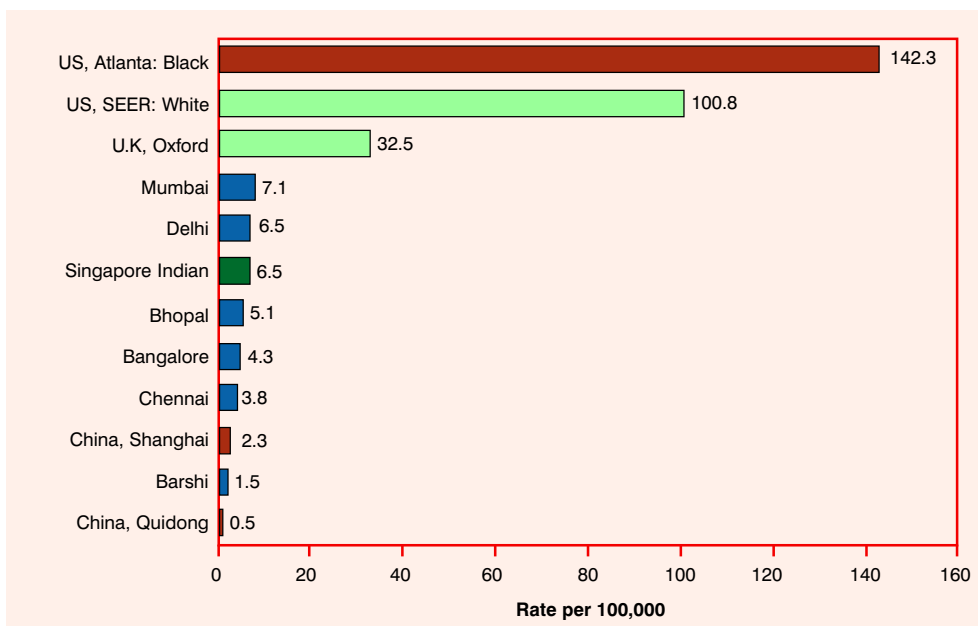


Fig. 4.17 (c) : International Comparisons - AAR



BRAIN – NS (ICD-9: 191-192)

Numbers and Incidence

Registry	MALES				FEMALES				M:F Ratio
	No.	%	R	AAR	No.	%	R	AAR	
Bangalore	356	3.5	8	2.8	198	1.7	12	1.7	1.8
Barshi	8	1.3	>15	0.5	4	0.5	>15	0.3	2.0
Bhopal	103	4.1	7	3.1	54	2.4	7	1.7	1.9
Chennai	327	2.9	10	2.6	173	1.4	14	1.5	1.9
Delhi	1269	4.8	3	4.6	724	2.8	6	3.2	1.8
Mumbai	1100	3.8	10	3.3	634	2.3	9	2.3	1.7

Among males, cancer of the brain (and nervous system) is one of ten leading sites of cancer in all urban registries. It is also among the first ten leading sites in females in Bhopal, Delhi and Mumbai. The male female ratio appears fairly uniform at just about or below 2 in all registries.

Age Distribution - Males (Fig. 4.18 (a))

This is one of few sites of cancer that is fairly common in all age groups – childhood, young adults, truncated age group and in the elderly, though there could be some relatively higher rates in the older age group.

Time Trends - Males (Fig. 4.18 (b))

There is a significant increase in the rates of these cancers over the years in both sexes in the registries at Delhi and Mumbai and to a lesser extent in Chennai.

Histological Type

Diffusely infiltrating astrocytomas are the most frequent intra-cranial neoplasms accounting for over 60% of all primary brain tumours (Kleihues and Cavenee, 2000) and a similar pattern was seen in the registries here in both sexes. Medulloblastoma constituted 6-10% of the brain tumours.

International Comparisons - Males (Fig. 4.18 (c))

Yukon in Canada has the highest AAR in males (11.6) and Trieste in Italy has shown the highest rate of 8.7 in females. The US, SEER and UK, Oxford rates are higher than those in the Indian registries but Indians in Singapore have lower rates than most registries in India.

BRAIN – NS (ICD-9: 191-192) - MALES

Figure 4.18

Fig. 4.18 (a) : Age Specific Incidence Rate

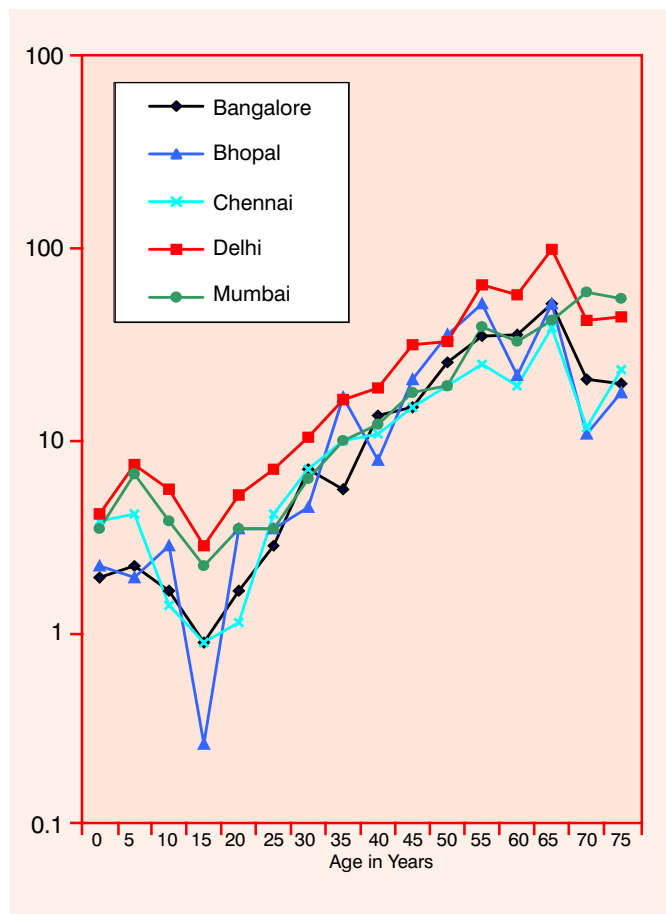


Fig. 4.18 (b) : Trends in AAR

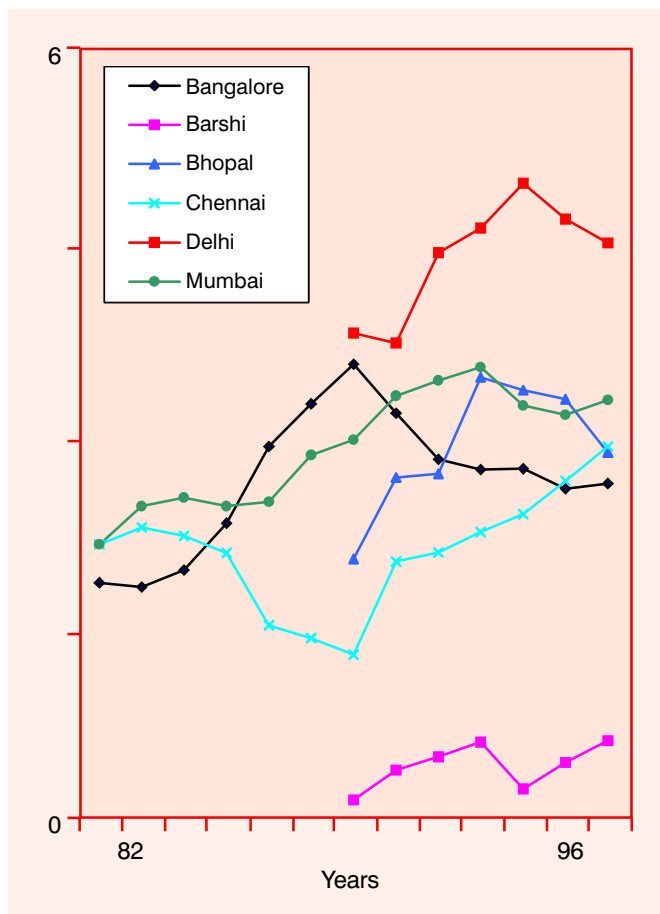
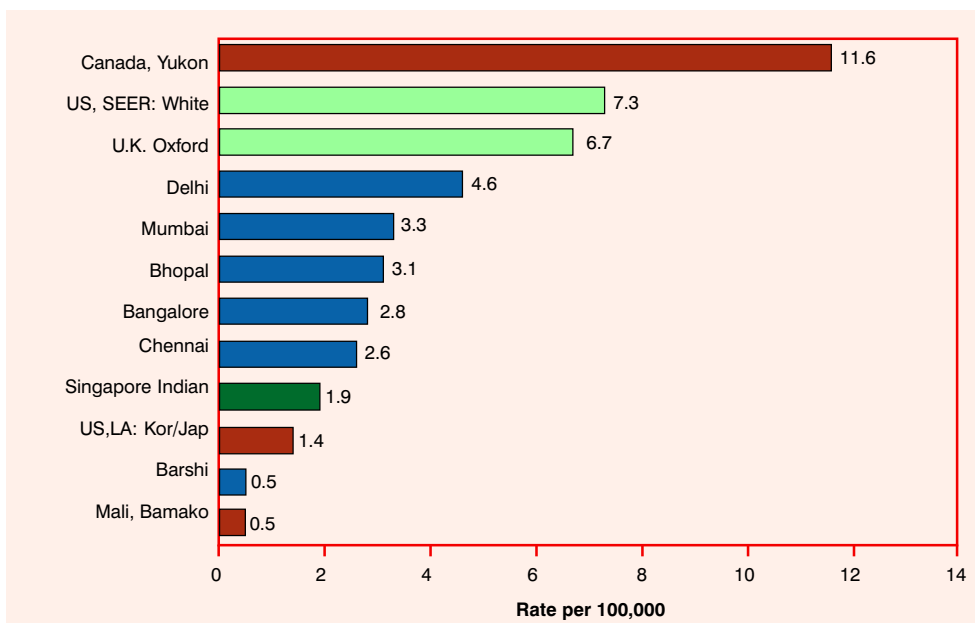


Fig. 4.18 (c) : International Comparisons - AAR



THYROID (ICD-9: 193) - FEMALES

Numbers and Incidence

Registry	No.	%	R	AAR	M:F Ratio
Bangalore	339	2.9	7	3.0	0.4
Barshi	6	0.8	>15	0.4	0.8
Bhopal	35	1.6	13	1.2	0.6
Chennai	189	1.5	12	1.6	0.5
Delhi	447	1.7	11	2.0	0.5
Mumbai	515	1.9	14	1.9	0.4

This is a relatively more common and important site of cancer in females. Except in Bangalore cancer of the thyroid is not one of the ten leading sites of cancer in females. It is one of the very few cancers of the common anatomical sites that is just half or even less common among males compared to females. Among the registries Bangalore has the highest AAR of 3.0.

Age Distribution (Fig. 4.19 (a))

Cancer of the thyroid is seen in young women as well as in older and elder adults.

Time Trends (Fig. 4.19 (b))

There seems to be some fluctuation in the rates of thyroid cancer during the years.

Histological Type

Papillary carcinomas constituted 60% of thyroid cancers in Bangalore and Chennai, whereas this was around 40% in other registries. Follicular carcinomas accounted for 15% of thyroid cancers in Bangalore and Bhopal; in the other three urban registries this varied from 25-34%. Medullary carcinomas formed 5-6% of the cancers in Bangalore, Delhi and Mumbai, but this was 1% in Chennai and 12% in Bhopal.

International Comparisons (Fig. 4.19 (c))

Phillipinos in Hawaii, USA have the highest AAR of 25.5. The rates in India are much lower but comparable to the rates of the Indian population in Singapore or those in UK, Oxford.

Comment

Worldwide cancers of the thyroid constitute 1-2% of cancers in females. Incidence rates are approximately three times higher in females than in males, the female excess varying with age being greater in the young (Muir, 1995).

THYROID (ICD-9: 193) - FEMALES

Figure 4.19

Fig. 4.19 (a) : Age Specific Incidence Rate

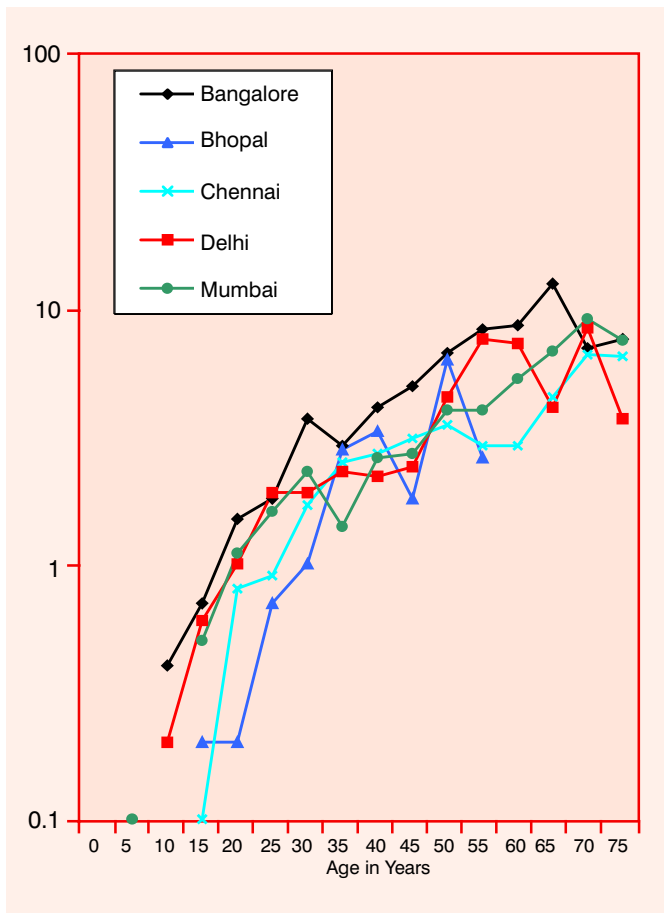


Fig. 4.19 (b) : Trends in AAR

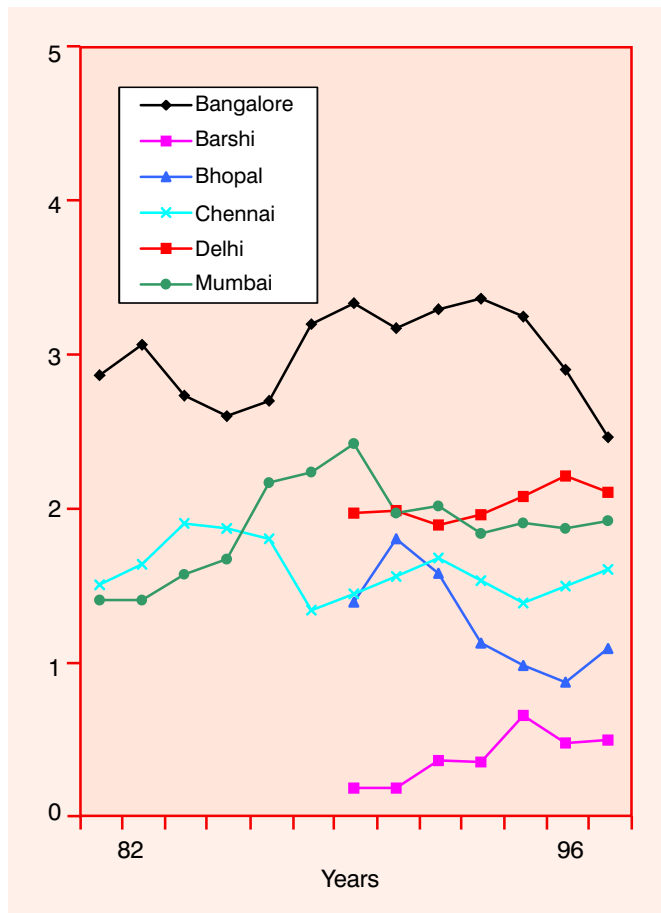
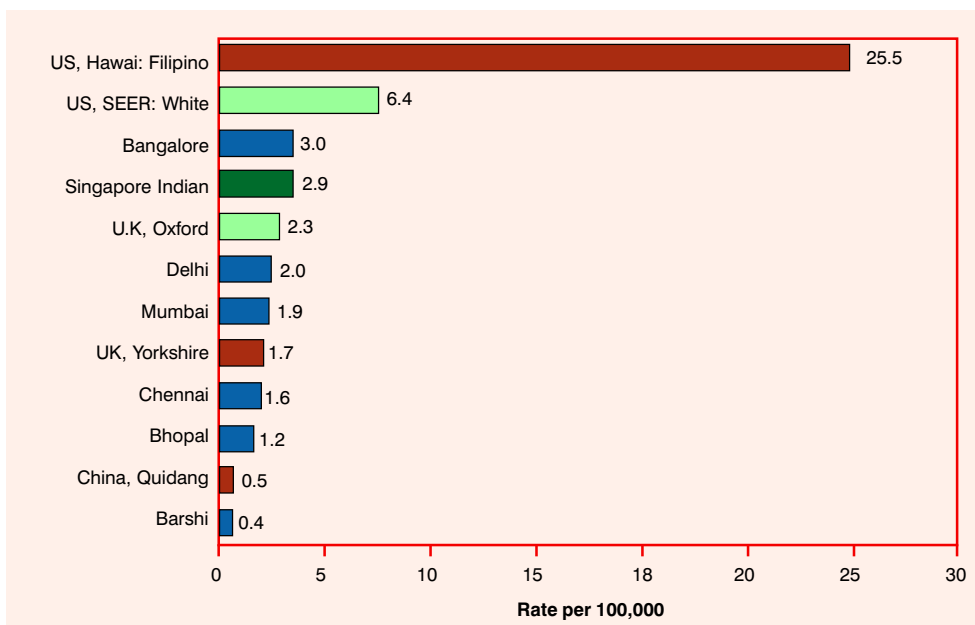


Fig. 4.19 (c) : International Comparisons - AAR



NON-HODGKIN'S LYMPHOMA (ICD-9: 200+202)

Numbers and Incidence

Registry	MALES				FEMALES				M:F Ratio
	No.	%	R	AAR	No.	%	R	AAR	
Bangalore	392	3.8	6	3.5	225	1.9	10	2.4	1.7
Barshi	12	1.9	>15	0.8	8	1.0	14	0.6	1.5
Bhopal	63	2.5	13	2.0	32	1.4	15	1.0	2.0
Chennai	423	3.7	8	3.4	238	1.9	9	2.0	1.8
Delhi	1229	4.7	5	5.1	597	2.3	7	3.1	2.1
Mumbai	1231	4.3	9	4.3	660	2.4	8	2.9	1.9

In all urban registries, except Bhopal, non-Hodgkin's Lymphoma is one of ten leading sites of cancer in either sex. The male female ratio is slightly less than two.

Age Distribution - Males (Fig. 4.20 (a))

This is another cancer whose occurrence is not very dependent on age and is seen in any age group though it tends to be more common in older ages.

Time Trends - Males (Fig. 4.20 (b))

There seems to be tendency for this cancer to rise in Mumbai and Delhi.

Histological Type

Since there are major changes in classification with several differing schools of thought, it is rather difficult to classify this group and observe proportions in a meaningful way.

International Comparisons - Males (Fig. 4.20 (c))

Western countries have a higher rate than those registries in India wherein the rates are comparable to the Indian population in Singapore or with the lower rates around the world.

Comment

The reported five-year relative survival (both sexes combined) in the registries is as follows: Bangalore: 34.5%; Chennai: 21.1%; (Nandakumar *et al* 1998; Shanta *et al* 1998). Non-Hodgkin's Lymphoma along with Hodgkin's disease constitute an important group of malignancies in our country not only because of their numbers when combined, but more because of the challenges the lymphomas have posed in terms of aetiology and epidemiology.

NON-HODGKIN'S LYMPHOMA (ICD-9: 200+202) - MALES

Figure 4.20

Fig. 4.20 (a) : Age Specific Incidence Rate

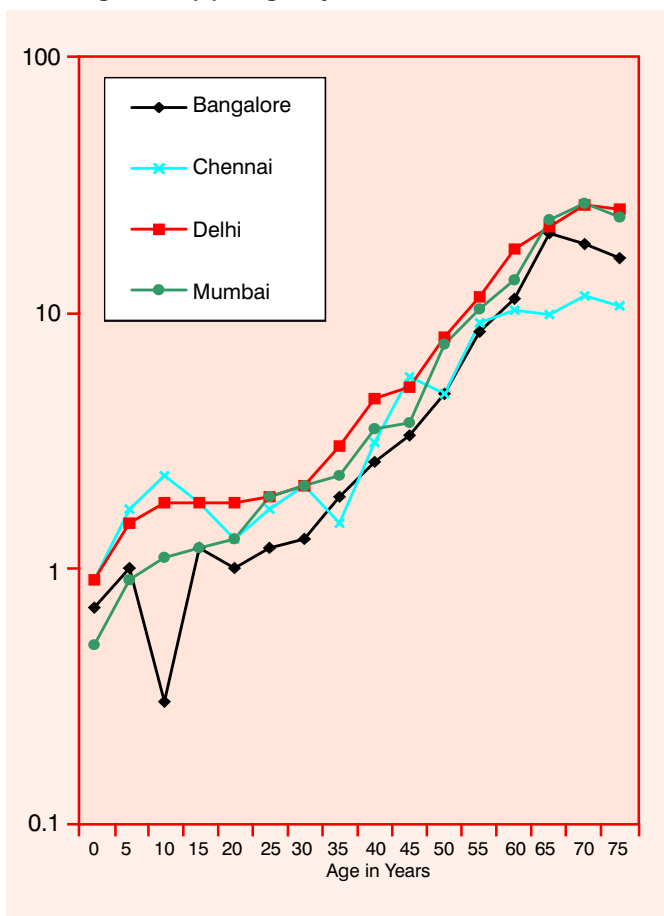


Fig. 4.20 (b) : Trends in AAR

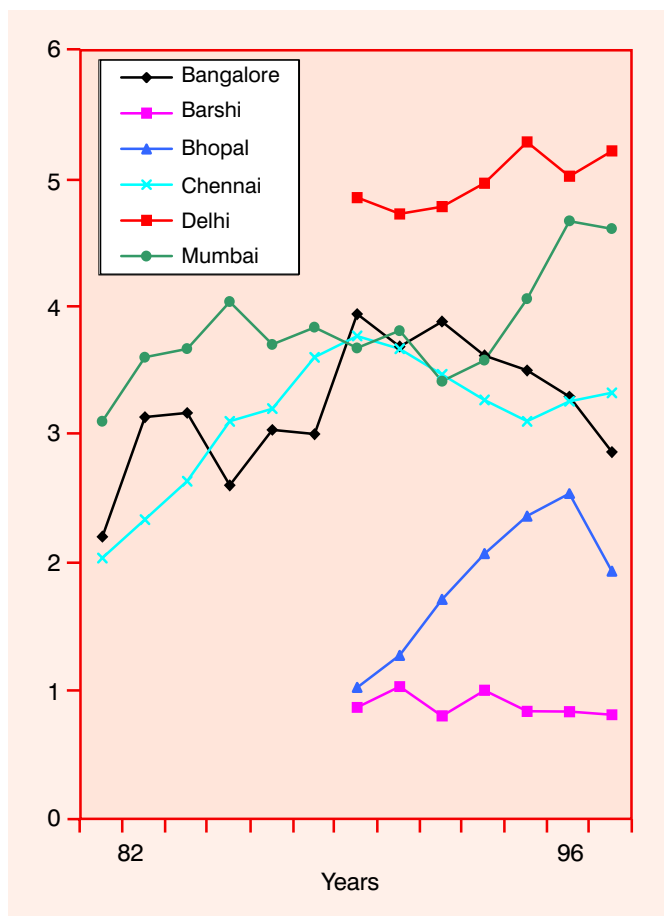
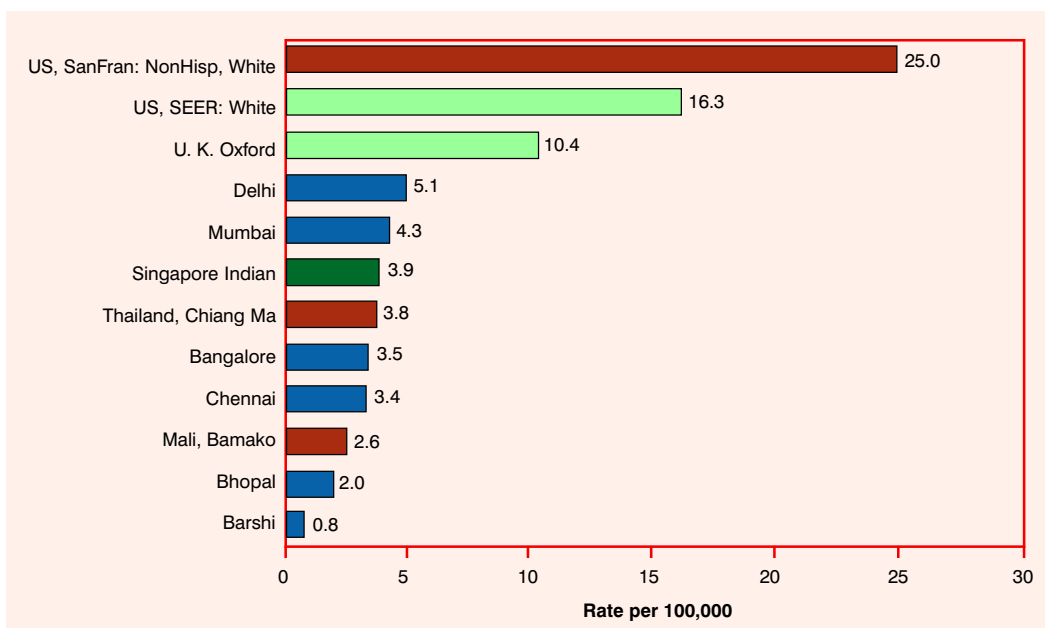


Fig. 4.20 (c) : International Comparisons - AAR



LYMPHOID LEUKAEMIAS (ICD-9: 204) - MALES

Numbers and Incidence

Registry	No.	%	R	AAR	M:F Ratio
Bangalore	163	1.6	>15	1.2	1.7
Barshi	18	2.8	13	1.0	2.3
Bhopal	51	2.0	>15	1.4	4.3
Chennai	224	2.0	>15	1.7	2.0
Delhi	704	2.7	12	2.3	2.2
Mumbai	585	2.0	>15	1.8	1.9

Though lymphoid leukaemias are not one of ten leading sites of cancer by themselves along with the malignant lymphomas they constitute an important entity in terms of aetiology and epidemiology. The male incidence varies from two to four fold that seen in females.

Age Distribution (Fig. 4.21 (a))

The graphs of age distribution are combined for both acute and chronic lymphatic leukaemia. Therefore, the age distribution is seen in the very young and very old.

Time Trends (Fig. 4.21 (b))

There appears to be an upward trend in the incidence of these leukaemias.

Histological Type

In males the relative proportion of acute lymphatic leukaemia varied from 72% in Bangalore to 96% in Chennai with corresponding proportions (28 and 4%) of chronic lymphatic leukaemia. Among females, in Barshi 100% of the cases were of the acute type and in other centres it varied from 73% in Bangalore to 90% in Chennai.

International Comparisons (Fig. 4.21 (c))

Yukon province in Canada has the highest incidence of lymphoid leukaemia in both males and females with females having a higher AAR of 11.1 than the 9.6 seen in males. The US, SEER and UK, Oxford rates are higher than that seen in the Indian registries.

Comment

The reported five-year relative survival (both sexes combined) in the registries is as follows: Bangalore: 30.7%; Chennai: 25.4%; (Nandakumar *et al* 1998; Shanta *et al* 1998). The introduction of immunophenotyping and molecular biological techniques has made definitions of these tumours more clear and that distinction between lymphoid leukaemias and lymphomas was largely artificial; it reflected patterns of spread in the individual patient rather than basic cellular or clinical differences (Fritz *et al*, 2000).

LYMPHOID LEUKAEMIAS (ICD-9: 204) - MALES

Figure 4.21

Fig. 4.21 (a) : Age Specific Incidence Rate

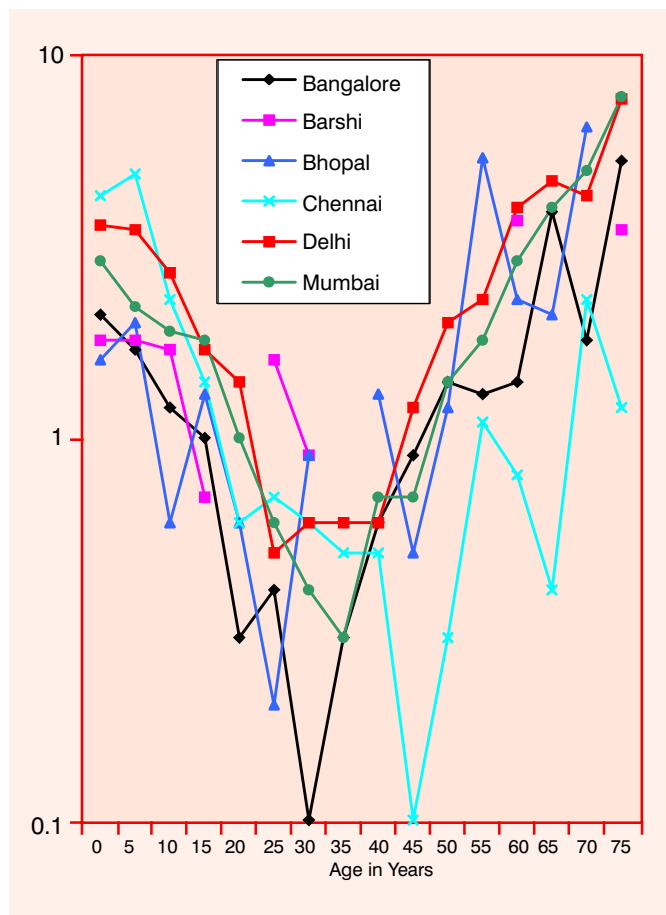


Fig. 4.21 (b) : Trends in AAR

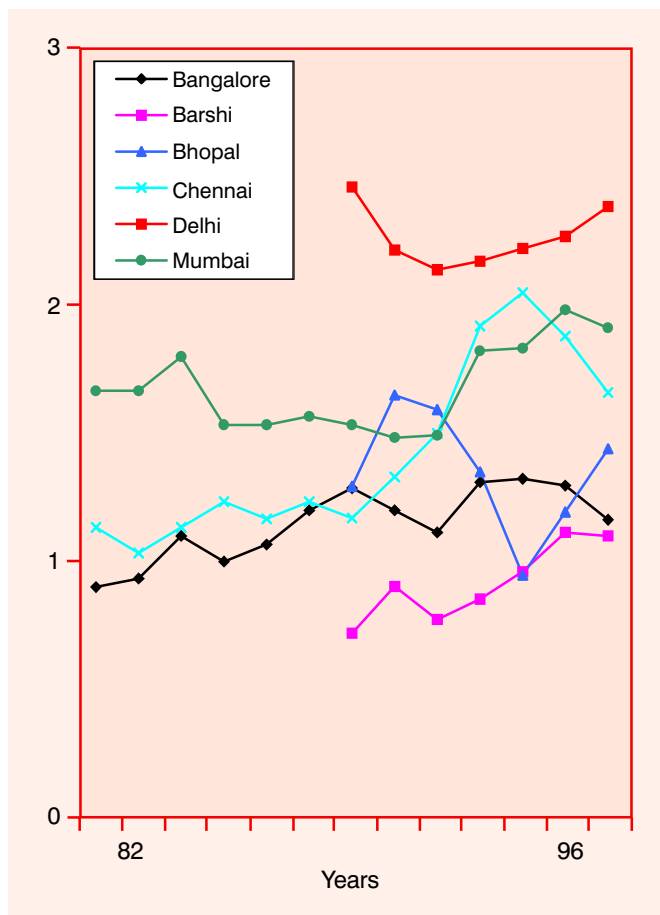
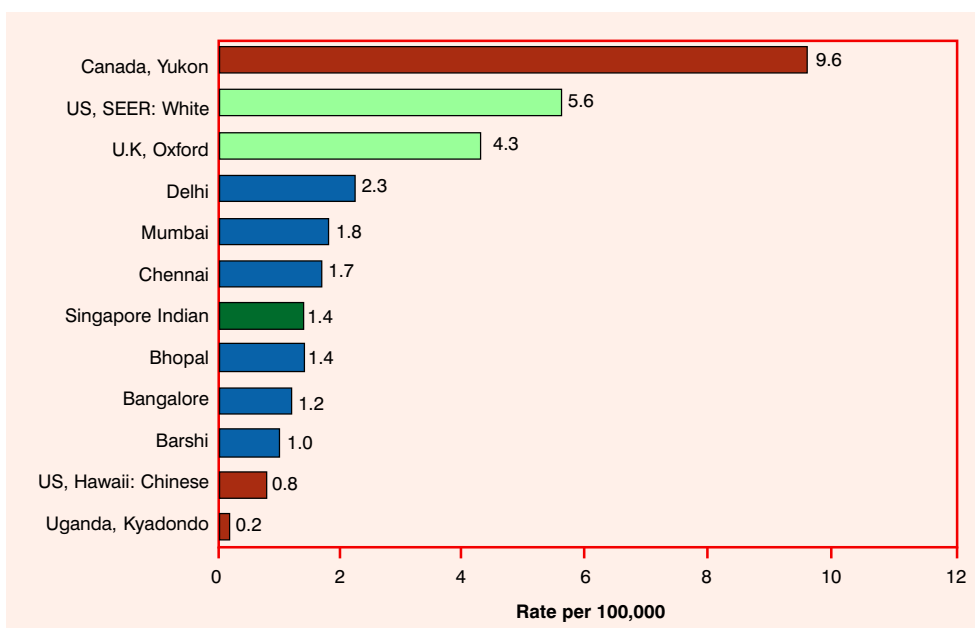


Fig. 4.21 (c) : International Comparisons - AAR



MYELOID LEUKAEMIAS (ICD-9: 205)

Numbers and Incidence

Registry	MALES				FEMALES				M:F Ratio
	No.	%	R	AAR	No.	%	R	AAR	
Bangalore	250	2.4	14	1.8	200	1.7	11	1.7	1.3
Barshi	21	3.3	10	1.4	10	1.3	9	0.7	2.1
Bhopal	72	2.8	10	1.8	42	1.9	10	1.4	1.7
Chennai	181	1.6	>15	1.4	150	1.2	>15	1.2	1.2
Delhi	694	2.7	13	2.3	482	1.9	9	1.9	1.4
Mumbai	665	2.3	>15	2.0	443	1.6	>15	1.6	1.5

Overall, the incidence of myeloid in comparison to lymphoid leukaemias is slightly higher in males but distinctly higher in females. Consequently the male female ratio is less than that of lymphoid leukaemias. In both males and females in Barshi and Bhopal and in Delhi Females myeloid leukaemias are one of ten leading sites of cancer.

Age Distribution - Males (Fig. 4.22 (a))

Both acute and chronic myeloid leukaemias are encountered in all age groups. Compared to the west, chronic myeloid leukaemia is not uncommon in children in India.

Time Trends - Males (Fig. 4.22 (b))

There appears to be an increase over time in the occurrence of these neoplasms.

Histological Type

Acute myeloid leukaemia constituted 38% and 32% of myeloid leukaemias in Bhopal males and females respectively. The corresponding proportion in the other registries varied from 43-60% except in males in Barshi where this was 70%. The remaining proportion was essentially chronic myeloid leukaemias with less than 5% of other types of myeloid leukaemia.

International Comparisons - Males (Fig. 4.22 (c))

The range of difference in the AAR both nationally and with those registries abroad is not very high. Indians in Singapore have lower rates among males in most of the urban Indian registries, while the female rates are higher.

Comment

The reported five-year relative survival (both sexes combined) in the registries is as follows: Bangalore: 21.5%; Chennai: 17.0%; (Nandakumar *et al* 1998; Shanta *et al* 1998).

MYELOID LEUKAEMIAS (ICD-9: 205) - MALES

Figure 4.22

Fig. 4.22 (a) : Age Specific Incidence Rate

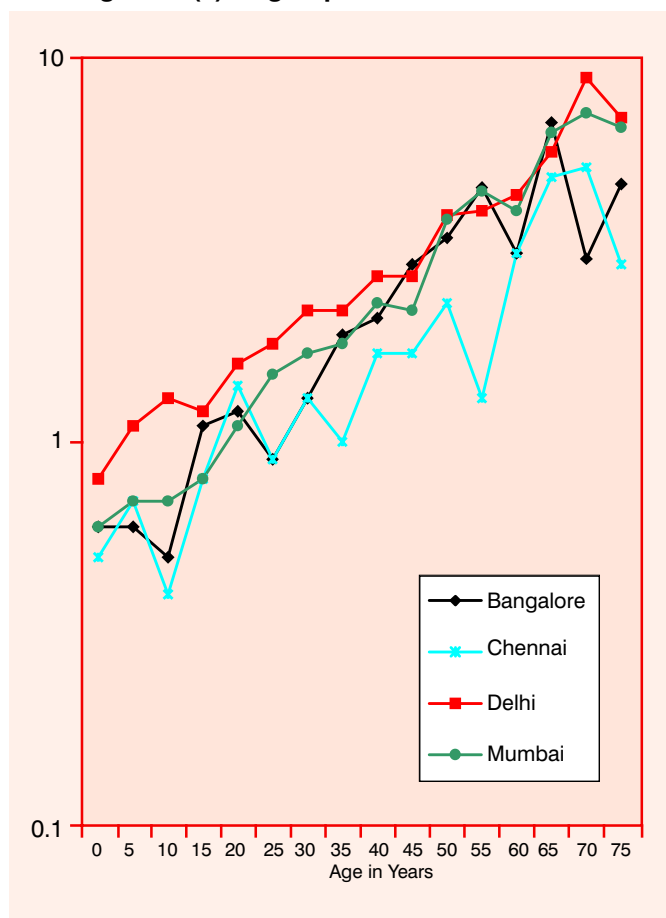


Fig. 4.22 (b) : Trends in AAR

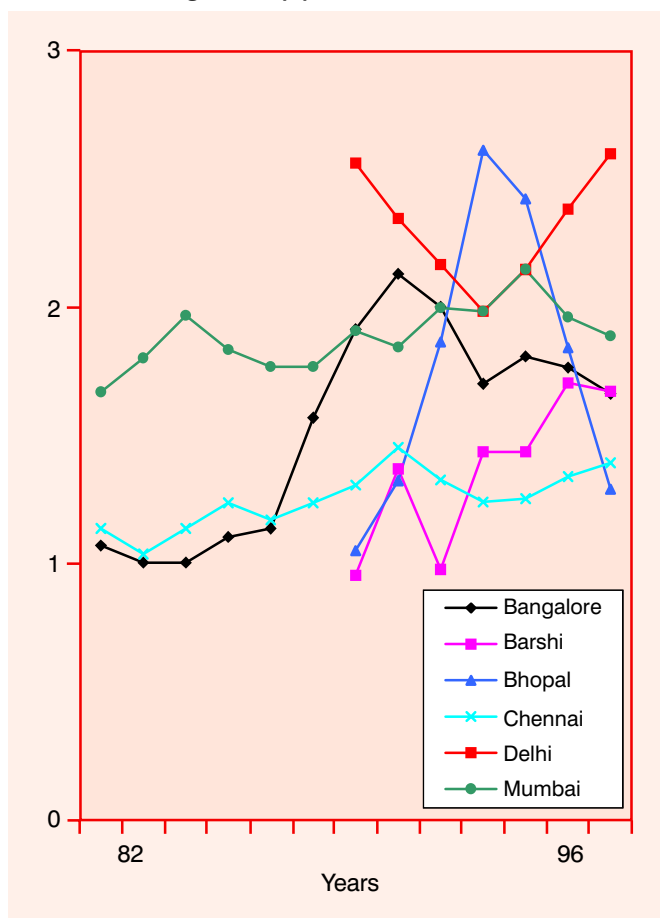
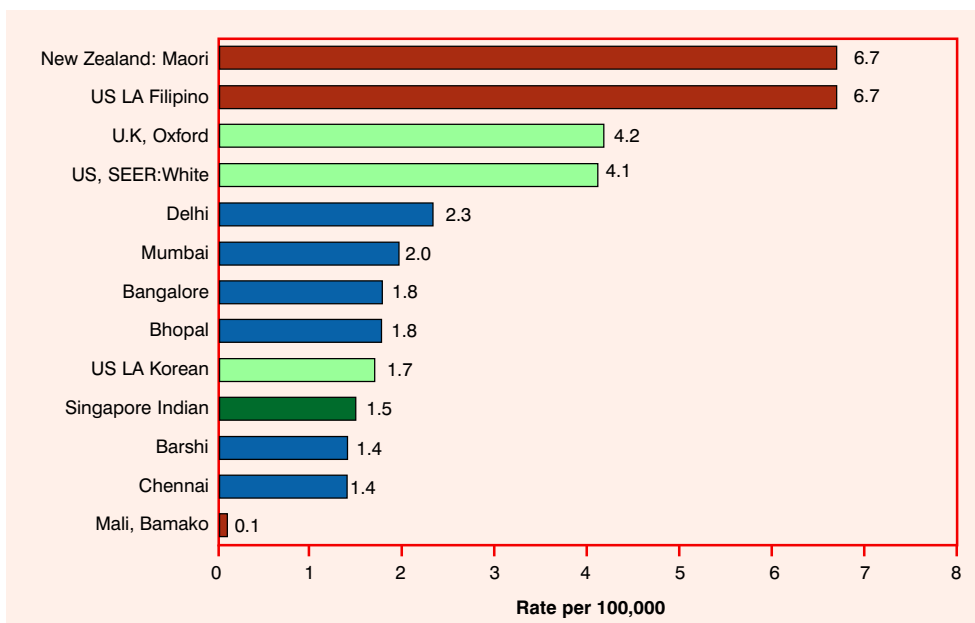


Fig. 4.22 (c) : International Comparisons - AAR



CANCER MORTALITY

Part of the data collection of the PBCRs involves visits to the municipal corporation units to collect information on reported cancer deaths. This includes visits to the vital statistics division as well. Registries also obtain information on cancer death through other means. These include post cards sent for follow-up or active follow-up done for survival studies, hospital and other institutional deaths etc. Chennai registry has taken up an important and novel method of following/tracing all deaths.

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/morbidity 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".

There are certain limitations in the collection of cancer mortality data. These include the system of registration of death and certification of the cause of death. Though, in the urban centres all deaths are generally registered, many times the required information is not completely available. This pertains to cause of death, and when cancer is mentioned as a cause, the anatomical site of cancer is not mentioned and when that is mentioned the morphologic type is not stated. Because of this, it appears difficult to have 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. Therefore, the differences between these and other registries (especially urban) are reflected in the data from these two registries.

The following table (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.

TABLE 5.1: Number of Incident and Mortality cases and Mortality - Incidence Percent (M/I%) (1990-1996).

Registry	MALES			FEMALES		
	Incidence	Mortality	M/I%	Incidence	Mortality	M/I%
Bangalore	10240	3130	30.6	11740	2769	23.6
Barshi	638	527	82.6	766	516	67.4
Bhopal	2539	886	34.9	2250	643	28.6
Chennai	11366	6680*	58.8	12355	5785*	46.8
Delhi	26218	7105	27.1	25861	5240	20.3
Mumbai	28953	14516	50.2	27091	12313	45.5

* includes 1899 and 1523 cases (in males and females respectively) of deaths of cancer patients where cancer is not mentioned as a cause of death.

Cancer mortality indicates deaths from cancer in a defined population during a specified time period. For this report all cancer deaths that have occurred from 1 January 1990 till 31 December 1996 are included. The date of diagnosis of the cancer in these cases may have been during the above period or prior to 1 January 1990. 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 5.2 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 (1990-1996).

Registry	MALES			FEMALES		
	CMR	AAMR	TMR	CMR	AAMR	TMR
Bangalore	19.0	30.3	48.4	19.1	29.4	55.4
Barshi	31.8	38.4	57.0	33.0	39.7	80.4
Bhopal	19.8	34.8	64.3	15.3	27.3	58.7
Chennai	46.3	62.1	114.5	43.0	55.7	119.6
Delhi	20.2	34.3	55.8	17.2	28.9	56.5
Mumbai	36.9	62.2	82.2	36.6	58.2	92.4

The number of matched deaths and number of 'Death Certificate Only' (DCO) cases and the total deaths for the period 1 January 1990 to 31 December 1996 is shown in the Table 5.3.

TABLE 5.3: Number and Proportion (%) of Matched Deaths (MD), Number of DCO's and Total Deaths (TD) (1990-1996)

Registry	MALES				FEMALES			
	MD	%	DCO's	TD	MD	%	DCO's	TD
Bangalore	1966	(62.8)	1164	3130	1709	(61.7)	1060	2769
Barshi	522	(99.1)	5	527	511	(99.0)	5	516
Bhopal	793	(89.5)	93	886	580	(90.2)	63	643
Chennai	6239	(93.4)	441	6680 *	5301	(91.7)	484	5785 *
Delhi	3769	(53.0)	3336	7105	2690	(51.3)	2550	5240
Mumbai	12471	(85.9)	2045	14516	10409	(84.5)	1904	12313

* includes 1899 and 1523 cases (in males and females respectively) of deaths of cancer patients where cancer is not mentioned as a cause of death.

The age specific mortality rates for the six registries are depicted in the figures 5.1 (a) and (b) for males and females respectively.

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

Fig. 5.1(a): Average Annual Age Specific Cancer Mortality: ALL SITES - MALES

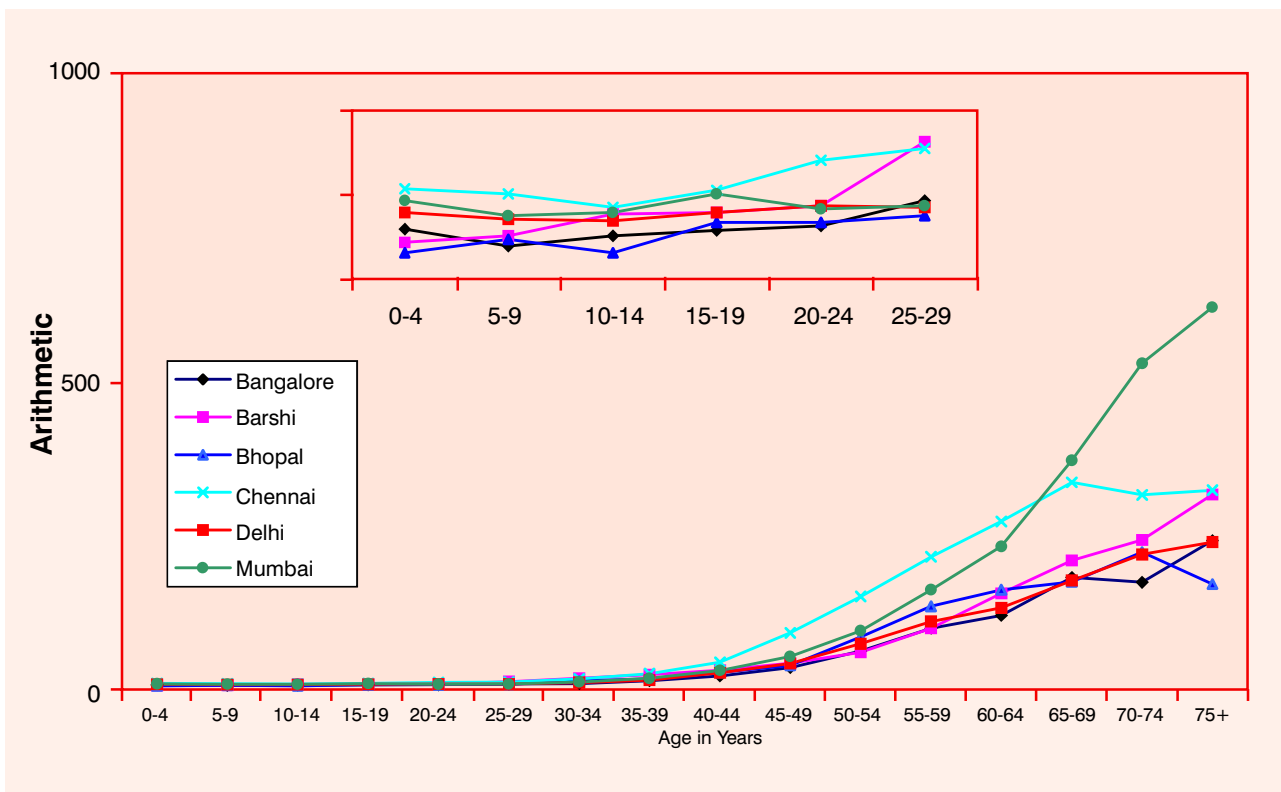
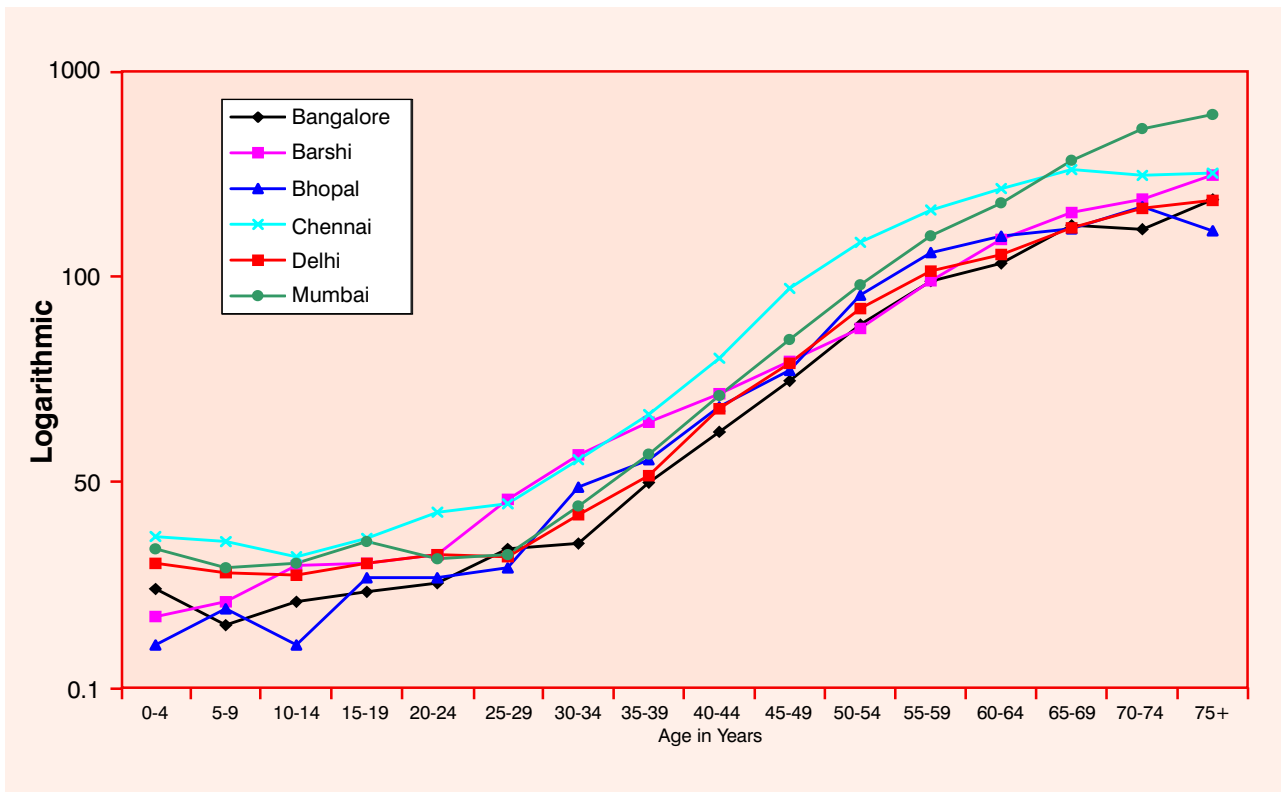


Fig. 5.1(b): Average Annual Age Specific Cancer Mortality: ALL SITES - FEMALES

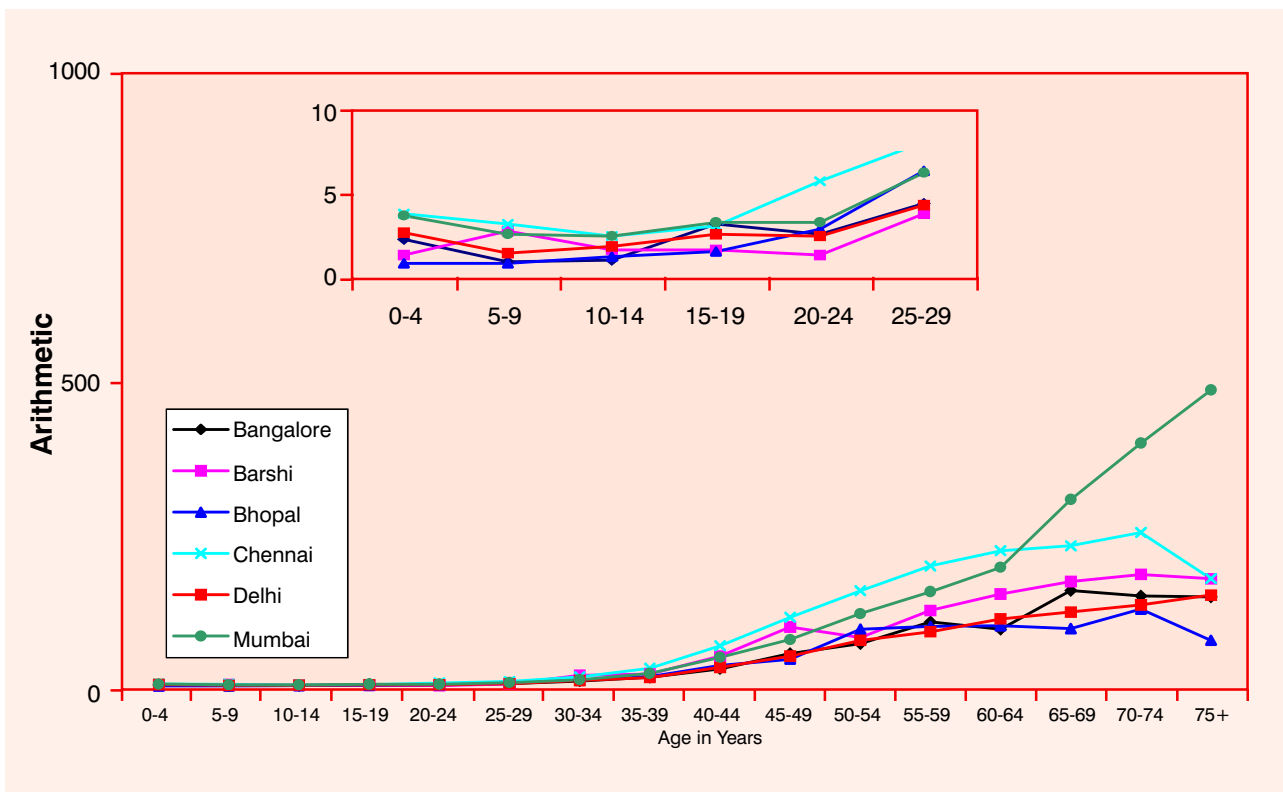
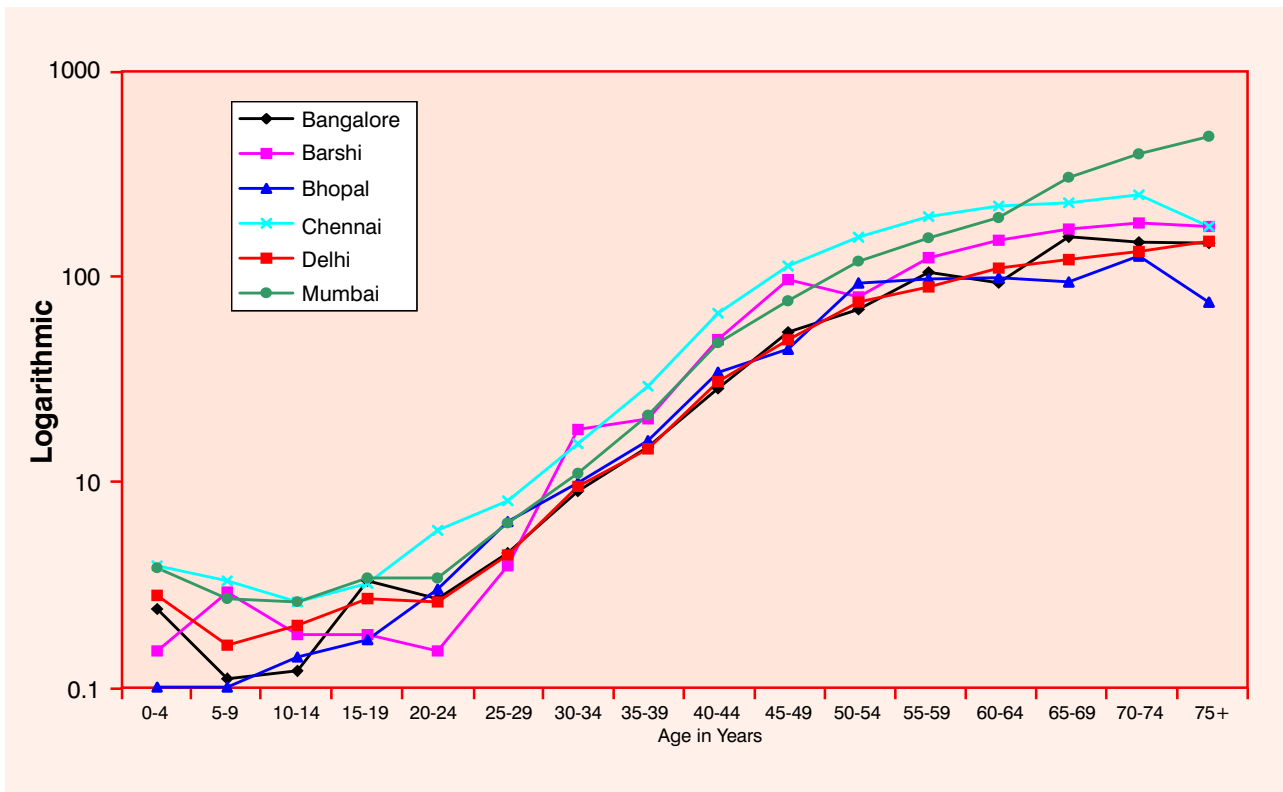
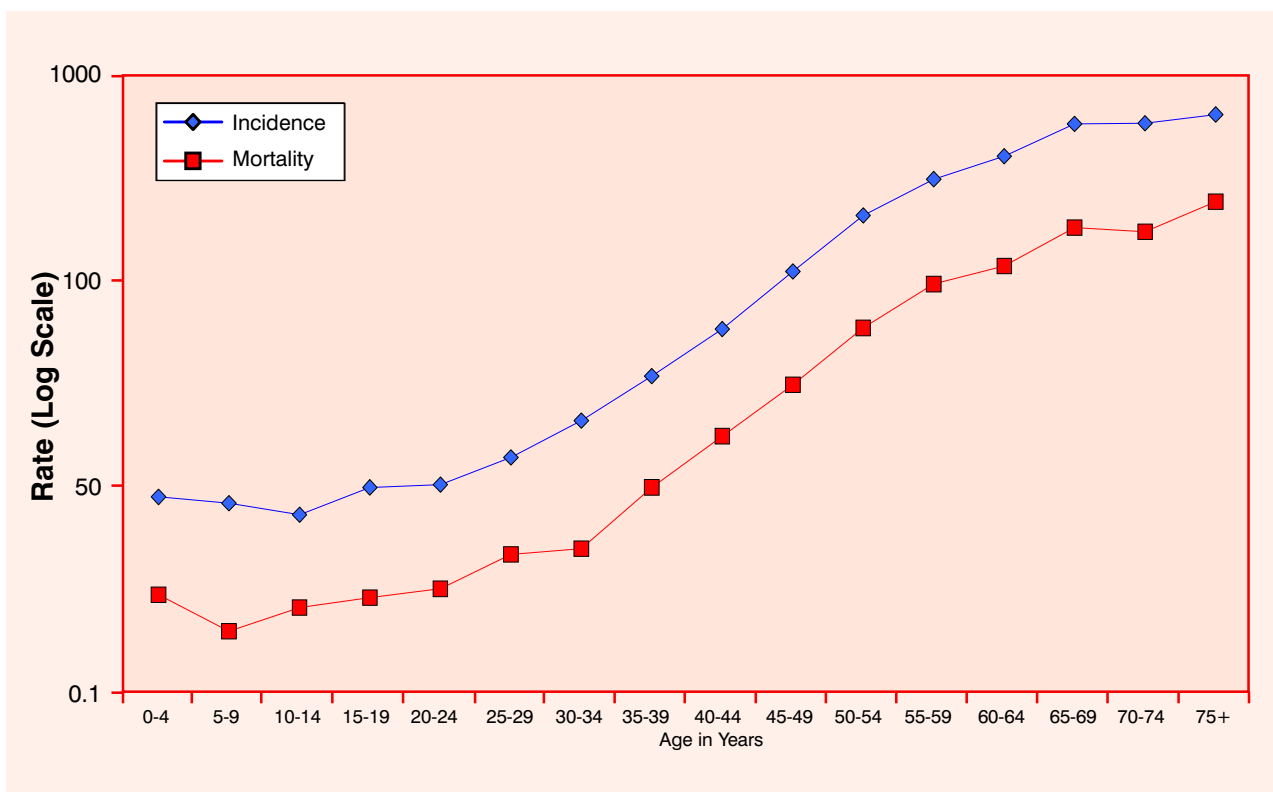


Fig. 5.2(a) : Average Annual Age Specific Incidence & Mortality Rates – Bangalore

MALES



FEMALES

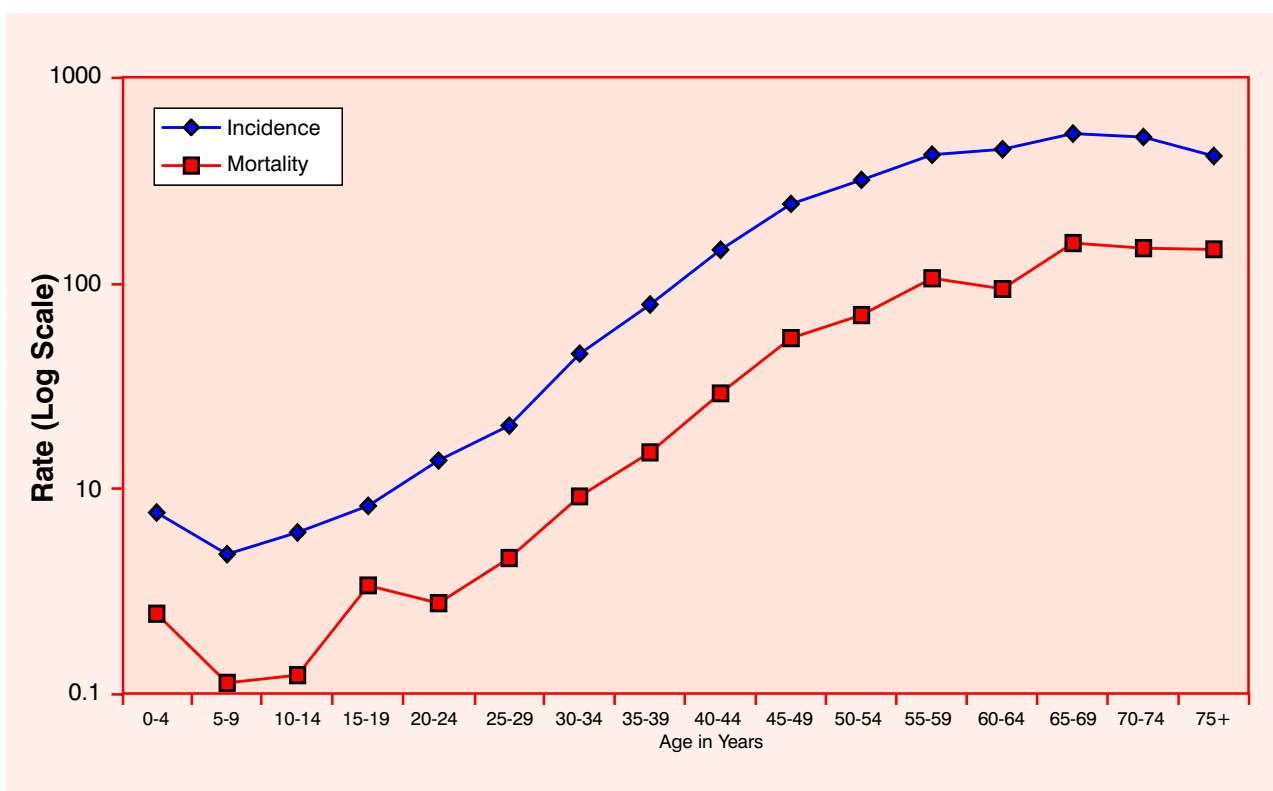
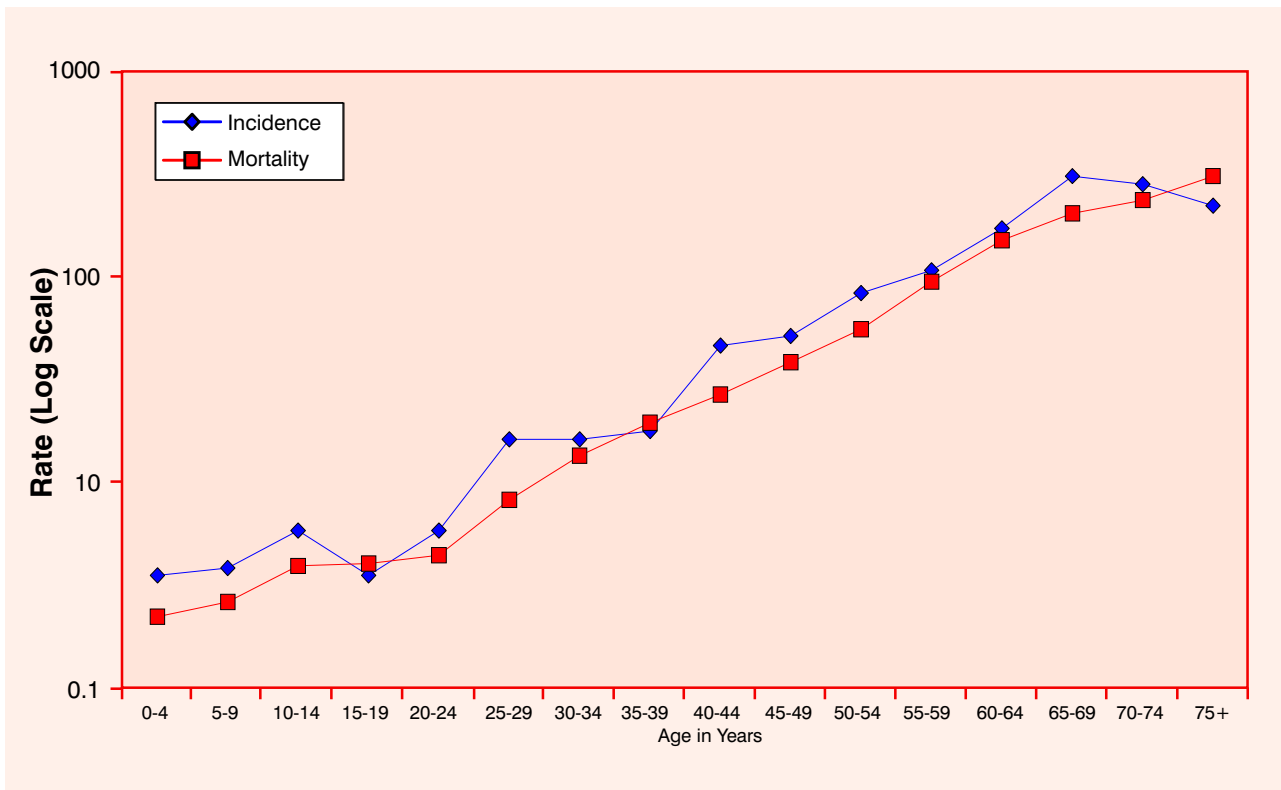


Fig. 5.2(b) : Average Annual Age Specific Incidence & Mortality Rates – Barshi

MALES



FEMALES

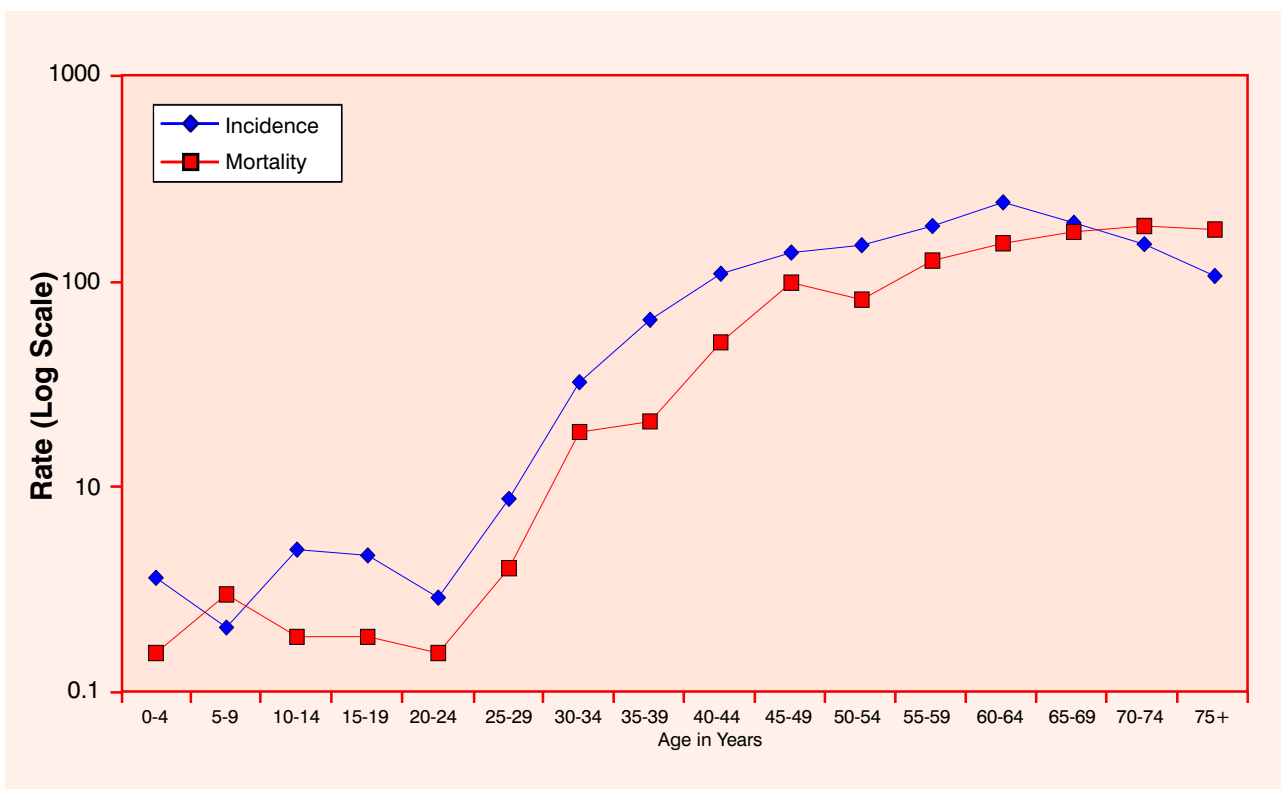
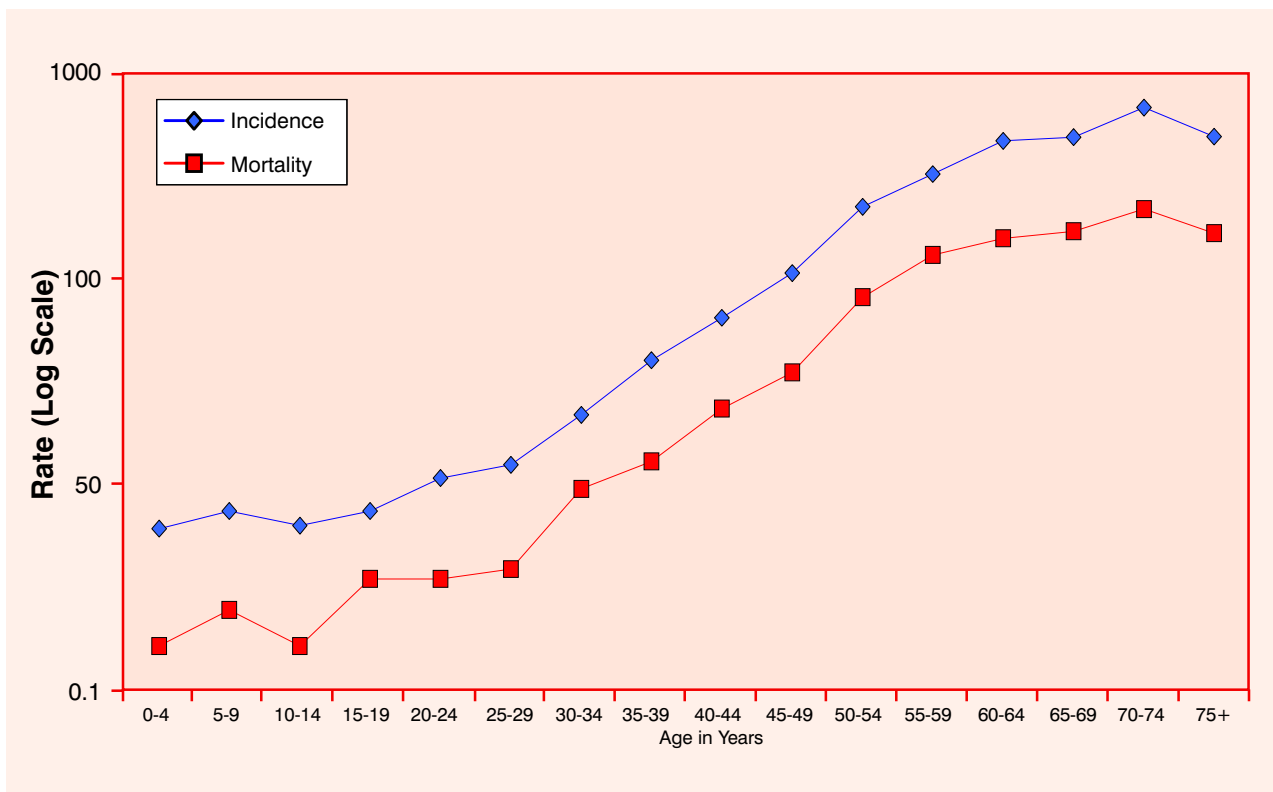


Fig. 5.2(c) : Average Annual Age Specific Incidence & Mortality Rates – Bhopal

MALES



FEMALES

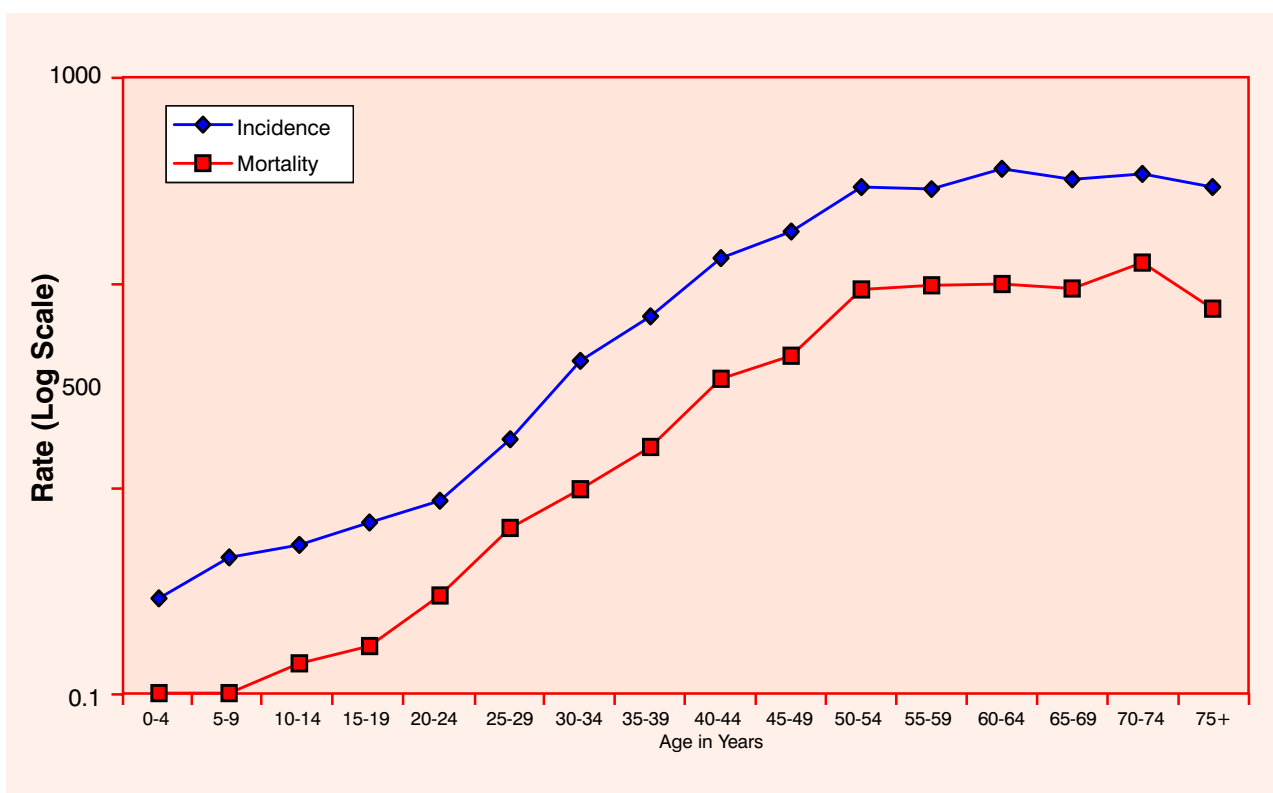
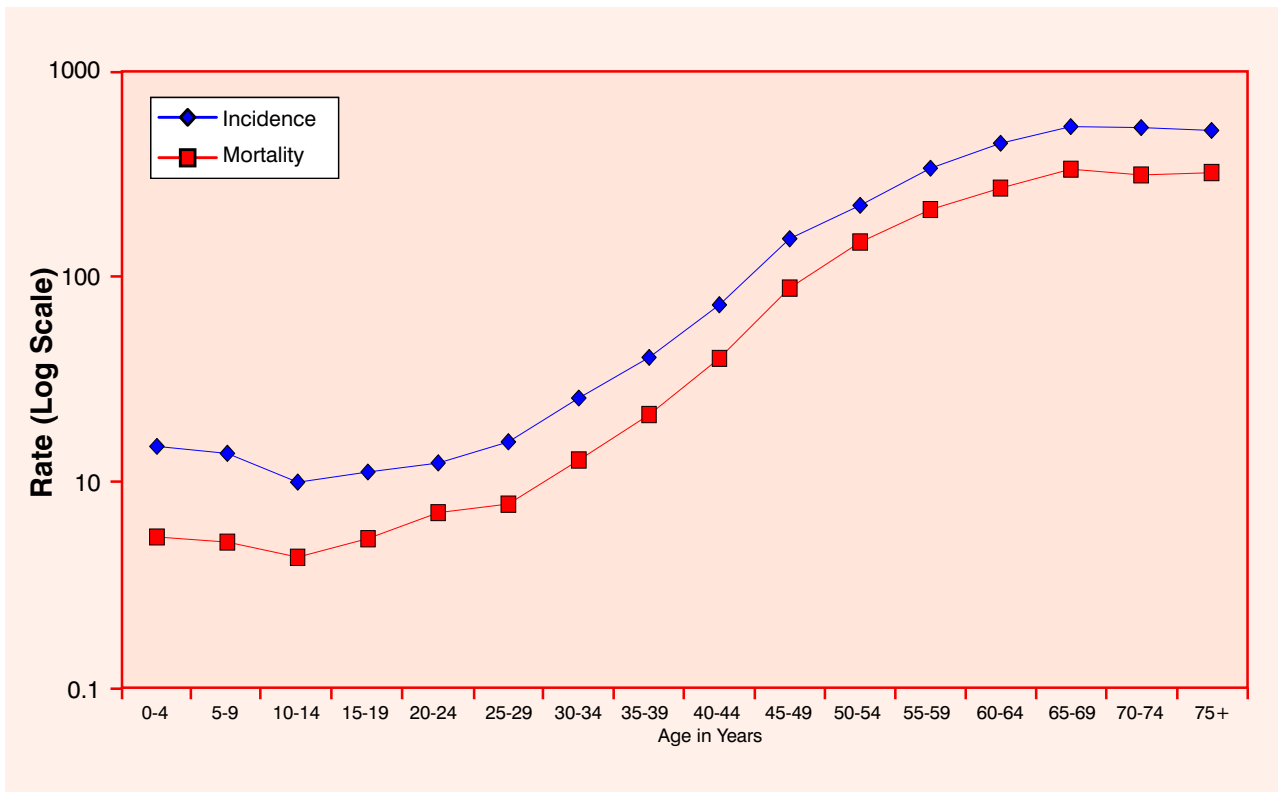


Fig. 5.2(d) : Average Annual Age Specific Incidence & Mortality Rates – Chennai

MALES



FEMALES

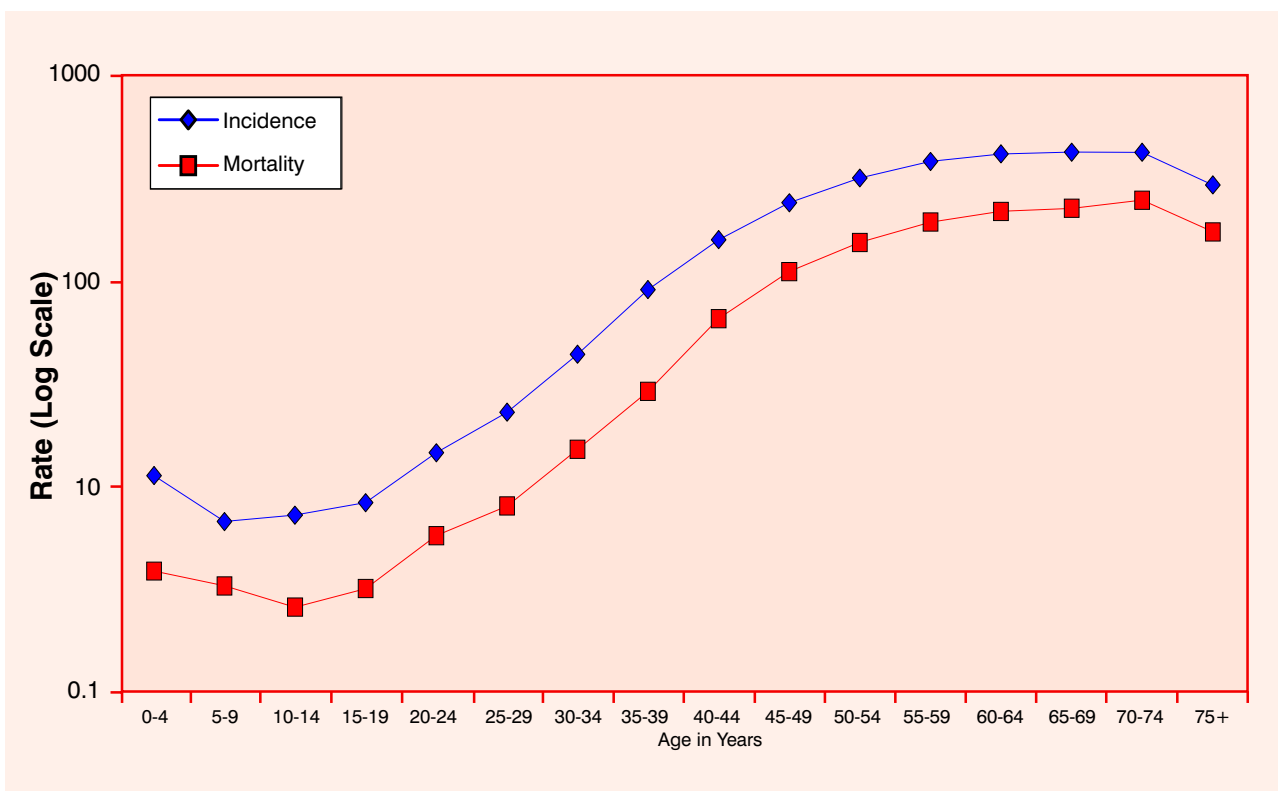
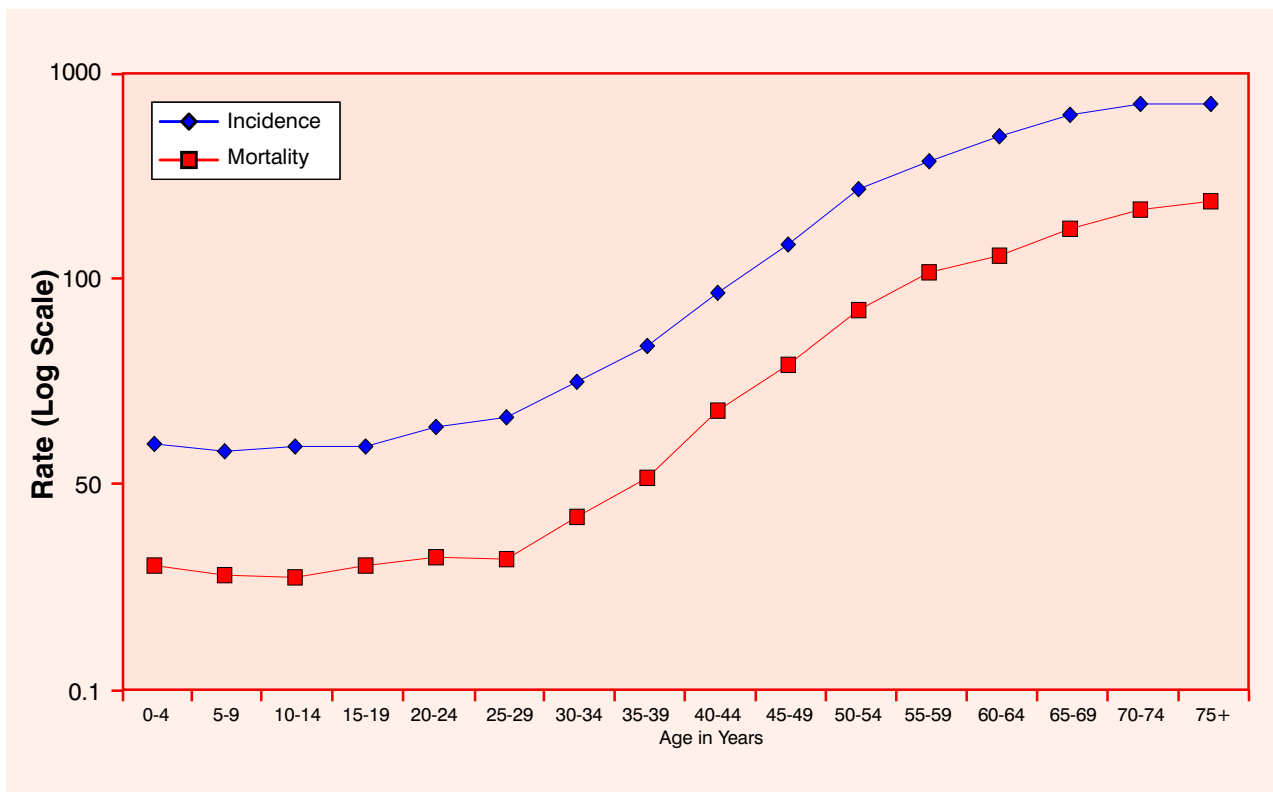


Fig. 5.2(e) : Average Annual Age Specific Incidence & Mortality Rates – Delhi

MALES



FEMALES

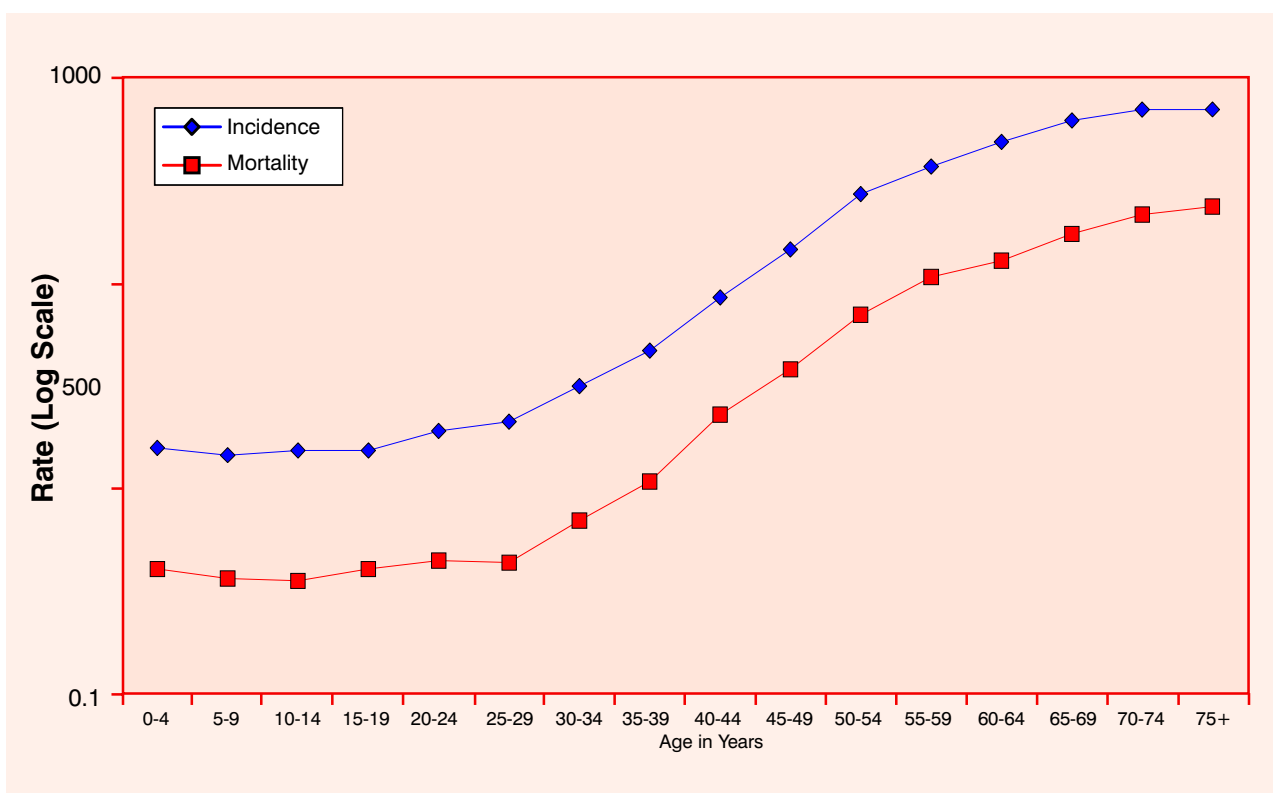
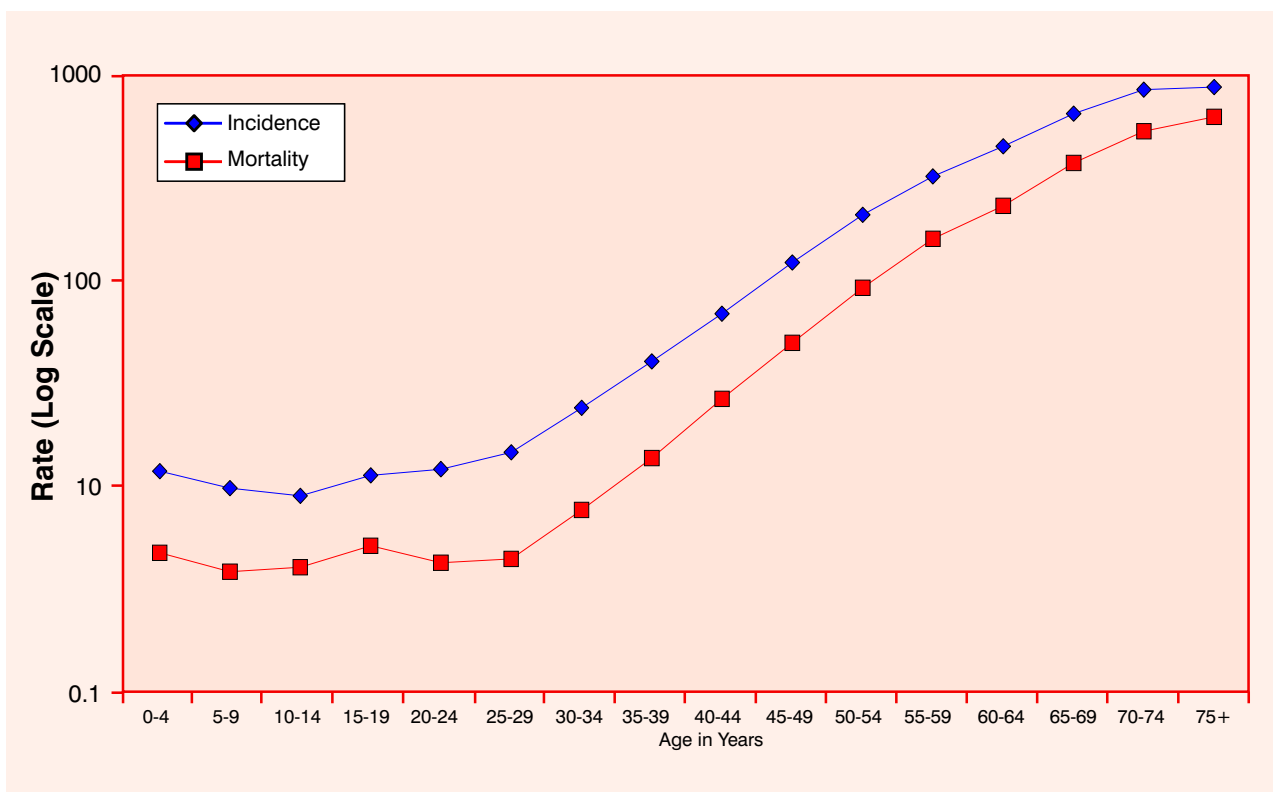
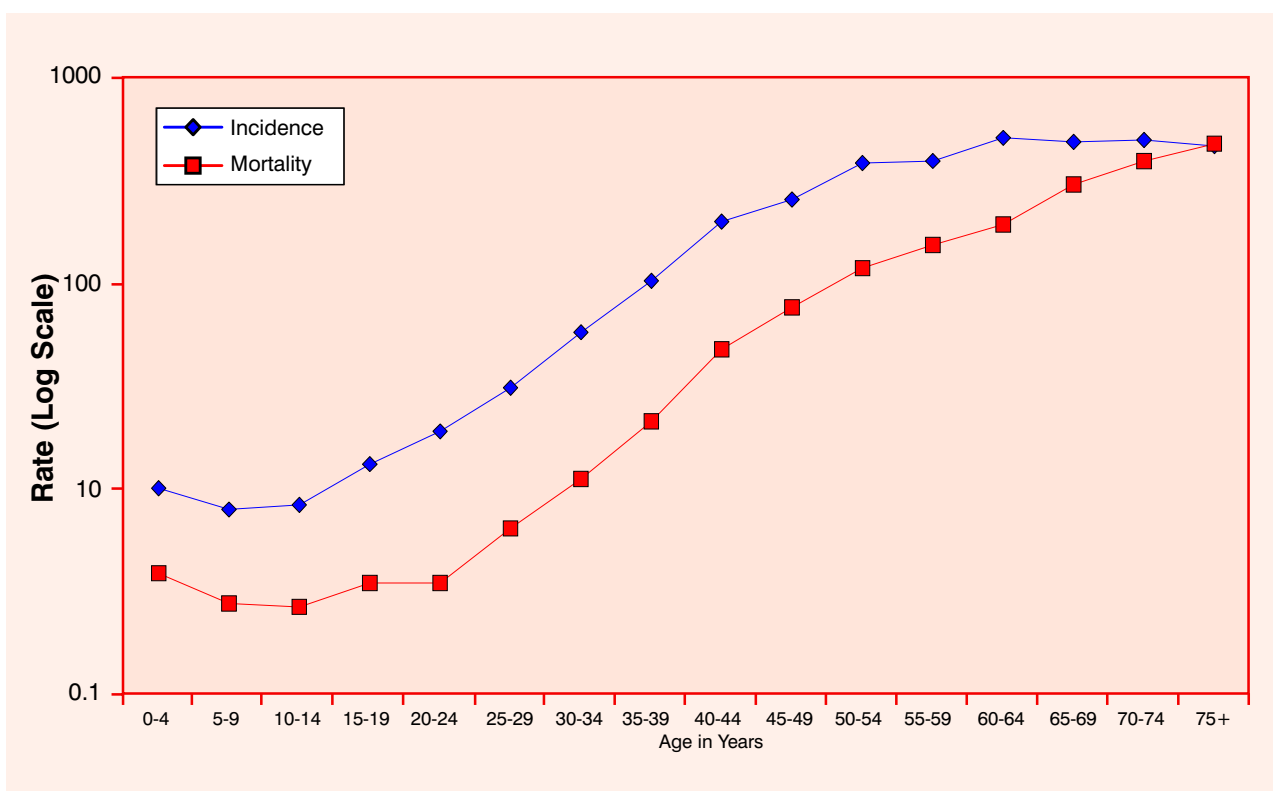


Fig. 5.2(f) : Average Annual Age Specific Incidence & Mortality Rates – Mumbai

MALES



FEMALES



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 so as to ensure a high degree of case ascertainment;
2. **Adequacy of data:** to have certain core and critical items of patient information on all cases;
3. **Accuracy of data:** to ensure that data are free from errors of abstraction, coding, data entry etc.;
4. **Comparability of data:** to adopt information techniques in coding, classification etc., that would assure comparability internally and externally;
5. **Reliability of data:** to ensure reliability of data through periodic audits.

In order to assess the extent or completeness of coverage of cancer cases a population based cancer survey was carried out in the three registries at Bangalore, Chennai and Mumbai that commenced operation under the NCRP earlier in 1982. The overall plan envisaged selection of a representative sample of the population covered by the three registries and conduct house to house visits. Two sub-units or wards were selected in each of the registries. This selection depended on the population characteristics, number of cases registered during the period and the feasibility of the field workers to cover the households in the selected area within a specified time frame. Cancer cases captured through survey were identified with registered cases. All cancer cases diagnosed during the period 1st January 1991 to 31st December 1995 constituted the basis for the survey. Deaths during the above period but diagnosed before 1st January 1991 were excluded. The proportion of coverage of registered cases was derived from Maximum Likelihood Estimates of "Missing Cases" (Bishop *et al*, 1975). The estimate of coverage of cancer cases was 71.8% in Bangalore, 78% in Mumbai and 100% in Chennai. The estimated proportion of missing cases is 0% in Chennai, 4.7% in Mumbai and 12.6% in Bangalore.

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 more 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).

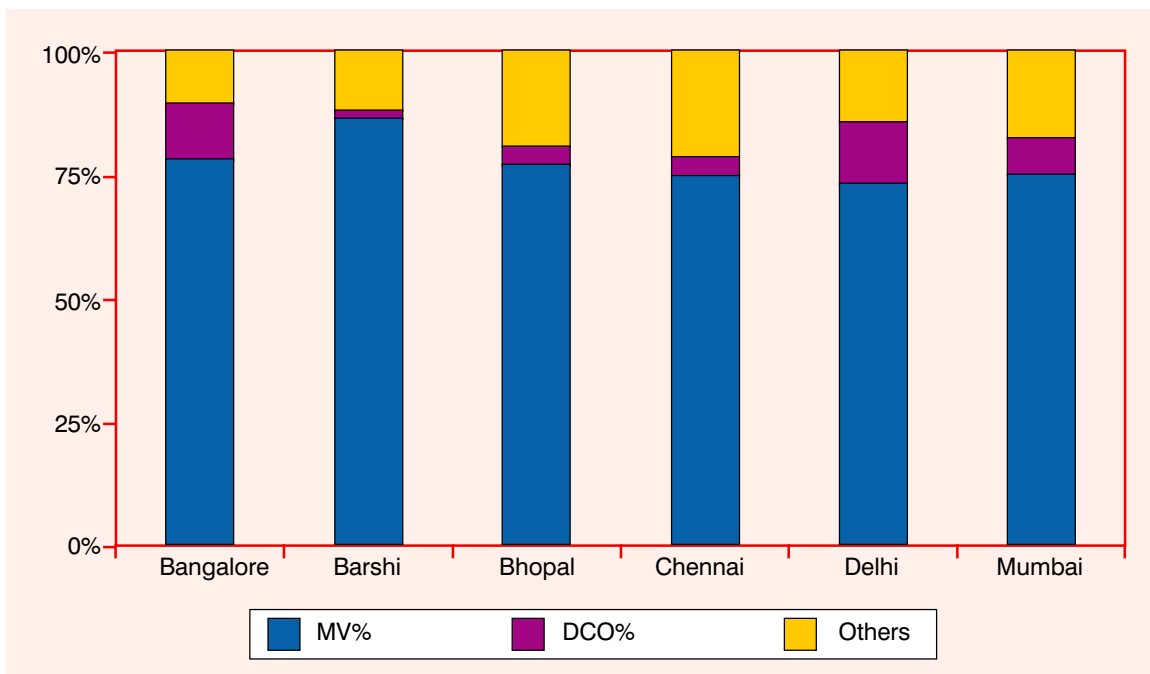
Death Certificate Only

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 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.

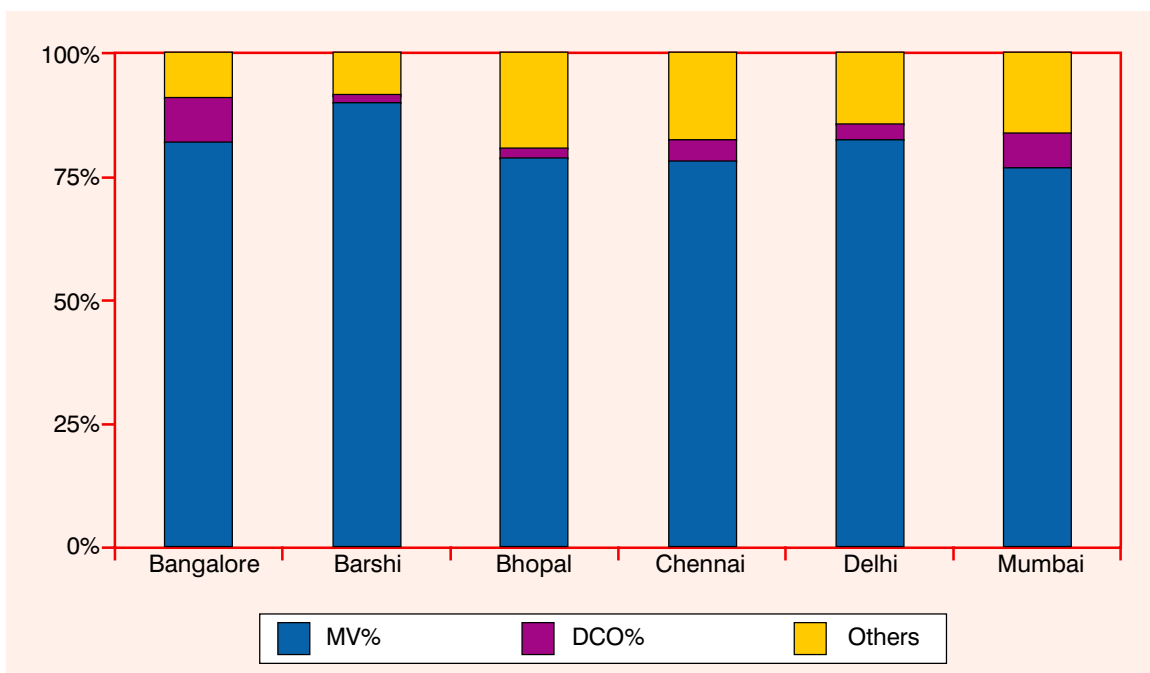
Table 6.1 and Figure 6.1 provide the number and proportion of cancers of all sites that have a microscopic diagnosis and the number and proportion of DCO's. The tabulations by specific site are given with detailed tabulations of data of individual registries.

Figure 6.1: Proportion (%) of Microscopic Verification (MV%), and Proportion of Death Certificate Only (DCO%) Cases

MALES



FEMALES



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*, 1994). 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 and Oxford, UK.

TABLE 6.1: Proportion of Microscopic Verification (MV%), Proportion of DCO's (DCO%) and Mortality-Incidence Percent (M/I%) (1990-1996).

Registry	MALES			FEMALES		
	MV%	DCO%	M/I%	MV%	DCO%	M/I%
Bangalore	77.8	11.4	30.6	82.0	9.0	23.6
Barshi	86.7	0.8	82.6	90.5	0.7	67.4
Bhopal	77.0	3.7	34.9	78.8	2.8	28.6
Chennai	74.6	3.9	58.9	78.5	3.9	47.0
Delhi	73.1	12.7	27.1	72.7	9.9	20.3
Mumbai	75.2	7.1	50.2	76.8	7.0	45.5
US, SEER: White	95.0	1.0	42.0	95.0	1.0	43.0
UK, Oxford	74.0	1.0	67.0	77.0	0.0	58.0
Japan, Miyagi	79.0	7.0	56.0	79.0	8.0	50.0

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 1990 to 31 December 1996 in the different geographic areas covered by the six population based cancer registries.

Rates: Rates for cancer are always expressed per 100,000 population. For childhood cancer this may be expressed as per one million, but this 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:

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

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.

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

and Cumulative Risk is expressed as

$$\text{Cumulative Risk} = 100 \times [1 - \exp(-\text{cumulative rate}/100)]$$

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.

Demography and Population Estimates

India is a vast country and censuses of population are conducted every 10 years. This has been conducted first in 1871 and since then, the ten-year interval has been regularly followed. The last census was conducted in March-April 2001. Though the total population by district and cities have since been made available as preliminary figures, the exact population by five-year age group would take at least two-years from now to be released. The latter for the year 2001 is required to calculate the growth rate as compared with that of the 1991 census and estimation of the population for the inter-censal years 1992 to 2000. This includes the years 1992 to 1996 that form a major part of this report.

The populations of 1981 and 1991 have been used in this report to calculate the estimates of population for the years 1992 to 1996. Thus the growth rate of the decade 1981 to 1991 for the respective registry areas has been used to estimate the populations for the years 1992-96 rather than the growth rate of the decade 1991 to 2001. The preliminary reports from the recent census of 2001 appear to indicate that some registry areas could have shown a possible decline in growth rates compared to the rate of growth seen in the decade 1981-91. If this is true, there could be corrections in cancer incidence rates as well, but it is expected that these would be only marginal.

In the calculation of incidence rates the denominator is the average of the populations for the years 1990 to 1996 by each five-year age group and sex (Parkin *et al* 1997). The population pyramids and the average population 1990-1996 is given under detailed tabulation of individual registries.

The methodology and guidelines followed to estimate the inter-censal population for the years 1990 to 1996 for the areas covered by the registries is given below:

The population estimates for different registry areas have been obtained from the 1981 & 1991 census population totals. The latest census (2001) results have not yet been published and hence the projections had to be based on the available 1981 & 1991 census results (Census of India, 1981; 1991). Projections for mid-year (1st July) were made using the geometric growth rate, separately for each 5-year age-sex group. For the year 1990, the populations are inter-censal and for the years 1991-1996 they are post-censal estimates. Adjustments have been made in the base area populations for Delhi where there was a change in the geographic boundary from 1981 census to 1991 census. The geographic limits of other registry areas did not change between 1981 & 1991 censuses. The statistics on migration are not available for 1991 census and so the population estimates are not adjusted for the migration in any of the registry areas.

Bangalore: Bangalore city is the capital of Karnataka State, 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 Population Based Cancer Registry at Bangalore covers the area under the Bangalore Urban Agglomeration (UA). The area is about 276.4 sq. km as per 1991 census. The geographic limits of Bangalore UA did not change between 1981 & 1991 censuses.

Barshi: This is a rural registry covering one tehsil (Barshi) from the Sholapur district and 2 tehsils (Paranda & Bhum) from the Osmanabad district of Maharashtra State, in the western part of the country. It covers 346 villages spread over 3714 sq. km. To estimate the populations for the required years, the rural population totals (male & female separately) for all the villages in a tehsil for 1981 & 1991 were added up to get the total population of each tehsil at the two time points. Assuming that the age distribution of the tehsil population is same as that of rural population in the respective district, total population in each tehsil in 1981 & 1991 were distributed according to the age distribution of the rural population in the respective district and for each sex group, as per the 1981 & 1991 censuses. Then projections were made for each age-sex group based on these 1981 & 1991 populations in the 3 tehsils.

Bhopal: Bhopal city is the capital of Madhya Pradesh State, in the north-central part of the country and lies at 23° N latitude and 77° 7' E longitude. The Population Based Cancer Registry at Bhopal covers the area under the Bhopal Urban Agglomeration. The area covered is about 284.9 sq. km.

Chennai: Chennai city is the capital of Tamil Nadu State, in the southeastern part of the country and lies at 13° N and 82° E at sea level, on the shores of the Bay of Bengal. Population Based Cancer Registry covers Chennai city corporation. It has an area of 170 sq. km.

Delhi: Delhi city is the capital of the country, and lies in the northern part of the country, between 28° 25' & 28° 53' N latitude and between 73° 22' & 76° 50' E longitude. The Population Based Cancer Registry at Delhi covers the urban areas of the Delhi Union Territory (UT), for which census estimates of population are available. The areas covered are the Municipal Corporation of Delhi, New Delhi Municipal Committee (NDMC) and the Delhi Cantonment Board and 29 census towns. The area is about 685.3 sq. km as per 1991 census. Eight census towns have been included in 1991 census for the first time under Delhi UT urban area. They are Gharonda Neemka Bangar (Patpar Ganj), Mundka, Nangal Dewat, Malikpur Kohi, Ghitorni, Yahya Nagar, Sultan Pur and Taj Pul. For the population projections, the population of these 8 areas in 1981 were added to the Delhi Union Territory Urban population 1981, so that the base populations of 1981 & 1991 belong to the same geographic limits.

Mumbai: Mumbai city is the capital of Maharashtra State, in the west coastal part of the country and lies between 18° 54' & 19° 18' N latitude and 70° 47' & 73° 0' E longitude. The Population Based Cancer Registry at Mumbai covers the area under the city of Greater Bombay (Brihan Mumbai). Being on the shores of Arabian Sea, it has a warm and humid climate. The area is about 603 sq. km.

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INDIVIDUAL REGISTRY DATA: 1990-1996

Write up and Detailed Tabulations

BRIEF DESCRIPTION OF REGISTRY

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Population Pyramid showing Age Distribution

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POPULATION BASED CANCER REGISTRY, BANGALORE

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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 the 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.

The PBCR covers an area of 276.4 sq. km and the estimated population covered by the registry is 51,42,775 (as on 1st July 1997 based on 1991 census). The proportion of Hindus is 80.5%, 10.3% are Muslims, 5.2% of Christians, the rest belonging other sections.

Data collection is actively done by Assistant Social Scientists visiting the various sources of registration namely Hospitals/Nursing Homes and Histopathology labs according to a regular weekly schedule. Information on deaths is collected from 25 units of the Bangalore Municipal Corporation/City Municipal Councils and Hospitals. Data entry, range and consistency checks, tabulation etc., are all carried out with in house programmes developed on d-base and EPI-Info packages. Duplicate checks are carried out by a combination of computer programme and manual verification.

All patients registered under PBCR are classified into proved cancer, proved non-cancer, probably cancer and probably non-cancer. The details of proved cancer are completed in the core-proforma by the staff of PBCR by using the International Coding system and details are entered. A report concerning cancer is published every year based on the data (usually of two years). Besides this, the PBCR provides a background for studies in Kidwai Memorial Institute of Oncology by providing the data on cancer burden in the community and the registry aids in cancer control programmes. 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.

Other Staff of Population Based Cancer Registry, Bangalore

Mr. K. Puttaswamy, M.Sc., L.LB.	:	Senior Bio-statistician
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Smt. P. Savithamma, B.A.	:	Typist & Data Entry Operator
Mr. B.R. Srinivas	:	Attender

Figure BLR-1
Population Pyramid showing Age Distribution: 1990-1996
Bangalore

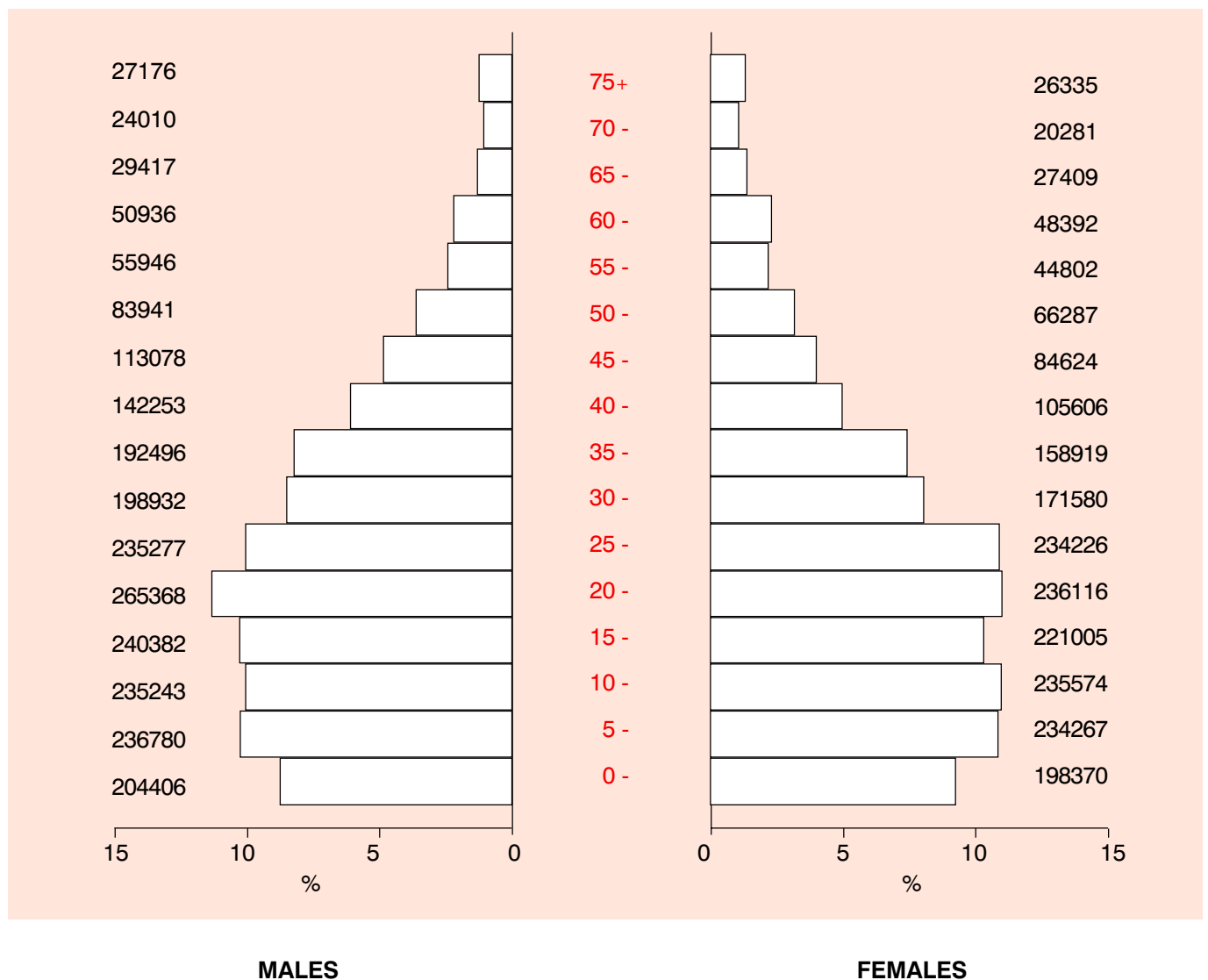


TABLE: BLR-1

Population by Five Year Age Group and Gender : 1990-1996
Number and Relative Proportion (%)

Bangalore

Age Group	MALES		FEMALES		TOTAL	
	Number	%	Number	%	Number	%
0-4	204406	8.74	198370	9.38	402776	9.05
5-9	239780	10.25	234267	11.08	474047	10.65
10-14	235243	10.06	235574	11.14	470817	10.57
15-19	240382	10.28	221005	10.46	461387	10.36
20-24	265368	11.35	236116	11.17	501484	11.26
25-29	235277	10.06	234226	11.08	469503	10.54
30-34	198932	8.51	171580	8.12	370512	8.32
35-39	192496	8.23	158919	7.52	351415	7.89
40-44	142253	6.08	105606	5.00	247859	5.57
45-49	113078	4.84	84624	4.00	197702	4.44
50-54	83941	3.59	66287	3.14	150228	3.37
55-59	55946	2.39	44802	2.12	100748	2.26
60-64	50936	2.18	48392	2.29	99328	2.23
65-69	29417	1.26	27409	1.30	56826	1.28
70-74	24010	1.03	20281	0.96	44291	0.99
75+	27176	1.16	26335	1.25	53511	1.20
Total	2338641	100.0	2113793	100.0	4452434	100.0

TABLE: BLR-2**Main Sources* of Registration of Incident Cancers: 1990-1996****Bangalore**

Name of Institution	Year of Diagnosis and Relative Proportion (%)							1990-96	
	1990	1991	1992	1993	1994	1995	1996	Number	%
Kidwai Memorial	47.3	49.4	51.3	47.8	52.2	49.8	46.4	10807	49.2
Bangalore Inst. of Oncology	8.4	11.9	10.9	10.7	13.0	12.0	13.7	2532	11.5
St. John's Med. College	5.9	5.1	4.7	4.5	4.2	4.9	5.1	1081	4.9
Victoria Hospital	5.4	3.0	1.6	3.3	2.9	2.6	2.6	668	3.0
Manipal Hospital	0.0	1.0	2.9	3.0	3.8	2.8	4.9	579	2.6
St Martha's Hospital	2.0	1.7	2.5	2.3	2.2	2.3	2.5	487	2.2
Bangalore Hospital	0.0	0.0	1.1	3.0	2.6	2.7	2.7	386	1.8
St. Philomena's Hospital	3.0	2.0	2.4	1.3	1.1	1.0	1.1	371	1.7
Dr. Kanan Gharpure's Lab	0.0	2.0	2.2	2.5	3.0	0.6	0.0	326	1.5
M.S. Ramaiah Med. College	1.8	1.4	1.0	1.7	1.2	2.0	1.1	325	1.5
Anand Diagnostic Lab	0.0	1.9	3.0	2.5	1.0	1.2	0.5	324	1.5
Curie Institute of Oncology	0.0	0.0	0.0	0.0	0.0	1.5	6.1	235	1.1
Bowring Hospital	1.5	0.8	1.6	1.1	0.8	0.8	0.3	217	1.0
Bang Municipal Corporation	6.1	4.6	3.0	4.5	2.2	4.6	3.9	912	4.2
Total of Above								19276	87.7
All Others								2704	12.3
Total All Sources								21980	100.0

* 1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 1990-96.

* 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-3(a): Number of Incident Cancers by Five Year Age Group and Site (ICD-9):
1990-1996 - 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	2	0	1	1	1	1	3	2	1	3	15	0.15
141	Tongue	0	0	0	0	1	4	6	13	13	46	47	49	53	37	40	39	348	3.40
142	Salivary Gland	1	1	2	0	1	3	1	5	4	6	5	5	2	5	8	4	53	0.52
143	Gum	0	0	1	0	0	1	0	3	2	6	7	7	9	4	7	7	54	0.53
144	Floor of Mouth	0	0	0	1	0	0	2	1	0	6	17	10	2	3	2	1	45	0.44
145	Other Mouth	1	0	0	0	1	0	5	9	11	24	27	24	35	13	21	14	185	1.81
146	Oropharynx	1	0	1	1	2	2	1	6	16	24	31	38	25	25	14	17	204	1.99
147	Nasopharynx	0	0	5	3	2	2	2	8	3	4	5	2	4	5	2	3	50	0.49
148	Hypopharynx	0	0	0	2	2	4	3	22	17	50	85	71	102	91	49	62	560	5.47
149	Pharynx Etc.	0	0	0	1	0	0	2	0	4	6	17	7	11	9	3	9	69	0.67
150	Oesophagus	0	0	0	0	1	3	12	28	31	82	128	126	146	115	97	115	884	8.63
151	Stomach	0	0	3	2	2	9	24	30	57	92	106	129	170	107	99	121	951	9.29
152	Small Intestine	0	0	0	0	0	2	0	2	2	4	1	0	0	1	3	2	17	0.17
153	Colon	0	0	0	0	3	7	12	8	17	22	36	21	23	34	26	35	244	2.38
154	Rectum	0	0	0	0	12	11	16	17	20	34	25	51	38	40	27	36	327	3.19
155	Liver	6	3	3	1	2	3	6	7	10	26	31	40	33	41	38	31	281	2.74
156	Gall Bladder	1	0	0	0	0	1	3	2	3	6	10	9	4	9	6	8	62	0.61
157	Pancreas	0	0	0	0	0	2	3	5	10	10	17	15	27	16	8	21	134	1.31
158	Retroperitoneum	6	3	1	1	1	1	3	3	5	4	7	6	4	1	0	2	48	0.47
159	Other Dig System	0	0	0	1	2	1	0	2	3	3	3	4	4	1	2	4	30	0.29
160	Nasal Cavity	1	2	0	2	0	0	4	2	6	1	8	5	4	9	2	4	50	0.49
161	Larynx	0	0	0	0	2	1	5	18	19	34	56	61	74	57	39	48	414	4.04
162	Lung	0	0	1	1	3	3	7	11	48	63	94	90	135	100	90	72	718	7.01
163	Pleura	0	0	0	0	1	2	0	2	4	2	4	5	9	2	1	7	39	0.38
164	Thymus	0	0	0	2	1	1	3	3	2	0	4	1	0	5	0	0	22	0.21
165	Other Resp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
170	Bone	4	6	11	28	15	8	4	11	6	2	9	12	10	3	4	9	142	1.39
171	Conn. Tissue	1	1	8	4	12	5	3	11	5	8	11	4	7	5	8	5	98	0.96
172	Skin Melanoma	0	0	0	0	0	1	1	0	3	0	3	3	6	1	2	2	22	0.21
173	Skin. Other	1	0	0	0	1	6	6	17	7	10	22	20	14	17	10	28	159	1.55
175	Breast Male	0	0	0	0	0	1	0	2	0	1	4	4	1	6	2	4	25	0.24
185	Prostate	0	0	0	0	1	1	1	3	4	4	22	30	57	58	79	128	388	3.79
186	Testis	3	0	1	6	10	9	15	19	3	7	1	4	3	4	1	2	88	0.86
187	Penis Etc.	0	1	0	0	1	2	6	9	9	14	20	20	19	16	12	21	150	1.46
188	Uri. Bladder	0	1	1	1	1	4	5	10	14	13	26	33	42	42	43	61	297	2.90
189	Kidney	15	10	1	0	2	1	4	2	10	11	17	20	12	19	8	13	145	1.42
190	Eye	6	7	0	0	0	0	3	1	1	0	3	2	0	0	2	1	26	0.25
191	Brain	12	15	12	8	14	19	31	26	38	31	37	30	29	22	8	9	341	3.33
192	Nervous System	2	1	2	0	0	0	3	1	1	2	0	1	0	0	1	1	15	0.15
193	Thyroid Gland	0	0	5	6	6	15	7	8	14	14	16	7	6	8	5	10	127	1.24
194	Oth. Endo. Gland	2	0	0	1	0	1	0	2	0	0	1	0	1	0	0	0	8	0.08
195	Ill Def. Sites	1	1	3	4	2	2	2	5	8	9	13	7	9	3	1	14	84	0.82
196	Sec. Lymph Node	1	0	0	1	2	6	1	5	10	15	23	24	37	31	21	24	201	1.96
197	Sec. Res. Etc	2	0	0	0	1	2	4	4	7	16	25	16	25	19	18	23	162	1.58
198	Sec. Other	1	0	1	0	2	1	4	11	7	12	22	14	25	16	12	14	142	1.39
199	Prim. Unknown	3	3	6	8	12	21	19	41	40	55	70	91	103	72	67	85	696	6.80
200	Lymphosarcoma	5	9	4	6	3	3	4	7	9	1	7	5	12	12	6	10	103	1.01
201	Hodgkin's Disease	6	14	12	12	8	10	9	10	21	8	9	8	11	8	6	10	162	1.58
202	Other Lymphatic	6	9	2	13	15	16	14	19	17	25	21	28	28	30	25	21	289	2.82
203	Multiple Myeloma	0	0	0	0	0	0	1	2	2	15	12	10	10	12	18	11	93	0.91
204	Leuk. Lymphatic	30	28	20	16	5	7	1	4	6	7	8	5	5	8	3	10	163	1.59
205	Leuk. Myelocytic	9	10	9	19	23	15	18	26	21	23	20	18	11	14	5	9	250	2.44
206	Leuk. Monocytic	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	3	0.03
207	Leuk. Misc.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.01
208	Leuk. Unspecified	2	8	2	6	7	3	3	4	4	3	4	1	0	4	3	2	56	0.55
	All Sites	129	134	117	157	182	222	291	467	576	862	1198	1194	1402	1162	955	1192	10240	100.00

**TABLE: BLR-3(b): Number of Incident Cancers by Five Year Age Group and Site (ICD-9):
1990-1996 - 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	1	0	1	2	1	2	3	1	0	3	14	0.12
141	Tongue	0	0	0	0	0	2	4	4	5	6	11	6	17	7	12	14	88	0.75
142	Salivary Gland	0	3	2	0	5	4	0	4	5	5	6	1	3	2	1	5	46	0.39
143	Gum	1	0	0	1	0	0	4	6	11	27	33	17	28	19	10	20	177	1.51
144	Floor of Mouth	0	0	0	0	0	0	0	1	2	0	1	0	1	0	0	0	5	0.04
145	Other Mouth	0	0	0	0	2	5	9	26	49	63	91	66	91	58	44	40	544	4.63
146	Oropharynx	0	0	0	0	0	3	0	2	2	6	9	5	7	4	6	6	50	0.43
147	Nasopharynx	0	0	3	4	1	2	0	5	1	3	4	1	1	1	2	0	28	0.24
148	Hypopharynx	0	0	0	0	1	2	6	6	12	18	13	14	21	11	6	8	118	1.01
149	Pharynx Etc.	0	0	0	1	0	1	2	0	4	1	7	6	5	2	7	1	37	0.32
150	Oesophagus	0	0	0	0	3	5	8	22	31	78	105	101	110	92	79	69	703	5.99
151	Stomach	0	0	0	2	7	8	16	32	37	42	52	50	69	61	40	44	460	3.92
152	Small Intestine	0	1	0	1	0	0	0	0	1	1	1	0	1	1	0	1	8	0.07
153	Colon	0	0	0	1	3	4	5	11	10	16	21	23	33	15	20	17	179	1.52
154	Rectum	0	0	0	2	13	7	8	8	23	32	35	30	43	15	25	26	267	2.27
155	Liver	3	0	2	0	2	6	3	4	8	13	14	15	18	13	6	10	117	1.00
156	Gall Bladder	0	0	0	0	0	0	0	1	5	3	8	8	12	4	8	7	56	0.48
157	Pancreas	0	0	1	0	1	0	4	4	8	8	5	7	11	10	9	9	77	0.66
158	Retroperitoneum	4	1	0	0	2	1	0	5	5	4	2	4	5	4	4	3	44	0.37
159	Other Dig System	0	0	0	0	0	2	1	0	2	2	2	1	6	3	4	1	24	0.20
160	Nasal Cavity	0	0	0	1	0	1	1	1	2	3	7	5	5	4	1	3	34	0.29
161	Larynx	0	0	0	2	0	0	5	7	2	6	7	8	6	5	3	5	56	0.48
162	Lung	0	0	0	2	2	4	5	4	6	19	25	24	21	27	10	16	165	1.41
163	Pleura	0	0	0	0	0	0	0	1	2	1	4	2	2	3	1	3	19	0.16
164	Thymus	0	2	1	0	0	2	0	4	1	0	0	0	0	0	0	0	10	0.09
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	9	10	16	10	5	5	6	4	9	8	5	9	3	7	4	113	0.96
171	Conn. Tissue	1	3	6	3	8	8	7	7	4	6	4	5	3	2	5	5	77	0.66
172	Skin Melanoma	0	0	0	0	0	2	0	1	0	2	2	2	2	1	2	0	14	0.12
173	Skin. Other	0	2	1	1	5	5	7	10	9	12	6	13	20	16	13	20	140	1.19
174	Breast	0	0	0	3	17	52	135	221	279	324	287	245	254	159	105	105	2186	18.62
179	Uterus NOS	0	0	0	0	1	3	5	2	3	4	10	4	5	2	3	5	47	0.40
180	Cervix	0	0	1	3	11	42	123	240	281	414	364	306	338	200	102	98	2523	21.49
181	Placenta	0	0	0	0	3	5	3	0	0	0	0	0	0	0	0	0	11	0.09
182	Body Uterus	0	0	1	1	3	4	9	7	16	24	37	37	36	21	22	13	231	1.97
183	Ovary	1	7	5	17	17	27	26	42	59	56	64	61	55	32	26	17	512	4.36
184	Vagina	1	1	0	0	2	2	4	9	7	8	10	16	19	16	11	13	119	1.01
188	Uri. Bladder	2	0	0	0	0	0	1	0	2	6	6	5	24	9	5	13	73	0.62
189	Kidney	7	1	1	0	3	2	1	5	6	12	4	10	8	3	4	3	70	0.60
190	Eye	14	2	0	0	0	1	0	0	3	0	1	0	2	2	0	1	26	0.22
191	Brain	10	16	11	10	12	18	11	13	13	17	16	12	12	8	4	7	190	1.62
192	Nervous System	1	1	0	1	0	0	2	1	0	0	0	0	0	1	1	0	8	0.07
193	Thyroid Gland	0	0	6	11	24	29	44	32	30	29	31	26	29	24	10	14	339	2.89
194	Oth. Endo. Gland	4	0	0	0	0	2	0	0	3	0	0	0	0	0	0	0	9	0.08
195	Ill Def. Sites	1	2	0	2	3	2	6	5	2	7	5	7	8	8	3	4	65	0.55
196	Sec. Lymph. Node	1	1	1	1	1	3	4	7	5	8	9	13	12	13	12	8	99	0.84
197	Sec. Res. Etc	0	0	0	0	1	1	4	6	6	9	15	18	19	14	11	11	115	0.98
198	Sec. Other	3	1	0	0	3	3	3	2	9	6	11	13	13	15	8	8	98	0.83
199	Prim. Unknown	4	1	5	9	9	19	22	35	55	78	65	87	63	69	44	71	636	5.42
200	Lymphosarcoma	1	0	0	1	3	0	3	4	6	5	5	4	3	6	3	3	47	0.40
201	Hodgkins. Disease	1	3	4	5	6	10	7	6	6	3	4	2	8	4	3	1	73	0.62
202	Oth. Lymphatic	4	0	3	5	9	5	12	13	10	15	18	12	32	16	12	12	178	1.52
203	Multiple Myeloma	1	0	0	0	0	0	0	3	4	5	7	10	16	7	9	9	71	0.60
204	Leuk. Lymphatic	24	11	14	5	4	4	1	3	4	4	2	3	3	4	5	6	97	0.83
205	Leuk. Myelocytic	7	4	12	8	21	15	16	21	8	17	24	13	11	13	6	4	200	1.70
206	Leuk. Monocytic	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0.02
207	Leuk. Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk. Unspecified	3	2	5	5	2	2	2	8	5	2	2	2	0	1	1	3	45	0.38
	All Sites	102	74	95	124	220	330	545	869	1074	1441	1481	1327	1523	1031	735	769	11740	100.00

TABLE: BLR-5(a):
Trends in Crude (CR) & Age Adjusted (AAR) Cancer Incidence Rates from 1990 to 1996 - Males
Bangalore

ICD-9	Site	1990		1991		1992		1993		1994		1995		1996	
		CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR
140	Lip	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2
141	Tongue	2.4	3.8	2.0	3.3	1.7	2.8	2.8	4.6	2.3	3.9	1.5	2.3	2.2	3.5
142	Salivary Gland	0.4	0.7	0.4	0.5	0.4	0.7	0.2	0.2	0.4	0.5	0.2	0.3	0.3	0.4
143	Gum	0.4	0.7	0.3	0.5	0.3	0.5	0.2	0.3	0.3	0.5	0.4	0.7	0.3	0.5
144	Floor of Mouth	0.1	0.2	0.3	0.4	0.3	0.5	0.5	0.6	0.2	0.4	0.3	0.5	0.2	0.4
145	Other Mouth	1.3	2.0	1.0	1.5	0.8	1.2	1.5	2.2	1.3	2.1	1.0	1.4	1.2	2.1
146	Oropharynx	1.0	1.7	1.5	2.6	1.4	2.2	1.0	1.6	1.1	1.8	1.3	1.9	1.4	2.1
147	Nasopharynx	0.3	0.3	0.4	0.6	0.1	0.2	0.1	0.1	0.3	0.4	0.4	0.5	0.5	0.8
148	Hypopharynx	2.9	5.1	3.6	5.9	3.6	6.2	3.7	6.5	3.4	5.7	3.5	5.9	3.2	5.4
149	Pharynx Etc.	0.2	0.4	0.5	0.9	0.2	0.3	0.5	0.8	0.6	0.9	0.5	0.7	0.4	0.7
150	Oesophagus	5.5	9.5	5.8	9.7	4.9	8.1	6.0	10.2	5.1	8.8	6.1	10.1	4.4	7.4
151	Stomach	5.5	8.8	6.7	11.3	6.3	10.4	5.5	9.0	5.5	9.1	6.1	9.8	5.2	8.3
152	Small Intestine	0.1	0.2	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.2	0.0	0.1	0.2	0.2
153	Colon	1.6	2.6	1.6	2.7	1.2	2.1	1.8	2.7	1.3	2.0	1.5	2.4	1.4	2.1
154	Rectum	2.0	3.1	1.9	3.1	1.8	3.1	2.5	3.7	1.7	2.5	1.9	2.7	2.2	3.3
155	Liver	1.7	2.6	1.6	2.6	1.8	3.0	2.1	3.7	1.8	2.8	1.7	2.9	1.4	2.4
156	Gall Bladder	0.2	0.4	0.3	0.6	0.5	0.8	0.7	1.1	0.5	0.8	0.2	0.3	0.2	0.4
157	Pancreas	0.9	1.5	1.0	1.6	0.9	1.4	0.8	1.3	0.9	1.4	0.7	1.2	0.6	1.0
158	Retroperitoneum	0.3	0.3	0.2	0.3	0.3	0.4	0.4	0.6	0.3	0.4	0.3	0.4	0.2	0.3
159	Other Dig System	0.4	0.5	0.1	0.2	0.2	0.2	0.0	0.0	0.3	0.5	0.1	0.2	0.1	0.2
160	Nasal Cavity	0.4	0.5	0.3	0.5	0.5	0.8	0.4	0.6	0.2	0.3	0.2	0.3	0.2	0.3
161	Larynx	3.2	5.5	2.9	4.8	2.2	3.9	2.1	3.5	2.4	4.0	2.4	3.9	2.5	4.1
162	Lung	4.0	6.8	4.9	8.4	4.8	8.5	4.8	8.0	3.9	6.5	4.3	7.1	4.1	6.7
163	Pleura	0.1	0.2	0.1	0.2	0.6	0.9	0.3	0.5	0.1	0.2	0.2	0.3	0.3	0.4
164	Thymus	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.0	0.0	0.3	0.5	0.1	0.1
165	Other Resp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170	Bone	0.9	1.0	0.9	0.9	1.1	1.4	1.5	1.8	0.3	0.4	1.0	1.1	0.5	0.6
171	Conn. Tissue	0.6	0.7	0.4	0.6	0.7	0.8	0.7	0.9	0.6	0.9	0.7	0.8	0.5	0.6
172	Skin Melanoma	0.2	0.2	0.3	0.4	0.1	0.2	0.1	0.2	0.2	0.3	0.1	0.1	0.0	0.0
173	Skin. Other	0.8	1.2	0.9	1.2	1.1	2.0	1.1	1.8	1.0	1.4	0.9	1.4	1.0	1.4
175	Breast Male	0.1	0.2	0.1	0.1	0.3	0.5	0.1	0.1	0.1	0.2	0.3	0.6	0.0	0.1
185	Prostate	2.7	5.3	2.1	3.8	3.0	5.4	2.4	4.3	1.9	3.5	2.3	4.1	2.3	4.2
186	Testis	0.6	0.4	0.5	0.5	0.4	0.5	0.6	0.7	0.6	0.6	0.5	0.5	0.6	0.6
187	Penis Etc.	1.1	1.7	1.0	1.5	0.9	1.6	0.9	1.5	1.2	1.8	0.9	1.2	0.6	0.9
188	Uri. Bladder	2.1	3.4	2.2	3.6	2.8	4.8	1.9	3.4	1.3	2.2	1.3	2.1	1.3	2.4
189	Kidney	0.6	0.8	0.9	1.4	1.0	1.7	0.9	1.4	1.1	1.6	1.1	1.7	0.6	0.9
190	Eye	0.2	0.3	0.2	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2
191	Brain	2.3	3.0	1.9	2.3	2.3	2.7	2.2	2.7	1.8	2.3	1.8	2.4	2.3	3.0
192	Nervous System	0.1	0.1	0.1	0.0	0.2	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.0
193	Thyroid Gland	1.0	1.3	1.0	1.3	0.7	0.7	0.8	0.9	0.5	0.6	0.7	1.0	0.8	1.0
194	Oth. Endo. Gland	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
195	Ill Def. Sites	0.6	0.9	0.3	0.4	0.3	0.4	0.1	0.2	0.8	1.0	0.7	1.0	0.8	1.0
196	Sec. Lymph. Node	0.9	1.7	1.6	2.5	1.3	2.2	1.8	2.8	1.0	1.7	1.1	1.9	0.9	1.6
197	Sec. Res. Etc	0.8	1.3	0.7	1.0	0.9	1.4	1.4	2.4	1.2	1.9	1.0	1.5	1.0	1.7
198	Sec. Other	0.9	1.4	0.6	1.1	0.8	1.4	1.6	2.4	0.8	1.2	0.7	1.0	0.7	1.1
199	Prim. Unknown	5.4	9.0	6.6	10.4	4.1	6.1	4.0	6.2	2.4	3.6	5.1	7.7	2.6	4.1
200	Lymphosarcoma	0.8	1.1	0.4	0.7	1.1	1.5	0.9	1.2	0.4	0.5	0.6	0.8	0.3	0.5
201	Hodgkins. Disease	1.0	1.3	0.7	0.9	1.1	1.2	1.0	1.4	1.3	1.4	1.1	1.3	0.8	0.9
202	Oth. Lymph. Node	2.3	3.4	1.9	2.8	1.6	2.2	1.8	2.5	1.8	2.6	1.7	2.3	1.4	2.0
203	Multiple Myeloma	0.3	0.6	0.5	0.9	0.5	1.0	0.6	1.0	0.8	1.3	0.6	1.0	0.6	1.0
204	Leuk. Lymphatic	1.0	1.1	0.8	0.9	1.0	1.3	1.4	1.7	0.8	1.0	1.0	1.3	1.0	1.3
205	Leuk. Myelocytic	2.1	2.5	1.4	1.6	1.5	1.9	1.5	1.6	1.6	1.9	1.5	1.8	1.2	1.3
206	Leuk. Monocytic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
207	Leuk. Misc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
208	Leuk. Unspecified	0.5	0.6	0.5	0.5	0.3	0.4	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.3
	All Sites	64.9	102.1	65.8	103.9	64.7	102.4	67.9	105.8	58.3	90.4	62.2	95.2	55.2	85.6

TABLE: BLR-5(b):

**Trends in Crude (CR) & Age Adjusted (AAR) Cancer Incidence Rates from 1990 to 1996 - Females
Bangalore**

ICD-9	Site	1990		1991		1992		1993		1994		1995		1996	
		CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR
140	Lip	0.2	0.3	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.0	0.1
141	Tongue	0.8	1.5	1.0	1.6	0.6	1.0	0.5	0.7	0.4	0.7	0.4	0.6	0.6	0.9
142	Salivary Gland	0.5	0.6	0.3	0.4	0.2	0.3	0.3	0.3	0.3	0.5	0.2	0.3	0.3	0.3
143	Gum	1.3	2.2	1.7	2.5	1.2	2.0	0.8	1.4	0.9	1.6	1.4	2.4	1.1	2.0
144	Floor of Mouth	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.1
145	Other Mouth	4.2	7.2	3.6	5.9	3.3	5.4	4.6	7.6	3.8	6.4	3.2	5.3	3.2	5.2
146	Oropharynx	0.3	0.6	0.4	0.7	0.3	0.5	0.2	0.3	0.3	0.5	0.3	0.5	0.4	0.7
147	Nasopharynx	0.2	0.2	0.1	0.1	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3
148	Hypopharynx	0.6	0.9	0.7	1.0	0.8	1.2	1.1	1.8	0.8	1.4	0.7	1.1	0.9	1.5
149	Pharynx Etc.	0.3	0.4	0.5	0.8	0.2	0.3	0.2	0.3	0.3	0.5	0.2	0.2	0.2	0.4
150	Oesophagus	4.8	8.3	6.1	10.6	4.9	8.4	4.3	7.6	4.8	8.1	5.4	9.7	3.2	5.5
151	Stomach	3.8	5.9	3.2	5.5	3.0	4.9	3.6	5.8	3.1	5.2	2.9	4.8	2.4	3.7
152	Small Intestine	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.0	0.0	0.1	0.1	0.0	0.1
153	Colon	1.2	1.9	1.1	1.9	1.6	2.4	1.4	2.4	1.3	2.1	0.9	1.4	1.1	1.8
154	Rectum	1.7	2.8	1.8	2.9	1.7	2.8	2.2	3.3	1.2	1.9	1.9	3.0	2.0	3.1
155	Liver	1.1	1.9	0.9	1.5	0.6	1.0	0.9	1.5	0.9	1.3	0.7	1.2	0.4	0.6
156	Gall Bladder	0.4	0.8	0.4	0.7	0.3	0.6	0.5	0.8	0.4	0.6	0.5	0.9	0.1	0.2
157	Pancreas	0.5	0.8	0.4	0.6	0.8	1.2	0.4	0.7	0.5	0.8	0.5	0.9	0.5	0.9
158	Retroperitoneum	0.2	0.3	0.6	0.8	0.5	0.6	0.2	0.4	0.2	0.3	0.2	0.3	0.3	0.4
159	Other Dig System	0.3	0.5	0.3	0.4	0.2	0.3	0.1	0.1	0.2	0.3	0.1	0.2	0.1	0.2
160	Nasal Cavity	0.3	0.5	0.4	0.6	0.3	0.6	0.3	0.5	0.1	0.1	0.2	0.3	0.0	0.1
161	Larynx	0.6	1.0	0.3	0.4	0.3	0.4	0.3	0.5	0.4	0.7	0.4	0.5	0.4	0.6
162	Lung	1.2	2.0	1.2	2.0	1.2	2.0	1.3	2.2	0.8	1.5	1.3	2.3	0.8	1.3
163	Pleura	0.3	0.4	0.1	0.2	0.2	0.4	0.2	0.3	0.0	0.0	0.0	0.1	0.1	0.2
164	Thymus	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1
165	Other Resp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170	Bone	0.9	1.2	0.9	1.0	0.7	0.9	1.0	1.1	0.9	1.1	0.5	0.7	0.5	0.6
171	Conn. Tissue	0.6	0.8	0.6	0.8	0.5	0.6	0.6	0.6	0.5	0.5	0.4	0.5	0.5	0.6
172	Skin Melanoma	0.1	0.0	0.2	0.3	0.1	0.2	0.1	0.2	0.1	0.3	0.1	0.2	0.0	0.0
173	Skin. Other	1.0	1.4	0.9	1.4	0.8	1.4	1.8	2.9	0.6	1.0	0.8	1.2	0.8	1.1
174	Breast Female	13.3	20.1	16.4	24.9	14.4	21.6	15.9	23.3	13.6	20.4	15.4	23.2	14.5	21.3
179	Uterus NOS	0.3	0.4	0.2	0.3	0.4	0.5	0.5	0.7	0.3	0.4	0.0	0.0	0.6	0.9
180	Cervix Uteri	19.2	29.2	17.8	27.5	17.3	26.1	19.1	29.6	16.2	24.6	16.2	25.2	14.1	21.7
181	Placenta	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1
182	Corpus Uteri	1.3	2.3	1.7	2.8	1.3	2.1	1.3	2.0	2.0	3.4	1.4	2.4	1.9	3.0
183	Ovary Etc.	2.7	3.6	3.2	4.6	2.7	3.9	4.1	6.2	4.0	5.7	3.6	5.2	3.8	5.4
184	Other Fem Gen.	1.0	1.7	1.1	1.8	0.5	0.9	0.6	1.0	0.9	1.5	0.9	1.4	0.7	1.0
188	Uri. Bladder	0.5	0.9	0.5	0.9	0.5	0.9	0.5	0.9	0.5	0.8	0.5	0.9	0.5	0.8
189	Kidney	0.3	0.4	0.7	0.9	0.8	1.3	0.2	0.3	0.4	0.6	0.5	0.9	0.4	0.6
190	Eye	0.1	0.2	0.4	0.5	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.3
191	Brain	0.8	1.0	1.3	1.6	1.7	2.1	1.4	1.5	1.4	1.9	1.3	1.6	1.1	1.3
192	Nervous System	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.0	0.0
193	Thyroid Gland	2.6	3.4	2.2	2.9	2.7	3.6	2.8	3.6	2.0	2.6	1.8	2.5	1.9	2.3
194	Oth. Endo. Gland	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
195	Ill Def. Sites	0.6	1.1	0.4	0.5	0.3	0.5	0.1	0.1	0.3	0.5	0.6	0.8	0.8	1.3
196	Sec. Lymph. Node	0.6	1.1	0.8	1.1	0.5	0.9	0.7	1.1	0.7	1.0	0.9	1.5	0.6	0.9
197	Sec. Res. Etc	0.5	0.9	0.6	0.9	1.0	1.8	1.0	1.6	0.9	1.5	0.9	1.4	0.7	1.1
198	Sec. Other	0.4	0.7	0.5	0.7	0.9	1.4	0.9	1.5	0.8	1.3	0.6	1.0	0.7	1.0
199	Prim. Unknown	6.6	10.9	7.2	11.0	3.7	5.5	5.3	8.8	2.2	3.5	3.5	5.4	2.4	3.8
200	Lymphosarcoma	0.4	0.7	0.5	0.7	0.3	0.6	0.3	0.4	0.3	0.4	0.3	0.4	0.2	0.3
201	Hodgkins. Disease	0.3	0.4	0.6	0.5	0.6	0.8	0.5	0.6	0.6	0.7	0.5	0.8	0.4	0.4
202	Oth. Lymph. Node	1.1	1.6	1.0	1.4	1.8	2.7	1.4	2.1	1.2	1.6	1.0	1.6	1.1	1.5
203	Multiple Myeloma	0.5	0.9	0.3	0.6	0.5	0.8	0.3	0.6	0.4	0.7	0.5	0.9	0.7	1.2
204	Leuk. Lymphatic	0.7	1.0	0.6	0.7	0.6	0.8	0.8	1.0	0.6	0.7	0.6	0.6	0.7	0.8
205	Leuk. Myelocytic	1.4	1.6	1.2	1.4	1.3	1.7	1.2	1.5	1.2	1.6	1.4	1.8	1.7	2.2
206	Leuk. Monocytic	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
207	Leuk. Misc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
208	Leuk. Unspecified	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.4	0.6
	All Sites	83.5	128.6	86.6	133.5	79.5	121.0	86.4	132.6	74.0	113.8	76.5	119.5	70.6	106.3

TABLE: BLR-6(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) 1990-1996: 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	0.02	0.02
141	Tongue	0.22	0.22	0.43	0.43
142	Salivary Gland	0.03	0.03	0.06	0.06
143	Gum	0.03	0.03	0.07	0.07
144	Floor of Mouth	0.04	0.04	0.05	0.05
145	Other Mouth	0.13	0.13	0.22	0.22
146	Oropharynx	0.14	0.14	0.24	0.24
147	Nasopharynx	0.02	0.02	0.04	0.04
148	Hypopharynx	0.36	0.36	0.73	0.73
149	Pharynx Etc.	0.05	0.05	0.08	0.08
150	Oesophagus	0.56	0.56	1.13	1.12
151	Stomach	0.61	0.61	1.16	1.15
152	Small Intestine	0.01	0.01	0.02	0.02
153	Colon	0.12	0.12	0.28	0.28
154	Rectum	0.19	0.19	0.37	0.37
155	Liver	0.16	0.16	0.37	0.37
156	Gall Bladder	0.03	0.03	0.07	0.07
157	Pancreas	0.09	0.09	0.15	0.15
158	Retroperitoneum	0.03	0.03	0.03	0.03
159	Other Dig System	0.02	0.02	0.03	0.03
160	Nasal Cavity	0.03	0.03	0.05	0.05
161	Larynx	0.27	0.27	0.53	0.53
162	Lung	0.46	0.46	0.97	0.97
163	Pleura	0.03	0.03	0.04	0.04
164	Thymus	0.01	0.01	0.02	0.02
165	Other Resp.	0.00	0.00	0.00	0.00
170	Bone	0.07	0.07	0.09	0.09
171	Conn. Tissue	0.05	0.05	0.08	0.08
172	Skin Melanoma	0.02	0.02	0.03	0.03
173	Skin. Other	0.09	0.09	0.16	0.16
175	Breast Male	0.01	0.01	0.03	0.03
185	Prostate	0.14	0.14	0.52	0.52
186	Testis	0.04	0.04	0.05	0.05
187	Penis Etc.	0.09	0.09	0.16	0.16
188	Uri. Bladder	0.15	0.15	0.38	0.38
189	Kidney	0.08	0.08	0.15	0.15
190	Eye	0.01	0.01	0.02	0.02
191	Brain	0.19	0.19	0.27	0.27
192	Nervous System	0.01	0.01	0.01	0.01
193	Thyroid Gland	0.06	0.06	0.10	0.10
194	Oth. Endo. Gland	0.00	0.00	0.00	0.00
195	Ill Def. Sites	0.05	0.05	0.06	0.06
196	Sec. Lymph. Node	0.12	0.12	0.26	0.26
197	Sec. Res. Etc	0.10	0.10	0.19	0.19
198	Sec. Other	0.09	0.09	0.17	0.17
199	Prim. Unknown	0.41	0.41	0.79	0.79
200	Lymphosarcoma	0.05	0.05	0.09	0.09
201	Hodgkins. Disease	0.07	0.07	0.11	0.11
202	Oth. Lymph. Node	0.15	0.15	0.30	0.30
203	Multiple Myeloma	0.05	0.05	0.13	0.13
204	Leuk. Lymphatic	0.06	0.06	0.09	0.09
205	Leuk. Myelocytic	0.12	0.12	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. Unspecified	0.02	0.02	0.04	0.04
	All Sites	5.92	5.75	11.60	10.95

TABLE: BLR-6(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) 1990-1996: 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	0.06	0.06	0.12	0.12
142	Salivary Gland	0.03	0.03	0.03	0.03
143	Gum	0.14	0.14	0.22	0.22
144	Floor of Mouth	0.00	0.00	0.00	0.00
145	Other Mouth	0.44	0.44	0.75	0.75
146	Oropharynx	0.04	0.04	0.07	0.07
147	Nasopharynx	0.02	0.02	0.03	0.03
148	Hypopharynx	0.10	0.10	0.15	0.15
149	Pharynx Etc.	0.03	0.03	0.06	0.06
150	Oesophagus	0.54	0.54	1.06	1.05
151	Stomach	0.32	0.32	0.63	0.63
152	Small Intestine	0.01	0.01	0.01	0.01
153	Colon	0.14	0.14	0.25	0.25
154	Rectum	0.21	0.21	0.33	0.33
155	Liver	0.09	0.09	0.14	0.14
156	Gall Bladder	0.05	0.05	0.08	0.08
157	Pancreas	0.05	0.05	0.11	0.11
158	Retroperitoneum	0.03	0.03	0.05	0.05
159	Other Dig System	0.02	0.02	0.04	0.04
160	Nasal Cavity	0.03	0.03	0.04	0.04
161	Larynx	0.04	0.04	0.07	0.07
162	Lung	0.12	0.12	0.23	0.23
163	Pleura	0.01	0.01	0.03	0.03
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	0.09
171	Conn. Tissue	0.04	0.04	0.06	0.06
172	Skin Melanoma	0.01	0.01	0.02	0.02
173	Skin. Other	0.09	0.09	0.17	0.17
174	Breast	1.72	1.71	2.50	2.47
179	Uterus NOS.	0.04	0.04	0.05	0.05
180	Cervix	2.10	2.08	2.98	2.94
181	Placenta	0.00	0.00	0.00	0.00
182	Body Uterus	0.19	0.19	0.33	0.33
183	Ovary	0.39	0.39	0.56	0.56
184	Vagina	0.08	0.08	0.17	0.17
188	Uri. Bladder	0.06	0.06	0.10	0.10
189	Kidney	0.05	0.05	0.08	0.08
190	Eye	0.01	0.01	0.02	0.02
191	Brain	0.11	0.11	0.15	0.15
192	Nervous System	0.00	0.00	0.01	0.01
193	Thyroid Gland	0.22	0.22	0.32	0.32
194	Oth. Endo. Gland	0.00	0.00	0.00	0.00
195	Ill Def. Sites	0.04	0.04	0.08	0.08
196	Sec. Lymph. Node	0.07	0.07	0.14	0.14
197	Sec. Res. Etc	0.09	0.09	0.17	0.17
198	Sec. Other	0.07	0.07	0.14	0.14
199	Prim. Unknown	0.45	0.45	0.78	0.78
200	Lymphosarcoma	0.03	0.03	0.06	0.06
201	Hodgkins. Disease	0.04	0.04	0.06	0.06
202	Oth. Lymph. Node	0.12	0.12	0.21	0.21
203	Multiple Myeloma	0.06	0.06	0.11	0.11
204	Leuk. Lymphatic	0.04	0.04	0.07	0.07
205	Leuk. Myelocytic	0.12	0.12	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. Unspecified	0.02	0.02	0.03	0.03
	All Sites	8.84	8.46	14.12	13.17

**TABLE: BLR-7(a): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Method of Diagnosis 1990-1996 - Males
Bangalore**

ICD-9	Site	Clinical		Microscopic		X-Ray		D.C.O.		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	0	0.0	15	100.0	0	0.0	0	0.0	0	0.0	15	100.0
141	Tongue	29	8.3	311	89.4	0	0.0	6	1.7	2	0.6	348	100.0
142	Salivary Gland	3	5.7	47	88.7	1	1.9	1	1.9	1	1.9	53	100.0
143	Gum	3	5.6	51	94.4	0	0.0	0	0.0	0	0.0	54	100.0
144	Floor of Mouth	9	20.0	35	77.8	0	0.0	1	2.2	0	0.0	45	100.0
145	Other Mouth	16	8.6	164	88.6	0	0.0	5	2.7	0	0.0	185	100.0
146	Oropharynx	10	4.9	191	93.6	0	0.0	3	1.5	0	0.0	204	100.0
147	Nasopharynx	5	10.0	45	90.0	0	0.0	0	0.0	0	0.0	50	100.0
148	Hypopharynx	73	13.0	472	84.3	4	0.7	10	1.8	1	0.2	560	100.0
149	Pharynx Etc.	9	13.0	50	72.5	0	0.0	9	13.0	1	1.4	69	100.0
150	Oesophagus	78	8.8	689	77.9	50	5.7	50	5.7	17	1.9	884	100.0
151	Stomach	134	14.1	696	73.2	10	1.1	82	8.6	29	3.0	951	100.0
152	Small Intestine	0	0.0	14	82.4	0	0.0	2	11.8	1	5.9	17	100.0
153	Colon	32	13.1	189	77.5	0	0.0	18	7.4	5	2.0	244	100.0
154	Rectum	29	8.9	283	86.5	0	0.0	12	3.7	3	0.9	327	100.0
155	Liver	16	5.7	199	70.8	4	1.4	51	18.1	11	3.9	281	100.0
156	Gall Bladder	6	9.7	49	79.0	1	1.6	3	4.8	3	4.8	62	100.0
157	Pancreas	38	28.4	60	44.8	4	3.0	20	14.9	12	9.0	134	100.0
158	Retroperitoneum	2	4.2	44	91.7	0	0.0	2	4.2	0	0.0	48	100.0
159	Other Dig System	0	0.0	26	86.7	0	0.0	3	10.0	1	3.3	30	100.0
160	Nasal Cavity	5	10.0	44	88.0	0	0.0	0	0.0	1	2.0	50	100.0
161	Larynx	56	13.5	345	83.3	2	0.5	11	2.7	0	0.0	414	100.0
162	Lung	72	10.0	511	71.2	51	7.1	79	11.0	5	0.7	718	100.0
163	Pleura	2	5.1	31	79.5	0	0.0	6	15.4	0	0.0	39	100.0
164	Thymus	0	0.0	17	77.3	3	13.6	2	9.1	0	0.0	22	100.0
165	Other Resp.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
170	Bone	2	1.4	128	90.1	3	2.1	9	6.3	0	0.0	142	100.0
171	Conn. Tissue	4	4.1	92	93.9	1	1.0	1	1.0	0	0.0	98	100.0
172	Skin Melanoma	0	0.0	22	100.0	0	0.0	0	0.0	0	0.0	22	100.0
173	Skin. Other	7	4.4	149	93.7	0	0.0	3	1.9	0	0.0	159	100.0
175	Breast Male	6	24.0	19	76.0	0	0.0	0	0.0	0	0.0	25	100.0
185	Prostate	45	11.6	310	79.9	4	1.0	20	5.2	9	2.3	388	100.0
186	Testis	5	5.7	80	90.9	1	1.1	2	2.3	0	0.0	88	100.0
187	Penis Etc.	4	2.7	143	95.3	0	0.0	3	2.0	0	0.0	150	100.0
188	Uri. Bladder	15	5.1	263	88.6	2	0.7	11	3.7	6	2.0	297	100.0
189	Kidney	4	2.8	128	88.3	1	0.7	11	7.6	1	0.7	145	100.0
190	Eye	0	0.0	24	92.3	2	7.7	0	0.0	0	0.0	26	100.0
191	Brain	9	2.6	301	88.3	3	0.9	19	5.6	9	2.6	341	100.0
192	Nervous System	0	0.0	13	86.7	0	0.0	2	13.3	0	0.0	15	100.0
193	Thyroid Gland	10	7.9	113	89.0	0	0.0	4	3.1	0	0.0	127	100.0
194	Oth. Endo. Gland	0	0.0	8	100.0	0	0.0	0	0.0	0	0.0	8	100.0
195	Ill Def. Sites	4	4.8	69	82.1	0	0.0	10	11.9	1	1.2	84	100.0
196	Sec. Lymph. Node	4	2.0	194	96.5	2	1.0	1	0.5	0	0.0	201	100.0
197	Sec. Res. Etc	11	6.8	142	87.7	3	1.9	3	1.9	3	1.9	162	100.0
198	Sec. Other	19	13.4	97	68.3	15	10.6	3	2.1	8	5.6	142	100.0
199	Prim. Unknown	23	3.3	65	9.3	1	0.1	606	87.1	1	0.1	696	100.0
200	Lymphosarcoma	0	0.0	99	96.1	0	0.0	3	2.9	1	1.0	103	100.0
201	Hodgkins. Disease	0	0.0	157	96.9	0	0.0	5	3.1	0	0.0	162	100.0
202	Oth. Lymph. Node	1	0.3	269	93.1	0	0.0	18	6.2	1	0.3	289	100.0
203	Multiple Myeloma	1	1.1	84	90.3	2	2.2	4	4.3	2	2.2	93	100.0
204	Leuk. Lymphatic	3	1.8	146	89.6	0	0.0	14	8.6	0	0.0	163	100.0
205	Leuk. Myelocytic	2	0.8	227	90.8	0	0.0	21	8.4	0	0.0	250	100.0
206	Leuk. Monocytic	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
207	Leuk. Misc.	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
208	Leuk. Unspecified	2	3.6	39	69.6	0	0.0	15	26.8	0	0.0	56	100.0
	All Sites	808	7.9	7963	77.8	170	1.7	1164	11.4	135	1.3	10240	100.0

**TABLE: BLR-7(b): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Method of Diagnosis 1990-1996 - Females
Bangalore**

ICD-9	Site	Clinical		Microscopic		X-Ray		D.C.O.		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	2	14.3	11	78.6	0	0.0	1	7.1	0	0.0	14	100.0
141	Tongue	7	8.0	78	88.6	0	0.0	3	3.4	0	0.0	88	100.0
142	Salivary Gland	4	8.7	42	91.3	0	0.0	0	0.0	0	0.0	46	100.0
143	Gum	14	7.9	163	92.1	0	0.0	0	0.0	0	0.0	177	100.0
144	Floor of Mouth	0	0.0	5	100.0	0	0.0	0	0.0	0	0.0	5	100.0
145	Other Mouth	46	8.5	484	89.0	0	0.0	13	2.4	1	0.2	544	100.0
146	Oropharynx	3	6.0	46	92.0	0	0.0	1	2.0	0	0.0	50	100.0
147	Nasopharynx	2	7.1	24	85.7	0	0.0	1	3.6	1	3.6	28	100.0
148	Hypopharynx	11	9.3	99	83.9	4	3.4	3	2.5	1	0.8	118	100.0
149	Pharynx Etc.	2	5.4	25	67.6	0	0.0	10	27.0	0	0.0	37	100.0
150	Oesophagus	61	8.7	552	78.5	43	6.1	32	4.6	15	2.1	703	100.0
151	Stomach	58	12.6	335	72.8	2	0.4	47	10.2	18	3.9	460	100.0
152	Small Intestine	1	12.5	5	62.5	0	0.0	2	25.0	0	0.0	8	100.0
153	Colon	20	11.2	141	78.8	0	0.0	14	7.8	4	2.2	179	100.0
154	Rectum	21	7.9	232	86.9	1	0.4	13	4.9	0	0.0	267	100.0
155	Liver	11	9.4	67	57.3	0	0.0	34	29.1	5	4.3	117	100.0
156	Gall Bladder	6	10.7	43	76.8	0	0.0	5	8.9	2	3.6	56	100.0
157	Pancreas	22	28.6	35	45.5	1	1.3	14	18.2	5	6.5	77	100.0
158	Retroperitoneum	2	4.5	39	88.6	0	0.0	3	6.8	0	0.0	44	100.0
159	Other Dig System	2	8.3	20	83.3	0	0.0	2	8.3	0	0.0	24	100.0
160	Nasal Cavity	2	5.9	32	94.1	0	0.0	0	0.0	0	0.0	34	100.0
161	Larynx	9	16.1	41	73.2	0	0.0	6	10.7	0	0.0	56	100.0
162	Lung	14	8.5	116	70.3	9	5.5	26	15.8	0	0.0	165	100.0
163	Pleura	4	21.1	12	63.2	0	0.0	3	15.8	0	0.0	19	100.0
164	Thymus	0	0.0	10	100.0	0	0.0	0	0.0	0	0.0	10	100.0
165	Other Resp.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
170	Bone	2	1.8	103	91.2	1	0.9	7	6.2	0	0.0	113	100.0
171	Conn. Tissue	3	3.9	69	89.6	1	1.3	4	5.2	0	0.0	77	100.0
172	Skin Melanoma	0	0.0	14	100.0	0	0.0	0	0.0	0	0.0	14	100.0
173	Skin. Other	3	2.1	136	97.1	0	0.0	1	0.7	0	0.0	140	100.0
174	Breast	168	7.7	1932	88.4	5	0.2	71	3.2	10	0.5	2186	100.0
179	Uterus NOS.	2	4.3	27	57.4	1	2.1	17	36.2	0	0.0	47	100.0
180	Cervix	211	8.4	2261	89.6	2	0.1	45	1.8	4	0.2	2523	100.0
181	Placenta	1	9.1	10	90.9	0	0.0	0	0.0	0	0.0	11	100.0
182	Body Uterus	7	3.0	217	93.9	0	0.0	7	3.0	0	0.0	231	100.0
183	Ovary	51	10.0	436	85.2	3	0.6	14	2.7	8	1.6	512	100.0
184	Vagina	4	3.4	114	95.8	0	0.0	1	0.8	0	0.0	119	100.0
188	Uri. Bladder	4	5.5	62	84.9	2	2.7	4	5.5	1	1.4	73	100.0
189	Kidney	4	5.7	64	91.4	2	2.9	0	0.0	0	0.0	70	100.0
190	Eye	2	7.7	24	92.3	0	0.0	0	0.0	0	0.0	26	100.0
191	Brain	2	1.1	168	88.4	2	1.1	14	7.4	4	2.1	190	100.0
192	Nervous System	0	0.0	8	100.0	0	0.0	0	0.0	0	0.0	8	100.0
193	Thyroid Gland	17	5.0	313	92.3	1	0.3	8	2.4	0	0.0	339	100.0
194	Oth. Endo. Gland	0	0.0	8	88.9	0	0.0	1	11.1	0	0.0	9	100.0
195	Ill Def. Sites	5	7.7	51	78.5	0	0.0	8	12.3	1	1.5	65	100.0
196	Sec. Lymph. Node	2	2.0	94	94.9	1	1.0	2	2.0	0	0.0	99	100.0
197	Sec. Res. Etc	13	11.3	85	73.9	4	3.5	5	4.3	8	7.0	115	100.0
198	Sec. Other	10	10.2	75	76.5	6	6.1	1	1.0	6	6.1	98	100.0
199	Prim. Unknown	13	2.0	51	8.0	1	0.2	570	89.6	1	0.2	636	100.0
200	Lymphosarcoma	0	0.0	47	100.0	0	0.0	0	0.0	0	0.0	47	100.0
201	Hodgkins. Disease	0	0.0	71	97.3	0	0.0	2	2.7	0	0.0	73	100.0
202	Oth. Lymph. Node	4	2.2	164	92.1	0	0.0	9	5.1	1	0.6	178	100.0
203	Multiple Myeloma	3	4.2	60	84.5	3	4.2	5	7.0	0	0.0	71	100.0
204	Leuk. Lymphatic	0	0.0	89	91.8	0	0.0	8	8.2	0	0.0	97	100.0
205	Leuk. Myelocytic	2	1.0	189	94.5	0	0.0	9	4.5	0	0.0	200	100.0
206	Leuk. Monocytic	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	2	100.0
207	Leuk. Misc.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
208	Leuk. Unspecified	2	4.4	29	64.4	0	0.0	14	31.1	0	0.0	45	100.0
	All Sites	859	7.3	9630	82.0	95	0.8	1060	9.0	96	0.8	11740	100.0

TABLE: BLR-8(a): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Detailed Microscopic Diagnosis, 1990-1996 - Males : Bangalore

ICD-9	Site	Pri. Hist		Sec. Hist		Cytology		Blood Film		Bone Marrow		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	15	99.9	0	0	0	0	0	0	0	0	0	0	15	100
141	Tongue	243	69.8	10	2.9	58	16.7	0	0	0	0	37	10.6	348	100
142	Salivary Glands	37	69.8	1	1.9	9	17	0	0	0	0	6	11.3	53	100
143	Gum	49	90.7	0	0	2	3.7	0	0	0	0	3	5.6	54	100
144	Floor of Mouth	35	77.8	0	0	0	0	0	0	0	0	10	22.2	45	100
145	Other Mouth	148	80	3	1.6	13	7	0	0	0	0	21	11.4	185	100
146	Oropharynx	157	77	10	4.9	24	11.8	0	0	0	0	13	6.4	204	100
147	Nasopharynx	32	64	6	12	7	14	0	0	0	0	5	10	50	100
148	Hypopharynx	324	57.9	22	3.9	126	22.5	0	0	0	0	88	15.7	560	100
149	Pharynx etc	40	58	1	1.4	9	13	0	0	0	0	19	27.5	69	100
150	Oesophagus	664	75.1	5	0.6	20	2.3	0	0	0	0	195	22.1	884	100
151	Stomach	631	66.4	30	3.2	34	3.6	0	0	0	0	256	26.9	951	100
152	Small Intestine	13	76.5	1	5.9	0	0	0	0	0	0	3	17.6	17	100
153	Colon	176	72.1	4	1.6	9	3.7	0	0	0	0	55	22.5	244	100
154	Rectum	272	83.2	4	1.2	7	2.1	0	0	0	0	44	13.5	327	100
155	Liver	98	34.9	8	2.8	93	33.1	0	0	0	0	82	29.2	281	100
156	Gall Bladder	42	67.7	3	4.8	4	6.5	0	0	0	0	13	21	62	100
157	Pancreas	31	23.1	11	8.2	18	13.4	0	0	0	0	74	55.2	134	100
158	Retroperito	30	62.5	1	2.1	13	27.1	0	0	0	0	4	8.3	48	100
159	Other Digs	9	30	9	30	8	26.7	0	0	0	0	4	13.3	30	100
160	Nasal Cavity	41	82	0	0	3	6	0	0	0	0	6	12	50	100
161	Larynx	302	72.9	4	1	38	9.2	1	0.2	0	0	69	16.7	414	100
162	Lung	263	36.6	57	7.9	190	26.5	0	0	0	0	208	29	718	100
163	Pleura	17	43.6	0	0	14	35.9	0	0	0	0	8	20.5	39	100
164	Thymus	13	59.1	0	0	4	18.2	0	0	0	0	5	22.7	22	100
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	Bone	110	77.5	1	0.7	15	10.6	0	0	2	1.4	14	9.9	142	100
171	Connective	82	83.7	0	0	10	10.2	0	0	0	0	6	6.1	98	100
172	Skin Melanoma	19	86.4	1	4.5	2	9.1	0	0	0	0	0	0	22	100
173	Skin Other	145	91.2	1	0.6	3	1.9	0	0	0	0	10	6.3	159	100
175	Breast Male	15	60	0	0	4	16	0	0	0	0	6	24	25	100
185	Prostate	291	75	6	1.5	13	3.4	0	0	0	0	78	20.1	388	100
186	Testis	71	80.7	2	2.3	7	8	0	0	0	0	8	9.1	88	100
187	Penis etc	136	90.7	3	2	4	2.7	0	0	0	0	7	4.7	150	100
188	Uri Bladder	256	86.2	0	0	7	2.4	0	0	0	0	34	11.4	297	100
189	Kidney	112	77.2	3	2.1	13	9	0	0	0	0	17	11.7	145	100
190	Eye	23	88.5	0	0	1	3.8	0	0	0	0	2	7.7	26	100
191	Brain	301	88.3	0	0	0	0	0	0	0	0	40	11.7	341	100
192	Nervous Sys	12	80	0	0	1	6.7	0	0	0	0	2	13.3	15	100
193	Thyroid Glands	87	68.5	9	7.1	17	13.4	0	0	0	0	14	11	127	100
194	Oth. Endo. Gland	7	87.5	0	0	1	12.5	0	0	0	0	0	0	8	100
195	Ill Def Site	57	67.9	1	1.2	11	13.1	0	0	0	0	15	17.9	84	100
196	Sec Lymph Node	2	1	80	39.8	112	55.7	0	0	0	0	7	3.5	201	100
197	Sec Res. Etc	0	0	47	29	95	58.6	0	0	0	0	20	12.3	162	100
198	Sec Other	1	0.7	74	52.1	20	14.1	0	0	2	1.4	45	31.7	142	100
199	Prim Unknown	56	8	6	0.9	3	0.4	0	0	0	0	631	90.7	696	100
200	Lymph Sarcoma	82	79.6	0	0	10	9.7	0	0	7	6.8	4	3.9	103	100
201	Hodgkins Disease	152	93.8	0	0	4	2.5	0	0	1	0.6	5	3.1	162	100
202	Oth. Lymph. Node	217	75.1	0	0	40	13.8	0	0	12	4.2	20	6.9	289	100
203	Mult Myeloma	24	25.8	0	0	3	3.2	0	0	57	61.3	9	9.7	93	100
204	Leuk Lymphatic	5	3.1	0	0	0	0	14	8.6	127	77.9	17	10.4	163	100
205	Leuk Myelocytic	10	4	0	0	0	0	48	19.2	169	67.6	23	9.2	250	100
206	Leuk Monocytic	1	33.3	0	0	0	0	1	33.3	1	33.3	0	0	3	100
207	Leuk Oth Sp	0	0	1	99.9	0	0	0	0	0	0	0	0	1	100
208	Leuk unspecified	4	7.1	0	0	0	0	10	17.9	25	44.6	17	30.4	56	100
	All Sites	5960	58.2	425	4.2	1099	10.7	74	0.7	403	3.9	2279	22.3	10240	100

TABLE: BLR-8(b): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Detailed Microscopic Diagnosis, 1990-1996 - Females : Bangalore

ICD-9	Site	Pri. Hist		Sec. Hist		Cytology		Blood Film		Bone Marrow		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	10	71.4	0	0	1	7.1	0	0	0	0	3	21.4	14	100
141	Tongue	72	81.8	0	0	6	6.8	0	0	0	0	10	11.4	88	100
142	Salivary Glands	39	84.8	0	0	3	6.5	0	0	0	0	4	8.7	46	100
143	Gum	160	90.4	0	0	3	1.7	0	0	0	0	14	7.9	177	100
144	Floor of Mouth	5	99.9	0	0	0	0	0	0	0	0	0	0	5	100
145	Other Mouth	472	86.8	2	0.4	10	1.8	0	0	0	0	60	11	544	100
146	Oropharynx	35	70	3	6	8	16	0	0	0	0	4	8	50	100
147	Nasopharynx	15	53.6	3	10.7	6	21.4	0	0	0	0	4	14.3	28	100
148	Hypopharynx	77	65.3	2	1.7	20	16.9	0	0	0	0	19	16.1	118	100
149	Pharynx etc	24	64.9	0	0	1	2.7	0	0	0	0	12	32.4	37	100
150	Oesophagus	532	75.7	5	0.7	15	2.1	0	0	0	0	151	21.5	703	100
151	Stomach	296	64.3	17	3.7	22	4.8	0	0	0	0	125	27.2	460	100
152	Small Intestine	5	62.5	0	0	0	0	0	0	0	0	3	37.5	8	100
153	Colon	137	76.5	2	1.1	2	1.1	0	0	0	0	38	21.2	179	100
154	Rectum	228	85.4	3	1.1	1	0.4	0	0	0	0	35	13.1	267	100
155	Liver	32	27.4	5	4.3	30	25.6	0	0	0	0	50	42.7	117	100
156	Gall Bladder	35	62.5	4	7.1	4	7.1	0	0	0	0	13	23.2	56	100
157	Pancreas	17	22.1	4	5.2	14	18.2	0	0	0	0	42	54.5	77	100
158	Retroperito	28	63.6	1	2.3	10	22.7	0	0	0	0	5	11.4	44	100
159	Other Dig System	7	29.2	6	25	7	29.2	0	0	0	0	4	16.7	24	100
160	Nasal Cavity	31	91.2	0	0	1	2.9	0	0	0	0	2	5.9	34	100
161	Larynx	35	62.5	0	0	6	10.7	0	0	0	0	15	26.8	56	100
162	Lung	62	37.6	16	9.7	38	23	0	0	0	0	49	29.7	165	100
163	Pleura	6	31.6	1	5.3	5	26.3	0	0	0	0	7	36.8	19	100
164	Thymus	8	80	0	0	2	20	0	0	0	0	0	0	10	100
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	Bone	89	78.8	0	0	14	12.4	0	0	0	0	10	8.8	113	100
171	Connective	58	75.3	0	0	11	14.3	0	0	0	0	8	10.4	77	100
172	Skin Melanoma	12	85.7	2	14.3	0	0	0	0	0	0	0	0	14	100
173	Skin Other	130	92.9	1	0.7	5	3.6	0	0	0	0	4	2.9	140	100
174	Breast Female	1646	75.3	24	1.1	262	12	0	0	0	0	254	11.6	2186	100
179	Uterus NOS.	25	53.2	2	4.3	0	0	0	0	0	0	20	42.6	47	100
180	Cervix	2235	88.6	5	0.2	21	0.8	0	0	0	0	262	10.4	2523	100
181	Placenta	9	81.8	1	9.1	0	0	0	0	0	0	1	9.1	11	100
182	Body Uterus	216	93.5	1	0.4	0	0	0	0	0	0	14	6.1	231	100
183	Ovary	357	69.7	22	4.3	57	11.1	0	0	0	0	76	14.8	512	100
184	Vagina	109	91.6	2	1.7	3	2.5	0	0	0	0	5	4.2	119	100
188	Uri Bladder	60	82.2	0	0	2	2.7	0	0	0	0	11	15.1	73	100
189	Kidney	56	80	2	2.9	6	8.6	0	0	0	0	6	8.6	70	100
190	Eye	22	84.6	0	0	2	7.7	0	0	0	0	2	7.7	26	100
191	Brain	168	88.4	0	0	0	0	0	0	0	0	22	11.6	190	100
192	Nervous Sys	7	87.5	1	12.5	0	0	0	0	0	0	0	0	8	100
193	Thyroid Glands	252	74.3	14	4.1	47	13.9	0	0	0	0	26	7.7	339	100
194	Oth. Endo. Gland	5	55.6	0	0	3	33.3	0	0	0	0	1	11.1	9	100
195	Ill Def Sites	39	60	0	0	12	18.5	0	0	0	0	14	21.5	65	100
196	Sec Lymph Node	3	3	54	54.5	37	37.4	0	0	0	0	5	5.1	99	100
197	Sec Res. Etc.	0	0	26	22.6	59	51.3	0	0	0	0	30	26.1	115	100
198	Sec Other	0	0	52	53.1	23	23.5	0	0	0	0	23	23.5	98	100
199	Prim Unknown	44	6.9	5	0.8	2	0.3	0	0	0	0	585	92	636	100
200	Lymph Sarcoma	43	91.5	0	0	2	4.3	0	0	2	4.3	0	0	47	100
201	Hodgkins Disease	64	87.7	0	0	7	9.6	0	0	0	0	2	2.7	73	100
202	Oth. Lymph. Node	133	74.7	0	0	23	12.9	0	0	8	4.5	14	7.9	178	100
203	Mult Myeloma	18	25.4	0	0	1	1.4	0	0	41	57.7	11	15.5	71	100
204	Leuk Lymphatic	3	3.1	0	0	0	0	10	10.4	75	78.1	8	8.3	96	100
205	Leuk Myelocytic	6	3	0	0	0	0	42	21	141	70.5	11	5.5	200	100
206	Leuk Monocytic	0	0	0	0	0	0	1	50	1	50	0	0	2	100
207	Leuk Oth Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	Leuk unspecified	1	2.2	0	0	0	0	9	20	19	42.2	16	35.6	45	100
	All Sites	8179	69.7	288	2.5	814	6.9	62	0.5	287	2.4	2110	18	11740	100

**TABLE: BLR-9(a): Number of Cancer Deaths by Five Year Age Group and Site (ICD-9)
1990-1996 - 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	0	0	1	0	0	0	0	1	0.03
141	Tongue	1	0	0	0	0	1	0	3	3	9	7	7	9	9	9	8	66	2.11
142	Salivary Gland	0	0	0	0	0	0	0	0	0	1	1	0	1	3	1	0	7	0.22
143	Gum	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0.06
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	0	2	3	0	0	1	0	6	0.19
145	Other Mouth	0	0	0	0	0	0	0	0	2	4	3	0	10	4	3	4	30	0.96
146	Oropharynx	0	0	0	1	0	1	0	0	2	2	3	2	2	8	1	3	25	0.80
147	Nasopharynx	0	0	1	1	0	0	1	0	0	0	1	2	1	1	0	0	8	0.26
148	Hypopharynx	0	0	0	0	1	1	0	6	5	5	10	16	21	13	5	14	97	3.10
149	Pharynx Etc.	0	0	0	0	0	0	0	0	2	1	5	1	4	6	5	5	29	0.93
150	Oesophagus	0	0	0	0	0	0	4	6	8	20	34	33	40	35	30	45	255	8.15
151	Stomach	1	1	1	0	1	4	8	11	21	28	40	39	50	38	45	49	337	10.77
152	Small Intestine	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	1	6	0.19
153	Colon	0	0	0	0	1	4	0	0	3	7	6	4	12	10	6	16	69	2.20
154	Rectum	0	1	0	0	2	2	6	1	5	6	6	8	6	8	7	9	67	2.14
155	Liver	4	0	1	0	0	1	2	2	6	10	11	13	16	16	12	23	117	3.74
156	Gall Bladder	0	0	0	0	0	1	0	1	1	1	5	2	2	5	2	1	21	0.67
157	Pancreas	1	0	0	0	0	0	0	1	6	4	4	8	15	9	6	11	65	2.08
158	Retroperitoneum	2	0	0	0	0	1	2	0	2	0	3	0	1	0	1	2	14	0.45
159	Other Dig System	0	0	0	0	1	0	0	0	0	1	1	2	1	0	1	1	8	0.26
160	Nasal Cavity	0	0	0	0	0	0	0	1	0	0	2	0	0	2	0	1	6	0.19
161	Larynx	1	0	0	1	0	0	0	2	2	3	6	8	11	11	5	10	60	1.92
162	Lung	0	0	0	0	0	1	2	3	15	26	31	45	45	35	19	38	260	8.31
163	Pleura	0	0	0	0	0	1	0	1	2	2	1	4	3	0	0	4	18	0.58
164	Thymus	1	0	0	0	0	0	1	1	0	2	1	0	1	1	0	0	8	0.26
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	4	3	1	0	1	1	1	2	3	3	3	2	4	30	0.96
171	Conn. Tissue	1	0	1	2	4	3	0	2	0	2	1	3	1	2	1	1	24	0.77
172	Skin Melanoma	0	0	0	0	0	1	0	0	0	0	3	0	0	1	0	0	5	0.16
173	Skin. Other	0	0	0	0	0	1	1	0	0	0	1	4	1	1	0	3	12	0.38
175	Breast Male	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2	4	0.13
185	Prostate	0	0	0	0	0	0	0	2	1	0	4	6	9	11	15	33	81	2.59
186	Testis	0	0	0	2	0	3	2	3	0	1	2	0	1	1	0	1	16	0.51
187	Penis Etc.	0	0	0	0	1	0	1	1	0	1	2	1	0	2	1	3	13	0.42
188	Uri. Bladder	0	0	0	0	0	1	0	1	0	3	2	5	4	5	8	9	38	1.21
189	Kidney	1	1	0	0	0	0	1	0	3	4	1	4	2	3	0	7	27	0.86
190	Eye	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0.06
191	Brain	4	5	2	2	3	5	8	6	8	4	11	4	4	5	3	2	76	2.43
192	Nervous System	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0.06
193	Thyroid Gland	0	0	0	0	0	0	0	0	1	1	4	1	2	2	1	0	12	0.38
194	Oth. Endo. Gland	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3	0.10
195	Ill Def. Sites	0	0	1	1	0	0	0	3	1	1	6	2	1	1	1	3	21	0.67
196	Sec. Lymph. Node	0	0	0	1	0	0	0	1	0	2	5	5	1	4	4	3	26	0.83
197	Sec. Res. Etc	0	0	0	0	0	1	0	0	4	1	3	5	6	6	1	5	32	1.02
198	Sec. Other	0	0	0	0	0	0	0	3	2	1	1	4	6	3	3	5	28	0.89
199	Prim. Unknown	4	3	6	6	9	20	20	40	42	54	72	99	89	72	68	92	696	22.24
200	Lymphosarcoma	2	3	1	1	1	0	1	1	2	2	2	2	6	3	2	4	33	1.05
201	Hodgkins. Disease	1	2	1	2	2	2	1	2	5	1	6	2	2	1	2	5	37	1.18
202	Oth. Lymph. Node	2	4	1	4	8	6	3	13	6	10	7	8	14	8	3	7	104	3.32
203	Multiple Myeloma	0	0	0	0	0	0	0	1	0	6	2	5	4	5	5	3	31	0.99
204	Leuk. Lymphatic	10	3	8	9	3	3	1	4	2	1	2	3	0	3	1	6	59	1.88
205	Leuk. Myelocytic	2	2	9	5	10	3	3	9	9	11	14	7	5	6	2	6	103	3.29
206	Leuk. Monocytic	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	3	0.10
207	Leuk. Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk. Unspecified	2	4	1	2	1	2	1	2	2	2	5	0	0	3	1	2	30	0.96
	All Sites	41	31	36	46	52	70	69	135	175	245	342	372	413	366	285	452	3130	100.00

**TABLE: BLR-9(b): Number of Cancer Deaths by Five Year Age Group and Site (ICD-9)
1990-1996 - 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	0	0	0	0	0	0	0	0	0	0	0.00
141	Tongue	0	0	0	0	0	0	1	1	0	0	0	1	5	2	0	2	12	0.43
142	Salivary Gland	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	4	0.14
143	Gum	0	0	0	0	0	0	0	0	0	3	1	1	1	2	3	1	12	0.43
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	0	2	4	9	7	3	11	7	6	8	57	2.06
146	Oropharynx	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0.07
147	Nasopharynx	0	0	0	1	2	0	0	3	0	1	1	0	0	0	1	0	9	0.33
148	Hypopharynx	0	0	0	0	1	0	1	2	1	3	3	2	3	3	0	1	20	0.72
149	Pharynx Etc.	0	0	0	1	0	0	1	0	0	0	1	1	3	0	6	2	15	0.54
150	Oesophagus	1	0	0	0	0	1	3	9	6	24	25	24	29	23	18	15	178	6.43
151	Stomach	0	0	0	1	0	5	8	2	13	17	12	17	13	17	20	18	143	5.16
152	Small Intestine	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	3	0.11
153	Colon	0	0	0	0	2	0	0	0	5	3	5	8	8	6	5	7	49	1.77
154	Rectum	0	0	0	1	5	2	2	0	2	4	6	9	6	4	4	10	55	1.99
155	Liver	2	0	1	0	0	2	2	3	4	7	9	8	4	9	5	9	65	2.35
156	Gall Bladder	0	0	0	0	0	0	0	0	1	1	0	5	3	4	2	2	18	0.65
157	Pancreas	0	0	0	0	1	0	1	4	2	6	1	1	5	7	7	5	40	1.44
158	Retroperitoneum	1	0	0	0	0	1	0	0	0	0	0	1	1	1	1	2	8	0.29
159	Other Dig System	0	0	0	0	0	0	0	0	0	0	3	0	0	2	2	1	8	0.29
160	Nasal Cavity	0	1	0	0	0	0	0	1	0	1	1	0	0	0	0	0	4	0.14
161	Larynx	0	0	0	1	0	0	0	1	0	1	2	1	1	1	1	2	11	0.40
162	Lung	0	0	0	0	0	2	3	1	3	5	7	7	8	15	6	6	63	2.28
163	Pleura	0	0	0	0	0	0	0	0	1	0	3	2	0	2	0	2	10	0.36
164	Thymus	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.04
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	1	3	1	1	0	0	1	1	2	2	2	2	3	2	21	0.76
171	Conn. Tissue	0	1	1	1	0	1	1	0	0	2	1	1	1	0	0	0	10	0.36
172	Skin Melanoma	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	2	0.07
173	Skin. Other	1	0	0	0	0	1	0	1	1	0	0	0	0	0	0	1	5	0.18
174	Breast	2	0	0	0	0	10	21	30	41	56	48	44	41	33	18	23	367	13.25
179	Uterus NOS.	0	0	0	0	0	1	0	0	3	2	7	6	0	1	4	3	27	0.98
180	Cervix	0	0	0	1	0	5	13	27	34	41	46	45	41	34	20	23	330	11.92
181	Placenta	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.04
182	Body Uterus	1	0	0	1	0	0	0	0	1	1	2	3	5	3	4	3	24	0.87
183	Ovary	0	0	1	4	2	7	3	7	8	17	15	13	14	15	5	8	119	4.30
184	Vagina	0	0	0	0	0	0	0	0	0	1	0	1	2	0	2	2	8	0.29
188	Uri. Bladder	1	0	0	0	0	0	0	0	0	0	1	1	3	3	0	3	12	0.43
189	Kidney	1	1	0	0	0	1	1	2	0	3	1	1	1	0	0	0	12	0.43
190	Eye	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	0.07
191	Brain	1	0	0	1	2	1	3	3	3	5	6	3	3	2	1	4	38	1.37
192	Nervous System	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.04
193	Thyroid Gland	0	0	1	0	0	0	0	1	0	4	2	3	5	4	3	4	27	0.98
194	Oth. Endo. Gland	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0.11
195	Ill Def. Sites	0	0	0	0	0	0	0	0	0	2	1	2	3	2	0	1	11	0.40
196	Sec. Lymph. Node	0	0	0	1	0	0	0	0	0	1	2	0	0	0	1	3	8	0.29
197	Sec. Res. Etc	1	0	0	0	1	0	5	1	2	2	3	4	2	3	1	4	29	1.05
198	Sec. Other	1	0	0	0	1	1	0	1	2	2	0	0	0	2	3	2	15	0.54
199	Prim. Unknown	3	2	6	10	7	20	18	34	55	72	74	92	75	72	46	72	658	23.76
200	Lymphosarcoma	0	0	0	0	1	1	1	0	2	0	2	0	0	1	0	0	8	0.29
201	Hodgkins. Disease	0	0	0	0	1	2	2	2	2	1	0	1	0	0	1	0	12	0.43
202	Oth. Lymph. Node	4	1	0	2	4	1	4	1	3	1	4	6	6	9	3	5	54	1.95
203	Multiple Myeloma	1	0	0	0	0	0	0	1	1	2	2	1	4	2	1	2	17	0.61
204	Leuk. Lymphatic	4	4	2	6	1	0	1	2	2	2	2	2	2	5	2	2	39	1.41
205	Leuk. Myelocytic	3	1	2	10	9	4	10	8	5	8	10	6	3	2	4	5	90	3.25
206	Leuk. Monocytic	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2	0.07
207	Leuk. Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk. Unspecified	2	3	1	1	0	0	1	9	3	1	4	2	0	0	1	2	30	1.08
	All Sites	31	15	16	46	42	70	108	161	213	316	325	331	315	301	210	269	2769	100.00

**TABLE: BLR-11: Number (#) and Proportion (%) of Types of Childhood Cancers 1990-1996
Bangalore**

Type of Childhood Cancer	Males		Females	
	#	%	#	%
I. LEUKAEMIAS	104	27.37	73	26.94
(a) Acute lymphocytic leukaemia	66	17.37	38	14.02
(b) Other lymphoid leukaemia	0	0.00	4	1.48
(c) Acute non-lymphocytic leukaemia	25	6.58	17	6.27
(d) Chronic myeloid leukaemia	2	0.53	4	1.48
(e) Other and unspecified leukaemia	11	2.89	10	3.69
II. LYMPHOMAS & OTHER RETICULOENDOTHELIAL	65	17.11	15	5.54
(a) Hodgkin's disease	32	8.42	8	2.95
(b) Non-Hodgkin lymphoma	19	5.00	4	1.48
(c) Burkitt's lymphoma	8	2.11	0	0.00
(d) Unspecified lymphomas	6	1.58	2	0.74
(e) Histiocytosis X	0	0.00	0	0.00
(f) Other reticuloendothelial neoplasms	0	0.00	1	0.37
III. C.N.S.& MISC.INTRACRANIAL & INTRASPINAL NEOP.	43	11.32	39	14.39
(a) Ependymoma	1	0.26	1	0.37
(b) Astrocytoma	23	6.05	16	5.90
(c) Medulloblastoma	11	2.89	13	4.80
(d) Other glioma	4	1.05	3	1.11
(e) Misc.intracranial & intraspinal neop.	4	1.05	6	2.21
IV. SYMPATHETIC NERVOUS SYSTEM TUMOURS	17	4.47	13	4.80
(a) Neuroblastoma & ganglioneuroblastoma	15	3.95	13	4.80
(b) Other	2	0.53	0	0.00
V. RETINOBLASTOMA	11	2.89	15	5.54
VI. RENAL TUMOURS	26	6.84	9	3.32
(a) Wilms' tumour	21	5.53	9	3.32
(b) Renal carcinoma	2	0.53	0	0.00
(c) Other & unsp. malignant renal tumours	3	0.79	0	0.00
VII. HEPATIC TUMOURS	11	2.89	5	1.85
(a) Hepatoblastoma	6	1.58	2	0.74
(b) Hepatic carcinoma	4	1.05	3	1.1
(c) Other & unsp. malignant hepatic tumours	1	0.26	0	0.00
VIII. MALIGNANT BONE TUMOURS	21	5.53	27	9.96
(a) Osteosarcoma	6	1.58	8	2.95
(b) Chondrosarcoma	1	0.26	2	0.74
(c) Ewing's sarcoma	6	1.58	13	4.80
(d) Other & unsp. malignant bone tumours	8	2.11	4	1.48
IX. SOFT-TISSUE(S-T) SARCOMAS(S)	20	5.26	10	3.69
(a) Rhabdomyos. embryonals.& s-t.Ewings tum.	17	4.47	7	2.58
(b) Fibros.neurofibros.&oth.fibromatous neop.	0	0.00	1	0.37
(c) Other soft-tissue sarcoma	3	0.79	2	0.74
X. GERM-CELL TROPHOBLASTIC & OTH GONADAL NEOP.	3	0.79	16	5.90
(a) Non-gonadal gc & trophoblastic neop.	0	0.00	3	1.11
(b) Gonadal gc & trophoblastic neop.	3	0.79	12	4.43
(c) Gonadal carcinoma	0	0.00	1	0.37
(d) Other & unsp.malignant gonadal tumours	0	0.00	0	0.00
XI. CARCINOMA & OTH MALIGNANT EPITHELIAL NEOP.	25	6.58	24	8.86
(a) Adrenocortical carcinoma	0	0.00	0	0.00
(b) Thyroid carcinoma	5	1.32	5	1.85
(c) Nasopharyngeal carcinoma	5	1.32	3	1.11
(d) Malanomatous neoplasms	0	0.00	0	0.00
(e) Other carcinoma	15	3.95	16	5.90
XII. OTHER & UNSP. MALIGNANT NEOPLASMS	14	3.68	7	2.58
OTHERS (Not Classified)	20	5.26	18	6.64
TOTAL (ALL CHILDHOOD CANCERS)	380	100.00	271	100.00

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

Dr. K. A. Dinshaw, Principal Investigator

Dr. B.M. Nene, Co-Principal Investigator

Mr. M.K. Chauhan, Co-investigator

Mr. D.N. Rao, Co-investigator

The rural cancer registry at Barshi, (Barshi, Paranda & Bhum) which was set up in 1987, by the Indian Council of Medical Research 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. The registry is situated in the vicinity of Nargis Dutt Memorial Cancer Hospital (NDMCH) (located on the outskirts of Barshi town) with a total population of about 0.4 million in 346 villages spread over 3713 km². 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 km² and a total population of generally less than 5000. The registry area is situated between latitudes 17.1° & 18.4° N and longitudes 76° and 76.4°E. Most of the population is Hindu (96%). Muslims form 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 and is staffed by one computer specialist cum Statistician, one medical records supervisor, one medical records in-charge, one records attendant and six field investigators. 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 a hospital 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 institution the field investigators 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, which assists in 'follow back' to the medical records in the treating hospital or physi-

cian 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 1993-1997.

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

It was observed that smoking related cancers had a very low incidence. A tobacco survey confirmed that smoking is not common (only 6% in males) in the population.

The activities of the registry, have enhanced cancer awareness in the population and has resulted in improved stage at diagnosis and improved 5 year survival in cervical cancer cases. This is based on the following publications by the registry:

1. K. Jayant, B.M. Nene, R.S. Rao, P.S. Dale (1995). Improved stage at diagnosis of cervical cancer with increased cancer awareness in a rural Indian population. *International Journal of Cancer*, 63, 161-613.
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.

Registry Staff :

Mr. A.M. Budukh	: Statistician
Mr. A.M.I. Shaikh	: Medical Record In-charge
Dr. F.Y. Khan	: Medical Record Supervisor
Mr. S.R. Mathapati	: Record Attendant
Mr. N.V. Kesari	: Field Investigator
Mr. N.P. Gaikwad	: Field Investigator
Mr. D.R. Pise	: Field Investigator
Mr. N.S. Panse	: Field Investigator
Mr. T.S. Dudhankar	: Field Investigator
Mr. B.D. Honmane	: Field Invesigator

Figure: BRS-1:
Population Pyramid showing Age Distribution: 1990-1996
Barshi

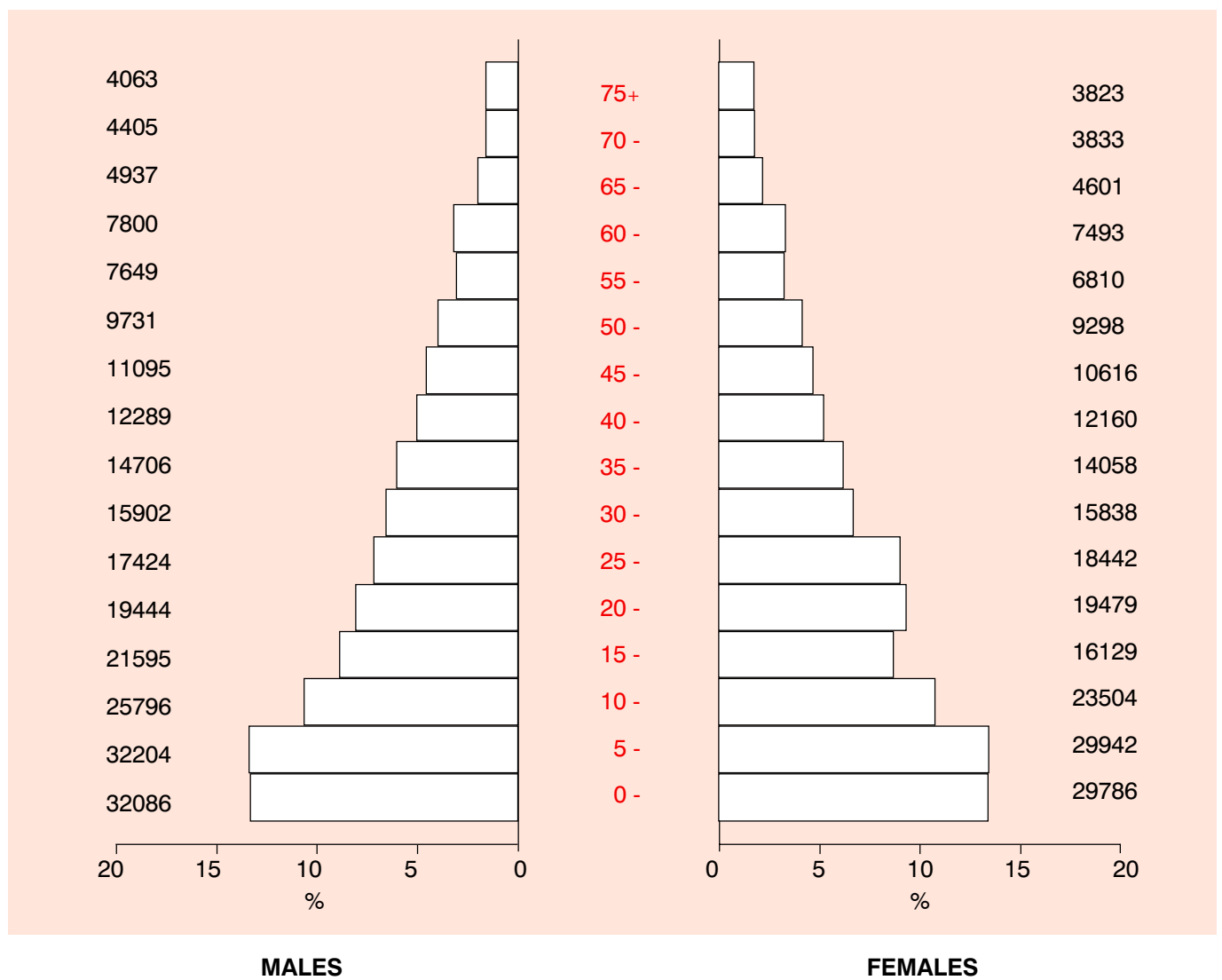


TABLE: BRS-1

Population by Five Year Age Group and Gender : 1990-1996
Number and Relative Proportion (%)

Barshi

Age Group	MALES		FEMALES		TOTAL	
	Number	%	Number	%	Number	%
0-4	32086	13.33	29786	13.19	61872	13.26
5-9	32204	13.38	29942	13.26	62146	13.32
10-14	25796	10.72	23504	10.41	49300	10.57
15-19	21595	8.97	16129	7.14	37724	8.09
20-24	19444	8.08	19479	8.63	38923	8.34
25-29	17424	7.24	18442	8.17	35866	7.69
30-34	15902	6.61	15838	7.01	31740	6.80
35-39	14706	6.11	14058	6.23	28764	6.17
40-44	12289	5.10	12160	5.39	24449	5.24
45-49	11095	4.61	10616	4.70	21711	4.65
50-54	9731	4.04	9298	4.12	19029	4.08
55-59	7648	3.18	6810	3.02	14458	3.10
60-64	7800	3.24	7493	3.32	15293	3.28
65-69	4937	2.05	4601	2.04	9538	2.04
70-74	4005	1.66	3833	1.70	7838	1.68
75+	4063	1.69	3823	1.69	7886	1.69
Total	240725	100.0	225812	100.0	466537	100.0

TABLE: BRS-2**Main Sources* of Registration of Incident Cancers: 1990-1996****Barshi**

Name of Institution	Year of Diagnosis and Relative Proportion (%)							1990-96	
	1990	1991	1992	1993	1994	1995	1996	Number	%
Barshi Cancer Hospital	70.3	66.2	66.7	62.4	59.8	55.4	64.6	893	63.6
Hiremath	4.6	4.9	3.9	5.4	5.2	5.4	5.6	70	5.0
Jagdale Mama	2.1	2.0	5.9	3.9	8.8	4.9	5.6	66	4.7
Camp	3.6	2.0	2.0	3.9	2.6	9.3	2.5	52	3.7
Civil Hosp.	3.6	2.5	3.4	3.9	3.6	3.4	1.0	43	3.1
Dr A.S. Kothare	2.1	4.4	1.0	4.4	1.0	2.5	2.0	35	2.5
Siddeshwar	0.5	6.4	1.0	2.0	1.0	2.5	2.5	32	2.3
TMH - Mumbai	2.6	2.9	2.9	2.0	1.0	0.5	1.5	27	1.9
NH/H Ahmednagar	0.5	0.5	1.0	1.0	1.0	2.9	3.5	21	1.5
N.W. Wadia	1.5	1.5	2.9	2.0	0.5	0.5	1.0	20	1.4
Dr Yadav Hosp	2.1	1.0	0.0	0.0	1.5	2.0	1.0	15	1.1
Total of Above								1274	90.7
All Others								130	9.3
Total All Sources								1404	100.0

* 1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 1990-1996.

* 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-3(a): Number of Incident Cancers by Five Year Age Group and Site (ICD-9):
1990-1996 – 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	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	4	0.63
141	Tongue	0	0	0	0	0	0	1	1	2	0	1	4	10	7	4	0	30	4.70
142	Salivary Gland	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	0.47
143	Gum	0	0	0	0	0	0	0	2	3	4	0	1	0	2	1	0	13	2.04
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.16
145	Other Mouth	0	0	0	0	0	1	2	1	2	2	2	2	2	1	3	1	19	2.98
146	Oropharynx	0	0	0	0	0	0	0	0	1	0	2	1	2	4	0	5	15	2.35
147	Nasopharynx	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.16
148	Hypopharynx	0	0	0	0	1	0	0	1	1	5	4	6	18	17	9	6	68	10.66
149	Pharynx Etc.	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1	4	0.63
150	Oesophagus	0	0	0	0	0	0	0	0	2	5	6	4	12	15	5	5	54	8.46
151	Stomach	0	0	0	0	0	0	0	0	2	1	3	3	2	3	2	0	16	2.51
152	Small Intestine	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.16
153	Colon	0	0	0	0	0	0	0	0	1	0	3	0	2	0	1	2	9	1.41
154	Rectum	0	0	0	0	0	2	3	0	4	0	4	3	0	1	3	1	21	3.29
155	Liver	0	0	0	0	0	0	0	0	2	0	4	5	6	3	3	3	26	4.08
156	Gall Bladder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0.31
157	Pancreas	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	0	8	1.25
158	Retroperitoneum	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	3	0.47
159	Other Dig System	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	1	0	0	0	0	2	1	1	1	0	2	8	1.25
161	Larynx	0	0	0	0	0	0	0	1	2	3	2	2	3	8	5	4	30	4.70
162	Lung	0	0	0	0	0	0	0	1	4	3	1	1	4	3	3	1	21	3.29
163	Pleura	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.16
164	Thymus	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.16
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	1	0	2	0	2	1	0	1	0	1	0	1	1	1	11	1.72
171	Conn. Tissue	0	1	1	1	0	0	0	1	0	1	0	1	0	1	1	0	8	1.25
172	Skin Melanoma	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.16
173	Skin. Other	0	0	0	0	0	0	0	1	2	1	0	2	4	1	5	1	17	2.66
175	Breast Male	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	0.47
185	Prostate	0	0	0	0	0	0	0	0	0	0	1	0	3	7	3	6	20	3.13
186	Testis	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	2	5	0.78
187	Penis Etc.	0	0	0	0	0	0	4	4	3	4	2	3	4	6	7	5	42	6.58
188	Uri. Bladder	0	0	0	0	0	0	0	0	0	0	3	1	0	4	2	4	14	2.19
189	Kidney	1	0	0	0	0	0	0	1	0	1	0	2	1	0	1	0	7	1.10
190	Eye	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
191	Brain	0	1	2	0	0	0	0	0	1	2	1	0	0	0	0	1	8	1.25
192	Nervous System	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	1	1	0	1	0	1	0	0	0	0	1	5	0.78
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	1	0	0	0	0	0	0	1	1	2	2	1	1	1	1	11	1.72
196	Sec. Lymph. Node	0	1	0	0	1	3	0	0	0	1	0	1	5	11	4	6	33	5.17
197	Sec. Res. Etc	0	0	0	0	0	0	1	0	2	2	1	0	2	4	5	1	18	2.82
198	Sec. Other	0	0	0	0	1	1	0	1	0	0	0	3	2	1	2	0	11	1.72
199	Prim. Unknown	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	3	0.47
200	Lymphosarcoma	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	3	0.47
201	Hodgkins. Disease	0	1	1	1	0	0	0	1	0	0	0	0	0	0	1	0	5	0.78
202	Oth. Lymph. Node	0	0	0	0	0	2	0	1	2	0	1	2	0	1	0	0	9	1.41
203	Mult. Myeloma	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	0.31
204	Leuk. Lymphatic	4	4	3	1	0	2	1	0	0	0	0	0	2	0	0	1	18	2.82
205	Leuk. Myelocytic	2	0	1	1	1	4	0	0	0	1	7	1	2	0	0	1	21	3.29
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. Unspecified	0	0	0	1	0	0	2	0	0	0	0	1	0	0	0	0	4	0.63
	All Sites	8	9	10	5	8	20	18	18	40	40	57	58	95	108	80	64	638	100.00

**TABLE: BRS-3(b):Number of Incident Cancers by Five Year Age Group and Site (ICD-9):
1990-1996 – 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	1	0	0	0	0	0	1	0.13
141	Tongue	0	0	0	0	1	0	0	1	2	1	0	1	1	1	0	0	8	1.04
142	Salivary Gland	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.13
143	Gum	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.13
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	0	1	2	3	0	1	1	0	1	10	1.31
146	Oropharynx	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	0.26
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	1	0	1	1	0	1	0	0	2	1	3	0	10	1.31
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	0	2	2	2	6	10	6	3	1	32	4.18
151	Stomach	0	0	0	0	0	0	2	1	0	0	0	3	2	0	2	1	11	1.44
152	Small Intestine	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	0	3	0	2	0	1	0	1	7	0.91
154	Rectum	0	0	0	0	0	1	0	0	1	2	1	0	0	1	1	1	8	1.04
155	Liver	0	0	0	0	0	1	0	1	0	2	1	1	0	0	0	0	6	0.78
156	Gall Bladder	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	4	0.52
157	Pancreas	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.13
158	Retroperitoneum	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.13
159	Other Dig System	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
160	Nasal Cavity	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	3	0.39
161	Larynx	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	3	0.39
162	Lung	0	0	0	0	0	0	0	0	1	2	2	0	2	0	0	1	8	1.04
163	Pleura	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.13
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	0	1	0	0	1	0	1	0	0	0	0	0	0	3	0.39
171	Conn. Tissue	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	3	0.39
172	Skin Melanoma	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	3	0.39
173	Skin. Other	0	0	0	0	0	0	1	0	2	1	0	1	4	1	0	1	11	1.44
174	Breast	0	0	0	0	0	2	7	9	17	17	12	13	17	12	8	2	116	15.14
179	Uterus NOS.	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	2	0.26
180	Cervix	0	0	0	0	0	3	19	39	47	55	61	47	67	27	16	7	388	50.65
181	Placenta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
182	Body Uterus	0	0	0	0	0	0	0	0	1	1	2	1	0	0	1	0	6	0.78
183	Ovary	0	0	0	2	1	0	0	1	3	2	0	3	2	2	1	0	17	2.22
184	Vagina	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	2	8	1.04
188	Uri. Bladder	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	0.26
189	Kidney	0	0	0	0	0	0	0	1	1	0	2	0	1	0	0	0	5	0.65
190	Eye	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0.39
191	Brain	0	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	4	0.52
192	Nervous System	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	0	0	0	1	3	0	0	0	0	0	0	1	6	0.78
194	Oth. Endo. Gland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.13
195	Ill Def. Sites	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0.26
196	Sec. Lymph. Node	0	1	0	1	0	2	0	0	2	0	1	2	3	1	1	2	16	2.09
197	Sec. Res. Etc	0	0	0	0	0	0	0	0	1	2	2	0	4	2	0	2	13	1.70
198	Sec. Other	0	0	0	0	0	0	1	1	1	1	0	1	2	0	0	0	7	0.91
199	Prim. Unknown	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2	0.26
200	Lymphosarcoma	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0.26
201	Hodgkins. Disease	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.13
202	Oth. Lymph. Node	2	0	0	0	0	0	1	0	0	3	0	0	0	0	0	0	6	0.78
203	Mult. Myeloma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
204	Leuk. Lymphatic	1	2	3	0	0	1	0	0	0	0	0	1	0	0	0	0	8	1.04
205	Leuk. Myelocytic	0	0	2	1	0	0	0	2	1	0	1	0	1	2	0	0	10	1.31
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. Unspecified	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0.39
	All Sites	7	4	8	5	4	11	35	63	91	101	96	87	125	61	40	28	766	100.00

TABLE: BRS-5(a):
Trends in Crude (CR) & Age Adjusted (AAR) Cancer Incidence Rates from 1990 to 1996 - Males
Barshi

ICD-9	Site	1990		1991		1992		1993		1994		1995		1996	
		CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR
140	Lip	0.4	0.6	0.0	0.0	0.4	0.5	0.4	0.5	0.0	0.0	0.4	0.5	0.0	0.0
141	Tongue	0.9	1.1	3.0	3.8	0.4	0.6	1.7	2.2	2.5	3.0	0.8	1.0	3.2	3.9
142	Salivary Gland	0.4	0.7	0.4	0.5	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143	Gum	1.3	1.7	0.9	1.2	1.3	1.7	0.0	0.0	0.4	0.5	0.8	0.9	0.8	0.9
144	Floor of Mouth	0.4	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
145	Other Mouth	0.4	0.6	3.0	3.6	1.3	1.5	1.2	1.5	0.4	0.5	0.4	0.5	1.2	1.3
146	Oropharynx	0.0	0.0	0.9	1.2	1.3	1.8	1.2	1.5	1.2	1.6	1.6	1.9	0.0	0.0
147	Nasopharynx	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
148	Hypopharynx	6.1	7.9	5.6	7.6	5.5	7.4	2.9	3.8	3.7	4.4	3.2	4.0	1.6	1.9
149	Pharynx Etc.	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
150	Oesophagus	5.3	6.9	1.3	1.8	6.4	8.1	2.9	3.9	1.2	1.5	2.4	3.2	3.2	4.0
151	Stomach	0.9	1.0	0.9	1.2	0.4	0.5	2.1	2.7	1.2	1.6	0.8	1.0	0.4	0.5
152	Small Intestine	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153	Colon	0.0	0.0	0.9	1.1	0.4	0.5	0.4	0.5	0.8	1.0	0.8	1.0	0.4	0.5
154	Rectum	0.4	0.7	2.2	2.6	1.3	1.5	1.7	2.0	1.2	1.4	1.2	1.2	0.8	1.0
155	Liver	0.9	1.1	1.7	2.2	1.7	2.1	2.5	3.1	0.4	0.5	1.6	2.0	2.0	2.5
156	Gall Bladder	0.0	0.0	0.0	0.0	0.4	0.5	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
157	Pancreas	1.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.0	0.4	0.5	0.4	0.5
158	Retroperitoneum	0.4	0.6	0.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0
159	Other Dig System	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160	Nasal Cavity	0.9	1.0	0.4	0.5	0.0	0.0	0.4	0.5	0.4	0.5	0.8	1.0	0.4	0.6
161	Larynx	3.5	4.8	0.9	1.3	1.7	2.1	2.1	2.7	2.0	2.5	1.6	2.0	0.8	0.9
162	Lung	0.9	1.1	1.3	1.6	0.9	1.2	0.8	1.0	1.2	1.5	0.8	1.0	2.8	3.4
163	Pleura	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	0.0
164	Thymus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	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	0.0	0.0	0.0	0.0	0.0
170	Bone	1.3	1.4	0.0	0.0	0.0	0.0	1.7	1.8	0.8	0.8	0.0	0.0	0.8	0.9
171	Conn. Tissue	0.4	0.3	0.4	0.6	1.3	1.3	0.0	0.0	0.0	0.0	0.8	0.9	0.4	0.6
172	Skin Melanoma	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
173	Skin. Other	1.8	2.3	0.4	0.5	0.9	0.9	0.8	1.0	0.0	0.0	2.4	2.9	0.8	0.9
175	Breast Male	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.4	0.5	0.4	0.5
185	Prostate	1.3	1.8	0.4	0.5	0.9	1.2	1.2	1.5	0.8	1.1	1.6	2.0	2.0	2.6
186	Testis	0.4	0.6	0.0	0.0	0.4	0.4	0.4	0.5	0.4	0.4	0.0	0.0	0.4	0.4
187	Penis Etc.	2.6	3.0	3.9	4.8	1.7	2.0	1.2	1.6	2.5	2.9	4.4	5.3	1.2	1.5
188	Uri. Bladder	0.0	0.0	0.0	0.0	2.1	2.7	1.2	1.8	0.8	1.0	0.8	1.0	0.8	0.9
189	Kidney	0.4	0.4	0.0	0.0	0.0	0.0	0.8	1.1	0.0	0.0	0.8	1.0	0.8	0.8
190	Eye	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
191	Brain	0.0	0.0	0.9	1.1	0.4	0.3	0.4	0.4	0.0	0.0	0.8	0.9	0.8	0.9
192	Nervous System	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
193	Thyroid Gland	0.9	1.0	0.4	0.5	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0	0.4	0.4
194	Oth. Endo. Gland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
195	Ill Def. Sites	0.4	0.6	0.4	0.5	0.0	0.0	1.2	1.3	0.8	1.0	0.0	0.0	1.6	2.0
196	Sec. Lymph. Node	2.2	2.8	1.3	1.6	2.1	2.5	4.5	6.1	2.5	3.0	0.4	0.6	0.8	1.1
197	Sec. Res. Etc	0.0	0.0	1.3	1.7	1.3	1.6	1.2	1.6	0.4	0.5	2.4	3.0	0.8	0.9
198	Sec. Other	0.4	0.5	0.0	0.0	0.9	1.2	0.0	0.0	1.2	1.5	0.8	0.9	1.2	1.3
199	Prim. Unknown	0.9	1.1	0.0	0.0	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
200	Lymphosarcoma	0.4	0.4	0.0	0.0	0.4	0.5	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0
201	Hodgkins. Disease	0.0	0.0	0.0	0.0	0.9	0.9	0.0	0.0	0.8	0.7	0.0	0.0	0.4	0.4
202	Oth. Lymph. Node	0.0	0.0	0.9	1.0	0.4	0.5	0.8	1.0	0.0	0.0	0.8	1.0	0.8	0.9
203	Mult. Myeloma	0.0	0.0	0.4	0.5	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
204	Leuk. Lymphatic	1.3	1.2	0.9	0.9	0.4	0.3	1.2	1.4	1.2	1.2	0.8	0.8	1.6	1.4
205	Leuk. Myelocytic	0.4	0.6	1.7	1.9	0.4	0.5	1.7	1.9	1.6	1.9	1.2	1.3	1.6	1.8
206	Leuk. Monocytic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
207	Leuk. Misc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
208	Leuk. Unspecified	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	1.2	1.2
	All Sites	40.8	51.0	37.9	48.0	38.6	47.7	41.3	51.8	32.7	39.0	37.4	44.6	36.7	43.6

TABLE: BRS-5(b):
Trends in Crude (CR) & Age Adjusted (AAR) Cancer Incidence Rates from 1990 to 1996 - Females
Barshi

ICD-9	Site	1990		1991		1992		1993		1994		1995		1996	
		CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR
140	Lip	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	0.0
141	Tongue	0.0	0.0	0.5	0.6	0.0	0.0	0.9	1.1	0.4	0.4	1.7	2.0	0.0	0.0
142	Salivary Gland	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143	Gum	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	0.0
144	Floor of Mouth	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145	Other Mouth	0.5	0.6	0.9	1.1	0.5	0.5	0.4	0.5	0.4	0.5	0.9	1.0	0.9	1.1
146	Oropharynx	0.0	0.0	0.0	0.0	0.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6
147	Nasopharynx	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148	Hypopharynx	0.0	0.0	0.9	1.0	0.5	0.5	1.8	1.9	0.4	0.5	0.9	1.1	0.0	0.0
149	Pharynx Etc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150	Oesophagus	1.9	2.3	0.5	0.6	3.6	4.8	2.2	2.8	1.8	2.2	1.7	2.1	2.5	3.2
151	Stomach	1.4	1.9	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	2.1	2.3
152	Small Intestine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153	Colon	0.9	1.2	0.0	0.0	0.0	0.0	1.3	1.7	0.0	0.0	0.4	0.6	0.4	0.5
154	Rectum	0.9	1.2	0.9	1.1	0.5	0.6	0.4	0.4	0.0	0.0	0.0	0.0	0.9	1.1
155	Liver	1.4	1.7	0.5	0.6	0.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156	Gall Bladder	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.4	0.5	0.4	0.5	0.4	0.5
157	Pancreas	0.5	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
158	Retroperitoneum	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
159	Other Dig System	0.0	0.0	0.0	0.0	0.0	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	0.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
161	Larynx	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.0	0.4	0.5	0.0	0.0	0.0	0.0
162	Lung	0.5	0.6	0.9	1.1	0.0	0.0	0.4	0.5	0.4	0.5	0.4	0.5	0.9	1.0
163	Pleura	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.0	0.0	0.0	0.0
164	Thymus	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0
170	Bone	0.5	0.6	0.5	0.4	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
171	Conn. Tissue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.4	0.5	0.4	0.4
172	Skin Melanoma	0.0	0.0	0.0	0.0	0.5	0.6	0.0	0.0	0.0	0.0	0.9	1.0	0.0	0.0
173	Skin. Other	0.9	1.0	0.0	0.0	0.5	0.6	0.4	0.5	1.3	1.6	0.4	0.5	1.3	1.5
174	Breast Female	8.4	9.8	8.7	10.7	7.7	9.6	3.6	4.4	7.9	8.9	6.4	7.8	8.9	10.5
179	Uterus NOS.	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
180	Cervix Uteri	23.2	27.8	27.9	33.9	26.1	31.1	23.5	27.8	25.3	30.1	25.8	30.9	20.3	23.8
181	Placenta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
182	Corpus Uteri	0.0	0.0	0.5	0.5	0.9	1.2	0.4	0.6	0.4	0.5	0.4	0.5	0.0	0.0
183	Ovary Etc.	1.9	2.3	0.5	0.7	0.9	1.0	0.4	0.6	1.3	1.4	1.7	2.1	0.9	1.1
184	Other Fem Gen.	0.0	0.0	0.9	1.1	1.4	1.6	0.4	0.7	0.4	0.5	0.4	0.5	0.0	0.0
188	Uri. Bladder	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.4	0.5	0.0	0.0
189	Kidney	0.0	0.0	0.5	0.4	0.0	0.0	0.4	0.5	0.9	1.0	0.0	0.0	0.4	0.5
190	Eye	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.0	0.0
191	Brain	0.0	0.0	0.5	0.5	0.0	0.0	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.5
192	Nervous System	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
193	Thyroid Gland	0.5	0.5	0.0	0.0	0.5	0.5	0.4	0.5	0.9	0.9	0.0	0.0	0.4	0.6
194	Oth. Endo. Gland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0
195	Ill Def. Sites	0.0	0.0	0.5	0.6	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
196	Sec. Lymph. Node	1.4	1.7	1.4	1.5	1.4	1.8	1.8	2.0	0.4	0.5	0.4	0.5	0.4	0.5
197	Sec. Res. Etc	0.5	0.6	0.9	1.1	0.9	1.1	2.2	2.9	0.4	0.5	0.9	1.0	0.0	0.0
198	Sec. Other	0.5	0.5	0.9	1.0	0.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9
199	Prim. Unknown	0.0	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0
200	Lymphosarcoma	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.0	0.0	0.0	0.0	0.4	0.5
201	Hodgkins. Disease	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0
202	Oth. Lymph. Node	0.0	0.0	0.9	1.0	0.5	0.4	0.0	0.0	0.4	0.6	0.4	0.5	0.4	0.4
203	Mult. Myeloma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
204	Leuk. Lymphatic	0.9	0.8	0.9	0.8	0.9	0.8	0.4	0.3	0.0	0.0	0.4	0.6	0.0	0.0
205	Leuk. Myelocytic	0.0	0.0	0.9	0.8	0.9	1.1	0.9	1.2	1.3	1.4	0.0	0.0	0.4	0.5
206	Leuk. Monocytic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
207	Leuk. Misc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
208	Leuk. Unspecified	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.4	0.4	0.0	0.0
	All Sites	47.3	56.4	53.0	63.3	50.9	61.5	46.5	55.1	49.7	58.1	47.7	56.8	44.4	52.4

TABLE: BRS-6(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) 1990-1996: Males
Barshi

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu.Rate %	Cu.Risk	Cu.Rate%	Cu.Risk
140	Lip	0.03	0.03	0.03	0.03
141	Tongue	0.16	0.16	0.33	0.33
142	Salivary Gland	0.00	0.00	0.05	0.05
143	Gum	0.06	0.06	0.11	0.11
144	Floor of Mouth	0.00	0.00	0.00	0.00
145	Other Mouth	0.09	0.09	0.16	0.16
146	Oropharynx	0.05	0.05	0.11	0.11
147	Nasopharynx	0.00	0.00	0.00	0.00
148	Hypopharynx	0.30	0.30	0.70	0.70
149	Pharynx Etc.	0.01	0.01	0.03	0.03
150	Oesophagus	0.24	0.24	0.54	0.54
151	Stomach	0.09	0.09	0.17	0.17
152	Small Intestine	0.01	0.01	0.01	0.01
153	Colon	0.05	0.05	0.06	0.06
154	Rectum	0.10	0.10	0.17	0.17
155	Liver	0.14	0.14	0.24	0.24
156	Gall Bladder	0.00	0.00	0.02	0.02
157	Pancreas	0.04	0.04	0.09	0.09
158	Retroperitoneum	0.01	0.01	0.03	0.03
159	Other Dig System	0.00	0.00	0.00	0.00
160	Nasal Cavity	0.04	0.04	0.05	0.05
161	Larynx	0.10	0.10	0.30	0.30
162	Lung	0.10	0.10	0.20	0.20
163	Pleura	0.01	0.01	0.01	0.01
164	Thymus	0.00	0.00	0.00	0.00
165	Other Resp.	0.00	0.00	0.00	0.00
170	Bone	0.04	0.04	0.07	0.07
171	Conn. Tissue	0.03	0.03	0.06	0.06
172	Skin Melanoma	0.01	0.01	0.01	0.01
173	Skin. Other	0.08	0.08	0.18	0.18
175	Breast Male	0.00	0.00	0.05	0.05
185	Prostate	0.04	0.04	0.19	0.19
186	Testis	0.02	0.02	0.02	0.02
187	Penis Etc.	0.16	0.16	0.37	0.37
188	Uri. Bladder	0.03	0.03	0.13	0.13
189	Kidney	0.04	0.04	0.06	0.06
190	Eye	0.00	0.00	0.00	0.00
191	Brain	0.03	0.03	0.03	0.03
192	Nervous System	0.00	0.00	0.00	0.00
193	Thyroid Gland	0.02	0.02	0.02	0.02
194	Oth. Endo. Gland	0.00	0.00	0.00	0.00
195	Ill Def. Sites	0.06	0.06	0.09	0.09
196	Sec. Lymph. Node	0.08	0.08	0.31	0.31
197	Sec. Res. Etc	0.05	0.05	0.20	0.20
198	Sec. Other	0.06	0.06	0.11	0.11
199	Prim. Unknown	0.01	0.01	0.03	0.03
200	Lymphosarcoma	0.02	0.02	0.02	0.02
201	Hodgkins. Disease	0.01	0.01	0.03	0.03
202	Oth. Lymph. Node	0.05	0.05	0.07	0.07
203	Mult. Myeloma	0.02	0.02	0.02	0.02
204	Leuk. Lymphatic	0.06	0.06	0.06	0.06
205	Leuk. Myelocytic	0.12	0.12	0.12	0.12
206	Leuk. Monocytic	0.00	0.00	0.00	0.00
207	Leuk. Misc.	0.00	0.00	0.00	0.00
208	Leuk. Unspecified	0.02	0.02	0.02	0.02
	All Sites	2.68	2.64	5.68	5.52

TABLE: BRS-6(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) 1990-1996: Females
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	0.05	0.05	0.06	0.06
142	Salivary Gland	0.00	0.00	0.00	0.00
143	Gum	0.01	0.01	0.01	0.01
144	Floor of Mouth	0.00	0.00	0.00	0.00
145	Other Mouth	0.06	0.06	0.07	0.07
146	Oropharynx	0.01	0.01	0.02	0.02
147	Nasopharynx	0.00	0.00	0.00	0.00
148	Hypopharynx	0.04	0.04	0.11	0.11
149	Pharynx Etc.	0.00	0.00	0.00	0.00
150	Oesophagus	0.20	0.20	0.35	0.35
151	Stomach	0.06	0.06	0.10	0.10
152	Small Intestine	0.00	0.00	0.00	0.00
153	Colon	0.04	0.04	0.06	0.06
154	Rectum	0.03	0.03	0.07	0.07
155	Liver	0.04	0.04	0.04	0.04
156	Gall Bladder	0.02	0.02	0.02	0.02
157	Pancreas	0.01	0.01	0.01	0.01
158	Retroperitoneum	0.01	0.01	0.01	0.01
159	Other Dig System	0.00	0.00	0.00	0.00
160	Nasal Cavity	0.01	0.01	0.02	0.02
161	Larynx	0.02	0.02	0.02	0.02
162	Lung	0.05	0.05	0.05	0.05
163	Pleura	0.01	0.01	0.01	0.01
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	0.02	0.02	0.02	0.02
172	Skin Melanoma	0.02	0.02	0.02	0.02
173	Skin. Other	0.07	0.07	0.09	0.09
174	Breast	0.69	0.69	1.03	1.02
179	Uterus NOS.	0.01	0.01	0.01	0.01
180	Cervix	2.54	2.51	3.26	3.21
181	Placenta	0.00	0.00	0.00	0.00
182	Body Uterus	0.04	0.04	0.06	0.06
183	Ovary	0.10	0.10	0.15	0.15
184	Vagina	0.03	0.03	0.07	0.07
188	Uri. Bladder	0.01	0.01	0.02	0.02
189	Kidney	0.04	0.04	0.04	0.04
190	Eye	0.01	0.01	0.01	0.01
191	Brain	0.02	0.02	0.02	0.02
192	Nervous System	0.00	0.00	0.00	0.00
193	Thyroid Gland	0.03	0.03	0.03	0.03
194	Oth. Endo. Gland	0.00	0.00	0.00	0.00
195	Ill Def. Sites	0.00	0.00	0.02	0.02
196	Sec. Lymph. Node	0.08	0.08	0.12	0.12
197	Sec. Res. Etc	0.07	0.07	0.10	0.10
198	Sec. Other	0.05	0.05	0.05	0.05
199	Prim. Unknown	0.01	0.01	0.02	0.02
200	Lymphosarcoma	0.02	0.02	0.02	0.02
201	Hodgkins. Disease	0.00	0.00	0.00	0.00
202	Oth. Lymph. Node	0.03	0.03	0.03	0.03
203	Mult. Myeloma	0.00	0.00	0.00	0.00
204	Leuk. Lymphatic	0.03	0.03	0.03	0.03
205	Leuk. Myelocytic	0.04	0.04	0.07	0.07
206	Leuk. Monocytic	0.00	0.00	0.00	0.00
207	Leuk. Misc.	0.00	0.00	0.00	0.00
208	Leuk. Unspecified	0.01	0.01	0.01	0.01
	All Sites	4.67	4.56	6.36	6.16

TABLE: BRS-7(a): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Method of Diagnosis 1990-1996 - Males**Barshi**

ICD-9	Site	Clinical		Microscopic		X-Ray		D.C.O.		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	1	25.0	3	75.0	0	0.0	0	0.0	0	0.0	4	100.0
141	Tongue	4	13.3	26	86.7	0	0.0	0	0.0	0	0.0	30	100.0
142	Salivary Gland	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
143	Gum	0	0.0	13	100.0	0	0.0	0	0.0	0	0.0	13	100.0
144	Floor of Mouth	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
145	Other Mouth	0	0.0	19	100.0	0	0.0	0	0.0	0	0.0	19	100.0
146	Oropharynx	0	0.0	15	100.0	0	0.0	0	0.0	0	0.0	15	100.0
147	Nasopharynx	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
148	Hypopharynx	8	11.8	60	88.2	0	0.0	0	0.0	0	0.0	68	100.0
149	Pharynx Etc.	0	0.0	4	100.0	0	0.0	0	0.0	0	0.0	4	100.0
150	Oesophagus	3	5.6	48	88.9	2	3.7	0	0.0	1	1.9	54	100.0
151	Stomach	1	6.3	14	87.5	1	6.3	0	0.0	0	0.0	16	100.0
152	Small Intestine	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
153	Colon	2	22.2	7	77.8	0	0.0	0	0.0	0	0.0	9	100.0
154	Rectum	3	14.3	18	85.7	0	0.0	0	0.0	0	0.0	21	100.0
155	Liver	0	0.0	22	84.6	0	0.0	1	3.8	3	11.5	26	100.0
156	Gall Bladder	0	0.0	1	50.0	0	0.0	1	50.0	0	0.0	2	100.0
157	Pancreas	5	62.5	2	25.0	0	0.0	0	0.0	1	12.5	8	100.0
158	Retroperitoneum	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
159	Other Dig System	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
160	Nasal Cavity	0	0.0	8	100.0	0	0.0	0	0.0	0	0.0	8	100.0
161	Larynx	7	23.3	23	76.7	0	0.0	0	0.0	0	0.0	30	100.0
162	Lung	3	14.3	16	76.2	1	4.8	1	4.8	0	0.0	21	100.0
163	Pleura	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
164	Thymus	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
165	Other Resp.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
170	Bone	1	9.1	10	90.9	0	0.0	0	0.0	0	0.0	11	100.0
171	Conn. Tissue	0	0.0	8	100.0	0	0.0	0	0.0	0	0.0	8	100.0
172	Skin Melanoma	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
173	Skin. Other	2	11.8	15	88.2	0	0.0	0	0.0	0	0.0	17	100.0
175	Breast Male	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
185	Prostate	4	20.0	16	80.0	0	0.0	0	0.0	0	0.0	20	100.0
186	Testis	2	40.0	3	60.0	0	0.0	0	0.0	0	0.0	5	100.0
187	Penis Etc.	3	7.1	39	92.9	0	0.0	0	0.0	0	0.0	42	100.0
188	Uri. Bladder	2	14.3	11	78.6	0	0.0	1	7.1	0	0.0	14	100.0
189	Kidney	1	14.3	5	71.4	0	0.0	0	0.0	1	14.3	7	100.0
190	Eye	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
191	Brain	0	0.0	8	100.0	0	0.0	0	0.0	0	0.0	8	100.0
192	Nervous System	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
193	Thyroid Gland	1	20.0	4	80.0	0	0.0	0	0.0	0	0.0	5	100.0
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. Sites	0	0.0	10	90.9	0	0.0	0	0.0	1	9.1	11	100.0
196	Sec. Lymph. Node	4	12.1	29	87.9	0	0.0	0	0.0	0	0.0	33	100.0
197	Sec. Res. Etc	1	5.6	13	72.2	1	5.6	0	0.0	3	16.7	18	100.0
198	Sec. Other	2	18.2	8	72.7	0	0.0	0	0.0	1	9.1	11	100.0
199	Prim. Unknown	0	0.0	0	0.0	3	100.0	0	0.0	0	0.0	3	100.0
200	Lymphosarcoma	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
201	Hodgkins. Disease	0	0.0	5	100.0	0	0.0	0	0.0	0	0.0	5	100.0
202	Oth. Lymph. Node	0	0.0	9	100.0	0	0.0	0	0.0	0	0.0	9	100.0
203	Mult. Myeloma	0	0.0	1	50.0	1	50.0	0	0.0	0	0.0	2	100.0
204	Leuk. Lymphatic	0	0.0	18	100.0	0	0.0	0	0.0	0	0.0	18	100.0
205	Leuk. Myelocytic	0	0.0	21	100.0	0	0.0	0	0.0	0	0.0	21	100.0
206	Leuk. Monocytic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
207	Leuk. Misc.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
208	Leuk. Unspecified	0	0.0	3	75.0	0	0.0	1	25.0	0	0.0	4	100.0
	All Sites	60	9.4	553	86.7	9	1.4	5	0.8	11	1.7	638	100.0

TABLE: BRS-7(b): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Method of Diagnosis 1990-1996 - Females**Barshi**

ICD-9	Site	Clinical		Microscopic		X-Ray		D.C.O.		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
141	Tongue	3	37.5	5	62.5	0	0.0	0	0.0	0	0.0	8	100.0
142	Salivary Gland	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
143	Gum	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
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	1	10.0	9	90.0	0	0.0	0	0.0	0	0.0	10	100.0
146	Oropharynx	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	2	100.0
147	Nasopharynx	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
148	Hypopharynx	1	10.0	9	90.0	0	0.0	0	0.0	0	0.0	10	100.0
149	Pharynx Etc.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
150	Oesophagus	5	15.6	27	84.4	0	0.0	0	0.0	0	0.0	32	100.0
151	Stomach	3	27.3	8	72.7	0	0.0	0	0.0	0	0.0	11	100.0
152	Small Intestine	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
153	Colon	1	14.3	6	85.7	0	0.0	0	0.0	0	0.0	7	100.0
154	Rectum	1	12.5	7	87.5	0	0.0	0	0.0	0	0.0	8	100.0
155	Liver	2	33.3	3	50.0	1	16.7	0	0.0	0	0.0	6	100.0
156	Gall Bladder	0	0.0	3	75.0	1	25.0	0	0.0	0	0.0	4	100.0
157	Pancreas	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0
158	Retroperitoneum	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
159	Other Dig System	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
160	Nasal Cavity	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
161	Larynx	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
162	Lung	1	12.5	7	87.5	0	0.0	0	0.0	0	0.0	8	100.0
163	Pleura	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
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	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
171	Conn. Tissue	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
172	Skin Melanoma	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
173	Skin. Other	0	0.0	11	100.0	0	0.0	0	0.0	0	0.0	11	100.0
174	Breast	12	10.3	104	89.7	0	0.0	0	0.0	0	0.0	116	100.0
179	Uterus NOS.	1	50.0	0	0.0	0	0.0	1	50.0	0	0.0	2	100.0
180	Cervix	23	5.9	364	93.8	1	0.3	0	0.0	0	0.0	388	100.0
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	6	100.0	0	0.0	0	0.0	0	0.0	6	100.0
183	Ovary	1	5.9	16	94.1	0	0.0	0	0.0	0	0.0	17	100.0
184	Vagina	0	0.0	8	100.0	0	0.0	0	0.0	0	0.0	8	100.0
188	Uri. Bladder	0	0.0	1	50.0	0	0.0	0	0.0	1	50.0	2	100.0
189	Kidney	0	0.0	4	80.0	0	0.0	1	20.0	0	0.0	5	100.0
190	Eye	0	0.0	2	66.7	0	0.0	1	33.3	0	0.0	3	100.0
191	Brain	0	0.0	2	50.0	1	25.0	0	0.0	1	25.0	4	100.0
192	Nervous System	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
193	Thyroid Gland	0	0.0	6	100.0	0	0.0	0	0.0	0	0.0	6	100.0
194	Oth. Endo. Gland	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
195	Ill Def. Sites	1	50.0	0	0.0	1	50.0	0	0.0	0	0.0	2	100.0
196	Sec. Lymph. Node	0	0.0	15	93.8	1	6.3	0	0.0	0	0.0	16	100.0
197	Sec. Res. Etc	0	0.0	11	84.6	0	0.0	0	0.0	2	15.4	13	100.0
198	Sec. Other	0	0.0	7	100.0	0	0.0	0	0.0	0	0.0	7	100.0
199	Prim. Unknown	0	0.0	0	0.0	1	50.0	1	50.0	0	0.0	2	100.0
200	Lymphosarcoma	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	2	100.0
201	Hodgkins. Disease	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
202	Oth. Lymph. Node	0	0.0	5	83.3	0	0.0	1	16.7	0	0.0	6	100.0
203	Mult. Myeloma	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
204	Leuk. Lymphatic	0	0.0	8	100.0	0	0.0	0	0.0	0	0.0	8	100.0
205	Leuk. Myelocytic	0	0.0	10	100.0	0	0.0	0	0.0	0	0.0	10	100.0
206	Leuk. Monocytic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
207	Leuk. Misc.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
208	Leuk. Unspecified	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
	All Sites	57	7.4	693	90.5	7	0.9	5	0.7	4	0.5	766	100.0

TABLE: BRS-8(a): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Detailed Microscopic Diagnosis, 1990-1996 - Males : Barshi

ICD-9	Site	Pri. Hist		Sec. Hist		Cytology		Blood Film		Bone Marrow		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	3	75	0	0	0	0	0	0	0	0	1	25	4	100
141	Tongue	26	86.7	0	0	0	0	0	0	0	0	4	13.3	30	100
142	Salivary Glands	2	66.7	0	0	1	33.3	0	0	0	0	0	0	3	100
143	Gum	13	99.9	0	0	0	0	0	0	0	0	0	0	13	100
144	Floor of Mouth	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
145	Other Mouth	19	99.9	0	0	0	0	0	0	0	0	0	0	19	100
146	Oropharynx	15	99.9	0	0	0	0	0	0	0	0	0	0	15	100
147	Nasopharynx	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
148	Hypopharynx	57	83.8	0	0	3	4.4	0	0	0	0	8	11.8	68	100
149	Pharynx etc	4	99.9	0	0	0	0	0	0	0	0	0	0	4	100
150	Oesophagus	48	88.9	0	0	0	0	0	0	0	0	6	11.1	54	100
151	Stomach	13	81.3	1	6.3	0	0	0	0	0	0	2	12.5	16	100
152	Small Intestine	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
153	Colon	6	66.7	0	0	1	11.1	0	0	0	0	2	22.2	9	100
154	Rectum	16	76.2	0	0	2	9.5	0	0	0	0	3	14.3	21	100
155	Liver	8	30.8	0	0	14	53.8	0	0	0	0	4	15.4	26	100
156	Gall Bladder	0	0	0	0	1	50	0	0	0	0	1	50	2	100
157	Pancreas	2	25	0	0	0	0	0	0	0	0	6	75	8	100
158	Retroperito	2	66.7	0	0	1	33.3	0	0	0	0	0	0	3	100
159	Other Digs	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	Nasal Cavity	6	75	0	0	2	25	0	0	0	0	0	0	8	100
161	Larynx	20	66.7	2	6.7	1	3.3	0	0	0	0	7	23.3	30	100
162	Lung	3	14.3	2	9.5	11	52.4	0	0	0	0	5	23.8	21	100
163	Pleura	0	0	0	0	1	99.9	0	0	0	0	0	0	1	100
164	Thymus	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	Bone	8	72.7	0	0	2	18.2	0	0	0	0	1	9.1	11	100
171	Connective	8	99.9	0	0	0	0	0	0	0	0	0	0	8	100
172	Skin Melanoma	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
173	Skin Other	13	76.5	0	0	2	11.8	0	0	0	0	2	11.8	17	100
175	Breast Male	3	99.9	0	0	0	0	0	0	0	0	0	0	3	100
185	Prostate	14	70	1	5	1	5	0	0	0	0	4	20	20	100
186	Testis	3	60	0	0	0	0	0	0	0	0	2	40	5	100
187	Penis etc	37	88.1	0	0	2	4.8	0	0	0	0	3	7.1	42	100
188	Uri. Bladder	10	71.4	0	0	1	7.1	0	0	0	0	3	21.4	14	100
189	Kidney	4	57.1	0	0	1	14.3	0	0	0	0	2	28.6	7	100
190	Eye	0	0	0	0	0	0	0	0	0	0	0	0	0	0
191	Brain	8	99.9	0	0	0	0	0	0	0	0	0	0	8	100
192	Nervous Sys	0	0	0	0	0	0	0	0	0	0	0	0	0	0
193	Thyroid Glands	2	40	0	0	2	40	0	0	0	0	1	20	5	100
194	Oth. Endo. Gland	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	Ill Def Site	8	72.7	0	0	2	18.2	0	0	0	0	1	9.1	11	100
196	Sec Lymph Node	0	0	19	57.6	10	30.3	0	0	0	0	4	12.1	33	100
197	Sec Resp Et	0	0	3	16.7	10	55.6	0	0	0	0	5	27.8	18	100
198	Sec Other	0	0	5	45.5	3	27.3	0	0	0	0	3	27.3	11	100
199	Prim Unknown	0	0	0	0	0	0	0	0	0	0	3	99.9	3	100
200	Lymph Sarcoma	2	66.7	0	0	0	0	0	0	1	33.3	0	0	3	100
201	Hodgkins Disease	5	99.9	0	0	0	0	0	0	0	0	0	0	5	100
202	Oth Lymph. Node	7	77.8	0	0	0	0	0	0	2	22.2	0	0	9	100
203	Mult. Myeloma	0	0	0	0	0	0	0	0	1	50	1	50	2	100
204	Leuk Lymphatic	0	0	0	0	0	0	5	27.8	13	72.2	0	0	18	100
205	Leuk Myelocytic	0	0	0	0	0	0	7	33.3	14	66.7	0	0	21	100
206	Leuk Monocytic	0	0	0	0	0	0	0	0	0	0	0	0	0	0
207	Leuk Oth Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	Leuk unspecified	0	0	0	0	0	0	3	75	0	0	1	25	4	100
	All Sites	400	62.7	33	5.2	74	11.6	15	2.4	31	4.9	85	13.3	638	100

TABLE: BRS-8(b): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Detailed Microscopic Diagnosis, 1990-1996 - Females : Barshi

ICD-9	Site	Pri. Hist		Sec. Hist		Cytology		Blood Film		Bone Marrow		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
141	Tongue	5	62.5	0	0	0	0	0	0	0	0	3	37.5	8	100
142	Salivary Glands	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
143	Gum	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	Other Mouth	9	90	0	0	0	0	0	0	0	0	1	10	10	100
146	Oropharynx	2	99.9	0	0	0	0	0	0	0	0	0	0	2	100
147	Nasopharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0
148	Hypopharynx	9	90	0	0	0	0	0	0	0	0	1	10	10	100
149	Pharynx etc	0	0	0	0	0	0	0	0	0	0	0	0	0	0
150	Oesophagus	24	75	0	0	3	9.4	0	0	0	0	5	15.6	32	100
151	Stomach	4	36.4	3	27.3	1	9.1	0	0	0	0	3	27.3	11	100
152	Small Intestine	0	0	0	0	0	0	0	0	0	0	0	0	0	0
153	Colon	6	85.7	0	0	0	0	0	0	0	0	1	14.3	7	100
154	Rectum	6	75	1	12.5	0	0	0	0	0	0	1	12.5	8	100
155	Liver	2	33.3	0	0	1	16.7	0	0	0	0	3	50	6	100
156	Gall Bladder	3	75	0	0	0	0	0	0	0	0	1	25	4	100
157	Pancreas	0	0	0	0	0	0	0	0	0	0	1	99.9	1	100
158	Retroperito	0	0	0	0	1	99.9	0	0	0	0	0	0	1	100
159	Other Digs	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160	Nasal Cavity	3	99.9	0	0	0	0	0	0	0	0	0	0	3	100
161	Larynx	3	99.9	0	0	0	0	0	0	0	0	0	0	3	100
162	Lung	1	12.5	0	0	6	75	0	0	0	0	1	12.5	8	100
163	Pleura	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
164	Thymus	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
170	Bone	3	99.9	0	0	0	0	0	0	0	0	0	0	3	100
171	Connective	2	66.7	0	0	1	33.3	0	0	0	0	0	0	3	100
172	Skin Melanoma	3	99.9	0	0	0	0	0	0	0	0	0	0	3	100
173	Skin Other	11	99.9	0	0	0	0	0	0	0	0	0	0	11	100
174	Breast Female	83	71.6	2	1.7	19	16.4	0	0	0	0	12	10.3	116	100
179	Uterus NOS.	0	0	0	0	0	0	0	0	0	0	2	99.9	2	100
180	Cervix	330	85.1	0	0	34	8.8	0	0	0	0	24	6.2	388	100
181	Placenta	0	0	0	0	0	0	0	0	0	0	0	0	0	0
182	Body Uterus	6	99.9	0	0	0	0	0	0	0	0	0	0	6	100
183	Ovary	16	94.1	0	0	0	0	0	0	0	0	1	5.9	17	100
184	Vagina	8	99.9	0	0	0	0	0	0	0	0	0	0	8	100
188	Uri. Bladder	1	50	0	0	0	0	0	0	0	0	1	50	2	100
189	Kidney	4	80	0	0	0	0	0	0	0	0	1	20	5	100
190	Eye	2	66.7	0	0	0	0	0	0	0	0	1	33.3	3	100
191	Brain	2	50	0	0	0	0	0	0	0	0	2	50	4	100
192	Nervous Sys	0	0	0	0	0	0	0	0	0	0	0	0	0	0
193	Thyroid Glands	6	99.9	0	0	0	0	0	0	0	0	0	0	6	100
194	Oth. Endo. Gland	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
195	Ill Def Site	0	0	0	0	0	0	0	0	0	0	2	99.9	2	100
196	Sec Lymph Node	0	0	13	81.3	2	12.5	0	0	0	0	1	6.3	16	100
197	Sec Resp Et	0	0	4	30.8	7	53.8	0	0	0	0	2	15.4	13	100
198	Sec Other	0	0	7	99.9	0	0	0	0	0	0	0	0	7	100
199	Prim Unknown	0	0	0	0	0	0	0	0	0	0	2	99.9	2	100
200	Lymph Sarcoma	2	99.9	0	0	0	0	0	0	0	0	0	0	2	100
201	Hodgkins Disease	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
202	Oth. Lymph. Node	4	66.7	0	0	0	0	0	0	1	16.7	1	16.7	6	100
203	Mult Myeloma	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	Leuk Lymphatic	0	0	0	0	0	0	2	25	6	75	0	0	8	100
205	Leuk Myelocytic	1	10	0	0	0	0	2	20	7	70	0	0	10	100
206	Leuk Monocytic	0	0	0	0	0	0	0	0	0	0	0	0	0	0
207	Leuk Oth Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	Leuk unspecified	0	0	0	0	0	0	0	0	3	99.9	0	0	3	100
	All Sites	567	74	30	3.9	75	9.8	4	0.5	17	2.2	73	9.5	766	100

**TABLE: BRS-9(a): Number of Cancer Deaths by Five Year Age Group and Site (ICD-9)
1990-1996 - 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
141	Tongue	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.19
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	0	0	0	0	0	0	0	0.00
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	0	0	0	0	0	0	0	0	0	0	0	0.00
146	Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.19
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	0	0	0	0	0	0	0	0	0	0	0	0.00
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	0	1	0	1	1	0	0	0	0	3	0.57
151	Stomach	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
152	Small Intestine	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	0	0	0	0	0	0	0	0	0	0.00
154	Rectum	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.19
155	Liver	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.19
156	Gall Bladder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
157	Pancreas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
158	Retroperitoneum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
159	Other Dig System	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	0	0	0	0	1	0	0	0	0	0	1	0.19
162	Lung	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.19
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
171	Conn. Tissue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
172	Skin Melanoma	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	0	0	0	0	0	0	0.00
175	Breast Male	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	0	0	1	1	0.19
186	Testis	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.19
187	Penis Etc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
188	Uri. Bladder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
189	Kidney	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
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	0	0	0	0	0	0	0	0	0	0	0	0.00
192	Nervous System	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	0	0	0.00
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. Node	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
197	Sec. Res. Etc	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0.38
198	Sec. Other	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.19
199	Prim. Unknown	4	5	6	4	6	9	15	19	22	30	33	47	82	69	67	87	505	95.83
200	Lymphosarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
201	Hodgkins. Disease	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.19
202	Oth. Lymph. Node	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.19
203	Mult. Myeloma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
204	Leuk. Lymphatic	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0.57
205	Leuk. Myelocytic	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	3	0.57
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. Unspecified	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	All Sites	5	6	7	6	6	10	15	20	23	30	38	51	83	71	67	89	527	100.00

**TABLE: BRS-9(b):Number of Cancer Deaths by Five Year Age Group and Site (ICD-9)
1990-1996 - 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	0	0	0	0	0.00
141	Tongue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
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	0	0	0	0	0	0	0	0.00
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	0	0	0	0	0	0	0	0	0	0	0	0.00
146	Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
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	0	0	0	0	0	0	0	0	0	0	0	0.00
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	0	0	0	0	0	0	0	0	0	0	0.00
151	Stomach	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.19
152	Small Intestine	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	0	0	0	0	0	0	0	0	0	0.00
154	Rectum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
155	Liver	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.19
156	Gall Bladder	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.19
157	Pancreas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
158	Retroperitoneum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
159	Other Dig System	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	0	0	0	0	0	0	0	0	0	0	0	0.00
162	Lung	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.19
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
171	Conn. Tissue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
172	Skin Melanoma	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	0	0	0	0	0	0	0.00
174	Breast	0	0	0	0	0	0	1	0	1	0	1	1	0	0	0	0	4	0.78
179	Uterus NOS.	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.19
180	Cervix	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	0.39
181	Placenta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
182	Body Uterus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
183	Ovary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.19
184	Vagina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
188	Uri. Bladder	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
189	Kidney	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.19
190	Eye	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.19
191	Brain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
192	Nervous System	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	0	0	0.00
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. Node	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
197	Sec. Res. Etc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
198	Sec. Other	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.19
199	Prim. Unknown	2	4	3	2	2	3	17	19	39	71	50	57	77	55	48	46	495	95.93
200	Lymphosarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
201	Hodgkins. Disease	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.19
202	Oth. Lymph. Node	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.19
203	Mult. Myeloma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
204	Leuk. Lymphatic	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0.39
205	Leuk. Myelocytic	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	0.39
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. Unspecified	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	All Sites	3	6	3	2	2	5	20	20	42	72	52	59	79	55	49	47	516	100.00

TABLE: BRS-10(a):
Average Annual Age Specific, Crude (CR), Age Adjusted (AAR) (with Standard Error(SE)) and
Truncated (35-64 Yrs) (TR) Mortality Rate per 100,000 population: 1990-1996 - 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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141	0.0	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	0.1	0.1	0.0	0.2
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	0.0	0.0	0.0	0.0
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
145	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	3.5	0.1	0.1	0.1	0.0
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	0.0	0.0	0.0	0.0
148	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
150	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.5	1.9	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.7
151	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
153	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2
155	0.0	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	0.1	0.1	0.0	0.2
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	0.0	0.0	0.0	0.0
157	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
161	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2
162	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2
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	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
170	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
173	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
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	0.0	0.0	3.5	0.1	0.1	0.1	0.0
186	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2
187	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
188	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
196	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
197	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.9	0.0	0.0	0.1	0.2	0.0	0.2
198	0.0	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	0.1	0.1	0.0	0.2
199	1.8	2.2	3.3	2.6	4.4	7.4	13.5	18.5	25.6	38.6	48.4	87.8	150.2	199.7	239.0	305.9	30.0	36.5	1.6	54.5
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	0.0	0.0	0.0	0.0
201	0.0	0.0	0.0	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	0.1	0.1	0.0	0.0
202	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.1	0.1	0.0	0.0
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	0.0	0.0	0.0	0.0
204	0.4	0.4	0.0	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	0.2	0.2	0.0	0.0
205	0.0	0.0	0.6	0.0	0.0	0.8	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.2
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	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0
208	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All	2.2	2.6	3.9	4.0	4.4	8.2	13.5	19.5	26.8	38.6	55.9	95.4	152.0	205.5	239.0	312.9	31.8	38.4	1.7	57.0

TABLE: BRS-11: Number (#) and Proportion (%) of Types of Childhood Cancers 1990-1996
Barshi

Type of Childhood Cancer	Males		Females	
	#	%	#	%
I. LEUKAEMIAS	14	51.85	10	52.63
(a) Acute lymphocytic leukaemia	11	40.74	6	31.58
(b) Other lymphoid leukaemia	0	0.00	0	0.00
(c) Acute non-lymphocytic leukaemia	2	7.41	1	5.26
(d) Chronic myeloid leukaemia	1	3.70	1	5.26
(e) Other and unspecified leukaemia	0	0.00	2	10.53
II. LYMPHOMAS & OTHER RETICULOENDOTHELIAL	3	11.11	1	5.26
(a) Hodgkin's disease	2	7.41	0	0.00
(b) Non-Hodgkin lymphoma	1	3.70	1	5.26
(c) Burkitt's lymphoma	0	0.00	0	0.00
(d) Unspecified lymphomas	0	0.00	0	0.00
(e) Histiocytosis X	0	0.00	0	0.00
(f) Other reticuloendothelial neoplasms	0	0.00	0	0.00
III. C.N.S.& MISC.INTRACRANIAL & INTRASPINAL NEOP.	3	11.11	1	5.26
(a) Ependymoma	0	0.00	0	0.00
(b) Astrocytoma	3	11.11	0	0.00
(c) Medulloblastoma	0	0.00	1	5.26
(d) Other glioma	0	0.00	0	0.00
(e) Misc.intracranial & intraspinal neop.	0	0.00	0	0.00
IV. SYMPATHETIC NERVOUS SYSTEM TUMOURS	0	0.00	2	10.53
(a) Neuroblastoma & ganglioneuroblastoma	0	0.00	2	10.53
(b) Other	0	0.00	0	0.00
V. RETINOBLASTOMA	0	0.00	2	10.53
VI. RENAL TUMOURS	1	3.70	0	0.00
(a) Wilms' tumour	1	3.70	0	0.00
(b) Renal carcinoma	0	0.00	0	0.00
(c) Other & unsp. malignant renal tumours	0	0.00	0	0.00
VII. HEPATIC TUMOURS	0	0.00	0	0.00
(a) Hepatoblastoma	0	0.00	0	0.00
(b) Hepatic carcinoma	0	0.00	0	0.00
(c) Other & unsp. malignant hepatic tumours	0	0.00	0	0.00
VIII. MALIGNANT BONE TUMOURS	1	3.70	0	0.00
(a) Osteosarcoma	1	3.70	0	0.00
(b) Chondrosarcoma	0	0.00	0	0.00
(c) Ewing's sarcoma	0	0.00	0	0.00
(d) Other & unsp. malignant bone tumours	0	0.00	0	0.00
IX. SOFT-TISSUE(S-T) SARCOMAS(S)	4	14.81	0	0.00
(a) Rhabdomyos. embryonals.& s-t.Ewings tum.	3	11.11	0	0.00
(b) Fibros.neurofibros.&oth.fibromatous neop.	0	0.00	0	0.00
(c) Other soft-tissue sarcoma	1	3.70	0	0.00
X. GERM-CELL TROPHOBLASTIC & OTH GONADAL NEOP.	0	0.00	0	0.00
(a) Non-gonadal gc & trophoblastic neop.	0	0.00	0	0.00
(b) Gonadal gc & trophoblastic neop.	0	0.00	0	0.00
(c) Gonadal carcinoma	0	0.00	0	0.00
(d) Other & unsp.malignant gonadal tumours	0	0.00	0	0.00
XI. CARCINOMA & OTH MALIGNANT EPITHELIAL NEOP.	0	0.00	2	10.53
(a) Adrenocortical carcinoma	0	0.00	0	0.00
(b) Thyroid carcinoma	0	0.00	0	0.00
(c) Nasopharyngeal carcinoma	0	0.00	0	0.00
(d) Malanomatous neoplasms	0	0.00	0	0.00
(e) Other carcinoma	0	0.00	2	10.53
XII. OTHER & UNSP. MALIGNANT NEOPLASMS	0	0.00	1	5.26
OTHERS (Not Classified)	1	3.70	0	0.00
TOTAL (ALL CHILDHOOD CANCERS)	27	100.00	19	100.00

POPULATION BASED CANCER REGISTRY, BHOPAL

Gandhi Medical College, Bhopal

Dr.S.Kanhere, Professor and Head of Pathology & Principal Investigator

Dr.S.Surange, Research Officer

Dr.R.Dikshit, Research Officer

Mr.A.Shrivastava, Assistant Research Officer

A special Population Based Cancer Registry (PBCR) 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 effect. Estimated population of Bhopal registry area as on July 1st 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 pathology laboratories. Histopathology facilities are available at Gandhi Medical College, Kasturba Hospital, Jawaharlal Nehru Cancer Hospital and with five private hospitals. JNCH and Hamidia Hospital attached to Gandhi Medical College, are the major sources for registration of cancer cases.

Registry collects information on all cancer patients from local sources as well as from Bombay, since many cancer cases directly go to these places for diagnosis and treatment. Death registration system in Bhopal is far from adequate.

Figure: BHP-1:
Population Pyramid showing Age Distribution: 1990-1996
Bhopal

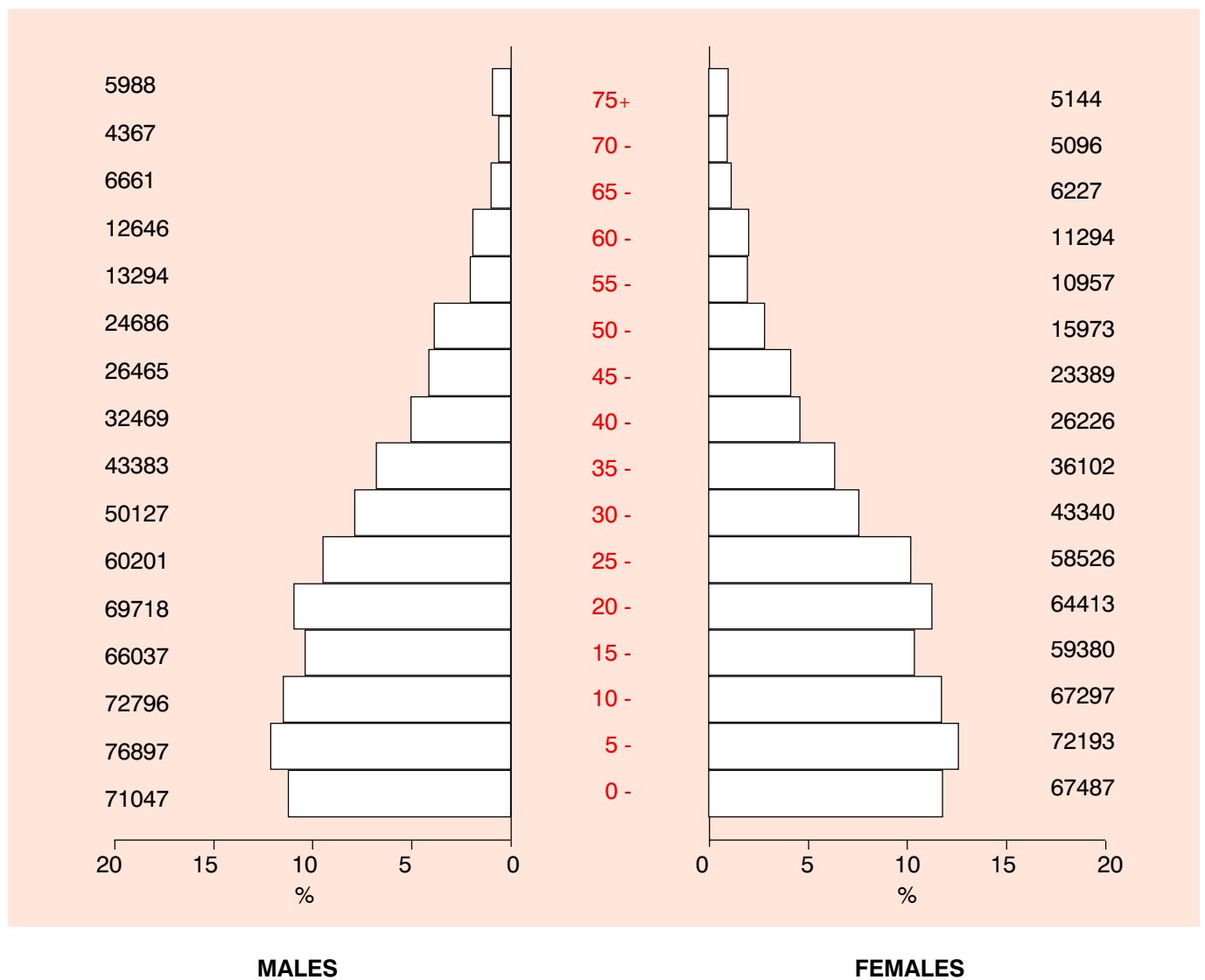


TABLE: BHP-1

Population by Five Year Age Group and Gender : 1990-1996
Number and Relative Proportion (%)

Bhopal

Age Group	MALES		FEMALES		TOTAL	
	Number	%	Number	%	Number	%
0-4	71047	11.16	67487	11.78	138534	11.45
5-9	76897	12.08	72193	12.60	149090	12.32
10-14	72796	11.43	67297	11.74	140093	11.58
15-19	66037	10.37	59380	10.36	125417	10.37
20-24	69718	10.95	64413	11.24	134131	11.09
25-29	60201	9.45	58526	10.21	118727	9.81
30-34	50127	7.87	43340	7.56	93467	7.73
35-39	43383	6.81	36102	6.30	79485	6.57
40-44	32469	5.10	26226	4.58	58695	4.85
45-49	26465	4.16	23389	4.08	49854	4.12
50-54	24686	3.88	15973	2.79	40659	3.36
55-59	13294	2.09	10957	1.91	24251	2.00
60-64	12646	1.99	11294	1.97	23940	1.98
65-69	6661	1.05	6227	1.09	12888	1.07
70-74	4367	0.69	5096	0.89	9463	0.78
75+	5988	0.94	5144	0.90	11132	0.92
Total	636782	100.0	573044	100.0	1209826	100.0

TABLE: BHP-2
Main Sources* of Registration of Incident Cancers: 1990-1996
Bhopal

Name of Institution	Year of Diagnosis and Relative Proportion (%)							1990-96	
	1990	1991	1992	1993	1994	1995	1996	Number	%
Hamidia Hospital	55.4	53.3	58.3	53.6	52.4	26.7	35.7	2261	47.2
J. N. Cancer Hospital	1.2	0.6	0.9	0.9	16.7	39.6	42.7	769	16.1
Sultania Hospital	11.1	13.2	11.8	9.2	6.4	7.2	4.9	425	8.9
Kasturba Hospital	4.6	3.4	4.6	8.7	3.8	8.5	9.0	298	6.2
TMH-Mumbai	4.3	4.2	6.9	7.4	9.1	5.2	3.8	281	5.9
Bhopal Medical Centre	4.1	6.3	6.1	5.7	3.0	1.5	0.0	175	3.7
Death Certificate Only	4.1	6.1	2.9	2.0	2.7	4.4	1.2	156	3.3
Navodaya Hospital	0.0	0.0	0.9	3.4	1.6	4.2	1.0	80	1.7
Sajjad Hospital	3.1	1.9	2.0	2.6	0.7	0.8	0.5	76	1.6
Indore Cancer Hospital	0.3	1.3	2.1	2.5	1.0	1.2	0.0	57	1.2
Jawahar Nehru Hospital	4.1	1.3	1.2	1.3	0.4	0.0	0.1	53	1.1
Parulkar Clinic	1.2	2.9	1.1	1.2	1.4	0.4	0.0	53	1.1
Total of Above								4684	97.8
All Others								105	2.2
Total All Sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0	4789	100.0

*1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 1990-1996.

*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-3(a): Number of Incident Cancers by Five Year Age Group and Site (ICD-9):
1990-1996 – 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	2	0	1	0	1	0	0	4	0.16
141	Tongue	0	0	0	0	0	2	1	10	12	16	40	24	35	25	22	19	206	8.11
142	Salivary Gland	0	0	0	0	0	0	0	2	0	0	1	2	2	1	0	0	8	0.32
143	Gum	0	0	0	0	0	0	0	1	0	4	10	2	7	2	2	3	31	1.22
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.04
145	Other Mouth	0	0	0	0	0	3	4	13	10	21	26	15	24	11	15	8	150	5.91
146	Oropharynx	0	0	0	0	1	0	1	1	4	1	13	4	17	8	10	6	66	2.60
147	Nasopharynx	0	0	0	0	0	0	1	1	1	3	0	2	1	1	0	0	10	0.39
148	Hypopharynx	0	0	0	0	0	0	2	2	9	13	28	24	39	16	18	15	166	6.54
149	Pharynx Etc.	0	0	0	0	0	0	1	0	1	0	1	1	3	2	3	3	15	0.59
150	Oesophagus	0	0	0	0	1	0	3	5	12	22	26	23	24	22	19	17	174	6.85
151	Stomach	0	0	1	2	3	2	3	3	6	8	19	11	7	10	8	5	88	3.47
152	Small Intestine	0	0	0	1	0	0	0	1	1	2	1	2	1	0	0	0	9	0.35
153	Colon	0	0	0	0	0	1	1	4	2	5	10	10	9	4	5	4	55	2.17
154	Rectum	0	0	0	0	0	1	1	4	3	3	6	9	12	4	2	1	46	1.81
155	Liver	1	1	0	0	0	0	3	4	4	4	6	9	8	5	5	1	51	2.01
156	Gall Bladder	0	0	0	0	1	1	0	0	2	2	5	3	11	6	3	1	35	1.38
157	Pancreas	0	0	0	0	0	0	2	2	2	5	6	11	9	3	2	2	44	1.73
158	Retroperitoneum	0	2	0	0	0	0	0	0	0	0	1	1	1	0	0	0	5	0.20
159	Other Dig System	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3	0.12
160	Nasal Cavity	0	0	0	0	0	0	1	1	1	3	3	4	4	0	1	1	19	0.75
161	Larynx	0	0	0	0	0	1	1	2	6	7	14	12	23	10	7	7	90	3.54
162	Lung	0	0	0	0	0	2	7	10	20	21	51	40	56	38	34	23	302	11.89
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	2	2	7	5	2	1	2	2	1	0	2	2	0	0	1	29	1.14
171	Conn. Tissue	1	2	4	2	1	5	6	3	5	2	3	2	4	2	1	1	44	1.73
172	Skin Melanoma	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	5	0.20
173	Skin. Other	0	0	0	0	1	1	3	4	3	6	8	2	9	5	4	10	56	2.21
175	Breast Male	0	0	0	0	0	0	1	0	0	1	3	0	2	1	1	2	11	0.43
185	Prostate	0	0	0	0	0	0	0	0	0	0	10	16	27	9	15	29	106	4.17
186	Testis	2	0	1	1	3	2	3	7	1	1	1	0	0	0	0	0	22	0.87
187	Penis Etc.	0	0	0	0	1	0	1	2	1	0	3	2	2	2	1	2	17	0.67
188	Uri. Bladder	0	0	0	0	0	1	0	2	2	8	8	12	9	10	4	9	65	2.56
189	Kidney	5	2	1	1	0	1	0	0	0	0	2	3	2	1	2	5	25	0.98
190	Eye	3	1	2	0	0	0	0	0	1	0	1	0	0	0	1	1	10	0.39
191	Brain	4	5	6	1	7	6	6	14	6	10	14	10	4	5	1	2	101	3.98
192	Nervous System	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0.08
193	Thyroid Gland	0	0	0	0	1	2	0	0	1	2	3	5	3	0	5	0	22	0.87
194	Oth. Endo. Gland	0	0	0	1	0	0	1	1	1	0	0	1	1	0	0	1	7	0.28
195	Ill Def. Sites	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.04
196	Sec. Lymph. Node	2	0	0	0	1	2	2	0	4	5	18	6	11	4	2	7	64	2.52
197	Sec. Res. Etc	0	0	0	0	0	2	0	0	2	3	7	3	6	3	1	5	32	1.26
198	Sec. Other	0	2	0	0	0	2	0	2	1	2	5	1	4	1	1	1	22	0.87
199	Prim. Unknown	0	2	0	3	1	1	0	4	2	8	7	7	17	5	5	10	72	2.84
200	Lymphosarcoma	1	2	1	1	1	0	0	2	2	0	3	1	1	3	0	1	19	0.75
201	Hodgkins. Disease	0	2	3	1	7	1	1	0	1	2	4	2	5	2	1	0	32	1.26
202	Oth. Lymph. Node	0	1	2	3	4	1	3	4	3	1	9	2	4	3	2	2	44	1.73
203	Mult. Myeloma	0	0	0	0	0	0	0	0	2	1	4	8	2	5	0	0	22	0.87
204	Leuk. Lymphatic	8	11	3	6	3	1	3	0	3	1	2	5	2	1	2	0	51	2.01
205	Leuk. Myelocytic	1	2	4	4	10	9	11	7	7	4	3	4	3	0	3	0	72	2.84
206	Leuk. Monocytic	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.04
207	Leuk. Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk. Unspecified	0	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	7	0.28
	All Sites	30	38	31	35	53	53	74	121	147	198	389	303	419	230	210	208	2539	100.00

**TABLE: BHP-3(b): Number of Incident Cancers by Five Year Age Group and Site (ICD-9):
1990-1996 – 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	1	0	0	1	0	0	0	0	2	0.09
141	Tongue	0	0	0	0	0	0	0	2	0	4	3	5	4	1	5	2	26	1.16
142	Salivary Gland	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	4	0.18
143	Gum	0	0	0	0	0	0	1	0	0	1	2	3	3	1	2	0	13	0.58
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0.09
145	Other Mouth	0	0	0	0	0	0	3	2	8	8	14	11	17	10	11	5	89	3.96
146	Oropharynx	0	0	0	0	0	0	1	0	1	0	0	1	3	1	3	0	10	0.44
147	Nasopharynx	0	0	1	1	0	2	0	0	1	1	1	0	0	0	0	0	7	0.31
148	Hypopharynx	0	0	0	0	0	1	0	1	3	3	1	0	3	4	2	2	20	0.89
149	Pharynx Etc.	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	3	0.13
150	Oesophagus	0	0	0	0	0	0	0	2	11	11	16	11	16	11	9	13	100	4.44
151	Stomach	0	0	1	0	0	1	5	2	3	8	9	1	4	3	2	4	43	1.91
152	Small Intestine	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.04
153	Colon	0	0	0	0	0	0	2	2	1	3	4	0	8	3	1	3	27	1.20
154	Rectum	0	0	0	0	2	0	3	2	1	3	6	4	4	2	7	2	36	1.60
155	Liver	0	0	0	0	0	0	3	0	7	4	1	3	1	1	4	0	24	1.07
156	Gall Bladder	0	0	0	0	0	0	0	2	5	7	6	8	11	4	4	6	53	2.36
157	Pancreas	0	0	0	0	0	0	1	1	1	3	3	4	3	5	1	1	23	1.02
158	Retroperitoneum	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	2	0.09
159	Other Dig System	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.04
160	Nasal Cavity	0	0	0	0	0	0	0	1	4	3	3	2	1	1	3	0	18	0.80
161	Larynx	0	0	0	0	0	0	0	0	2	1	2	4	3	1	0	3	16	0.71
162	Lung	0	0	0	0	0	1	0	2	4	4	6	11	11	3	6	6	54	2.40
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	1	0	0	0	0	0	0	0	0	1	0.04
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	2	2	2	0	1	1	1	1	0	2	1	0	0	0	16	0.71
171	Conn. Tissue	1	1	1	1	3	2	1	1	1	2	4	1	0	0	1	0	20	0.89
172	Skin Melanoma	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	3	0.13
173	Skin. Other	0	0	0	0	0	0	1	1	3	2	4	3	4	7	3	0	28	1.24
174	Breast	0	0	0	2	1	13	36	61	60	93	74	48	52	24	16	20	500	22.22
179	Uterus NOS.	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	3	0.13
180	Cervix	0	0	0	0	2	19	42	55	65	76	95	52	66	28	24	13	537	23.87
181	Placenta	0	0	0	0	2	3	0	0	1	0	0	0	0	0	0	0	6	0.27
182	Body Uterus	0	0	0	0	0	0	1	1	6	8	7	5	8	0	0	2	38	1.69
183	Ovary	1	1	0	6	10	9	4	12	21	17	22	10	15	9	4	6	147	6.53
184	Vagina	0	0	0	0	1	0	0	2	2	0	3	0	2	1	2	1	14	0.62
188	Uri. Bladder	0	0	0	0	0	0	0	0	1	2	2	1	5	2	2	3	18	0.80
189	Kidney	5	3	0	0	0	0	1	0	0	1	2	1	4	2	0	0	19	0.84
190	Eye	1	1	0	0	0	0	0	0	1	0	1	1	0	0	0	0	5	0.22
191	Brain	2	6	6	2	4	2	5	3	3	5	8	1	3	1	1	0	52	2.31
192	Nervous System	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0.09
193	Thyroid Gland	0	0	0	1	1	3	3	7	6	3	7	2	0	1	0	1	35	1.56
194	Oth. Endo. Gland	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0.09
195	Ill Def. Sites	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3	0.13
196	Sec. Lymph. Node	0	0	0	1	0	1	0	0	2	2	2	1	2	2	0	3	16	0.71
197	Sec. Res. Etc	0	0	0	0	0	1	2	1	4	3	5	1	6	5	3	4	35	1.56
198	Sec. Other	0	0	2	0	1	0	0	0	2	0	1	3	2	0	1	0	12	0.53
199	Prim. Unknown	0	0	2	2	2	2	1	2	3	3	6	10	9	1	2	4	49	2.18
200	Lymphosarcoma	0	0	0	1	2	2	0	0	0	1	1	1	1	0	0	0	9	0.40
201	Hodgkins. Disease	0	3	1	2	2	0	1	0	1	0	1	0	1	1	0	0	13	0.58
202	Oth. Lymph. Node	0	0	4	1	3	2	2	1	1	1	2	2	4	0	0	0	23	1.02
203	Mult. Myeloma	0	0	0	0	0	1	0	0	3	3	0	1	0	1	2	0	11	0.49
204	Leuk. Lymphatic	1	1	3	2	0	2	0	0	0	0	0	0	2	0	0	1	12	0.53
205	Leuk. Myelocytic	1	4	2	4	0	4	5	5	2	3	3	3	2	3	0	1	42	1.87
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. Unspecified	0	1	0	0	1	0	1	0	0	2	0	0	0	0	0	0	5	0.22
	All Sites	14	23	26	29	41	72	128	174	245	294	329	221	286	140	122	106	2250	100.00

TABLE: BHP-5(a):
Trends in Crude (CR)& Age Adjusted (AAR) Cancer Incidence Rates from 1990 to 1996 - Males
Bhopal

ICD-9	Site	1990		1991		1992		1993		1994		1995		1996	
		CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR
140	Lip	0.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.7	0.0	0.0	0.0	0.0
141	Tongue	6.1	12.2	4.3	8.7	4.3	8.9	4.4	8.2	4.5	8.6	4.3	7.5	4.5	8.5
142	Salivary Gland	0.2	0.2	0.2	0.2	0.2	0.5	0.0	0.0	0.0	0.0	0.6	1.0	0.1	0.3
143	Gum	0.5	1.1	0.0	0.0	0.8	1.8	0.3	0.4	0.9	1.6	1.3	2.0	0.8	1.5
144	Floor of Mouth	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0
145	Other Mouth	1.4	2.4	2.1	3.5	2.8	4.7	4.3	7.0	3.8	6.6	4.5	8.4	4.1	7.3
146	Oropharynx	1.3	2.2	1.0	2.0	1.8	3.5	1.9	3.9	1.8	4.1	1.3	2.2	1.2	2.8
147	Nasopharynx	0.4	0.9	0.2	0.3	0.0	0.0	0.2	0.1	0.3	0.5	0.0	0.0	0.6	0.7
148	Hypopharynx	4.5	9.4	3.5	5.6	4.1	8.6	4.1	8.2	3.9	7.4	3.2	6.1	3.0	6.1
149	Pharynx Etc.	0.4	0.9	0.7	1.6	0.2	0.2	0.2	0.3	0.2	0.3	0.1	0.4	0.7	1.3
150	Oesophagus	5.1	9.9	3.5	7.2	3.3	5.9	3.5	7.0	4.4	8.5	3.8	6.8	4.0	7.5
151	Stomach	2.7	4.9	2.9	4.6	1.8	3.3	1.3	2.4	2.0	3.2	1.4	3.0	1.9	3.1
152	Small Intestine	0.0	0.0	0.2	0.3	0.2	0.3	0.3	0.5	0.2	0.2	0.6	0.7	0.0	0.0
153	Colon	1.3	2.1	0.9	2.0	1.0	1.9	1.1	1.6	1.2	2.1	1.3	2.4	1.8	3.3
154	Rectum	0.9	1.3	1.7	3.4	0.7	1.3	0.6	1.0	1.5	2.4	1.2	2.3	0.7	1.3
155	Liver	0.5	0.9	0.7	1.1	1.3	2.6	1.4	2.7	1.8	2.7	0.7	1.5	1.4	2.3
156	Gall Bladder	0.5	1.0	0.9	1.7	0.8	1.6	0.8	1.9	0.8	1.5	0.6	1.1	1.1	2.1
157	Pancreas	1.1	2.2	1.0	1.8	1.2	2.1	1.0	1.5	1.7	3.0	0.7	1.4	0.4	0.6
158	Retroperitoneum	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.7
159	Other Dig System	0.2	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0
160	Nasal Cavity	0.5	1.0	0.4	0.6	0.2	0.2	0.8	1.6	0.5	0.9	0.6	0.8	0.1	0.1
161	Larynx	1.6	2.4	2.1	4.1	2.1	3.7	1.7	3.7	2.1	4.1	2.0	3.7	2.3	4.8
162	Lung	5.8	10.4	7.1	14.9	7.6	15.1	6.8	14.1	6.2	10.9	6.6	12.5	7.3	13.6
163	Pleura	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164	Thymus	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0
170	Bone	0.0	0.0	0.7	0.8	0.3	0.3	0.8	0.9	1.2	1.4	0.4	0.4	1.0	0.9
171	Conn. Tissue	1.1	1.5	1.0	1.0	1.2	1.1	1.4	2.0	1.5	1.9	0.6	1.0	0.3	0.3
172	Skin Melanoma	0.0	0.0	0.0	0.0	0.3	0.7	0.2	0.3	0.0	0.0	0.3	0.7	0.0	0.0
173	Skin. Other	1.3	1.9	2.1	3.6	1.2	2.1	1.0	1.6	1.1	1.6	1.0	2.1	1.4	2.8
175	Breast Male	0.7	1.9	0.2	0.2	0.0	0.0	0.3	0.4	0.3	0.4	0.0	0.0	0.3	0.5
185	Prostate	2.7	6.3	2.4	5.6	2.1	4.2	2.7	5.5	2.0	3.8	2.2	4.8	2.6	6.1
186	Testis	0.2	0.2	1.0	0.9	0.5	0.4	0.6	0.6	0.0	0.0	0.6	0.6	0.6	0.4
187	Penis Etc.	0.4	0.6	0.7	1.4	0.5	0.8	0.5	0.8	0.0	0.0	0.7	1.2	0.0	0.0
188	Uri. Bladder	1.3	3.0	1.6	3.4	1.5	2.7	1.0	2.0	1.5	2.9	1.6	2.8	1.8	3.2
189	Kidney	0.5	0.9	0.2	0.5	0.7	1.2	0.2	0.1	0.8	1.1	0.6	1.2	1.0	1.3
190	Eye	0.4	0.3	0.2	0.2	0.2	0.1	0.2	0.3	0.3	0.3	0.1	0.1	0.3	0.6
191	Brain	0.9	1.9	2.4	2.9	2.5	3.3	3.0	4.1	2.0	2.2	2.7	3.1	2.2	2.9
192	Nervous System	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.0	0.0	0.0	0.0
193	Thyroid Gland	0.7	1.0	0.2	0.5	0.7	1.0	0.5	1.2	0.2	0.1	0.9	1.4	0.4	1.1
194	Oth. Endo. Gland	0.2	0.2	0.0	0.0	0.3	0.7	0.2	0.2	0.0	0.0	0.3	0.4	0.1	0.1
195	Ill Def. Sites	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
196	Sec. Lymph. Node	0.5	0.7	0.5	0.9	1.7	3.2	0.6	1.3	1.8	3.0	2.7	3.7	1.8	3.2
197	Sec. Res. Etc	0.2	0.5	1.4	2.5	0.5	0.8	0.3	0.8	0.8	1.2	0.7	1.3	1.1	1.8
198	Sec. Other	0.9	1.4	0.5	0.8	0.3	0.8	1.1	1.4	0.2	0.1	0.4	0.7	0.1	0.4
199	Prim. Unknown	1.6	2.2	2.2	4.6	1.7	3.0	1.1	1.8	1.7	3.6	2.3	4.0	0.8	1.4
200	Lymphosarcoma	0.4	0.3	0.4	0.7	0.3	0.4	0.6	0.9	0.3	0.6	0.6	0.9	0.4	0.7
201	Hodgkins. Disease	1.4	1.7	1.0	1.2	0.8	1.1	0.2	0.2	0.5	0.8	0.3	0.5	1.0	1.4
202	Oth. Lymph. Node	1.4	1.8	0.5	0.6	0.8	1.4	1.4	2.3	0.9	1.6	1.2	1.5	0.7	0.7
203	Mult. Myeloma	0.7	1.6	0.5	0.8	0.2	0.3	0.8	1.4	0.8	1.7	0.4	0.9	0.1	0.2
204	Leuk. Lymphatic	0.7	1.1	1.6	1.9	1.2	1.3	1.0	0.9	0.6	0.7	1.4	2.1	1.5	1.6
205	Leuk. Myelocytic	0.9	0.8	1.9	2.4	2.3	2.3	2.8	3.1	1.7	1.9	0.7	0.6	1.1	1.4
206	Leuk. Monocytic	0.2	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
207	Leuk. Misc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
208	Leuk. Unspecified	0.0	0.0	0.2	0.2	0.0	0.0	0.3	0.3	0.0	0.0	0.3	0.2	0.3	0.2
	All Sites	54.5	98.1	56.8	101.4	56.1	99.8	57.1	100.3	58.2	100.6	57.9	100.1	57.6	100.9

TABLE: BHP-5(b):
Trends in Crude (CR)& Age Adjusted (AAR) Cancer Incidence Rates from 1990 to 1996 - Females
Bhopal

ICD-9	Site	1990		1991		1992		1993		1994		1995		1996	
		CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR
140	Lip	0.2	0.4	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141	Tongue	0.2	0.4	1.0	1.8	0.7	1.5	0.2	0.4	1.3	2.5	0.2	0.3	0.9	1.8
142	Salivary Gland	0.2	0.2	0.0	0.0	0.2	0.2	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
143	Gum	0.2	0.4	0.2	0.4	0.4	0.6	0.2	0.4	0.2	0.2	0.6	1.3	0.5	0.9
144	Floor of Mouth	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.0	0.0	0.2	0.2	0.0	0.0
145	Other Mouth	2.2	4.0	1.5	2.9	2.6	5.8	2.3	4.5	2.7	5.3	1.8	3.2	2.4	4.4
146	Oropharynx	0.4	0.9	0.2	0.6	0.4	0.8	0.0	0.0	0.3	0.5	0.3	0.7	0.2	0.2
147	Nasopharynx	0.2	0.3	0.0	0.0	0.0	0.0	0.4	0.4	0.3	0.3	0.2	0.1	0.2	0.3
148	Hypopharynx	0.2	0.3	0.0	0.0	0.6	0.9	0.9	1.3	1.2	2.6	0.2	0.4	0.5	0.9
149	Pharynx Etc.	0.2	0.4	0.0	0.0	0.0	0.0	0.2	0.4	0.2	0.3	0.0	0.0	0.0	0.0
150	Oesophagus	1.8	3.8	2.1	3.4	2.4	5.0	3.0	6.0	2.8	5.8	2.6	5.0	2.6	4.9
151	Stomach	0.8	1.0	1.9	3.2	0.9	1.8	0.7	1.7	1.0	1.5	1.0	1.4	1.2	1.8
152	Small Intestine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3
153	Colon	1.0	2.3	0.6	1.1	0.6	0.9	0.4	0.7	1.3	2.2	0.3	0.8	0.6	1.0
154	Rectum	0.6	1.1	1.2	1.7	0.7	1.1	1.1	2.1	0.0	0.0	1.4	2.7	1.2	2.4
155	Liver	0.4	0.4	0.2	0.2	0.4	0.7	0.7	1.4	0.8	1.5	1.3	1.9	0.3	0.6
156	Gall Bladder	0.8	1.7	0.8	1.6	1.1	2.2	1.6	2.8	0.8	1.4	2.1	4.0	1.8	3.6
157	Pancreas	0.4	0.9	0.2	0.4	0.7	1.7	1.1	2.4	0.3	0.5	0.3	0.6	0.9	1.6
158	Retroperitoneum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4
159	Other Dig System	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
160	Nasal Cavity	0.8	1.1	0.4	0.8	0.0	0.0	0.5	0.9	0.7	1.4	0.5	0.7	0.3	0.6
161	Larynx	0.6	1.4	0.2	0.3	0.2	0.4	0.5	1.1	0.3	0.6	0.3	0.6	0.6	1.1
162	Lung	0.6	1.1	0.6	1.3	1.5	3.3	1.8	2.8	1.3	2.8	1.9	4.0	1.5	2.5
163	Pleura	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164	Thymus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	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	0.0	0.0	0.0	0.0	0.0
170	Bone	0.4	0.7	1.0	0.8	0.4	0.5	0.4	0.3	0.2	0.4	0.5	0.5	0.2	0.1
171	Conn. Tissue	0.0	0.0	0.8	0.8	0.7	1.3	0.4	0.5	0.8	0.9	0.3	0.3	0.5	0.5
172	Skin Melanoma	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.2	0.3
173	Skin. Other	0.4	0.7	0.6	1.0	0.7	1.5	0.4	0.9	0.8	1.5	1.1	2.6	0.8	1.4
174	Breast Female	12.4	20.2	11.8	20.0	13.2	21.3	12.8	20.7	13.2	21.3	11.8	18.5	12.1	18.2
179	Uterus NOS.	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6
180	Cervix Uteri	13.4	21.8	14.5	24.6	13.2	21.1	13.5	21.1	13.9	22.3	12.6	20.6	12.9	21.3
181	Placenta	0.2	0.2	0.4	0.4	0.0	0.0	0.0	0.0	0.3	0.3	0.2	0.1	0.0	0.0
182	Corpus Uteri	1.0	1.6	1.2	1.8	1.5	2.6	1.1	2.0	0.7	1.1	0.6	1.2	0.8	1.4
183	Ovary Etc.	3.4	4.8	3.7	5.6	5.3	7.5	3.3	5.2	3.5	5.4	3.7	6.0	2.9	4.9
184	Other Fem Gen.	0.6	0.6	1.0	2.0	0.0	0.0	0.0	0.0	0.3	0.6	0.0	0.0	0.6	1.2
188	Uri. Bladder	0.6	1.1	0.8	1.6	0.2	0.4	0.0	0.0	0.2	0.3	0.5	0.9	0.9	2.0
189	Kidney	1.2	2.2	0.4	0.6	0.4	0.5	0.4	0.3	0.5	0.6	0.3	0.6	0.3	0.5
190	Eye	0.0	0.0	0.2	0.2	0.6	1.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
191	Brain	1.6	1.9	1.9	3.0	0.7	0.9	1.1	1.8	1.8	2.1	1.0	0.9	1.1	0.9
192	Nervous System	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.4	0.0	0.0	0.0	0.0
193	Thyroid Gland	1.4	1.8	1.2	1.5	1.1	1.4	0.4	0.4	0.7	1.1	0.6	1.1	0.9	1.1
194	Oth. Endo. Gland	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0
195	Ill Def. Sites	0.2	0.2	0.2	0.6	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
196	Sec. Lymph. Node	0.8	1.3	0.4	0.6	0.6	1.1	0.5	0.9	0.3	0.6	0.0	0.0	0.3	0.7
197	Sec. Res. Etc	1.0	2.0	1.7	3.2	0.7	1.6	0.5	0.8	0.5	0.8	0.3	0.7	1.4	2.6
198	Sec. Other	0.0	0.0	0.6	1.0	0.2	0.4	0.7	0.9	0.3	0.5	0.0	0.0	0.3	0.6
199	Prim. Unknown	2.4	4.2	0.6	1.0	1.1	1.8	1.2	2.0	1.3	2.2	1.9	3.5	0.2	0.3
200	Lymphosarcoma	0.6	0.8	0.0	0.0	0.7	0.7	0.2	0.4	0.0	0.0	0.0	0.0	0.2	0.2
201	Hodgkins. Disease	1.2	0.9	0.2	0.2	0.7	1.1	0.2	0.5	0.2	0.2	0.0	0.0	0.0	0.0
202	Oth. Lymph. Node	1.0	1.1	0.6	0.4	0.4	0.5	0.2	0.2	0.3	0.4	0.8	1.1	0.8	1.3
203	Mult. Myeloma	0.2	0.5	0.4	1.0	0.0	0.0	0.7	1.1	0.0	0.0	0.3	0.4	0.3	0.4
204	Leuk. Lymphatic	0.4	0.3	0.2	0.2	0.2	0.2	0.5	0.7	0.3	0.5	0.3	0.3	0.2	0.3
205	Leuk. Myelocytic	1.0	1.0	0.8	0.7	1.1	1.2	1.6	1.9	0.8	1.2	0.8	1.4	1.2	2.0
206	Leuk. Monocytic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
207	Leuk. Misc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
208	Leuk. Unspecified	0.0	0.0	0.0	0.0	0.4	0.4	0.2	0.1	0.2	0.1	0.0	0.0	0.2	0.2
	All Sites	57.7	92.4	56.0	92.2	57.6	95.7	56.8	93.5	57.3	94.0	52.7	88.8	55.3	92.1

TABLE: BHP-6(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) 1990-1996: Males Bhopal

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu.Rate %	Cu.Risk	Cu.Rate%	Cu.Risk
140	Lip	0.01	0.01	0.03	0.03
141	Tongue	0.54	0.54	1.17	1.16
142	Salivary Gland	0.03	0.03	0.04	0.04
143	Gum	0.09	0.09	0.15	0.15
144	Floor of Mouth	0.00	0.00	0.00	0.00
145	Other Mouth	0.4	0.40	0.77	0.77
146	Oropharynx	0.17	0.17	0.42	0.42
147	Nasopharynx	0.03	0.03	0.04	0.04
148	Hypopharynx	0.49	0.49	0.96	0.96
149	Pharynx Etc.	0.03	0.03	0.10	0.10
150	Oesophagus	0.44	0.44	0.99	0.99
151	Stomach	0.21	0.21	0.45	0.45
152	Small Intestine	0.03	0.03	0.03	0.03
153	Colon	0.16	0.16	0.29	0.29
154	Rectum	0.16	0.16	0.23	0.23
155	Liver	0.14	0.14	0.28	0.28
156	Gall Bladder	0.11	0.11	0.22	0.22
157	Pancreas	0.15	0.15	0.22	0.22
158	Retroperitoneum	0.02	0.02	0.02	0.02
159	Other Dig System	0.01	0.01	0.01	0.01
160	Nasal Cavity	0.07	0.07	0.08	0.08
161	Larynx	0.28	0.28	0.50	0.50
162	Lung	0.81	0.81	1.78	1.76
163	Pleura	0.00	0.00	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	0.05	0.05	0.05	0.05
171	Conn. Tissue	0.09	0.09	0.13	0.13
172	Skin Melanoma	0.01	0.01	0.02	0.02
173	Skin. Other	0.12	0.12	0.24	0.24
175	Breast Male	0.02	0.02	0.05	0.05
185	Prostate	0.27	0.27	0.61	0.61
186	Testis	0.03	0.03	0.03	0.03
187	Penis Etc.	0.04	0.04	0.08	0.08
188	Uri. Bladder	0.17	0.17	0.34	0.34
189	Kidney	0.04	0.04	0.09	0.09
190	Eye	0.01	0.01	0.03	0.03
191	Brain	0.22	0.22	0.29	0.29
192	Nervous System	0.01	0.01	0.01	0.01
193	Thyroid Gland	0.06	0.06	0.15	0.15
194	Oth. Endo. Gland	0.02	0.02	0.02	0.02
195	Ill Def. Sites	0.01	0.01	0.01	0.01
196	Sec. Lymph. Node	0.18	0.18	0.25	0.25
197	Sec. Res. Etc	0.09	0.09	0.13	0.13
198	Sec. Other	0.06	0.06	0.09	0.09
199	Prim. Unknown	0.20	0.20	0.33	0.33
200	Lymphosarcoma	0.03	0.03	0.07	0.07
201	Hodgkins. Disease	0.07	0.07	0.11	0.11
202	Oth. Lymph. Node	0.09	0.09	0.16	0.16
203	Mult. Myeloma	0.07	0.07	0.13	0.13
204	Leuk. Lymphatic	0.09	0.09	0.13	0.13
205	Leuk. Myelocytic	0.13	0.13	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. Unspecified	0.01	0.01	0.01	0.01
	All Sites	6.57	6.36	12.50	11.75

TABLE: BHP-6(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) 1990-1996: 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	0.01	0.01
141	Tongue	0.09	0.09	0.17	0.17
142	Salivary Gland	0.01	0.01	0.01	0.01
143	Gum	0.05	0.05	0.09	0.09
144	Floor of Mouth	0.01	0.01	0.01	0.01
145	Other Mouth	0.30	0.30	0.57	0.57
146	Oropharynx	0.03	0.03	0.08	0.08
147	Nasopharynx	0.01	0.01	0.01	0.01
148	Hypopharynx	0.04	0.04	0.12	0.12
149	Pharynx Etc.	0.02	0.02	0.02	0.02
150	Oesophagus	0.31	0.31	0.57	0.57
151	Stomach	0.12	0.12	0.18	0.18
152	Small Intestine	0.01	0.01	0.01	0.01
153	Colon	0.09	0.09	0.14	0.14
154	Rectum	0.10	0.10	0.22	0.22
155	Liver	0.07	0.07	0.14	0.14
156	Gall Bladder	0.19	0.19	0.29	0.29
157	Pancreas	0.07	0.07	0.15	0.15
158	Retroperitoneum	0.01	0.01	0.01	0.01
159	Other Dig System	0.00	0.00	0.00	0.00
160	Nasal Cavity	0.06	0.06	0.11	0.11
161	Larynx	0.06	0.06	0.07	0.07
162	Lung	0.20	0.20	0.32	0.32
163	Pleura	0.00	0.00	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	0.04	0.04	0.04	0.04
171	Conn. Tissue	0.05	0.05	0.06	0.06
172	Skin Melanoma	0.01	0.01	0.01	0.01
173	Skin. Other	0.08	0.08	0.20	0.20
174	Breast	1.63	1.62	2.13	2.11
179	Uterus NOS.	0.02	0.02	0.02	0.02
180	Cervix	1.81	1.79	2.47	2.44
181	Placenta	0.01	0.01	0.01	0.01
182	Body Uterus	0.16	0.16	0.16	0.16
183	Ovary	0.43	0.43	0.59	0.59
184	Vagina	0.04	0.04	0.08	0.08
188	Uri. Bladder	0.06	0.06	0.11	0.11
189	Kidney	0.05	0.05	0.08	0.08
190	Eye	0.02	0.02	0.02	0.02
191	Brain	0.12	0.12	0.15	0.15
192	Nervous System	0.00	0.00	0.02	0.02
193	Thyroid Gland	0.09	0.09	0.11	0.11
194	Oth. Endo. Gland	0.00	0.00	0.00	0.00
195	Ill Def. Sites	0.00	0.00	0.02	0.02
196	Sec. Lymph. Node	0.04	0.04	0.06	0.06
197	Sec. Res. Etc	0.09	0.09	0.19	0.19
198	Sec. Other	0.05	0.05	0.06	0.06
199	Prim. Unknown	0.18	0.18	0.22	0.22
200	Lymphosarcoma	0.03	0.03	0.03	0.03
201	Hodgkins. Disease	0.02	0.02	0.04	0.04
202	Oth. Lymph. Node	0.07	0.07	0.07	0.07
203	Mult. Myeloma	0.02	0.02	0.06	0.06
204	Leuk. Lymphatic	0.02	0.02	0.02	0.02
205	Leuk. Myelocytic	0.10	0.10	0.13	0.13
206	Leuk. Monocytic	0.00	0.00	0.00	0.00
207	Leuk. Misc.	0.00	0.00	0.00	0.00
208	Leuk. Unspecified	0.01	0.01	0.01	0.01
	All Sites	7.11	6.86	10.44	9.91

TABLE: BHP-7(a): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Method of Diagnosis 1990-1996 - Males
Bhopal

ICD-9	Site	Clinical		Microscopic		X-Ray		D.C.O.		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	0	0.0	4	100.0	0	0.0	0	0.0	0	0.0	4	100.0
141	Tongue	24	11.7	179	86.9	2	1.0	1	0.5	0	0.0	206	100.0
142	Salivary Gland	0	0.0	8	100.0	0	0.0	0	0.0	0	0.0	8	100.0
143	Gum	1	3.2	29	93.5	1	3.2	0	0.0	0	0.0	31	100.0
144	Floor of Mouth	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
145	Other Mouth	13	8.7	137	91.3	0	0.0	0	0.0	0	0.0	150	100.0
146	Oropharynx	5	7.6	61	92.4	0	0.0	0	0.0	0	0.0	66	100.0
147	Nasopharynx	0	0.0	10	100.0	0	0.0	0	0.0	0	0.0	10	100.0
148	Hypopharynx	16	9.6	150	90.4	0	0.0	0	0.0	0	0.0	166	100.0
149	Pharynx Etc.	3	20.0	12	80.0	0	0.0	0	0.0	0	0.0	15	100.0
150	Oesophagus	3	1.7	144	82.8	15	8.6	2	1.1	10	5.7	174	100.0
151	Stomach	5	5.7	61	69.3	6	6.8	0	0.0	16	18.2	88	100.0
152	Small Intestine	0	0.0	7	77.8	1	11.1	1	11.1	0	0.0	9	100.0
153	Colon	2	3.6	48	87.3	2	3.6	1	1.8	2	3.6	55	100.0
154	Rectum	3	6.5	39	84.8	1	2.2	2	4.3	1	2.2	46	100.0
155	Liver	3	5.9	42	82.4	3	5.9	0	0.0	3	5.9	51	100.0
156	Gall Bladder	2	5.7	10	28.6	15	42.9	1	2.9	7	20.0	35	100.0
157	Pancreas	2	4.5	11	25.0	22	50.0	1	2.3	8	18.2	44	100.0
158	Retroperitoneum	0	0.0	5	100.0	0	0.0	0	0.0	0	0.0	5	100.0
159	Other Dig System	0	0.0	0	0.0	3	100.0	0	0.0	0	0.0	3	100.0
160	Nasal Cavity	3	15.8	15	78.9	1	5.3	0	0.0	0	0.0	19	100.0
161	Larynx	11	12.2	75	83.3	2	2.2	1	1.1	1	1.1	90	100.0
162	Lung	11	3.6	189	62.6	89	29.5	4	1.3	9	3.0	302	100.0
163	Pleura	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
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	1	3.4	23	79.3	4	13.8	0	0.0	1	3.4	29	100.0
171	Conn. Tissue	0	0.0	41	93.2	2	4.5	0	0.0	1	2.3	44	100.0
172	Skin Melanoma	0	0.0	5	100.0	0	0.0	0	0.0	0	0.0	5	100.0
173	Skin. Other	0	0.0	56	100.0	0	0.0	0	0.0	0	0.0	56	100.0
175	Breast Male	1	9.1	10	90.9	0	0.0	0	0.0	0	0.0	11	100.0
185	Prostate	2	1.9	88	83.0	2	1.9	0	0.0	14	13.2	106	100.0
186	Testis	0	0.0	19	86.4	2	9.1	0	0.0	1	4.5	22	100.0
187	Penis Etc.	2	11.8	15	88.2	0	0.0	0	0.0	0	0.0	17	100.0
188	Uri. Bladder	1	1.5	58	89.2	4	6.2	1	1.5	1	1.5	65	100.0
189	Kidney	1	4.0	21	84.0	0	0.0	0	0.0	3	12.0	25	100.0
190	Eye	0	0.0	7	70.0	3	30.0	0	0.0	0	0.0	10	100.0
191	Brain	0	0.0	59	58.4	25	24.8	0	0.0	17	16.8	101	100.0
192	Nervous System	0	0.0	1	50.0	1	50.0	0	0.0	0	0.0	2	100.0
193	Thyroid Gland	5	22.7	16	72.7	0	0.0	0	0.0	1	4.5	22	100.0
194	Oth. Endo. Gland	0	0.0	3	42.9	2	28.6	1	14.3	1	14.3	7	100.0
195	Ill Def. Sites	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	1	100.0
196	Sec. Lymph. Node	14	21.9	43	67.2	4	6.3	1	1.6	2	3.1	64	100.0
197	Sec. Res. Etc	7	21.9	8	25.0	12	37.5	2	6.3	3	9.4	32	100.0
198	Sec. Other	2	9.1	1	4.5	13	59.1	0	0.0	6	27.3	22	100.0
199	Prim. Unknown	2	2.8	0	0.0	0	0.0	70	97.2	0	0.0	72	100.0
200	Lymphosarcoma	0	0.0	19	100.0	0	0.0	0	0.0	0	0.0	19	100.0
201	Hodgkins. Disease	0	0.0	31	96.9	0	0.0	1	3.1	0	0.0	32	100.0
202	Oth. Lymph. Node	0	0.0	44	100.0	0	0.0	0	0.0	0	0.0	44	100.0
203	Mult. Myeloma	0	0.0	22	100.0	0	0.0	0	0.0	0	0.0	22	100.0
204	Leuk. Lymphatic	0	0.0	50	98.0	0	0.0	1	2.0	0	0.0	51	100.0
205	Leuk. Myelocytic	0	0.0	71	98.6	0	0.0	1	1.4	0	0.0	72	100.0
206	Leuk. Monocytic	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
207	Leuk. Misc.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
208	Leuk. Unspecified	0	0.0	6	85.7	0	0.0	1	14.3	0	0.0	7	100.0
	All Sites	145	5.7	1955	77.0	238	9.4	93	3.7	108	4.3	2539	100.0

TABLE: BHP-7(b): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Method of Diagnosis 1990-1996 - Females
Bhopal

ICD-9	Site	Clinical		Microscopic		X-Ray		D.C.O.		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	2	100.0
141	Tongue	1	3.8	25	96.2	0	0.0	0	0.0	0	0.0	26	100.0
142	Salivary Gland	1	25.0	3	75.0	0	0.0	0	0.0	0	0.0	4	100.0
143	Gum	3	23.1	10	76.9	0	0.0	0	0.0	0	0.0	13	100.0
144	Floor of Mouth	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	2	100.0
145	Other Mouth	13	14.6	76	85.4	0	0.0	0	0.0	0	0.0	89	100.0
146	Oropharynx	1	10.0	9	90.0	0	0.0	0	0.0	0	0.0	10	100.0
147	Nasopharynx	2	28.6	5	71.4	0	0.0	0	0.0	0	0.0	7	100.0
148	Hypopharynx	0	0.0	20	100.0	0	0.0	0	0.0	0	0.0	20	100.0
149	Pharynx Etc.	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
150	Oesophagus	1	1.0	74	74.0	14	14.0	1	1.0	10	10.0	100	100.0
151	Stomach	4	9.3	26	60.5	6	14.0	0	0.0	7	16.3	43	100.0
152	Small Intestine	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
153	Colon	3	11.1	22	81.5	1	3.7	0	0.0	1	3.7	27	100.0
154	Rectum	4	11.1	29	80.6	2	5.6	0	0.0	1	2.8	36	100.0
155	Liver	3	12.5	13	54.2	6	25.0	1	4.2	1	4.2	24	100.0
156	Gall Bladder	0	0.0	25	47.2	17	32.1	1	1.9	10	18.9	53	100.0
157	Pancreas	1	4.3	10	43.5	5	21.7	0	0.0	7	30.4	23	100.0
158	Retroperitoneum	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	2	100.0
159	Other Dig System	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
160	Nasal Cavity	2	11.1	16	88.9	0	0.0	0	0.0	0	0.0	18	100.0
161	Larynx	1	6.3	15	93.8	0	0.0	0	0.0	0	0.0	16	100.0
162	Lung	1	1.9	31	57.4	18	33.3	1	1.9	3	5.6	54	100.0
163	Pleura	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
164	Thymus	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	1	100.0
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	15	93.8	1	6.3	0	0.0	0	0.0	16	100.0
171	Conn. Tissue	0	0.0	19	95.0	1	5.0	0	0.0	0	0.0	20	100.0
172	Skin Melanoma	0	0.0	3	100.0	0	0.0	0	0.0	0	0.0	3	100.0
173	Skin. Other	0	0.0	28	100.0	0	0.0	0	0.0	0	0.0	28	100.0
174	Breast	52	10.4	439	87.8	7	1.4	2	0.4	0	0.0	500	100.0
179	Uterus NOS.	0	0.0	2	66.7	1	33.3	0	0.0	0	0.0	3	100.0
180	Cervix	78	14.5	455	84.7	3	0.6	1	0.2	0	0.0	537	100.0
181	Placenta	0	0.0	5	83.3	0	0.0	0	0.0	1	16.7	6	100.0
182	Body Uterus	2	5.3	34	89.5	2	5.3	0	0.0	0	0.0	38	100.0
183	Ovary	4	2.7	116	78.9	17	11.6	0	0.0	10	6.8	147	100.0
184	Vagina	2	14.3	12	85.7	0	0.0	0	0.0	0	0.0	14	100.0
188	Uri. Bladder	0	0.0	15	83.3	0	0.0	0	0.0	3	16.7	18	100.0
189	Kidney	0	0.0	15	78.9	3	15.8	1	5.3	0	0.0	19	100.0
190	Eye	1	20.0	4	80.0	0	0.0	0	0.0	0	0.0	5	100.0
191	Brain	0	0.0	23	44.2	26	50.0	0	0.0	3	5.8	52	100.0
192	Nervous System	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	2	100.0
193	Thyroid Gland	2	5.7	32	91.4	1	2.9	0	0.0	0	0.0	35	100.0
194	Oth. Endo. Gland	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	2	100.0
195	Ill Def. Sites	1	33.3	1	33.3	0	0.0	1	33.3	0	0.0	3	100.0
196	Sec. Lymph. Node	4	25.0	10	62.5	2	12.5	0	0.0	0	0.0	16	100.0
197	Sec. Res. Etc	5	14.3	7	20.0	14	40.0	1	2.9	8	22.9	35	100.0
198	Sec. Other	1	8.3	1	8.3	8	66.7	1	8.3	1	8.3	12	100.0
199	Prim. Unknown	0	0.0	0	0.0	0	0.0	49	100.0	0	0.0	49	100.0
200	Lymphosarcoma	0	0.0	9	100.0	0	0.0	0	0.0	0	0.0	9	100.0
201	Hodgkins. Disease	0	0.0	13	100.0	0	0.0	0	0.0	0	0.0	13	100.0
202	Oth. Lymph. Node	0	0.0	22	95.7	0	0.0	1	4.3	0	0.0	23	100.0
203	Mult. Myeloma	0	0.0	10	90.9	0	0.0	1	9.1	0	0.0	11	100.0
204	Leuk. Lymphatic	0	0.0	12	100.0	0	0.0	0	0.0	0	0.0	12	100.0
205	Leuk. Myelocytic	0	0.0	41	97.6	0	0.0	1	2.4	0	0.0	42	100.0
206	Leuk. Monocytic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
207	Leuk. Misc.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
208	Leuk. Unspecified	0	0.0	5	100.0	0	0.0	0	0.0	0	0.0	5	100.0
	All Sites	193	8.6	1772	78.8	156	6.9	63	2.8	66	2.9	2250	100.0

TABLE: BHP-8(a): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Detailed Microscopic Diagnosis, 1990-1996 - Males : Bhopal

ICD-9	Site	Pri. Hist		Sec. Hist		Cytology		Blood Film		Bone Marrow		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	4	99.9	0	0	0	0	0	0	0	0	0	0	4	100
141	Tongue	170	82.5	5	2.4	4	1.9	0	0	0	0	27	13.1	206	100
142	Salivary Glands	6	75	1	12.5	1	12.5	0	0	0	0	0	0	8	100
143	Gum	28	90.3	1	3.2	0	0	0	0	0	0	2	6.5	31	100
144	Floor of Mouth	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
145	Other Mouth	132	88	4	2.7	1	0.7	0	0	0	0	13	8.7	150	100
146	Oropharynx	59	89.4	1	1.5	1	1.5	0	0	0	0	5	7.6	66	100
147	Nasopharynx	5	50	5	50	0	0	0	0	0	0	0	0	10	100
148	Hypopharynx	142	85.5	4	2.4	4	2.4	0	0	0	0	16	9.6	166	100
149	Pharynx etc	12	80	0	0	0	0	0	0	0	0	3	20	15	100
150	Oesophagus	138	79.3	2	1.1	4	2.3	0	0	0	0	30	17.2	174	100
151	Stomach	54	61.4	3	3.4	4	4.5	0	0	0	0	27	30.7	88	100
152	Small Intestine	7	77.8	0	0	0	0	0	0	0	0	2	22.2	9	100
153	Colon	48	87.3	0	0	0	0	0	0	0	0	7	12.7	55	100
154	Rectum	39	84.8	0	0	0	0	0	0	0	0	7	15.2	46	100
155	Liver	31	60.8	0	0	11	21.6	0	0	0	0	9	17.6	51	100
156	Gall Bladder	10	28.6	0	0	0	0	0	0	0	0	25	71.4	35	100
157	Pancreas	8	18.2	2	4.5	1	2.3	0	0	0	0	33	75	44	100
158	Retroperito	4	80	0	0	1	20	0	0	0	0	0	0	5	100
159	Other Digs	0	0	0	0	0	0	0	0	0	0	3	99.9	3	100
160	Nasal Cavity	14	73.7	0	0	1	5.3	0	0	0	0	4	21.1	19	100
161	Larynx	70	77.8	3	3.3	2	2.2	0	0	0	0	15	16.7	90	100
162	Lung	125	41.4	8	2.6	56	18.5	0	0	0	0	113	37.4	302	100
163	Pleura	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	Thymus	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
170	Bone	23	79.3	0	0	0	0	0	0	0	0	6	20.7	29	100
171	Connective	39	88.6	0	0	2	4.5	0	0	0	0	3	6.8	44	100
172	Skin Melanoma	5	99.9	0	0	0	0	0	0	0	0	0	0	5	100
173	Skin Other	56	99.9	0	0	0	0	0	0	0	0	0	0	56	100
175	Breast Male	9	81.8	0	0	1	9.1	0	0	0	0	1	9.1	11	100
185	Prostate	85	80.2	0	0	3	2.8	0	0	0	0	18	17	106	100
186	Testis	19	86.4	0	0	0	0	0	0	0	0	3	13.6	22	100
187	Penis etc	15	88.2	0	0	0	0	0	0	0	0	2	11.8	17	100
188	Uri Bladder	58	89.2	0	0	0	0	0	0	0	0	7	10.8	65	100
189	Kidney	21	84	0	0	0	0	0	0	0	0	4	16	25	100
190	Eye	7	70	0	0	0	0	0	0	0	0	3	30	10	100
191	Brain	58	57.4	0	0	1	1	0	0	0	0	42	41.6	101	100
192	Nervous Sys	1	50	0	0	0	0	0	0	0	0	1	50	2	100
193	Thyroid Glands	10	45.5	0	0	6	27.3	0	0	0	0	6	27.3	22	100
194	Oth. Endo. Gland	2	28.6	0	0	1	14.3	0	0	0	0	4	57.1	7	100
195	Ill Def Site	0	0	0	0	0	0	0	0	0	0	1	99.9	1	100
196	Sec. Lymph Node	0	0	36	56.3	7	10.9	0	0	0	0	21	32.8	64	100
197	Sec. Res. Etc	1	3.1	5	15.6	2	6.3	0	0	0	0	24	75	32	100
198	Sec. Other	0	0	1	4.5	0	0	0	0	0	0	21	95.5	22	100
199	Prim Unknown	0	0	0	0	0	0	0	0	0	0	72	99.9	72	100
200	Lymph Sarcoma	19	99.9	0	0	0	0	0	0	0	0	0	0	19	100
201	Hodgkins Disease	25	78.1	0	0	5	15.6	0	0	1	3.1	1	3.1	32	100
202	Oth. Lymph. Node	41	93.2	0	0	2	4.5	0	0	1	2.3	0	0	44	100
203	Mult Myeloma	3	13.6	0	0	1	4.5	2	9.1	16	72.7	0	0	22	100
204	Leuk Lymphatic	0	0	0	0	0	0	27	52.9	23	45.1	1	2	51	100
205	Leuk Myelocytic	0	0	0	0	0	0	45	62.5	26	36.1	1	1.4	72	100
206	Leuk Monocytic	0	0	0	0	0	0	1	99.9	0	0	0	0	1	100
207	Leuk Oth Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	Leuk unspecified	0	0	0	0	0	0	2	28.6	4	57.1	1	14.3	7	100
	All Sites	1604	63.2	81	3.2	122	4.8	77	3	71	2.8	584	23	2539	100

TABLE: BHP-8(b): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Detailed Microscopic Diagnosis, 1990-1996 - Females : Bhopal

ICD-9	Site	Pri. Hist		Sec. Hist		Cytology		Blood Film		Bone Marrow		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	2	99.9	0	0	0	0	0	0	0	0	0	0	2	100
141	Tongue	23	88.5	2	7.7	0	0	0	0	0	0	1	3.8	26	100
142	Salivary Glands	2	50	0	0	1	25	0	0	0	0	1	25	4	100
143	Gum	10	76.9	0	0	0	0	0	0	0	0	3	23.1	13	100
144	Floor of Mouth	2	99.9	0	0	0	0	0	0	0	0	0	0	2	100
145	Other Mouth	76	85.4	0	0	0	0	0	0	0	0	13	14.6	89	100
146	Oropharynx	9	90	0	0	0	0	0	0	0	0	1	10	10	100
147	Nasopharynx	4	57.1	1	14.3	0	0	0	0	0	0	2	28.6	7	100
148	Hypopharynx	20	99.9	0	0	0	0	0	0	0	0	0	0	20	100
149	Pharynx etc	3	99.9	0	0	0	0	0	0	0	0	0	0	3	100
150	Oesophagus	72	72	1	1	1	1	0	0	0	0	26	26	100	100
151	Stomach	24	55.8	0	0	2	4.7	0	0	0	0	17	39.5	43	100
152	Small Intestine	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
153	Colon	21	77.8	0	0	1	3.7	0	0	0	0	5	18.5	27	100
154	Rectum	29	80.6	0	0	0	0	0	0	0	0	7	19.4	36	100
155	Liver	12	50	0	0	1	4.2	0	0	0	0	11	45.8	24	100
156	Gall Bladder	21	39.6	1	1.9	3	5.7	0	0	0	0	28	52.8	53	100
157	Pancreas	6	26.1	3	13	1	4.3	0	0	0	0	13	56.5	23	100
158	Retroperito	1	50	0	0	1	50	0	0	0	0	0	0	2	100
159	Other Digs	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
160	Nasal Cavity	15	83.3	0	0	1	5.6	0	0	0	0	2	11.1	18	100
161	Larynx	14	87.5	0	0	1	6.3	0	0	0	0	1	6.3	16	100
162	Lung	22	40.7	0	0	9	16.7	0	0	0	0	23	42.6	54	100
163	Pleura	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	Thymus	0	0	0	0	0	0	0	0	0	0	1	99.9	1	100
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	Bone	15	93.8	0	0	0	0	0	0	0	0	1	6.3	16	100
171	Connective	17	85	0	0	2	10	0	0	0	0	1	5	20	100
172	Skin Melanoma	3	99.9	0	0	0	0	0	0	0	0	0	0	3	100
173	Skin Other	27	96.4	0	0	1	3.6	0	0	0	0	0	0	28	100
174	Breast Female	386	77.2	1	0.2	52	10.4	0	0	0	0	61	12.2	500	100
179	Uterus NOS.	2	66.7	0	0	0	0	0	0	0	0	1	33.3	3	100
180	Cervix	442	82.3	0	0	13	2.4	0	0	0	0	82	15.3	537	100
181	Placenta	5	83.3	0	0	0	0	0	0	0	0	1	16.7	6	100
182	Body Uterus	33	86.8	0	0	1	2.6	0	0	0	0	4	10.5	38	100
183	Ovary	110	74.8	4	2.7	2	1.4	0	0	0	0	31	21.1	147	100
184	Vagina	10	71.4	0	0	2	14.3	0	0	0	0	2	14.3	14	100
188	Uri Bladder	15	83.3	0	0	0	0	0	0	0	0	3	16.7	18	100
189	Kidney	15	78.9	0	0	0	0	0	0	0	0	4	21.1	19	100
190	Eye	4	80	0	0	0	0	0	0	0	0	1	20	5	100
191	Brain	23	44.2	0	0	0	0	0	0	0	0	29	55.8	52	100
192	Nervous Sys	2	99.9	0	0	0	0	0	0	0	0	0	0	2	100
193	Thyroid Glands	16	45.7	0	0	16	45.7	0	0	0	0	3	8.6	35	100
194	Oth. Endo. Gland	2	99.9	0	0	0	0	0	0	0	0	0	0	2	100
195	Ill Def Site	1	33.3	0	0	0	0	0	0	0	0	2	66.7	3	100
196	Sec. Lymph Node	0	0	8	50	2	12.5	0	0	0	0	6	37.5	16	100
197	Sec. Res. Etc	0	0	6	17.1	1	2.9	0	0	0	0	28	80	35	100
198	Sec. Other	0	0	1	8.3	0	0	0	0	0	0	11	91.7	12	100
199	Prim Unknown	0	0	0	0	0	0	0	0	0	0	49	99.9	49	100
200	Lymph Sarcoma	8	88.9	0	0	1	11.1	0	0	0	0	0	0	9	100
201	Hodgkins Disease	7	53.8	0	0	6	46.2	0	0	0	0	0	0	13	100
202	Oth. Lymph. Node	20	87	0	0	2	8.7	0	0	0	0	1	4.3	23	100
203	Mult. Myeloma	3	27.3	0	0	0	0	1	9.1	6	54.5	1	9.1	11	100
204	Leuk Lymphatic	1	8.3	0	0	0	0	8	66.7	3	25	0	0	12	100
205	Leuk Myelocytic	2	4.8	0	0	0	0	26	61.9	13	31	1	2.4	42	100
206	Leuk Monocytic	0	0	0	0	0	0	0	0	0	0	0	0	0	0
207	Leuk Oth Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	Leuk unspecified	0	0	0	0	0	0	3	60	2	40	0	0	5	100
	All Sites	1559	69.3	28	1.2	123	5.5	38	1.7	24	1.1	478	21.2	2250	100

**TABLE: BHP-9(a):Number of Cancer Deaths by Five Year Age Group and Site (ICD-9)
1990-1996 - 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	0	2	0	1	0	0	0	3	0.34
141	Tongue	0	0	0	0	0	0	0	2	5	6	9	5	14	7	10	4	62	7.00
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	1	2	1	0	2	0	1	7	0.79
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3	0.34
145	Other Mouth	0	0	0	0	0	0	1	1	3	3	7	9	7	2	3	4	40	4.51
146	Oropharynx	0	0	0	0	0	0	1	0	0	2	1	1	3	2	4	2	16	1.81
147	Nasopharynx	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	0.23
148	Hypopharynx	0	0	0	0	0	0	1	1	5	1	9	5	8	1	5	5	41	4.63
149	Pharynx Etc.	0	0	0	0	0	0	0	0	0	0	0	2	1	0	1	0	4	0.45
150	Oesophagus	0	0	0	0	2	0	1	2	7	9	6	9	14	12	9	5	76	8.58
151	Stomach	0	0	0	0	1	1	3	1	2	3	9	6	4	5	1	1	37	4.18
152	Small Intestine	0	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	4	0.45
153	Colon	0	0	0	0	0	1	1	1	0	0	4	1	3	3	1	0	15	1.69
154	Rectum	0	0	0	0	0	1	1	4	2	0	0	4	5	3	1	1	22	2.48
155	Liver	0	1	0	0	0	0	3	2	3	1	2	6	2	4	0	0	24	2.71
156	Gall Bladder	0	0	0	0	1	1	0	0	2	0	0	2	4	3	0	0	13	1.47
157	Pancreas	0	0	0	0	0	0	0	3	0	4	6	6	4	2	1	2	28	3.16
158	Retroperitoneum	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0.34
159	Other Dig System	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	2	2	0	0	0	4	0.45
161	Larynx	0	0	0	0	0	0	0	0	2	3	5	5	6	2	4	2	29	3.27
162	Lung	0	0	0	0	0	0	4	2	4	4	21	11	12	12	11	6	87	9.82
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	0	1	2	3	0	1	1	0	1	0	0	1	0	0	1	11	1.24
171	Conn. Tissue	0	1	2	1	0	0	2	2	1	1	1	0	1	1	0	0	13	1.47
172	Skin Melanoma	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	1	0	1	0	0	3	0	1	1	1	1	9	1.02
175	Breast Male	0	0	0	0	0	0	1	0	0	0	2	0	1	0	0	0	4	0.45
185	Prostate	0	0	0	0	0	0	0	0	0	0	4	4	4	3	4	11	30	3.39
186	Testis	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	3	0.34
187	Penis Etc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
188	Uri. Bladder	0	0	0	0	0	1	0	0	0	2	4	6	5	1	2	2	23	2.60
189	Kidney	3	1	0	0	0	2	0	0	0	0	3	1	1	0	0	1	12	1.35
190	Eye	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0.34
191	Brain	2	1	2	0	1	2	2	6	3	4	5	6	0	0	0	1	35	3.95
192	Nervous System	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0.23
193	Thyroid Gland	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	4	0.45
194	Oth. Endo. Gland	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0.23
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. Node	1	0	0	2	4	0	0	2	2	0	3	1	6	3	0	0	24	2.71
197	Sec. Res. Etc	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	4	0.45
198	Sec. Other	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0.23
199	Prim. Unknown	0	3	1	4	1	2	2	5	5	15	22	17	23	7	6	18	131	14.79
200	Lymphosarcoma	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.11
201	Hodgkins. Disease	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.11
202	Oth. Lymph. Node	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	3	0.34
203	Mult. Myeloma	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.11
204	Leuk. Lymphatic	0	2	1	4	3	2	7	1	3	2	3	6	3	3	1	0	41	4.63
205	Leuk. Myelocytic	0	0	1	1	0	1	0	1	1	0	0	0	1	0	0	0	6	0.68
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. Unspecified	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.11
	All Sites	8	12	8	16	17	17	32	39	53	65	140	122	140	80	67	70	886	100.00

**TABLE: BHP-9(b): Number of Cancer Deaths by Five Year Age Group and Site (ICD-9)
1990-1996 - 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	0	0	0	0	0	0.00
141	Tongue	0	0	0	0	0	0	0	1	1	2	1	1	1	2	2	1	12	1.87
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	1	0	0	0	0	0	1	0	0	0	1	0	0	3	0.47
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	0	0	0	4	6	6	1	3	5	1	26	4.04
146	Oropharynx	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	2	0.31
147	Nasopharynx	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0.31
148	Hypopharynx	0	0	0	0	0	1	0	0	0	0	0	0	1	4	1	1	8	1.24
149	Pharynx Etc.	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.16
150	Oesophagus	0	0	0	0	0	0	0	1	5	3	6	8	6	5	5	2	41	6.38
151	Stomach	0	0	0	0	0	0	1	0	3	7	3	0	1	2	0	1	18	2.80
152	Small Intestine	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	1	1	1	1	2	0	3	2	0	0	11	1.71
154	Rectum	0	0	0	0	1	0	1	0	0	0	1	1	0	0	1	0	5	0.78
155	Liver	0	0	0	0	0	0	1	0	1	4	0	0	1	1	1	0	9	1.40
156	Gall Bladder	0	0	0	0	0	0	0	3	0	2	2	3	2	0	0	3	15	2.33
157	Pancreas	0	0	0	0	0	0	1	0	1	0	0	1	2	2	1	0	8	1.24
158	Retroperitoneum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
159	Other Dig System	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.16
160	Nasal Cavity	0	0	0	0	0	0	0	0	0	0	2	1	0	0	2	0	5	0.78
161	Larynx	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	3	0.47
162	Lung	0	0	0	0	0	2	0	0	3	0	2	6	2	2	3	3	23	3.58
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	1	0	0	0	0	0	0	0	0	1	0.16
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	0	0	0	0	0	0	1	1	1	0	0	0	0	3	0.47
171	Conn. Tissue	0	0	0	1	1	1	0	0	1	0	1	0	0	0	1	0	6	0.93
172	Skin Melanoma	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	1	0	1	0	1	2	0	1	0	0	6	0.93
174	Breast	0	0	0	0	0	3	9	11	15	21	22	14	14	3	6	3	121	18.82
179	Uterus NOS.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
180	Cervix	0	0	0	0	1	4	6	15	11	11	20	9	17	7	5	3	109	16.95
181	Placenta	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3	0.47
182	Body Uterus	0	0	0	0	0	0	0	0	1	2	3	0	1	0	0	0	7	1.09
183	Ovary	0	0	0	1	4	2	2	1	6	3	9	4	4	2	1	2	41	6.38
184	Vagina	0	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	4	0.62
188	Uri. Bladder	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.16
189	Kidney	1	1	0	0	0	0	0	0	0	0	1	0	3	0	0	0	6	0.93
190	Eye	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
191	Brain	1	2	2	0	3	1	0	0	1	2	2	1	1	1	0	0	17	2.64
192	Nervous System	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.16
193	Thyroid Gland	0	0	0	0	0	0	0	1	0	0	2	1	0	0	1	1	6	0.93
194	Oth. Endo. Gland	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.16
195	Ill Def. Sites	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3	0.47
196	Sec. Lymph. Node	0	0	1	1	0	1	0	0	1	0	0	0	1	0	0	0	5	0.78
197	Sec. Res. Etc	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2	0.31
198	Sec. Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
199	Prim. Unknown	0	0	2	2	2	5	2	2	7	8	13	12	13	1	8	5	82	12.75
200	Lymphosarcoma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
201	Hodgkins. Disease	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
202	Oth. Lymph. Node	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.16
203	Mult. Myeloma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.16
204	Leuk. Lymphatic	1	1	1	1	0	2	2	2	1	0	1	4	0	0	0	1	17	2.64
205	Leuk. Myelocytic	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	3	0.47
206	Leuk. Monocytic	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.16
207	Leuk. Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk. Unspecified	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0.31
	All Sites	5	5	7	8	14	27	30	40	64	73	104	75	78	41	45	27	643	100.00

TABLE: BHP-11: Number (#) and Proportion (%) of Types of Childhood Cancers 1990-1996
Bhopal

Type of Childhood Cancer	Males		Females	
	#	%	#	%
I. LEUKAEMIAS	32	32.32	12	19.05
(a) Acute lymphocytic leukaemia	22	22.22	5	7.94
(b) Other lymphoid leukaemia	0	0.00	0	0.00
(c) Acute non-lymphocytic leukaemia	5	5.05	4	6.35
(d) Chronic myeloid leukaemia	3	3.03	2	3.17
(e) Other and unspecified leukaemia	2	2.02	1	1.59
II. LYMPHOMAS & OTHER RETICULOENDOTHELIAL	13	13.13	7	11.11
(a) Hodgkin's disease	5	5.05	4	6.35
(b) Non-Hodgkin lymphoma	5	5.05	1	1.59
(c) Burkitt's lymphoma	2	2.02	0	0.00
(d) Unspecified lymphomas	1	1.01	2	3.17
(e) Histiocytosis X	0	0.00	0	0.00
(f) Other reticuloendothelial neoplasms	0	0.00	0	0.00
III. C.N.S.& MISC.INTRACRANIAL & INTRASPINAL NEOP.	16	16.16	16	25.40
(a) Ependymoma	0	0.00	0	0.00
(b) Astrocytoma	8	8.08	2	3.17
(c) Medulloblastoma	3	3.03	1	1.59
(d) Other glioma	1	1.01	5	7.94
(e) Misc.intracranial & intraspinal neop.	4	4.04	8	12.70
IV. SYMPATHETIC NERVOUS SYSTEM TUMOURS	5	5.05	0	0.00
(a) Neuroblastoma & ganglioneuroblastoma	5	5.05	0	0.00
(b) Other	0	0.00	0	0.00
V. RETINOBLASTOMA	5	5.05	2	3.17
VI. RENAL TUMOURS	8	8.08	7	11.11
(a) Wilms' tumour	5	5.05	4	6.35
(b) Renal carcinoma	1	1.01	2	3.17
(c) Other & unsp. malignant renal tumours	2	2.02	1	1.59
VII. HEPATIC TUMOURS	2	2.02	0	0.00
(a) Hepatoblastoma	1	1.01	0	0.00
(b) Hepatic carcinoma	1	1.01	0	0.00
(c) Other & unsp. malignant hepatic tumours	0	0.00	0	0.00
VIII. MALIGNANT BONE TUMOURS	4	4.04	5	7.94
(a) Osteosarcoma	2	2.02	2	3.17
(b) Chondrosarcoma	0	0.00	0	0.00
(c) Ewing's sarcoma	2	2.02	1	1.59
(d) Other & unsp. malignant bone tumours	0	0.00	2	3.17
IX. SOFT-TISSUE(S-T) SARCOMAS(S)	7	7.07	6	9.52
(a) Rhabdomyos. embryonals.& s-t.Ewings tum.	4	4.04	4	6.35
(b) Fibros.neurofibros.&oth.fibromatous neop.	0	0.00	0	0.00
(c) Other soft-tissue sarcoma	3	3.03	2	3.17
X. GERM-CELL TROPHOBLASTIC & OTH GONADAL NEOP.	3	3.03	3	4.76
(a) Non-gonadal gc & trophoblastic neop.	0	0.00	1	1.59
(b) Gonadal gc & trophoblastic neop.	3	3.03	2	3.17
(c) Gonadal carcinoma	0	0.00	0	0.00
(d) Other & unsp.malignant gonadal tumours	0	0.00	0	0.00
XI. CARCINOMA & OTH MALIGNANT EPITHELIAL NEOP.	1	1.01	1	1.59
(a) Adrenocortical carcinoma	0	0.00	0	0.00
(b) Thyroid carcinoma	0	0.00	0	0.00
(c) Nasopharyngeal carcinoma	0	0.00	0	0.00
(d) Malanomatous neoplasms	0	0.00	0	0.00
(e) Other carcinoma	1	1.01	1	1.59
XII. OTHER & UNSP. MALIGNANT NEOPLASMS	3	3.03	3	4.76
OTHERS (Not Classified)	0	0.00	1	1.59
TOTAL (ALL CHILDHOOD CANCERS)	99	100.00	63	100.00

POPULATION BASED CANCER REGISTRY, CHENNAI

Cancer Institute (WIA), Adyar, Chennai

Dr.V. Shanta, Principal Investigator, PBCR & Executive Chairman

Dr. Vendhan Gajalakshmi, Co-Principal Investigator, PBCR & Associate Professor & Head, Division of Epidemiology & Cancer Registry,

Mr.R. Swaminathan, Senior Bio-Statistician, PBCR,

Mrs.R. Rama, Statistical Assistant, PBCR

The population based cancer registry, Chennai (formerly Madras), dates back to 1981 and is one of the oldest in the network of National Cancer Registry Programme (NCRP), Indian Council of Medical Research (ICMR). It is based at the Cancer Institute (WIA), Chennai, a Regional Cancer Centre of the Government of India in the Ministry of Health and Family Welfare with the state of art facilities for cancer diagnosis, treatment and research. The registry caters to an area of 170 km² and a population (entirely urban) of 4.2 millions (951 females to 1000 males) as on 1 March 2001 constituting 0.4% and 6.8% of the total population of India and the state of Tamilnadu respectively. The population growth rate during 1991-2001 is 9.76% and the population density is 24,231 persons per km² in 2001 [Census of India, 2001]. Chennai (Madras), the capital of the state of Tamil Nadu, is situated at sea level on the eastern coast of peninsular India at latitude 13.04°N and longitude 80.17°E. Literacy rate is 80% (M: 85%; F: 75%) [Census of India, 2001]. Tamil is the predominantly spoken language. The majority are Hindus (84%) followed by Muslims (9%), Christians (6%) and other religious groups (1%) [Census of India, 1991]. General health care, including cancer diagnostic and treatment facilities, are provided by the government health services, one regional cancer centre (the Cancer Institute (WIA), Adyar) and supplemented by private practitioners and hospitals. The radiation oncology division at the Cancer Institute (WIA), a regional cancer centre in the Ministry of Health, Government of India is one of the best equipped centre in the country. Radiation therapy is also available in 4 government and 2 private hospitals. Surgical and chemotherapeutic services are offered in government and private hospitals and nursing homes.

Cancer is yet to be legislated as a notifiable disease in India. Cancer registration is therefore voluntary and is continued to be done by active method. The registry continues to enjoy good cooperation from all health care facilities in and around Chennai with 215 sources of registration till now: government and private hospitals, nursing homes, clinics, consultants, radiotherapy centres, pathology laboratories, imaging centres and hospices. The registry social scientists visit these sources regularly and collect morbidity data by interviewing the case wherever possible and/or from medical records. 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 criterion for 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. Registry operations are constantly monitored with emphasis on the quality of data collected which includes re-screening of cases at government hospitals, exercises on re-abstraction and coding on a random sample of cases and validity checks for unlikely combinations of age, sex, site and morphology. Data-processing has been progressively computerized to minimize the manual work and improve the quality and efficiency.

The PBCR, Chennai, has been the first among registries in the network 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 accomplishments based on such activities are plenty. Data quality was enhanced, the under registration of morbidity and mortality data was diminished and a simple estimate of completeness of registration was possible. Survival analysis of the top ten cancers were first available from Chennai PBCR among all other registries in NCRP. The availability of mortality information of incident cancer cases were doubled leading to an enhancement in the mortality to incidence ratio making it comparable with other registries in the world.

The dissemination of cancer information collected by the registry for the benefit of the community as well as the research fraternity is done by publishing annual and periodic reports on cancer incidence and mortality highlighting the trends and changes. A descriptive study of the pattern of common cancers among both sexes in Chennai giving the risk estimates with respect to age, literacy and religion besides special studies giving the salient features of survival and mortality data have been published in international scientific journals.

Figure: CHN-1:
Population Pyramid showing Age Distribution: 1990-1996
Chennai

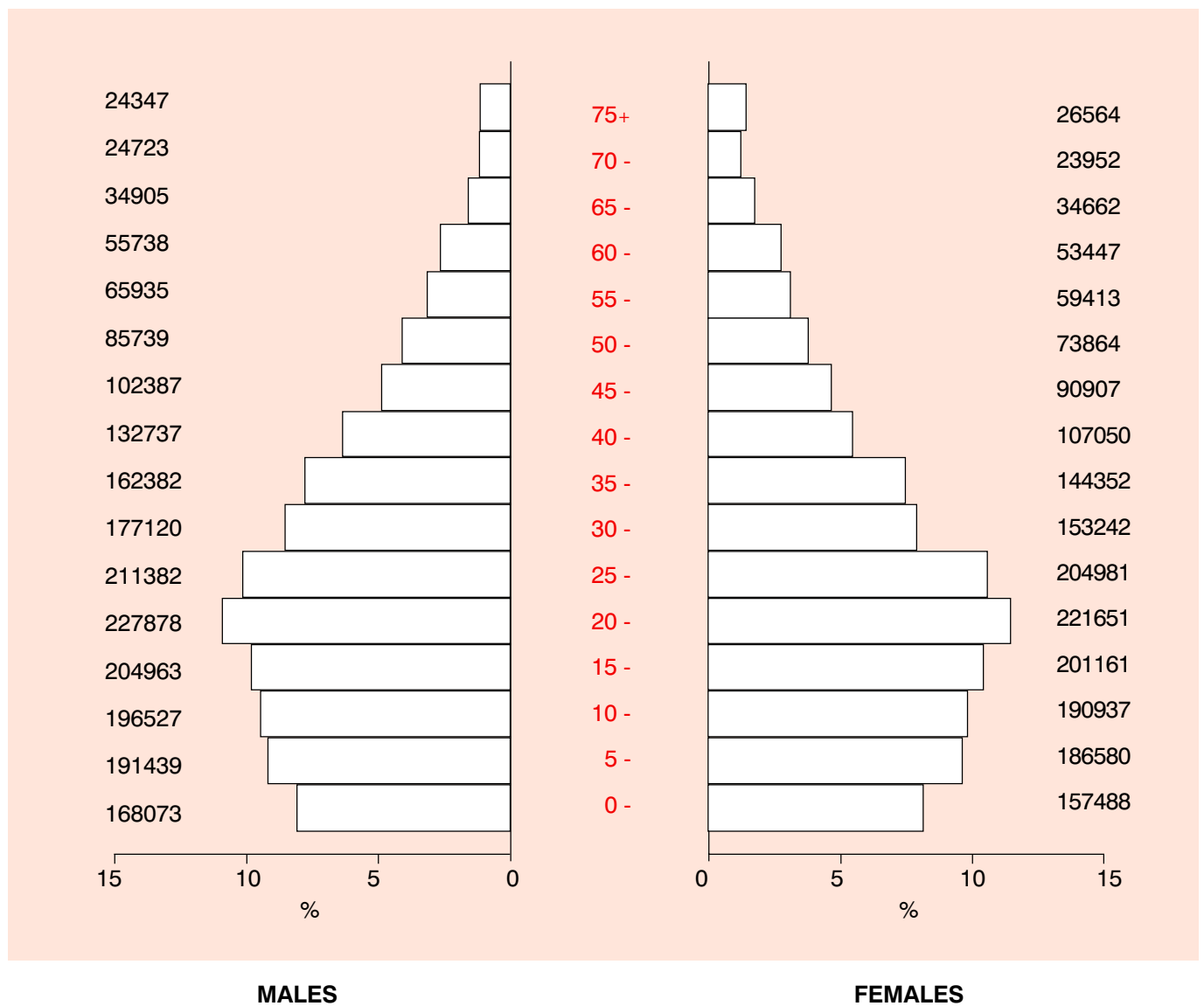


TABLE: CHN-1

Population by Five Year Age Group and Gender : 1990-1996
Number and Relative Proportion (%)

Chennai

Age Group	MALES		FEMALES		TOTAL	
	Number	%	Number	%	Number	%
0-4	168073	8.13	157488	8.16	325561	8.15
5-9	191439	9.26	186580	9.67	378019	9.46
10-14	196527	9.51	190937	9.89	387464	9.70
15-19	204963	9.92	201161	10.42	406124	10.16
20-24	227878	11.03	221651	11.48	449529	11.25
25-29	211382	10.23	204981	10.62	416363	10.42
30-34	177120	8.57	153242	7.94	330362	8.27
35-39	162382	7.86	144352	7.48	306734	7.68
40-44	132737	6.42	107050	5.55	239787	6.00
45-49	102387	4.96	90907	4.71	193294	4.84
50-54	85739	4.15	73864	3.83	159603	3.99
55-59	65935	3.19	59413	3.08	125348	3.14
60-64	55738	2.70	53447	2.77	109185	2.73
65-69	34905	1.69	34662	1.80	69567	1.74
70-74	24723	1.20	23952	1.24	48675	1.22
75+	24347	1.18	26564	1.38	50911	1.27
Total	2066275	100.0	1930251	100.0	3996526	100.0

TABLE: CHN-2**Main Sources* of Registration of Incident Cancers: 1990-1996****Chennai**

Name of Institution	Year of Diagnosis and Relative Proportion (%)							1990-96	
	1990	1991	1992	1993	1994	1995	1996	Number	%
Govt. General Hospital	23.1	22.6	20.7	17.4	19.8	18.6	17.6	4723	19.9
Cancer Institute (WIA)	17.5	16.7	18.5	18.3	16.5	17.5	15.7	4083	17.2
Govt. Stanley Hospital	9.7	9.9	9.5	12.0	9.4	8.1	7.8	2245	9.5
Govt. Royapetaah Hospital	6.7	8.3	5.2	7.4	5.4	5.0	6.0	1484	6.3
Govt. Women & Child Hos.	5.9	5.4	6.0	6.2	4.4	3.7	5.1	1239	5.2
Apollo Hospital	2.6	2.8	2.8	3.1	4.4	5.9	7.5	997	4.2
Corporation of Chennai	4.4	4.3	4.4	4.3	3.5	3.3	3.1	925	3.9
Govt. Kilpauk Medical Coll.	2.5	2.8	2.6	2.3	2.5	1.7	2.1	555	2.3
S.Rly Hospital	1.9	1.7	2.3	2.7	1.9	2.0	2.2	503	2.1
St. Isabel's Hospital	1.8	1.5	1.2	2.0	2.9	3.1	1.4	469	2.0
Peripheral Hospital	1.1	1.6	2.4	1.9	1.6	1.3	2.0	406	1.7
Dr. Rai's	0.0	0.3	0.5	2.5	1.8	3.5	2.9	400	1.7
VHS	1.2	1.6	1.7	1.2	1.7	1.9	1.9	380	1.6
Govt. R.S.R.M. Hospital	1.9	2.3	1.9	1.2	1.4	1.2	1.2	378	1.6
Govt. Kasturba Hospital	2.0	1.8	1.8	1.5	1.4	1.3	1.2	374	1.6
Premier Radiology Institute	1.9	1.3	0.8	1.0	2.3	2.1	1.4	367	1.5
Govt. Inst. of Child Health	1.2	0.9	1.8	1.9	1.9	1.4	0.9	336	1.4
Vijaya Hospital	0.8	1.2	0.9	0.8	1.5	1.4	2.0	299	1.3
CSI Rainy Hospital	1.6	1.6	1.3	1.2	1.3	0.4	0.6	268	1.1
Total of above								20431	86.1
All Others								3290	13.9
Total All Sources	100.0	100.0	100.0	100.0	100.0	100.0	100.0	23721	100.0

* 1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 1990-1996.

* 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-3(a): Number of Incident Cancers by Five Year Age Group and Site (ICD-9):
1990-1996 – 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	1	0	0	0	0	3	0	4	5	8	2	10	2	2	0	37	0.33
141	Tongue	0	0	0	1	0	2	8	17	29	67	76	90	94	77	41	33	535	4.71
142	Salivary Gland	0	0	0	1	0	3	4	3	9	5	8	4	6	7	2	3	55	0.48
143	Gum	0	0	0	0	1	0	0	3	1	10	11	16	20	12	15	9	98	0.86
144	Floor of Mouth	0	0	0	0	0	0	0	2	7	17	13	16	13	7	3	6	84	0.74
145	Other Mouth	0	0	0	0	7	5	9	15	24	50	67	87	78	65	45	37	489	4.30
146	Oropharynx	0	0	0	0	1	1	2	8	10	24	43	48	42	27	25	19	250	2.20
147	Nasopharynx	0	1	4	6	9	6	2	3	5	6	7	9	13	3	9	4	87	0.77
148	Hypopharynx	0	0	1	4	3	9	12	19	31	60	69	85	107	75	40	35	550	4.84
149	Pharynx Etc.	0	0	0	1	0	0	1	3	5	11	14	11	12	11	8	13	90	0.79
150	Oesophagus	0	0	0	1	2	4	12	25	46	97	137	153	179	116	78	70	920	8.09
151	Stomach	1	0	0	1	6	16	23	64	89	121	198	221	247	188	136	126	1437	12.64
152	Small Intestine	0	0	0	0	1	0	2	1	2	4	1	1	4	0	0	5	21	0.18
153	Colon	0	0	0	1	3	7	5	11	17	24	29	20	28	24	11	14	194	1.71
154	Rectum	0	0	0	0	8	13	15	18	26	26	40	39	44	41	24	35	329	2.89
155	Liver	8	0	0	1	0	5	4	11	17	22	38	31	41	41	19	15	253	2.23
156	Gall Bladder	0	0	0	0	0	0	2	3	6	5	5	10	11	7	4	6	59	0.52
157	Pancreas	0	0	0	0	1	2	5	8	18	25	19	23	29	22	10	13	175	1.54
158	Retroperitoneum	6	0	0	0	0	0	0	2	1	1	5	2	4	0	0	1	22	0.19
159	Other Dig System	0	0	0	0	0	0	0	0	0	1	0	1	4	2	1	1	10	0.09
160	Nasal Cavity	0	1	1	1	2	5	5	7	1	13	9	5	13	7	5	4	79	0.70
161	Larynx	0	0	1	0	1	2	6	10	30	55	62	84	85	66	39	27	468	4.12
162	Lung	0	0	1	3	5	12	21	32	76	130	153	207	229	171	91	59	1190	10.47
163	Pleura	0	0	0	0	1	0	0	1	0	2	0	1	1	0	1	0	7	0.06
164	Thymus	0	0	1	2	4	2	4	0	0	2	5	3	2	0	0	0	25	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	1	5	8	34	15	12	6	6	3	4	5	2	3	1	2	3	110	0.97
171	Conn. Tissue	7	2	6	5	11	9	11	9	9	6	8	8	3	5	9	5	113	0.99
172	Skin Melanoma	0	1	2	0	0	0	1	4	1	3	6	3	6	5	1	7	40	0.35
173	Skin. Other	1	0	0	1	1	2	6	7	13	13	15	18	23	25	20	14	159	1.40
175	Breast Male	0	0	0	0	0	1	0	1	2	2	2	2	6	4	3	4	27	0.24
185	Prostate	1	0	0	0	0	0	1	2	2	7	18	20	48	58	67	123	347	3.05
186	Testis	6	0	0	3	12	11	11	10	7	8	3	6	5	2	3	2	89	0.78
187	Penis Etc.	0	0	0	0	2	6	5	14	18	26	36	47	37	22	23	19	255	2.24
188	Uri. Bladder	0	2	0	1	2	0	3	3	16	18	20	35	37	37	35	37	246	2.16
189	Kidney	15	4	1	0	1	1	4	4	9	11	13	16	17	9	10	4	119	1.05
190	Eye	20	5	1	0	2	1	1	2	0	0	3	0	0	1	2	1	39	0.34
191	Brain	18	23	9	8	7	23	27	35	29	28	29	27	20	19	6	10	318	2.80
192	Nervous System	0	0	0	0	1	0	2	0	1	0	2	2	0	1	0	0	9	0.08
193	Thyroid Gland	0	0	0	1	2	2	5	2	1	8	13	20	13	5	13	6	91	0.80
194	Oth. Endo. Gland	6	3	2	1	1	4	0	0	2	2	0	1	0	0	0	0	22	0.19
195	Ill Def. Sites	1	0	1	0	0	0	1	3	1	1	2	4	3	2	1	2	22	0.19
196	Sec. Lymph. Node	1	0	0	1	0	1	1	7	5	20	17	22	26	19	17	11	148	1.30
197	Sec. Res. Etc	0	0	1	3	3	2	9	16	18	41	32	48	50	35	28	36	322	2.83
198	Sec. Other	0	0	0	1	0	1	4	4	2	11	6	9	15	8	5	7	73	0.64
199	Prim. Unknown	2	0	1	3	4	0	5	10	14	30	34	23	30	16	13	21	206	1.81
200	Lymphosarcoma	4	4	7	5	3	2	3	5	5	2	2	8	4	2	2	2	60	0.53
201	Hodgkins. Disease	8	34	16	10	16	10	13	9	14	13	7	6	4	6	2	4	172	1.51
202	Oth. Lymph. Node	7	19	25	22	17	23	23	12	24	38	27	34	36	22	18	16	363	3.19
203	Mult. Myeloma	0	0	0	0	0	2	2	5	7	10	6	15	14	16	14	7	98	0.86
204	Leuk. Lymphatic	51	65	32	19	10	10	8	6	5	1	2	5	3	1	4	2	224	1.97
205	Leuk. Myelocytic	6	10	5	11	22	14	16	11	16	12	14	6	12	12	9	5	181	1.59
206	Leuk. Monocytic	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0.02
207	Leuk. Misc.	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.01
208	Leuk. Unspecified	5	1	7	4	5	4	2	2	1	3	0	1	3	5	0	3	46	0.40
	All Sites	175	183	133	156	193	235	315	455	679	1101	1339	1557	1734	1309	916	886	11366	100.0

**TABLE: CHN-3(b): Number of Incident Cancers by Five Year Age Group and Site (ICD-9):
1990-1996 – 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	1	0	0	0	4	6	3	5	4	5	3	31	0.25
141	Tongue	0	0	0	0	0	3	3	10	10	19	27	27	29	24	13	11	176	1.42
142	Salivary Gland	1	0	0	4	1	4	2	0	2	4	4	6	2	1	5	2	38	0.31
143	Gum	0	0	0	0	0	0	0	3	4	12	21	20	24	12	8	6	110	0.89
144	Floor of Mouth	0	0	0	0	0	0	0	0	1	2	1	2	2	2	0	1	11	0.09
145	Other Mouth	0	1	0	0	0	4	13	19	43	44	85	71	94	51	38	26	489	3.96
146	Oropharynx	0	0	1	0	3	0	1	2	2	6	5	5	7	4	6	2	44	0.36
147	Nasopharynx	0	0	2	3	9	4	4	2	6	1	6	1	2	3	0	0	43	0.35
148	Hypopharynx	0	0	1	2	3	4	8	18	26	27	28	30	22	16	12	5	202	1.63
149	Pharynx Etc.	0	0	0	0	1	0	0	1	0	1	1	4	4	4	0	2	18	0.15
150	Oesophagus	0	0	0	1	2	7	10	30	45	62	108	108	85	63	60	32	613	4.96
151	Stomach	0	0	0	2	9	23	20	50	42	80	102	92	97	80	36	44	677	5.48
152	Small Intestine	0	0	0	0	1	0	0	0	2	1	0	1	2	3	1	1	12	0.10
153	Colon	0	0	1	1	2	2	4	7	13	13	22	21	23	18	11	12	150	1.21
154	Rectum	0	1	1	1	6	15	8	12	13	22	35	29	53	22	15	16	249	2.02
155	Liver	7	1	0	1	2	2	2	2	5	7	14	8	7	10	9	3	80	0.65
156	Gall Bladder	0	0	0	0	0	1	1	3	3	15	7	12	13	9	8	9	81	0.66
157	Pancreas	0	0	0	2	0	3	0	5	7	2	7	10	11	11	8	5	71	0.57
158	Retroperitoneum	2	0	1	0	1	1	0	3	2	4	0	1	2	2	1	1	21	0.17
159	Other Dig System	0	0	0	0	1	1	0	1	1	0	0	0	2	0	2	1	9	0.07
160	Nasal Cavity	0	0	0	1	3	1	1	3	3	6	4	5	9	5	3	3	47	0.38
161	Larynx	0	0	0	1	0	2	1	1	5	3	6	9	13	4	5	2	52	0.42
162	Lung	0	0	0	0	1	1	7	13	19	18	40	36	48	35	13	9	240	1.94
163	Pleura	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0	4	0.03
164	Thymus	1	0	0	1	0	0	1	0	1	1	0	0	0	2	1	0	8	0.06
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	11	16	7	8	4	4	4	2	1	4	3	0	2	0	68	0.55
171	Conn. Tissue	5	5	4	9	8	5	8	10	8	12	6	9	10	7	5	4	115	0.93
172	Skin Melanoma	0	0	0	0	0	1	0	1	2	3	4	4	5	1	4	2	27	0.22
173	Skin. Other	0	0	1	1	4	3	7	11	7	4	17	11	17	10	7	17	117	0.95
174	Breast	0	0	0	1	18	67	92	246	307	361	299	312	243	199	108	106	2359	19.09
179	Uterus NOS.	0	0	0	0	0	1	1	1	2	8	13	7	6	10	1	4	54	0.44
180	Cervix	0	0	0	0	12	42	146	300	407	540	520	479	424	206	151	93	3320	26.87
181	Placenta	0	0	0	2	11	11	5	0	1	0	0	0	0	0	0	0	30	0.24
182	Body Uterus	0	0	0	0	1	3	3	7	13	21	30	35	26	34	12	15	200	1.62
183	Ovary	2	3	10	17	28	30	25	50	49	72	72	73	90	49	31	12	613	4.96
184	Vagina	0	1	0	0	1	1	2	7	22	16	20	14	28	16	25	10	163	1.32
188	Uri. Bladder	0	1	1	0	0	0	0	4	3	11	9	10	14	11	18	12	94	0.76
189	Kidney	12	1	0	0	2	4	1	2	2	6	11	6	9	8	5	3	72	0.58
190	Eye	21	5	1	0	1	1	0	0	2	1	0	0	1	0	0	0	33	0.27
191	Brain	14	16	7	6	11	12	13	12	9	15	8	15	9	7	5	5	164	1.33
192	Nervous System	0	1	1	0	0	0	1	4	1	0	0	0	0	1	0	0	9	0.07
193	Thyroid Gland	0	0	0	2	13	13	18	25	20	23	18	12	11	11	11	12	189	1.53
194	Oth. Endo. Gland	7	1	0	1	0	0	1	0	1	1	1	2	1	0	0	1	17	0.14
195	Ill Def. Sites	3	1	1	0	1	0	2	2	2	5	1	2	3	1	2	4	30	0.24
196	Sec. Lymph. Node	0	0	1	3	2	2	3	7	8	6	7	13	15	11	6	5	89	0.72
197	Sec. Res. Etc	0	1	1	0	4	2	6	7	18	17	23	30	27	18	14	19	187	1.51
198	Sec. Other	0	1	1	1	1	3	1	2	7	12	9	6	7	6	7	2	66	0.53
199	Prim. Unknown	1	0	1	2	4	8	9	9	20	30	41	26	23	14	15	15	218	1.76
200	Lymphosarcoma	0	3	1	1	2	0	2	1	4	3	3	3	5	4	2	0	34	0.28
201	Hodgkins. Disease	3	10	9	4	13	6	3	7	2	2	7	1	5	2	0	1	75	0.61
202	Oth. Lymph. Node	2	8	12	10	13	19	15	14	12	19	8	15	21	16	16	4	204	1.65
203	Mult. Myeloma	0	0	0	0	0	0	1	2	2	4	3	7	7	3	6	5	40	0.32
204	Leuk. Lymphatic	33	16	16	6	5	2	4	2	8	1	0	6	3	2	4	4	112	0.91
205	Leuk. Myelocytic	4	6	8	13	12	11	15	8	12	9	11	15	8	13	3	2	150	1.21
206	Leuk. Monocytic	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0.02
207	Leuk. Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
208	Leuk. Unspecified	4	0	1	4	2	0	1	2	1	2	0	1	3	2	4	1	28	0.23
	All Sites	122	85	95	119	221	334	475	933	1212	1561	1672	1619	1582	1047	724	554	12355	100.0

TABLE: CHN-4(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: 1990-1996 - 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	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.7	1.3	0.4	2.6	0.8	1.2	0.0	0.3	0.3	0.0	0.8
141	0.0	0.0	0.0	0.1	0.0	0.1	0.6	1.5	3.1	9.3	12.7	19.5	24.1	31.5	23.7	19.4	3.7	5.1	0.2	10.4
142	0.0	0.0	0.0	0.1	0.0	0.2	0.3	0.3	1.0	0.7	1.3	0.9	1.5	2.9	1.2	1.8	0.4	0.5	0.1	0.9
143	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.1	1.4	1.8	3.5	5.1	4.9	8.7	5.3	0.7	1.0	0.1	1.7
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	2.4	2.2	3.5	3.3	2.9	1.7	3.5	0.6	0.8	0.1	1.9
145	0.0	0.0	0.0	0.0	0.4	0.3	0.7	1.3	2.6	7.0	11.2	18.8	20.0	26.6	26.0	21.7	3.4	4.6	0.2	8.9
146	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.7	1.1	3.3	7.2	10.4	10.8	11.1	14.4	11.1	1.7	2.4	0.2	4.9
147	0.0	0.1	0.3	0.4	0.6	0.4	0.2	0.3	0.5	0.8	1.2	1.9	3.3	1.2	5.2	2.3	0.6	0.7	0.1	1.2
148	0.0	0.0	0.1	0.3	0.2	0.6	1.0	1.7	3.3	8.4	11.5	18.4	27.4	30.7	23.1	20.5	3.8	5.2	0.2	10.4
149	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.3	0.5	1.5	2.3	2.4	3.1	4.5	4.6	7.6	0.6	0.9	0.1	1.5
150	0.0	0.0	0.0	0.1	0.1	0.3	1.0	2.2	5.0	13.5	22.8	33.1	45.9	47.5	45.1	41.1	6.4	8.8	0.3	17.9
151	0.1	0.0	0.0	0.1	0.4	1.1	1.9	5.6	9.6	16.9	33.0	47.9	63.3	76.9	78.6	73.9	9.9	13.6	0.4	25.9
152	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.1	0.2	0.6	0.2	0.2	1.0	0.0	0.0	2.9	0.1	0.2	0.0	0.4
153	0.0	0.0	0.0	0.1	0.2	0.5	0.4	1.0	1.8	3.3	4.8	4.3	7.2	9.8	6.4	8.2	1.3	1.7	0.1	3.5
154	0.0	0.0	0.0	0.0	0.5	0.9	1.2	1.6	2.8	3.6	6.7	8.4	11.3	16.8	13.9	20.5	2.3	3.0	0.2	5.2
155	0.7	0.0	0.0	0.1	0.0	0.3	0.3	1.0	1.8	3.1	6.3	6.7	10.5	16.8	11.0	8.8	1.7	2.4	0.2	4.4
156	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.6	0.7	0.8	2.2	2.8	2.9	2.3	3.5	0.4	0.5	0.1	1.1
157	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.7	1.9	3.5	3.2	5.0	7.4	9.0	5.8	7.6	1.2	1.6	0.1	3.3
158	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.8	0.4	1.0	0.0	0.0	0.6	0.2	0.2	0.0	0.4
159	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	1.0	0.8	0.6	0.6	0.1	0.1	0.0	0.2
160	0.0	0.1	0.1	0.1	0.1	0.3	0.4	0.6	0.1	1.8	1.5	1.1	3.3	2.9	2.9	2.3	0.5	0.7	0.1	1.3
161	0.0	0.0	0.1	0.0	0.1	0.1	0.5	0.9	3.2	7.7	10.3	18.2	21.8	27.0	22.5	15.8	3.2	4.5	0.2	9.1
162	0.0	0.0	0.1	0.2	0.3	0.8	1.7	2.8	8.2	18.1	25.5	44.8	58.7	70.0	52.6	34.6	8.2	11.2	0.3	23.1
163	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.3	0.0	0.2	0.3	0.0	0.6	0.0	0.0	0.1	0.0	0.1
164	0.0	0.0	0.1	0.1	0.3	0.1	0.3	0.0	0.0	0.3	0.8	0.6	0.5	0.0	0.0	0.0	0.2	0.2	0.0	0.3
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	0.0	0.0	0.0	0.0
170	0.1	0.4	0.6	2.4	0.9	0.8	0.5	0.5	0.3	0.6	0.8	0.4	0.8	0.4	1.2	1.8	0.8	0.7	0.1	0.6
171	0.6	0.1	0.4	0.3	0.7	0.6	0.9	0.8	1.0	0.8	1.3	1.7	0.8	2.0	5.2	2.9	0.8	0.9	0.1	1.0
172	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.4	0.1	0.4	1.0	0.6	1.5	2.0	0.6	4.1	0.3	0.4	0.1	0.6
173	0.1	0.0	0.0	0.1	0.1	0.1	0.5	0.6	1.4	1.8	2.5	3.9	5.9	10.2	11.6	8.2	1.1	1.5	0.1	2.4
175	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.3	0.3	0.4	1.5	1.6	1.7	2.3	0.2	0.3	0.1	0.4
185	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	1.0	3.0	4.3	12.3	23.7	38.7	72.2	2.4	3.8	0.2	2.9
186	0.5	0.0	0.0	0.2	0.8	0.7	0.9	0.9	0.8	1.1	0.5	1.3	1.3	0.8	1.7	1.2	0.6	0.6	0.1	0.9
187	0.0	0.0	0.0	0.0	0.1	0.4	0.4	1.2	1.9	3.6	6.0	10.2	9.5	9.0	13.3	11.1	1.8	2.3	0.1	4.8
188	0.0	0.1	0.0	0.1	0.1	0.0	0.2	0.3	1.7	2.5	3.3	7.6	9.5	15.1	20.2	21.7	1.7	2.5	0.2	3.6
189	1.3	0.3	0.1	0.0	0.1	0.1	0.3	0.4	1.0	1.5	2.2	3.5	4.4	3.7	5.8	2.3	0.8	1.1	0.1	1.9
190	1.7	0.4	0.1	0.0	0.1	0.1	0.1	0.2	0.0	0.0	0.5	0.0	0.0	0.4	1.2	0.6	0.3	0.4	0.0	0.1
191	1.5	1.7	0.7	0.6	0.4	1.6	2.2	3.1	3.1	3.9	4.8	5.8	5.1	7.8	3.5	5.9	2.2	2.5	0.1	4.2
192	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.3	0.4	0.0	0.4	0.0	0.0	0.1	0.1	0.0	0.1
193	0.0	0.0	0.0	0.1	0.1	0.1	0.4	0.2	0.1	1.1	2.2	4.3	3.3	2.0	7.5	3.5	0.6	0.8	0.1	1.6
194	0.5	0.2	0.1	0.1	0.1	0.3	0.0	0.0	0.2	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1
195	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.3	0.1	0.1	0.3	0.9	0.8	0.8	0.6	1.2	0.2	0.2	0.0	0.4
196	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.6	0.5	2.8	2.8	4.8	6.7	7.8	9.8	6.5	1.0	1.4	0.1	2.7
197	0.0	0.0	0.1	0.2	0.2	0.1	0.7	1.4	1.9	5.7	5.3	10.4	12.8	14.3	16.2	21.1	2.2	3.0	0.2	5.6
198	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.4	0.2	1.5	1.0	1.9	3.8	3.3	2.9	4.1	0.5	0.7	0.1	1.3
199	0.2	0.0	0.1	0.2	0.3	0.0	0.4	0.9	1.5	4.2	5.7	5.0	7.7	6.5	7.5	12.3	1.4	1.9	0.1	3.8
200	0.3	0.3	0.5	0.3	0.2	0.1	0.2	0.4	0.5	0.3	0.3	1.7	1.0	0.8	1.2	1.2	0.4	0.5	0.1	0.7
201	0.7	2.5	1.2	0.7	1.0	0.7	1.0	0.8	1.5	1.8	1.2	1.3	1.0	2.5	1.2	2.3	1.2	1.2	0.1	1.3
202	0.6	1.4	1.8	1.5	1.1	1.6	1.9	1.1	2.6	5.3	4.5	7.4	9.2	9.0	10.4	9.4	2.5	2.9	0.2	4.6
203	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.8	1.4	1.0	3.2	3.6	6.5	8.1	4.1	0.7	0.9	0.1	1.5
204	4.3	4.9	2.3	1.3	0.6	0.7	0.6	0.5	0.5	0.1	0.3	1.1	0.8	0.4	2.3	1.2	1.5	1.7	0.1	0.5
205	0.5	0.7	0.4	0.8	1.4	0.9	1.3	1.0	1.7	1.7	2.3	1.3	3.1	4.9	5.2	2.9	1.3	1.4	0.1	1.8
206	0.0	0.1	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	0.0	0.0
207	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	0.0	0.0	0.0	0.0	0.0
208	0.4	0.1	0.5	0.3	0.3	0.3	0.2	0.2	0.1	0.4	0.0	0.2	0.8	2.0	0.0	1.8	0.3	0.4	0.0	0.3
All	14.9	13.7	9.9	11.2	12.5	15.8	25.6	40.6	72.7	153.3	222.8	336.8	444.4	535.4	529.7	519.5	78.6	104.6	1.01	188.5

TABLE: CHN-4(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: 1990-1996 - 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	0.1	0.0	0.0	0.0	0.6	1.2	0.7	1.3	1.6	3.0	1.6	0.2	0.3	0.1	0.6
141	0.0	0.0	0.0	0.0	0.0	0.2	0.3	1.0	1.3	3.0	5.2	6.5	7.8	9.9	7.8	5.9	1.3	1.8	0.1	3.7
142	0.1	0.0	0.0	0.3	0.1	0.3	0.2	0.0	0.3	0.6	0.8	1.4	0.5	0.4	3.0	1.1	0.3	0.3	0.1	0.6
143	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	1.9	4.1	4.8	6.4	4.9	4.8	3.2	0.8	1.1	0.1	2.6
144	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.5	0.5	0.8	0.0	0.5	0.1	0.1	0.0	0.2
145	0.0	0.1	0.0	0.0	0.0	0.3	1.2	1.9	5.7	6.9	16.4	17.1	25.1	21.0	22.7	14.0	3.6	4.8	0.2	10.9
146	0.0	0.0	0.1	0.0	0.2	0.0	0.1	0.2	0.3	0.9	1.0	1.2	1.9	1.6	3.6	1.1	0.3	0.4	0.1	0.8
147	0.0	0.0	0.1	0.2	0.6	0.3	0.4	0.2	0.8	0.2	1.2	0.2	0.5	1.2	0.0	0.0	0.3	0.3	0.0	0.5
148	0.0	0.0	0.1	0.1	0.2	0.3	0.7	1.8	3.5	4.2	5.4	7.2	5.9	6.6	7.2	2.7	1.5	1.9	0.1	4.4
149	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.2	0.2	1.0	1.1	1.6	0.0	1.1	0.1	0.2	0.0	0.3
150	0.0	0.0	0.0	0.1	0.1	0.5	0.9	3.0	6.0	9.7	20.9	26.0	22.7	26.0	35.8	17.2	4.5	6.1	0.2	13.3
151	0.0	0.0	0.0	0.1	0.6	1.6	1.9	4.9	5.6	12.6	19.7	22.1	25.9	33.0	21.5	23.7	5.0	6.5	0.3	13.9
152	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.2	0.0	0.2	0.5	1.2	0.6	0.5	0.1	0.1	0.0	0.2
153	0.0	0.0	0.1	0.1	0.1	0.1	0.4	0.7	1.7	2.0	4.3	5.0	6.1	7.4	6.6	6.5	1.1	1.5	0.1	3.0
154	0.0	0.1	0.1	0.1	0.4	1.0	0.7	1.2	1.7	3.5	6.8	7.0	14.2	9.1	8.9	8.6	1.8	2.4	0.2	5.1
155	0.6	0.1	0.0	0.1	0.1	0.1	0.2	0.2	0.7	1.1	2.7	1.9	1.9	4.1	5.4	1.6	0.6	0.8	0.1	1.3
156	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	2.4	1.4	2.9	3.5	3.7	4.8	4.8	0.6	0.8	0.1	1.6
157	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.5	0.9	0.3	1.4	2.4	2.9	4.5	4.8	2.7	0.5	0.7	0.1	1.2
158	0.2	0.0	0.1	0.0	0.1	0.1	0.0	0.3	0.3	0.6	0.0	0.2	0.5	0.8	0.6	0.5	0.2	0.2	0.0	0.3
159	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.5	0.0	1.2	0.5	0.1	0.1	0.0	0.1
160	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.3	0.4	0.9	0.8	1.2	2.4	2.1	1.8	1.6	0.3	0.4	0.1	0.9
161	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.7	0.5	1.2	2.2	3.5	1.6	3.0	1.1	0.4	0.5	0.1	1.2
162	0.0	0.0	0.0	0.0	0.1	0.1	0.7	1.3	2.5	2.8	7.7	8.7	12.8	14.4	7.8	4.8	1.8	2.4	0.2	5.3
163	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
164	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.8	0.6	0.0	0.1	0.1	0.0	0.1
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	0.0	0.0	0.0	0.0
170	0.0	0.2	0.8	1.1	0.5	0.6	0.4	0.4	0.5	0.3	0.2	1.0	0.8	0.0	1.2	0.0	0.5	0.5	0.0	0.5
171	0.5	0.4	0.3	0.6	0.5	0.3	0.7	1.0	1.1	1.9	1.2	2.2	2.7	2.9	3.0	2.2	0.9	1.0	0.1	1.6
172	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.5	0.8	1.0	1.3	0.4	2.4	1.1	0.2	0.3	0.1	0.6
173	0.0	0.0	0.1	0.1	0.3	0.2	0.7	1.1	0.9	0.6	3.3	2.6	4.5	4.1	4.2	9.1	0.9	1.1	0.1	2.0
174	0.0	0.0	0.0	0.1	1.2	4.7	8.6	24.3	41.0	56.7	57.8	75.0	65.0	82.0	64.4	57.0	17.5	21.7	0.5	51.0
179	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	1.3	2.5	1.7	1.6	4.1	0.6	2.2	0.4	0.5	0.1	1.1
180	0.0	0.0	0.0	0.0	0.8	2.9	13.6	29.7	54.3	84.9	100.6	115.2	113.3	84.9	90.1	50.0	24.6	30.8	0.5	78.4
181	0.0	0.0	0.0	0.1	0.7	0.8	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0
182	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.7	1.7	3.3	5.8	8.4	6.9	14.0	7.2	8.1	1.5	2.0	0.1	4.0
183	0.2	0.2	0.7	1.2	1.8	2.1	2.3	4.9	6.5	11.3	13.9	17.6	24.1	20.2	18.5	6.5	4.5	5.5	0.2	12.0
184	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.7	2.9	2.5	3.9	3.4	7.5	6.6	14.9	5.4	1.2	1.6	0.1	3.2
188	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.4	0.4	1.7	1.7	2.4	3.7	4.5	10.7	6.5	0.7	1.0	0.1	1.6
189	1.1	0.1	0.0	0.0	0.1	0.3	0.1	0.2	0.3	0.9	2.1	1.4	2.4	3.3	3.0	1.6	0.5	0.7	0.1	1.1
190	1.9	0.4	0.1	0.0	0.1	0.1	0.0	0.0	0.3	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.3	0.0	0.1
191	1.3	1.2	0.5	0.4	0.7	0.8	1.2	1.2	1.2	2.4	1.5	3.6	2.4	2.9	3.0	2.7	1.2	1.4	0.1	1.9
192	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.1	0.1	0.0	0.1
193	0.0	0.0	0.0	0.1	0.8	0.9	1.7	2.5	2.7	3.6	3.5	2.9	2.9	4.5	6.6	6.5	1.4	1.6	0.1	3.0
194	0.6	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.2	0.5	0.3	0.0	0.0	0.5	0.1	0.2	0.0	0.2
195	0.3	0.1	0.1	0.0	0.1	0.0	0.2	0.2	0.3	0.8	0.2	0.5	0.8	0.4	1.2	2.2	0.2	0.3	0.0	0.4
196	0.0	0.0	0.1	0.2	0.1	0.1	0.3	0.7	1.1	0.9	1.4	3.1	4.0	4.5	3.6	2.7	0.7	0.8	0.1	1.7
197	0.0	0.1	0.1	0.0	0.3	0.1	0.6	0.7	2.4	2.7	4.4	7.2	7.2	7.4	8.4	10.2	1.4	1.8	0.1	3.7
198	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.9	1.9	1.7	1.4	1.9	2.5	4.2	1.1	0.5	0.6	0.1	1.3
199	0.1	0.0	0.1	0.1	0.3	0.6	0.8	0.9	2.7	4.7	7.9	6.3	6.1	5.8	8.9	8.1	1.6	2.0	0.1	4.5
200	0.0	0.2	0.1	0.1	0.1	0.0	0.2	0.1	0.5	0.5	0.6	0.7	1.3	1.6	1.2	0.0	0.3	0.3	0.0	0.6
201	0.3	0.8	0.7	0.3	0.8	0.4	0.3	0.7	0.3	0.3	1.4	0.2	1.3	0.8	0.0	0.5	0.6	0.6	0.0	0.7
202	0.2	0.6	0.9	0.7	0.8	1.3	1.4	1.4	1.6	3.0	1.5	3.6	5.6	6.6	9.5	2.2	1.5	1.7	0.1	2.6
203	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.6	0.6	1.7	1.9	1.2	3.6	2.7	0.3	0.4	0.1	0.8
204	3.0	1.2	1.2	0.4	0.3	0.1	0.4	0.2	1.1	0.2	0.0	1.4	0.8	0.8	2.4	2.2	0.8	1.0	0.0	0.6
205	0.4	0.5	0.6	0.9	0.8	0.8	1.4	0.8	1.6	1.4	2.1	3.6	2.1	5.4	1.8	1.1	1.1	1.2	0.1	1.8
206	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
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	0.0	0.0	0.0	0.0
208	0.4	0.0	0.1	0.3	0.1	0.0	0.1	0.2	0.1	0.3	0.0	0.2	0.8	0.8	2.4	0.5	0.2	0.3	0.0	0.3
All	11.3	6.8	7.4	8.4	14.6	23.4	44.6	92.5	161.6	245.4	323.6	389.2	422.5	430.9	432.5	298.2	91.4	115.3	1.06	253.7

TABLE: CHN-5(a):
Trends in Crude (CR)& Age Adjusted (AAR) Cancer Incidence Rates from 1990 to 1996 - Males
Chennai

ICD-9	Site	1990		1991		1992		1993		1994		1995		1996	
		CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR
140	Lip	0.2	0.2	0.4	0.5	0.2	0.2	0.4	0.5	0.3	0.5	0.1	0.2	0.2	0.2
141	Tongue	2.7	3.8	4.3	5.8	3.5	4.7	3.7	5.0	4.1	5.8	3.6	5.0	3.9	5.3
142	Salivary Gland	0.4	0.4	0.3	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.6	0.7	0.3	0.4
143	Gum	0.7	1.1	0.8	1.1	0.3	0.5	0.9	1.2	0.5	0.7	0.8	1.3	0.7	1.0
144	Floor of Mouth	0.5	0.7	0.5	0.6	0.7	0.9	0.7	1.0	0.6	0.8	0.6	0.8	0.4	0.6
145	Other Mouth	3.2	4.7	3.2	4.1	3.3	4.8	3.5	4.9	3.5	4.8	3.1	4.1	3.8	5.0
146	Oropharynx	1.7	2.5	1.6	2.2	2.0	2.8	1.5	2.0	1.5	2.1	2.3	3.2	1.4	1.9
147	Nasopharynx	0.4	0.4	0.6	0.7	0.8	1.0	0.5	0.7	0.8	0.9	0.5	0.6	0.6	0.7
148	Hypopharynx	3.3	4.7	3.8	5.2	4.5	6.1	3.7	4.9	3.3	4.4	4.4	5.8	3.6	4.8
149	Pharynx Etc.	0.6	0.9	0.9	1.1	0.5	0.8	0.5	0.7	0.4	0.7	0.9	1.2	0.5	0.7
150	Oesophagus	6.8	9.7	7.4	10.4	6.3	8.8	6.1	8.4	6.3	8.6	6.3	8.6	5.3	7.2
151	Stomach	10.3	14.3	9.9	14.0	10.2	14.1	9.6	13.2	9.0	12.3	9.6	12.9	10.9	14.5
152	Small Intestine	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.3	0.4	0.2	0.3
153	Colon	1.0	1.3	1.5	1.9	1.2	1.5	1.4	1.9	1.5	1.8	1.3	1.7	1.6	2.0
154	Rectum	2.4	3.1	2.1	2.9	2.7	3.3	2.1	2.8	1.9	2.5	2.7	3.6	2.0	2.5
155	Liver	1.5	2.1	1.5	2.3	1.6	2.0	1.2	1.6	1.8	2.4	2.2	3.0	2.3	3.2
156	Gall Bladder	0.3	0.4	0.4	0.5	0.5	0.7	0.2	0.3	0.4	0.6	0.6	0.8	0.4	0.6
157	Pancreas	1.1	1.5	1.0	1.3	0.9	1.2	1.3	1.7	1.3	1.7	1.6	2.2	1.2	1.5
158	Retroperitoneum	0.1	0.1	0.1	0.1	0.3	0.4	0.1	0.1	0.3	0.4	0.1	0.1	0.1	0.1
159	Other Dig System	0.1	0.1	0.1	0.1	0.1	0.2	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.1
160	Nasal Cavity	0.5	0.7	0.4	0.6	0.7	0.8	0.5	0.5	0.9	1.0	0.6	0.7	0.4	0.4
161	Larynx	3.4	4.9	3.5	4.8	2.4	3.3	3.4	4.9	3.5	4.7	3.3	4.5	3.1	4.0
162	Lung	9.4	12.6	8.4	11.5	8.5	12.1	9.2	12.4	7.7	10.6	6.6	9.0	8.0	10.7
163	Pleura	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1
164	Thymus	0.2	0.2	0.1	0.0	0.2	0.2	0.0	0.0	0.4	0.4	0.2	0.2	0.1	0.2
165	Other Resp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170	Bone	0.8	0.7	1.2	1.0	0.8	0.9	0.7	0.7	0.5	0.4	0.6	0.6	0.7	0.8
171	Conn. Tissue	0.7	0.8	0.7	0.7	0.8	0.9	0.7	0.8	1.0	1.3	0.7	0.8	0.7	0.9
172	Skin Melanoma	0.2	0.3	0.2	0.3	0.4	0.5	0.3	0.5	0.2	0.2	0.4	0.5	0.2	0.3
173	Skin. Other	0.7	0.9	1.2	1.7	1.2	1.7	1.2	1.6	1.4	1.9	1.0	1.4	1.1	1.4
175	Breast Male	0.1	0.1	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.2	0.4	0.6	0.3	0.4
185	Prostate	1.6	2.6	1.9	3.0	2.3	3.8	1.6	2.6	2.9	4.5	3.3	5.2	3.1	4.7
186	Testis	0.5	0.6	0.6	0.5	0.4	0.4	0.6	0.6	0.5	0.5	0.8	0.8	0.9	0.9
187	Penis Etc.	1.6	2.2	2.1	2.9	2.3	3.0	2.0	2.6	1.5	1.9	1.5	2.0	1.4	1.8
188	Uri. Bladder	1.7	2.7	1.6	2.4	1.4	1.9	1.3	1.8	2.4	3.5	1.8	2.5	1.8	2.5
189	Kidney	0.8	1.0	0.7	0.9	0.9	1.3	0.7	0.9	0.7	0.7	1.0	1.3	1.0	1.4
190	Eye	0.6	0.8	0.2	0.3	0.1	0.2	0.3	0.5	0.1	0.1	0.1	0.2	0.4	0.5
191	Brain	1.7	1.9	1.9	2.2	1.7	1.9	2.3	2.5	2.3	2.5	2.5	2.8	2.9	3.2
192	Nervous System	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1
193	Thyroid Gland	0.4	0.6	0.5	0.7	0.6	0.8	0.8	1.0	1.0	1.2	0.6	0.8	0.5	0.7
194	Oth. Endo. Gland	0.1	0.1	0.0	0.0	0.4	0.5	0.1	0.1	0.3	0.4	0.0	0.0	0.0	0.0
195	Ill Def. Sites	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2
196	Sec. Lymph. Node	1.0	1.4	1.4	2.0	0.8	1.1	1.1	1.5	0.9	1.2	1.0	1.4	1.1	1.4
197	Sec. Res. Etc	2.8	3.8	2.7	3.7	2.1	2.8	1.7	2.4	2.1	2.9	1.7	2.2	2.5	3.3
198	Sec. Other	0.7	0.9	0.3	0.4	0.5	0.8	0.6	0.8	0.4	0.6	0.5	0.6	0.6	0.7
199	Prim. Unknown	1.7	2.2	1.7	2.2	2.1	2.7	1.5	2.1	1.6	2.1	0.8	1.1	0.6	0.9
200	Lymphosarcoma	0.6	0.7	0.6	0.5	0.5	0.6	0.4	0.4	0.1	0.2	0.2	0.3	0.5	0.6
201	Hodgkins. Disease	1.3	1.2	1.2	1.3	0.7	0.8	1.4	1.5	1.1	1.1	1.3	1.4	1.3	1.3
202	Oth. Lymph. Node	2.9	3.2	2.4	2.7	2.4	2.7	2.4	2.9	2.2	2.5	3.0	3.4	2.5	2.9
203	Mult. Myeloma	0.6	0.8	0.7	0.9	0.5	0.8	0.7	1.0	0.9	1.2	0.9	1.3	0.5	0.6
204	Leuk. Lymphatic	1.2	1.2	1.3	1.4	1.7	1.9	2.0	2.4	1.7	1.8	1.4	1.4	1.6	1.8
205	Leuk. Myelocytic	1.4	1.6	1.2	1.3	0.9	1.0	1.2	1.4	1.4	1.4	1.3	1.3	1.4	1.5
206	Leuk. Monocytic	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
207	Leuk. Misc.	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
208	Leuk. Unspecified	0.2	0.2	0.0	0.0	0.1	0.1	0.5	0.6	0.7	0.9	0.3	0.4	0.3	0.3
	All Sites	77.2	103.4	79.8	105.7	78.0	104.9	77.4	103.0	78.7	103.7	79.6	105.4	79.3	103.1

TABLE: CHN-5(b):

Trends in Crude (CR)& Age Adjusted (AAR) Cancer Incidence Rates from 1990 to 1996 - Females
Chennai

ICD-9	Site	1990		1991		1992		1993		1994		1995		1996	
		CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR
140	Lip	0.4	0.6	0.4	0.6	0.3	0.4	0.1	0.1	0.3	0.4	0.2	0.2	0.1	0.1
141	Tongue	1.4	1.9	1.6	2.2	1.2	1.7	0.9	1.3	1.2	1.5	1.4	1.9	1.4	1.8
142	Salivary Gland	0.3	0.4	0.2	0.2	0.5	0.6	0.4	0.4	0.2	0.2	0.2	0.1	0.2	0.4
143	Gum	0.8	1.2	1.5	2.2	0.7	1.1	0.7	0.9	0.7	0.9	0.8	1.0	0.6	0.8
144	Floor of Mouth	0.1	0.1	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0
145	Other Mouth	4.7	6.5	3.4	4.5	4.5	6.3	3.3	4.6	3.1	3.9	3.5	4.5	2.9	3.8
146	Oropharynx	0.4	0.6	0.5	0.7	0.2	0.2	0.4	0.4	0.2	0.3	0.3	0.4	0.3	0.5
147	Nasopharynx	0.5	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.3	0.3
148	Hypopharynx	1.4	1.6	2.0	2.5	1.6	1.9	1.2	1.4	1.9	2.5	1.3	1.7	1.0	1.4
149	Pharynx Etc.	0.2	0.3	0.1	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.2	0.2	0.0	0.1
150	Oesophagus	4.5	6.0	4.7	6.5	4.3	5.8	3.6	4.8	4.4	5.9	4.8	6.5	5.4	6.9
151	Stomach	5.0	6.7	4.3	5.6	4.9	6.5	5.4	7.0	4.7	6.2	5.2	6.6	5.5	6.8
152	Small Intestine	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
153	Colon	1.2	1.6	1.2	1.6	0.7	1.0	1.0	1.4	1.0	1.2	1.4	1.8	1.3	1.7
154	Rectum	2.1	2.8	1.8	2.5	2.6	3.3	1.2	1.6	1.7	2.1	1.8	2.4	1.7	2.0
155	Liver	0.4	0.4	0.2	0.3	0.3	0.4	0.6	0.8	0.8	1.1	0.6	0.8	1.2	1.6
156	Gall Bladder	0.2	0.3	0.4	0.5	0.4	0.6	0.4	0.6	1.0	1.4	1.1	1.4	0.7	0.9
157	Pancreas	0.4	0.6	0.4	0.5	0.5	0.7	0.7	0.9	0.5	0.6	0.5	0.6	0.7	0.9
158	Retroperitoneum	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.4	0.4	0.2	0.2	0.2	0.2
159	Other Dig System	0.2	0.2	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1
160	Nasal Cavity	0.5	0.6	0.3	0.4	0.4	0.5	0.4	0.5	0.2	0.3	0.2	0.3	0.4	0.5
161	Larynx	0.3	0.5	0.4	0.6	0.4	0.5	0.4	0.6	0.2	0.3	0.5	0.6	0.5	0.6
162	Lung	1.9	2.7	1.6	2.1	2.4	3.1	1.6	2.1	1.2	1.6	1.5	1.9	2.3	3.1
163	Pleura	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
164	Thymus	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2
165	Other Resp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170	Bone	0.3	0.3	0.4	0.4	0.4	0.4	0.6	0.6	0.6	0.5	0.5	0.5	0.7	0.6
171	Conn. Tissue	0.9	1.0	0.9	1.0	0.8	0.9	1.3	1.5	0.7	0.9	0.8	0.9	0.6	0.6
172	Skin Melanoma	0.3	0.4	0.1	0.1	0.2	0.3	0.2	0.3	0.3	0.4	0.2	0.2	0.1	0.2
173	Skin. Other	0.7	0.9	0.9	1.0	0.8	1.1	0.9	1.1	0.9	1.1	0.8	1.1	1.0	1.3
174	Breast Female	16.7	21.4	16.3	20.6	16.0	20.3	17.5	21.6	18.1	22.1	17.9	21.6	19.2	23.8
179	Uterus NOS.	0.4	0.5	0.1	0.2	0.3	0.4	0.3	0.4	0.3	0.3	0.7	1.0	0.7	1.0
180	Cervix Uteri	27.3	34.7	26.5	33.4	24.0	30.9	25.9	32.3	24.2	29.9	22.6	27.9	21.8	27.0
181	Placenta	0.3	0.2	0.3	0.2	0.3	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2
182	Corpus Uteri	1.4	2.0	1.3	1.8	1.4	1.8	1.7	2.3	1.3	1.7	1.7	2.3	1.6	2.2
183	Ovary Etc.	4.2	5.1	4.7	5.6	4.4	5.5	4.9	5.9	4.2	5.0	4.2	4.9	5.2	6.4
184	Other Fem Gen.	1.3	1.8	1.4	1.9	1.1	1.5	1.0	1.3	1.1	1.4	1.2	1.6	1.3	1.8
188	Uri. Bladder	0.6	1.0	0.6	0.9	0.7	1.0	0.5	0.8	1.0	1.3	0.7	0.9	0.7	1.0
189	Kidney	0.6	0.9	0.5	0.7	0.5	0.7	0.5	0.6	0.4	0.6	0.7	0.8	0.6	0.8
190	Eye	0.4	0.5	0.3	0.4	0.3	0.4	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.5
191	Brain	1.1	1.2	0.8	1.0	0.9	1.1	1.3	1.5	1.0	1.1	1.5	1.6	1.8	2.0
192	Nervous System	0.2	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
193	Thyroid Gland	1.4	1.6	1.7	1.9	1.3	1.5	1.1	1.2	1.3	1.5	1.7	1.8	1.4	1.5
194	Oth. Endo. Gland	0.2	0.2	0.1	0.2	0.0	0.0	0.2	0.2	0.3	0.3	0.0	0.0	0.1	0.2
195	Ill Def. Sites	0.2	0.2	0.1	0.2	0.3	0.3	0.2	0.2	0.5	0.6	0.3	0.3	0.1	0.2
196	Sec. Lymph. Node	1.1	1.4	0.8	0.9	0.6	0.8	0.4	0.6	0.7	0.9	0.4	0.5	0.6	0.8
197	Sec. Res. Etc	1.2	1.7	1.8	2.5	1.2	1.5	1.8	2.4	1.1	1.3	1.4	1.8	1.3	1.7
198	Sec. Other	0.5	0.7	0.4	0.5	0.4	0.5	0.8	0.9	0.6	0.8	0.3	0.4	0.4	0.6
199	Prim. Unknown	1.9	2.4	1.9	2.4	2.3	2.9	2.0	2.5	1.4	1.7	1.2	1.6	0.8	1.0
200	Lymphosarcoma	0.3	0.4	0.5	0.6	0.2	0.2	0.4	0.4	0.1	0.0	0.2	0.2	0.2	0.3
201	Hodgkins. Disease	0.4	0.3	0.8	0.7	0.8	0.8	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
202	Oth. Lymph. Node	1.4	1.5	1.3	1.4	1.5	1.7	1.4	1.6	1.7	2.1	2.0	2.3	1.4	1.5
203	Mult. Myeloma	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.4	0.5	0.4	0.5
204	Leuk. Lymphatic	1.1	1.3	0.5	0.6	0.9	1.1	0.8	0.9	0.9	1.1	1.0	1.2	0.6	0.6
205	Leuk. Myelocytic	0.8	0.9	0.8	0.9	1.1	1.2	1.6	1.7	1.1	1.2	1.2	1.3	1.2	1.3
206	Leuk. Monocytic	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
207	Leuk. Misc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
208	Leuk. Unspecified	0.2	0.2	0.1	0.1	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3
	All Sites	94.8	121.5	92.0	116.9	90.0	115.2	91.9	114.7	90.1	111.3	90.9	112.0	92.1	115.4

TABLE: CHN-6(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) 1990-1996: Males Chennai

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	0.36	0.36	0.63	0.63
142	Salivary Gland	0.03	0.03	0.05	0.05
143	Gum	0.06	0.06	0.13	0.13
144	Floor of Mouth	0.06	0.06	0.09	0.09
145	Other Mouth	0.31	0.32	0.57	0.58
146	Oropharynx	0.17	0.17	0.30	0.30
147	Nasopharynx	0.05	0.05	0.08	0.08
148	Hypopharynx	0.36	0.36	0.63	0.63
149	Pharynx Etc.	0.05	0.05	0.10	0.10
150	Oesophagus	0.62	0.62	1.08	1.07
151	Stomach	0.90	0.90	1.68	1.67
152	Small Intestine	0.01	0.01	0.01	0.01
153	Colon	0.12	0.12	0.20	0.20
154	Rectum	0.19	0.19	0.34	0.34
155	Liver	0.15	0.15	0.29	0.29
156	Gall Bladder	0.04	0.04	0.06	0.06
157	Pancreas	0.11	0.11	0.19	0.18
158	Retroperitoneum	0.02	0.02	0.01	0.02
159	Other Dig System	0.01	0.01	0.01	0.01
160	Nasal Cavity	0.05	0.05	0.08	0.08
161	Larynx	0.31	0.31	0.56	0.56
162	Lung	0.81	0.81	1.42	1.41
163	Pleura	0.01	0.01	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	0.05	0.05	0.05	0.05
171	Conn. Tissue	0.05	0.05	0.08	0.08
172	Skin Melanoma	0.02	0.02	0.03	0.04
173	Skin. Other	0.09	0.08	0.19	0.19
175	Breast Male	0.01	0.01	0.03	0.03
185	Prostate	0.11	0.11	0.42	0.42
186	Testis	0.05	0.05	0.06	0.06
187	Penis Etc.	0.17	0.17	0.28	0.28
188	Uri. Bladder	0.13	0.13	0.30	0.31
189	Kidney	0.08	0.08	0.12	0.12
190	Eye	0.02	0.02	0.01	0.02
191	Brain	0.17	0.17	0.21	0.23
192	Nervous System	0.01	0.01	0.01	0.01
193	Thyroid Gland	0.06	0.06	0.11	0.11
194	Oth. Endo. Gland	0.01	0.01	0.01	0.01
195	Ill Def. Sites	0.01	0.02	0.02	0.02
196	Sec. Lymph. Node	0.09	0.09	0.18	0.18
197	Sec. Res. Etc	0.19	0.20	0.35	0.35
198	Sec. Other	0.05	0.05	0.08	0.08
199	Prim. Unknown	0.13	0.13	0.20	0.20
200	Lymphosarcoma	0.03	0.03	0.04	0.04
201	Hodgkins. Disease	0.08	0.08	0.08	0.09
202	Oth. Lymph. Node	0.20	0.20	0.29	0.29
203	Mult. Myeloma	0.05	0.05	0.13	0.13
204	Leuk. Lymphatic	0.09	0.09	0.06	0.10
205	Leuk. Myelocytic	0.09	0.09	0.13	0.14
206	Leuk. Monocytic	0.00	0.00	0.00	0.00
207	Leuk. Misc.	0.00	0.00	0.00	0.00
208	Leuk. Unspecified	0.02	0.02	0.03	0.03
	All Sites	6.87	6.64	12.05	11.49

**TABLE: CHN-6(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) 1990-1996: Females
Chennai**

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu.Rate %	Cu.Risk	Cu.Rate%	Cu.Risk
140	Lip	0.02	0.02	0.04	0.04
141	Tongue	0.13	0.13	0.22	0.22
142	Salivary Gland	0.02	0.02	0.04	0.04
143	Gum	0.09	0.09	0.14	0.14
144	Floor of Mouth	0.01	0.01	0.01	0.01
145	Other Mouth	0.37	0.37	0.59	0.59
146	Oropharynx	0.03	0.03	0.06	0.06
147	Nasopharynx	0.02	0.02	0.03	0.03
148	Hypopharynx	0.15	0.15	0.22	0.22
149	Pharynx Etc.	0.01	0.01	0.02	0.02
150	Oesophagus	0.45	0.45	0.76	0.76
151	Stomach	0.48	0.47	0.75	0.75
152	Small Intestine	0.01	0.01	0.02	0.02
153	Colon	0.10	0.10	0.17	0.17
154	Rectum	0.18	0.18	0.27	0.27
155	Liver	0.05	0.05	0.09	0.10
156	Gall Bladder	0.06	0.06	0.10	0.10
157	Pancreas	0.04	0.05	0.09	0.09
158	Retroperitoneum	0.01	0.01	0.02	0.02
159	Other Dig System	0.00	0.00	0.01	0.01
160	Nasal Cavity	0.03	0.03	0.05	0.05
161	Larynx	0.04	0.04	0.07	0.07
162	Lung	0.18	0.18	0.29	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	0.03	0.03	0.04	0.04
171	Conn. Tissue	0.07	0.07	0.09	0.10
172	Skin Melanoma	0.02	0.02	0.03	0.03
173	Skin. Other	0.07	0.07	0.11	0.11
174	Breast	1.67	1.66	2.40	2.37
179	Uterus NOS.	0.04	0.04	0.06	0.06
180	Cervix	2.58	2.54	3.45	3.39
181	Placenta	0.01	0.01	0.01	0.01
182	Body Uterus	0.14	0.13	0.24	0.24
183	Ovary	0.43	0.43	0.63	0.63
184	Vagina	0.11	0.11	0.21	0.21
188	Uri. Bladder	0.05	0.05	0.13	0.13
189	Kidney	0.05	0.04	0.07	0.07
190	Eye	0.02	0.02	0.01	0.02
191	Brain	0.09	0.09	0.11	0.12
192	Nervous System	0.00	0.00	0.01	0.01
193	Thyroid Gland	0.11	0.11	0.16	0.16
194	Oth. Endo. Gland	0.01	0.01	0.01	0.01
195	Ill Def. Sites	0.02	0.02	0.02	0.03
196	Sec. Lymph. Node	0.06	0.06	0.10	0.10
197	Sec. Res. Etc	0.13	0.13	0.21	0.21
198	Sec. Other	0.04	0.04	0.08	0.08
199	Prim. Unknown	0.15	0.16	0.23	0.23
200	Lymphosarcoma	0.02	0.02	0.04	0.03
201	Hodgkins. Disease	0.04	0.04	0.04	0.04
202	Oth. Lymph. Node	0.11	0.11	0.19	0.19
203	Mult. Myeloma	0.03	0.03	0.05	0.05
204	Leuk. Lymphatic	0.05	0.05	0.05	0.07
205	Leuk. Myelocytic	0.09	0.08	0.12	0.12
206	Leuk. Monocytic	0.00	0.00	0.00	0.00
207	Leuk. Misc.	0.00	0.00	0.00	0.00
208	Leuk. Unspecified	0.01	0.01	0.03	0.03
	All Sites	8.76	8.37	12.98	12.23

**TABLE: CHN-7(a): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Method of Diagnosis 1990-1996 - Males
Chennai**

ICD-9	Site	Clinical		Microscopic		X-Ray		D.C.O.		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	9	24.3	0	0.0	28	75.7	0	0.0	0	0.0	37	100.0
141	Tongue	113	21.2	2	0.4	414	77.5	5	0.9	0	0.0	535	100.0
142	Salivary Gland	15	26.8	0	0.0	39	69.6	0	0.0	2	3.6	55	100.0
143	Gum	20	20.6	0	0.0	77	79.4	0	0.0	0	0.0	98	100.0
144	Floor of Mouth	10	11.9	0	0.0	74	88.1	0	0.0	0	0.0	84	100.0
145	Other Mouth	130	26.6	2	0.4	353	72.2	4	0.8	0	0.0	489	100.0
146	Oropharynx	50	20.0	4	1.6	192	76.8	3	1.2	1	0.4	250	100.0
147	Nasopharynx	12	13.6	0	0.0	74	84.1	0	0.0	2	2.3	87	100.0
148	Hypopharynx	67	12.2	19	3.5	462	84.2	1	0.2	0	0.0	550	100.0
149	Pharynx Etc.	14	15.6	4	4.4	48	53.3	24	26.7	0	0.0	90	100.0
150	Oesophagus	22	2.4	180	19.6	690	75.0	18	2.0	10	1.1	920	100.0
151	Stomach	69	4.8	262	18.2	969	67.4	56	3.9	82	5.7	1437	100.0
152	Small Intestine	0	0.0	1	4.8	20	95.2	0	0.0	0	0.0	21	100.0
153	Colon	6	3.1	27	13.9	149	76.8	2	1.0	10	5.2	194	100.0
154	Rectum	30	9.1	20	6.1	264	80.2	7	2.1	8	2.4	329	100.0
155	Liver	4	1.6	0	0.0	194	76.4	9	3.5	47	18.5	253	100.0
156	Gall Bladder	4	6.8	2	3.4	35	59.3	1	1.7	17	28.8	59	100.0
157	Pancreas	11	6.2	11	6.2	78	44.1	8	4.5	69	39.0	175	100.0
158	Retroperitoneum	0	0.0	2	9.1	17	77.3	0	0.0	3	13.6	22	100.0
159	Other Dig System	1	10.0	3	30.0	3	30.0	0	0.0	3	30.0	10	100.0
160	Nasal Cavity	8	10.3	2	2.6	67	85.9	0	0.0	1	1.3	79	100.0
161	Larynx	56	12.0	11	2.4	391	83.7	8	1.7	1	0.2	468	100.0
162	Lung	13	1.1	316	26.6	789	66.3	22	1.9	50	4.2	1190	100.0
163	Pleura	0	0.0	0	0.0	7	100.0	0	0.0	0	0.0	7	100.0
164	Thymus	0	0.0	3	12.0	17	68.0	0	0.0	5	20.0	25	100.0
165	Other Resp.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
170	Bone	2	1.8	4	3.6	102	92.7	2	1.8	0	0.0	110	100.0
171	Conn. Tissue	2	1.8	0	0.0	112	98.3	0	0.0	0	0.0	113	100.0
172	Skin Melanoma	1	2.5	0	0.0	39	97.5	0	0.0	0	0.0	40	100.0
173	Skin. Other	4	2.5	0	0.0	153	96.8	1	0.6	0	0.0	159	100.0
175	Breast Male	2	7.1	0	0.0	25	89.3	1	3.6	0	0.0	27	100.0
185	Prostate	42	12.1	5	1.5	261	75.4	6	1.7	32	9.3	347	100.0
186	Testis	6	6.8	0	0.0	77	87.5	0	0.0	5	5.7	89	100.0
187	Penis Etc.	51	19.9	0	0.0	203	79.3	2	0.8	0	0.0	255	100.0
188	Uri. Bladder	5	2.0	9	3.6	197	79.8	3	1.2	33	13.4	246	100.0
189	Kidney	1	0.8	0	0.0	104	87.4	3	2.5	11	9.2	119	100.0
190	Eye	1	2.6	0	0.0	37	94.9	0	0.0	1	2.6	39	100.0
191	Brain	1	0.3	0	0.0	260	81.8	10	3.1	47	14.8	318	100.0
192	Nervous System	0	0.0	0	0.0	8	88.9	0	0.0	1	11.1	9	100.0
193	Thyroid Gland	9	10.0	2	2.2	71	78.9	2	2.2	6	6.7	91	100.0
194	Oth. Endo. Gland	0	0.0	0	0.0	20	90.9	0	0.0	2	9.1	22	100.0
195	Ill Def. Sites	4	18.2	0	0.0	12	54.6	3	13.6	3	13.6	22	100.0
196	Sec. Lymph. Node	28	18.9	0	0.0	117	79.1	0	0.0	3	2.0	148	100.0
197	Sec. Res. Etc	9	2.8	30	9.3	71	22.1	16	5.0	196	60.9	322	100.0
198	Sec. Other	2	2.7	10	13.7	42	57.5	1	1.4	18	24.7	73	100.0
199	Prim. Unknown	5	2.4	0	0.0	0	0.0	200	97.1	1	0.5	206	100.0
200	Lymphosarcoma	0	0.0	0	0.0	59	98.3	1	1.7	0	0.0	60	100.0
201	Hodgkins. Disease	0	0.0	0	0.0	170	98.8	2	1.2	0	0.0	172	100.0
202	Oth. Lymph. Node	0	0.0	0	0.0	353	97.5	7	1.9	2	0.6	363	100.0
203	Mult. Myeloma	0	0.0	0	0.0	98	100.0	0	0.0	0	0.0	98	100.0
204	Leuk. Lymphatic	0	0.0	0	0.0	223	99.6	1	0.5	0	0.0	224	100.0
205	Leuk. Myelocytic	0	0.0	0	0.0	180	99.5	1	0.6	0	0.0	181	100.0
206	Leuk. Monocytic	0	0.0	0	0.0	2	100.0	0	0.0	0	0.0	2	100.0
207	Leuk. Misc.	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	1	100.0
208	Leuk. Unspecified	0	0.0	0	0.0	35	76.1	11	23.9	0	0.0	46	100.0
	All Sites	839	7.4	931	8.2	8483	74.6	441	3.9	672	5.9	11366	100.0

**TABLE: CHN-7(b): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Method of Diagnosis 1990-1996 - Females
Chennai**

ICD-9	Site	Clinical		Microscopic		X-Ray		D.C.O.		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	8	25.8	0	0.0	23	74.2	0	0.0	0	0.0	31	100.0
141	Tongue	44	25.0	0	0.0	130	73.9	2	1.1	0	0.0	176	100.0
142	Salivary Gland	5	13.2	0	0.0	33	86.8	0	0.0	0	0.0	38	100.0
143	Gum	35	31.8	0	0.0	75	68.2	0	0.0	0	0.0	110	100.0
144	Floor of Mouth	2	18.2	0	0.0	9	81.8	0	0.0	0	0.0	11	100.0
145	Other Mouth	134	27.3	0	0.0	354	72.1	3	0.6	0	0.0	489	100.0
146	Oropharynx	6	13.6	1	2.3	37	84.1	0	0.0	0	0.0	44	100.0
147	Nasopharynx	4	9.3	3	7.0	35	81.4	0	0.0	1	2.3	43	100.0
148	Hypopharynx	33	16.1	6	2.9	165	80.5	1	0.5	0	0.0	202	100.0
149	Pharynx Etc.	4	22.2	0	0.0	8	44.4	6	33.3	0	0.0	18	100.0
150	Oesophagus	10	1.6	109	17.8	471	76.8	17	2.8	6	1.0	613	100.0
151	Stomach	39	5.8	129	19.1	433	64.2	36	5.3	38	5.6	677	100.0
152	Small Intestine	0	0.0	2	16.7	9	75.0	0	0.0	1	8.3	12	100.0
153	Colon	8	5.3	19	12.5	112	73.7	5	3.3	8	5.3	150	100.0
154	Rectum	11	4.4	25	10.1	208	83.9	2	0.8	2	0.8	249	100.0
155	Liver	1	1.3	0	0.0	56	70.0	8	10.0	15	18.8	80	100.0
156	Gall Bladder	3	3.7	2	2.5	46	56.8	1	1.2	29	35.8	81	100.0
157	Pancreas	2	2.8	4	5.6	38	53.5	2	2.8	25	35.2	71	100.0
158	Retroperitoneum	1	4.8	2	9.5	17	81.0	0	0.0	1	4.8	21	100.0
159	Other Dig System	0	0.0	2	22.2	5	55.6	1	11.1	1	11.1	9	100.0
160	Nasal Cavity	7	15.2	1	2.2	37	80.4	1	2.2	0	0.0	47	100.0
161	Larynx	10	19.6	1	2.0	39	76.5	1	2.0	0	0.0	52	100.0
162	Lung	5	2.1	61	25.4	145	60.4	15	6.3	14	5.8	240	100.0
163	Pleura	0	0.0	0	0.0	4	100.0	0	0.0	0	0.0	4	100.0
164	Thymus	0	0.0	2	25.0	6	75.0	0	0.0	0	0.0	8	100.0
165	Other Resp.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
170	Bone	2	2.9	1	1.5	59	86.8	5	7.4	1	1.5	68	100.0
171	Conn. Tissue	2	1.7	2	1.7	109	94.8	1	0.9	1	0.9	115	100.0
172	Skin Melanoma	0	0.0	0	0.0	27	100.0	0	0.0	0	0.0	27	100.0
173	Skin. Other	5	4.4	0	0.0	110	95.7	0	0.0	0	0.0	117	100.0
174	Breast	291	12.3	3	0.1	1993	84.4	50	2.1	25	1.1	2359	100.0
179	Uterus NOS.	12	22.2	0	0.0	28	51.9	7	13.0	7	13.0	54	100.0
180	Cervix	452	13.6	1	0.0	2820	85.0	35	1.1	10	0.3	3320	100.0
181	Placenta	0	0.0	1	3.3	29	96.7	0	0.0	0	0.0	30	100.0
182	Body Uterus	9	4.5	1	0.5	184	91.5	0	0.0	7	3.5	200	100.0
183	Ovary	65	10.6	15	2.5	436	71.1	16	2.6	81	13.2	613	100.0
184	Vagina	22	13.6	0	0.0	139	85.8	0	0.0	1	0.6	163	100.0
188	Uri. Bladder	1	1.1	4	4.2	80	84.2	4	4.2	6	6.3	94	100.0
189	Kidney	2	2.7	0	0.0	63	86.3	1	1.4	7	9.6	72	100.0
190	Eye	0	0.0	0	0.0	33	100.0	0	0.0	0	0.0	33	100.0
191	Brain	0	0.0	1	0.6	123	75.5	17	10.4	22	13.5	164	100.0
192	Nervous System	0	0.0	0	0.0	9	100.0	0	0.0	0	0.0	9	100.0
193	Thyroid Gland	17	9.0	4	2.1	152	80.9	1	0.5	14	7.5	189	100.0
194	Oth. Endo. Gland	0	0.0	1	5.9	11	64.7	0	0.0	5	29.4	17	100.0
195	Ill Def. Sites	5	16.7	2	6.7	13	43.3	5	16.7	5	16.7	30	100.0
196	Sec. Lymph. Node	20	22.5	0	0.0	67	75.3	1	1.1	1	1.1	89	100.0
197	Sec. Res. Etc	9	4.8	15	8.0	66	35.3	9	4.8	88	47.1	187	100.0
198	Sec. Other	2	3.0	11	16.7	29	43.9	4	6.1	20	30.3	66	100.0
199	Prim. Unknown	8	3.7	0	0.0	0	0.0	210	96.3	0	0.0	218	100.0
200	Lymphosarcoma	0	0.0	0	0.0	34	100.0	0	0.0	0	0.0	34	100.0
201	Hodgkins. Disease	0	0.0	0	0.0	74	98.7	1	1.3	0	0.0	75	100.0
202	Oth. Lymph. Node	0	0.0	0	0.0	198	98.0	4	2.0	0	0.0	204	100.0
203	Mult. Myeloma	0	0.0	0	0.0	41	97.6	1	2.4	0	0.0	40	100.0
204	Leuk. Lymphatic	0	0.0	0	0.0	112	100.0	0	0.0	0	0.0	112	100.0
205	Leuk. Myelocytic	0	0.0	0	0.0	147	98.7	2	1.3	0	0.0	150	100.0
206	Leuk. Monocytic	0	0.0	0	0.0	2	100.0	0	0.0	0	0.0	2	100.0
207	Leuk. Misc.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
208	Leuk. Unspecified	0	0.0	0	0.0	19	67.9	9	32.1	0	0.0	28	100.0
	All Sites	1296	10.5	431	3.5	9702	78.5	484	3.9	442	3.6	12355	100.0

TABLE: CHN-8(a): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Detailed Microscopic Diagnosis, 1990-1996 - Males : Chennai

ICD-9	Site	Pri. Hist		Sec. Hist		Cytology		Blood Film		Bone Marrow		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	28	75.7	0	0	0	0	0	0	0	0	9	24.3	37	100
141	Tongue	411	76.8	3	0.6	1	0.2	0	0	0	0	120	22.4	535	100
142	Salivary Glands	35	63.6	0	0	3	5.5	0	0	0	0	17	30.9	55	100
143	Gum	78	79.6	0	0	0	0	0	0	0	0	20	20.4	98	100
144	Floor of Mouth	73	86.9	1	1.2	0	0	0	0	0	0	10	11.9	84	100
145	Other Mouth	346	70.8	3	0.6	3	0.6	0	0	0	0	137	28	489	100
146	Oropharynx	190	76	1	0.4	1	0.4	0	0	0	0	58	23.2	250	100
147	Nasopharynx	67	77	4	4.6	2	2.3	0	0	0	0	14	16.1	87	100
148	Hypopharynx	454	82.5	8	1.5	1	0.2	0	0	0	0	87	15.8	550	100
149	Pharynx etc	47	52.2	1	1.1	0	0	0	0	0	0	42	46.7	90	100
150	Oesophagus	685	74.5	5	0.5	0	0	0	0	0	0	230	25	920	100
151	Stomach	943	65.6	22	1.5	3	0.2	0	0	0	0	469	32.6	1437	100
152	Small Intestine	20	95.2	0	0	0	0	0	0	0	0	1	4.8	21	100
153	Colon	145	74.7	4	2.1	0	0	0	0	0	0	45	23.2	194	100
154	Rectum	261	79.3	3	0.9	0	0	0	0	0	0	65	19.8	329	100
155	Liver	174	68.8	1	0.4	18	7.1	0	0	0	0	60	23.7	253	100
156	Gall Bladder	29	49.2	6	10.2	0	0	0	0	0	0	24	40.7	59	100
157	Pancreas	64	36.6	12	6.9	0	0	0	0	0	0	99	56.6	175	100
158	Retroperito	15	68.2	1	4.5	1	4.5	0	0	0	0	5	22.7	22	100
159	Other Digs	1	10	2	20	0	0	0	0	0	0	7	70	10	100
160	Nasal Cavity	66	83.5	1	1.3	1	1.3	0	0	0	0	11	13.9	79	100
161	Larynx	388	82.9	1	0.2	3	0.6	0	0	0	0	76	16.2	468	100
162	Lung	527	44.3	61	5.1	201	16.9	0	0	0	0	401	33.7	1190	100
163	Pleura	5	71.4	0	0	2	28.6	0	0	0	0	0	0	7	100
164	Thymus	17	68	0	0	0	0	0	0	0	0	8	32	25	100
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	Bone	102	92.7	0	0	0	0	0	0	0	0	8	7.3	110	100
171	Connective	108	95.6	0	0	3	2.7	0	0	0	0	2	1.8	113	100
172	Skin Melanoma	39	97.5	0	0	0	0	0	0	0	0	1	2.5	40	100
173	Skin Other	151	95	1	0.6	2	1.3	0	0	0	0	5	3.1	159	100
175	Breast Male	21	77.8	0	0	3	11.1	0	0	0	0	3	11.1	27	100
185	Prostate	262	75.5	0	0	0	0	0	0	0	0	85	24.5	347	100
186	Testis	74	83.1	3	3.4	1	1.1	0	0	0	0	11	12.4	89	100
187	Penis etc	201	78.8	2	0.8	0	0	0	0	0	0	52	20.4	255	100
188	Uri Bladder	190	77.2	1	0.4	5	2	0	0	0	0	50	20.3	246	100
189	Kidney	100	84	3	2.5	1	0.8	0	0	0	0	15	12.6	119	100
190	Eye	37	94.9	0	0	0	0	0	0	0	0	2	5.1	39	100
191	Brain	258	81.1	1	0.3	1	0.3	0	0	0	0	58	18.2	318	100
192	Nervous Sys	8	88.9	0	0	0	0	0	0	0	0	1	11.1	9	100
193	Thyroid Glands	64	70.3	2	2.2	6	6.6	0	0	0	0	19	20.9	91	100
194	Oth. Endo. Gland	20	90.9	0	0	0	0	0	0	0	0	2	9.1	22	100
195	Ill Def Site	6	27.3	3	13.6	3	13.6	0	0	0	0	10	45.5	22	100
196	Sec Lymph Node	0	0	109	73.6	8	5.4	0	0	0	0	31	20.9	148	100
197	Sec Res. Etc.	0	0	57	17.7	14	4.3	0	0	0	0	251	78	322	100
198	Sec Other	0	0	41	56.2	1	1.4	0	0	0	0	31	42.5	73	100
199	Prim Unknown	0	0	0	0	0	0	0	0	0	0	206	99.9	206	100
200	Lymph Sarcoma	59	98.3	0	0	0	0	0	0	0	0	1	1.7	60	100
201	Hodgkins Disease	169	98.3	0	0	0	0	0	0	1	0.6	2	1.2	172	100
202	Oth. Lymph. Node	348	95.9	0	0	3	0.8	0	0	3	0.8	9	2.5	363	100
203	Mult Myeloma	1	1	0	0	0	0	0	0	97	99	0	0	98	100
204	Leuk Lymphatic	0	0	0	0	0	0	5	2.2	218	97.3	1	0.4	224	100
205	Leuk Myelocytic	1	0.6	0	0	0	0	4	2.2	175	96.7	1	0.6	181	100
206	Leuk Monocytic	0	0	0	0	0	0	1	50	1	50	0	0	2	100
207	Leuk Oth Sp	0	0	0	0	0	0	0	0	1	99.9	0	0	1	100
208	Leuk unspecified	0	0	0	0	0	0	2	4.3	33	71.7	11	23.9	46	100
	All Sites	7288	64.1	363	3.2	291	2.6	12	0.1	529	4.7	2883	25.4	11366	100

TABLE: CHN-8(b): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Detailed Microscopic Diagnosis, 1990-1996 - Females : Chennai

ICD-9	Site	Pri. Hist		Sec. Hist		Cytology		Blood Film		Bone Marrow		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	23	74.2	0	0	0	0	0	0	0	0	8	25.8	31	100
141	Tongue	130	73.9	0	0	0	0	0	0	0	0	46	26.1	176	100
142	Salivary Glands	29	76.3	3	7.9	1	2.6	0	0	0	0	5	13.2	38	100
143	Gum	75	68.2	0	0	0	0	0	0	0	0	35	31.8	110	100
144	Floor of Mouth	9	81.8	0	0	0	0	0	0	0	0	2	18.2	11	100
145	Other Mouth	351	71.8	1	0.2	0	0	0	0	0	0	137	28	489	100
146	Oropharynx	34	77.3	1	2.3	2	4.5	0	0	0	0	7	15.9	44	100
147	Nasopharynx	34	79.1	0	0	1	2.3	0	0	0	0	8	18.6	43	100
148	Hypopharynx	160	79.2	1	0.5	1	0.5	0	0	0	0	40	19.8	202	100
149	Pharynx etc	8	44.4	0	0	0	0	0	0	0	0	10	55.6	18	100
150	Oesophagus	470	76.7	0	0	1	0.2	0	0	0	0	142	23.2	613	100
151	Stomach	419	61.9	15	2.2	1	0.1	0	0	0	0	242	35.7	677	100
152	Small Intestine	9	75	0	0	0	0	0	0	0	0	3	25	12	100
153	Colon	106	70.7	1	0.7	3	2	0	0	0	0	40	26.7	150	100
154	Rectum	207	83.1	2	0.8	0	0	0	0	0	0	40	16.1	249	100
155	Liver	52	65	0	0	4	5	0	0	0	0	24	30	80	100
156	Gall Bladder	41	50.6	4	4.9	1	1.2	0	0	0	0	35	43.2	81	100
157	Pancreas	33	46.5	4	5.6	1	1.4	0	0	0	0	33	46.5	71	100
158	Retroperito	16	76.2	0	0	1	4.8	0	0	0	0	4	19	21	100
159	Other Digs	4	44.4	0	0	1	11.1	0	0	0	0	4	44.4	9	100
160	Nasal Cavity	38	80.9	0	0	0	0	0	0	0	0	9	19.1	47	100
161	Larynx	40	76.9	0	0	0	0	0	0	0	0	12	23.1	52	100
162	Lung	98	40.8	11	4.6	36	15	0	0	0	0	95	39.6	240	100
163	Pleura	2	50	1	25	1	25	0	0	0	0	0	0	4	100
164	Thymus	5	62.5	1	12.5	0	0	0	0	0	0	2	25	8	100
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	Bone	58	85.3	0	0	1	1.5	0	0	0	0	9	13.2	68	100
171	Connective	108	93.9	1	0.9	0	0	0	0	0	0	6	5.2	115	100
172	Skin Melanoma	27	99.9	0	0	0	0	0	0	0	0	0	0	27	100
173	Skin Other	109	93.2	1	0.9	2	1.7	0	0	0	0	5	4.3	117	100
174	Breast Female	1796	76.1	29	1.2	163	6.9	0	0	0	0	371	15.7	2359	100
179	Uterus NOS.	28	51.9	0	0	0	0	0	0	0	0	26	48.1	54	100
180	Cervix	2812	84.7	2	0.1	9	0.3	0	0	0	0	497	15	3320	100
181	Placenta	29	96.7	0	0	0	0	0	0	0	0	1	3.3	30	100
182	Body Uterus	182	91	1	0.5	0	0	0	0	0	0	17	8.5	200	100
183	Ovary	385	62.8	16	2.6	35	5.7	0	0	0	0	177	28.9	613	100
184	Vagina	139	85.3	1	0.6	1	0.6	0	0	0	0	22	13.5	163	100
188	Uri Bladder	79	84	0	0	0	0	0	0	0	0	15	16	94	100
189	Kidney	60	83.3	2	2.8	0	0	0	0	0	0	10	13.9	72	100
190	Eye	33	99.9	0	0	0	0	0	0	0	0	0	0	33	100
191	Brain	124	75.6	0	0	0	0	0	0	0	0	40	24.4	164	100
192	Nervous Sys	9	99.9	0	0	0	0	0	0	0	0	0	0	9	100
193	Thyroid Glands	135	71.4	5	2.6	13	6.9	0	0	0	0	36	19	189	100
194	Oth. Endo. Gland	11	64.7	0	0	0	0	0	0	0	0	6	35.3	17	100
195	Ill Def Site	7	23.3	5	16.7	1	3.3	0	0	0	0	17	56.7	30	100
196	Sec Lymph Node	0	0	65	73	2	2.2	0	0	0	0	22	24.7	89	100
197	Sec Res. Etc	0	0	45	24.1	21	11.2	0	0	0	0	121	64.7	187	100
198	Sec Other	0	0	29	43.9	0	0	0	0	0	0	37	56.1	66	100
199	Prim Unknown	0	0	0	0	0	0	0	0	0	0	218	99.9	218	100
200	Lymph Sarcoma	34	99.9	0	0	0	0	0	0	0	0	0	0	34	100
201	Hodgkins Disease	74	98.7	0	0	0	0	0	0	0	0	1	1.3	75	100
202	Oth. Lymph. Node	198	97.1	0	0	2	1	0	0	0	0	4	2	204	100
203	Mult Myeloma	0	0	0	0	0	0	0	0	39	97.5	1	2.5	40	100
204	Leuk Lymphatic	0	0	0	0	0	0	3	2.7	109	97.3	0	0	112	100
205	Leuk Myelocytic	0	0	0	0	0	0	10	6.7	138	92	2	1.3	150	100
206	Leuk Monocytic	0	0	0	0	0	0	0	0	2	99.9	0	0	2	100
207	Leuk Oth Sp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
208	Leuk unspecified	0	0	0	0	0	0	2	7.1	17	60.7	9	32.1	28	100
	All Sites	8830	71.5	247	2	305	2.5	15	0.1	305	2.5	2653	21.5	12355	100

**TABLE: CHN-9(a): Number of Cancer Deaths by Five Year Age Group and Site (ICD-9)
1990-1996 - 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	1	0	0	2	2	0	4	2	0	0	11	0.16
141	Tongue	0	0	0	0	0	0	5	8	17	32	51	54	45	45	25	13	295	4.42
142	Salivary Gland	0	0	0	0	0	1	0	1	2	2	1	0	1	6	0	0	14	0.21
143	Gum	0	0	0	0	0	0	0	1	0	5	5	9	14	6	7	5	52	0.78
144	Floor of Mouth	0	0	0	0	0	0	0	0	5	6	6	9	6	2	2	3	39	0.58
145	Other Mouth	0	0	0	0	3	1	3	6	12	21	39	40	39	42	27	22	255	3.82
146	Oropharynx	0	0	0	0	0	0	0	1	3	14	25	29	22	13	15	8	130	1.95
147	Nasopharynx	0	1	2	0	2	4	1	2	1	4	5	4	3	3	5	6	43	0.64
148	Hypopharynx	0	0	0	2	1	2	10	8	17	24	46	47	65	40	28	20	310	4.64
149	Pharynx Etc.	0	0	0	1	0	0	0	3	4	6	9	10	9	7	6	13	68	1.02
150	Oesophagus	0	0	0	2	1	2	11	22	34	63	99	115	117	84	55	47	652	9.76
151	Stomach	1	0	0	1	4	6	14	42	59	83	148	170	164	135	87	95	1009	15.10
152	Small Intestine	0	0	0	0	1	0	0	1	1	0	0	0	3	0	0	4	10	0.15
153	Colon	0	0	0	0	1	2	2	5	4	10	23	14	15	15	7	9	107	1.60
154	Rectum	0	0	0	1	6	8	7	9	16	20	30	19	28	27	12	21	204	3.05
155	Liver	2	0	0	1	0	4	3	7	13	19	30	20	25	27	11	10	172	2.57
156	Gall Bladder	0	0	0	0	0	0	1	1	4	1	4	4	8	4	4	2	33	0.49
157	Pancreas	0	0	0	0	1	1	4	5	10	14	11	21	21	13	9	10	120	1.80
158	Retroperitoneum	1	0	0	0	0	0	0	1	1	1	1	1	5	0	0	0	11	0.16
159	Other Dig System	0	0	0	0	0	0	0	0	0	1	0	1	2	2	0	1	7	0.10
160	Nasal Cavity	0	0	0	0	2	3	2	2	2	2	7	2	3	6	4	4	39	0.58
161	Larynx	0	0	0	0	0	1	2	1	15	25	34	53	48	35	19	15	248	3.71
162	Lung	0	0	1	2	1	8	10	16	45	85	112	135	152	118	56	31	772	11.56
163	Pleura	0	0	0	0	0	0	0	1	0	2	0	0	1	0	0	0	4	0.06
164	Thymus	0	0	1	0	3	3	2	0	0	1	1	1	2	0	0	0	14	0.21
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	3	8	6	5	2	0	0	3	0	1	2	0	3	2	36	0.54
171	Conn. Tissue	2	1	0	4	7	3	4	4	4	3	2	5	1	5	4	2	51	0.76
172	Skin Melanoma	0	1	0	0	0	0	2	1	1	1	4	1	2	2	2	3	20	0.30
173	Skin. Other	0	0	0	0	1	0	1	4	6	5	8	9	8	8	7	4	61	0.91
175	Breast Male	0	0	0	0	0	0	0	0	1	1	1	1	2	0	0	2	8	0.12
185	Prostate	0	0	0	0	0	0	0	3	0	0	5	10	24	19	28	60	149	2.23
186	Testis	2	0	0	1	6	1	2	2	0	3	2	2	2	1	3	1	28	0.42
187	Penis Etc.	0	0	0	0	0	3	5	2	7	10	17	23	19	4	9	13	112	1.68
188	Uri. Bladder	0	1	0	1	1	0	0	1	6	10	9	14	17	17	18	16	111	1.66
189	Kidney	3	0	1	0	0	1	1	3	4	8	6	9	10	3	6	2	57	0.85
190	Eye	3	2	0	0	0	0	1	1	0	1	1	0	0	0	1	1	11	0.16
191	Brain	8	11	6	3	10	13	13	16	16	16	19	19	13	18	4	8	193	2.89
192	Nervous System	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2	0.03
193	Thyroid Gland	0	0	0	0	0	0	2	0	0	2	6	7	9	4	5	5	40	0.60
194	Oth. Endo. Gland	2	4	2	1	0	2	0	0	0	1	1	0	1	1	1	0	16	0.24
195	Ill Def. Sites	0	0	0	0	0	0	1	1	0	2	1	3	1	2	0	2	13	0.19
196	Sec. Lymph. Node	1	0	1	1	0	2	0	4	0	10	6	10	18	11	3	8	75	1.12
197	Sec. Res. Etc	0	0	0	1	2	1	6	9	10	30	23	35	32	19	19	23	210	3.14
198	Sec. Other	0	0	0	1	0	1	1	2	1	6	4	5	12	8	5	5	51	0.76
199	Prim. Unknown	2	0	1	3	4	0	5	10	14	30	34	23	29	16	13	21	205	3.07
200	Lymphosarcoma	0	1	3	3	2	2	1	2	2	1	1	2	5	1	0	2	28	0.42
201	Hodgkins. Disease	3	7	4	4	4	5	5	6	8	6	4	5	0	5	1	3	70	1.05
202	Oth. Lymph. Node	3	7	12	8	11	12	9	7	13	20	17	19	21	10	10	11	190	2.84
203	Mult. Myeloma	0	0	0	0	0	1	0	0	3	5	4	8	9	10	8	5	53	0.79
204	Leuk. Lymphatic	21	23	15	12	6	8	4	3	3	1	1	4	1	2	5	2	111	1.66
205	Leuk. Myelocytic	3	5	1	9	15	9	10	11	11	9	13	5	5	11	6	2	125	1.87
206	Leuk. Monocytic	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	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. Unspecified	1	1	5	3	3	2	2	2	1	3	0	0	3	4	0	3	33	0.49
	All Sites	58	67	58	73	106	117	155	237	376	630	879	978	1048	813	540	545	6680	100.00

**TABLE: CHN-11: Number (#) and Proportion (%) of Types of Childhood Cancers 1990-1996
Chennai**

Type of Childhood Cancer	Males		Females	
	#	%	#	%
I. LEUKAEMIAS	184	37.47	87	28.81
(a) Acute lymphocytic leukaemia	148	30.14	65	21.52
(b) Other lymphoid leukaemia	0	0	0	0
(c) Acute non-lymphocytic leukaemia	21	4.28	17	5.63
(d) Chronic myeloid leukaemia	1	0.2	1	0.33
(e) Other and unspecified leukaemia	14	2.85	4	1.32
II. LYMPHOMAS & OTHER RETICULOENDOTHELIAL	123	25.05	48	15.89
(a) Hodgkin's disease	58	11.81	22	7.28
(b) Non-Hodgkin lymphoma	52	10.59	18	5.96
(c) Burkitt's lymphoma	5	1.02	3	0.99
(d) Unspecified lymphomas	8	1.63	5	1.66
(e) Histiocytosis X	0	0	0	0
(f) Other reticuloendothelial neoplasms	0	0	0	0
III. C.N.S.& MISC.INTRACRANIAL & INTRASPINAL NEOP.	50	10.18	38	12.58
(a) Ependymoma	2	0.41	3	0.99
(b) Astrocytoma	18	3.67	23	7.62
(c) Medulloblastoma	16	3.26	6	1.99
(d) Other glioma	6	1.22	2	0.66
(e) Misc.intracranial & intraspinal neop.	8	1.63	4	1.32
IV. SYMPATHETIC NERVOUS SYSTEM TUMOURS	13	2.65	15	4.97
(a) Neuroblastoma & ganglioneuroblastoma	12	2.44	15	4.97
(b) Other	1	0.2	0	0
V. RETINOBLASTOMA	24	4.89	26	8.61
VI. RENAL TUMOURS	20	4.07	13	4.3
(a) Wilms' tumour	17	3.46	11	3.64
(b) Renal carcinoma	2	0.41	0	0
(c) Other & unsp. malignant renal tumours	1	0.2	2	0.66
VII. HEPATIC TUMOURS	8	1.63	8	2.65
(a) Hepatoblastoma	7	1.43	6	1.99
(b) Hepatic carcinoma	0	0	0	0
(c) Other & unsp. malignant hepatic tumours	1	0.2	2	0.66
VIII. MALIGNANT BONE TUMOURS	13	2.65	14	4.64
(a) Osteosarcoma	4	0.81	8	2.65
(b) Chondrosarcoma	1	0.2	0	0
(c) Ewing's sarcoma	5	1.02	5	1.66
(d) Other & unsp. malignant bone tumours	3	0.61	1	0.33
IX. SOFT-TISSUE(S-T) SARCOMAS(S)	20	4.07	16	5.3
(a) Rhabdomyos. embryonals.& s-t.Ewings tum.	12	2.44	12	3.97
(b) Fibros.neurofibros.&oth.fibromatous neop.	1	0.2	2	0.66
(c) Other soft-tissue sarcoma	7	1.43	2	0.66
X. GERM-CELL TROPHOBLASTIC & OTH GONADAL NEOP.	13	2.65	18	5.96
(a) Non-gonadal gc & trophoblastic neop.	7	1.43	4	1.32
(b) Gonadal gc & trophoblastic neop.	5	1.02	11	3.64
(c) Gonadal carcinoma	0	0	0	0
(d) Other & unsp.malignant gonadal tumours	1	0.2	3	0.99
XI. CARCINOMA & OTH MALIGNANT EPITHELIAL NEOP.	16	3.26	11	3.64
(a) Adrenocortical carcinoma	0	0	0	0
(b) Thyroid carcinoma	0	0	0	0
(c) Nasopharyngeal carcinoma	5	1.02	0	0
(d) Malanomatous neoplasms	3	0.61	0	0
(e) Other carcinoma	8	1.63	11	3.64
XII. OTHER & UNSP. MALIGNANT NEOPLASMS	5	1.02	8	2.65
OTHERS (Not Classified)	2	0.41	0	0
TOTAL (ALL CHILDHOOD CANCERS)	491	100	302	100

POPULATION BASED CANCER REGISTRY, DELHI

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The Population Based Cancer Registry at Institute Rotary Cancer Hospital (IRCH), All India Institute of Medical Sciences (AIIMS), Delhi was established by the Indian Council of Medical Research in January 1986 and covers urban areas of Delhi.

The Union Territory (UT) of Delhi, covering an area of 1483 sq. kms. is situated between the Himalayas and Aravalli range in the heart of the Indian sub-continent. It lies between 28.25 and 28.53 degrees North Latitude and 76.50 and 73.22 degrees East Longitude. It is bounded on the North, West and South by Haryana and on the East by Uttar Pradesh. The Union Territory of Delhi, for the purpose of census was divided into 5 tracts viz:- Delhi Municipal Corporation (Urban), Delhi Municipal Committee, Delhi Cantonment Board, 29 Census Towns, Rural Areas. The total population of Delhi UT as per 1991 census (as on 1st March 1991) was 94,20,644. Of the total population, 51,55,512 (54.7%) were males and 42,65,132 (45.3%) were females. Out of the total population of Delhi UT, the population of Delhi UT urban area as on 1st March, 1991 was 84,71,625 with 46,30,456 (54.7%) males and 38,41,169 (45.3%) females. Density of population was 12,361 inhabitants per sq. km. The area of Delhi UT urban is 685.34 sq. kms.

The Registry uses active case finding from 155 major sources of data consisting of cancer hospitals, general hospitals, teaching hospitals, Govt. hospitals/private hospitals and more than 250 private nursing homes and departments of vital statistics, of Delhi Municipal Corporation, Delhi Municipal Committee and the Cantonment Board.

The overall supervision and guidance is provided by the Officer-In-Charge of the registry. The method of daily working and technical guidance is provided by the Senior Research Officer. The registry has an active training programme. Special training is imparted to the social workers in the techniques of interviewing cancer patients and abstraction of data of cancer patients from hospital in-patients and out-patients services reports, radiotherapy, pathology files, medical records and death records. Data abstracters are also trained in cancer registration system methodology, gross anatomy, pathology, diagnostic and treatment methods of cancer, cancer epidemiology, mechanism of carcinogenesis and coding of cancer data.

Although cancer is not a notifiable disease, arrangements have been made with the hospitals outside registration area to notify the registry of resident cancer cases which are diagnosed and treated in them,

they are visited once a month or year to review these procedures. General practitioners are not contacted individually, as at one stage or the other almost all cancer patients are referred to specialists. The smaller nursing homes/clinics are contacted by letters and registration about cancer patients being treated by them are recovered on a proforma.

The social workers visit the collaborating hospitals interview cancer patients and suspected cases, abstract relevant information from hospital records and check permanent address, so that, only residents are used for calculating incidence rates and epidemiological studies and non-residents and migrants diagnosed prior to migration are excluded. Many patients present at advanced stages of disease and treatment may be commenced without waiting for the results of investigations. Therefore, even cases diagnosed on the basis of clinical findings alone are also registered. The only follow-up information collected routinely is the date and cause of death. Complete information on every cancer patient as per the NCRP requirement is obtained from every collaborating centre. Additional information to assess the residential status, in those cancer cases whose residential status is unknown is obtained by contacting the patients through post/telephone/or checking the electoral roll, whichever is available.

The death registration system in Delhi is very inadequate and incomplete. Death certificate of cancer patients maintained by the Municipal Corporation of Delhi (Urban), Delhi Municipal Committee and Delhi Cantonment Board are regularly reviewed and compared with the list of all living patients, not only to ensure the inclusion of a previously unregistered case, but also to complete the data on patients already registered. After collating the death certificate with the registered cases, the remaining death certificates, for which there is no extra information, are registered as "Death Certificate Only" cases (DCO).

Tata Memorial Hospital, Mumbai has been included as one of the collaborating centres, since a large number of residents of Delhi prefer to go to Tata Memorial Hospital for specialized cancer treatment. The resident cases are checked for duplicates and error. The data are then coded. Coding is done by ICD-9 (Site) and ICD-O (Morphology). Inconsistencies in coding corrected by Computer. Quality Control of information is maintained through the use of data processing, editing techniques, case finding audits and reviews of coded and abstracted data. A validity check was carried out on all the variables, and records with missing values and impossible codes were checked against the original files and corrected. Finally, a series of checks of site versus histology, site versus sex and site/histology versus age etc. were carried out to detect the coding or keying errors.

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6. Census of India 1981, Report of the Expert Committee on the population projections, Occasional papers no. 4 of 1998, page no. 29, 61 & 92.

Figure: DEL-1:
Population Pyramid showing Age Distribution: 1990-1996
Delhi

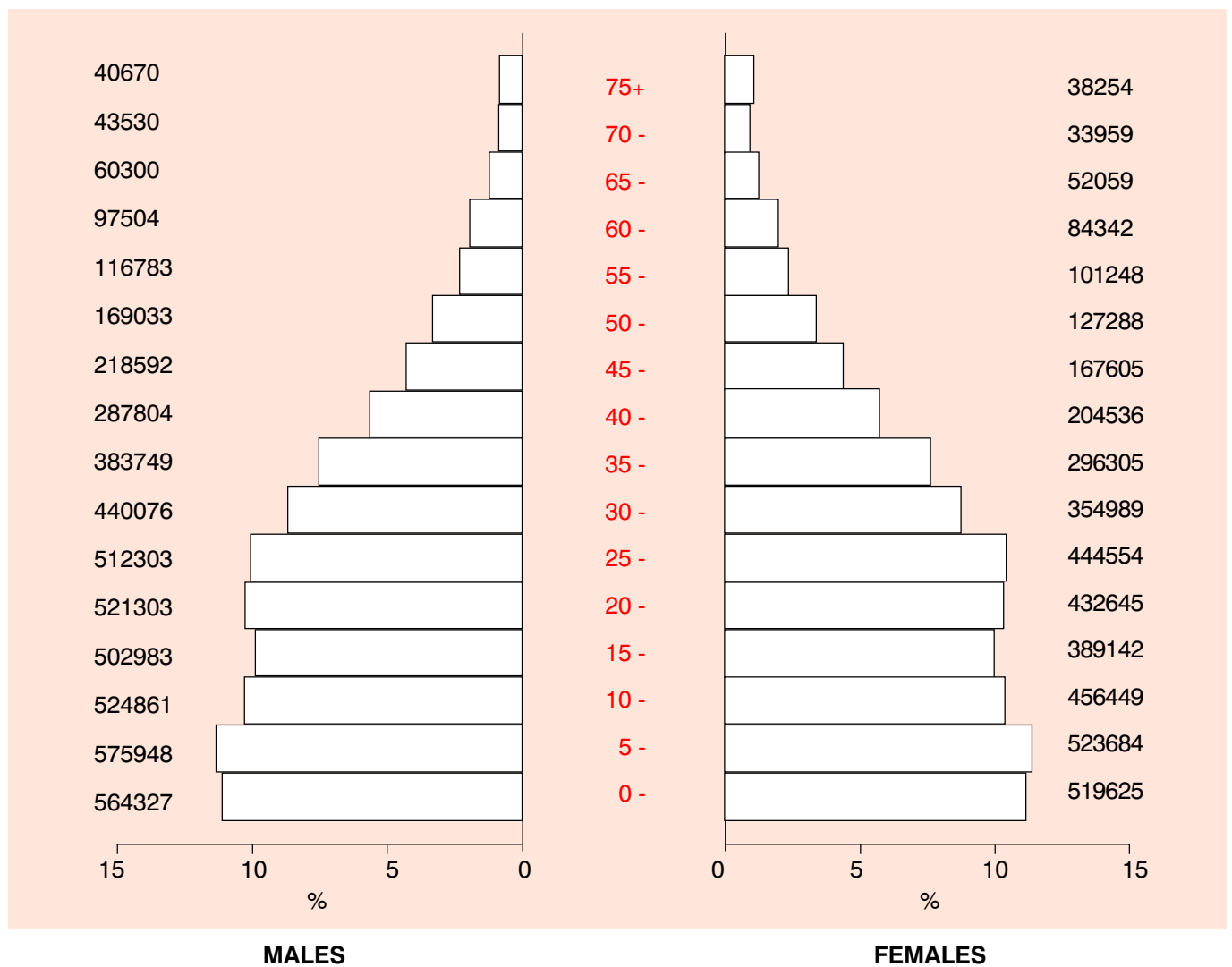


TABLE: DEL-1

Population by Five Year Age Group and Gender : 1990-1996
Number and Relative Proportion (%)

Delhi

Age Group	MALES		FEMALES		TOTAL	
	Number	%	Number	%	Number	%
0-4	564327	11.15	519625	12.29	1083952	11.67
5-9	575948	11.38	523684	12.39	1099632	11.84
10-14	524861	10.37	456449	10.80	981310	10.57
15-19	502983	9.94	389142	9.21	892125	9.61
20-24	521306	10.30	432645	10.24	953951	10.27
25-29	512303	10.13	444554	10.52	956857	10.30
30-34	440076	8.70	354989	8.40	795065	8.56
35-39	383749	7.58	296305	7.01	680054	7.32
40-44	287804	5.69	204536	4.84	492340	5.30
45-49	218592	4.32	167605	3.97	386197	4.16
50-54	169033	3.34	127288	3.01	296321	3.19
55-59	116783	2.31	101248	2.40	218031	2.35
60-64	97504	1.93	84342	2.00	181846	1.96
65-69	60300	1.19	52059	1.23	112359	1.21
70-74	43530	0.86	33959	0.80	77489	0.83
75+	40670	0.80	38254	0.91	78924	0.85
Total	5059769	100.0	4226684	100.0	9286453	100.0

TABLE: DEL-2**Main Sources* of Registration of Incident Cancers: 1990-1996****Delhi**

Name of Institution	Year of Diagnosis and Relative Proportion (%)							1990-96	
	1990	1991	1992	1993	1994	1995	1996	Number	%
AIIMS	17.1	18.4	19.6	17.5	18.3	17.1	17.9	9367	18.0
Safdarjang Hospital	20.2	18.1	17.4	17.7	13.2	12.8	12.7	8241	15.8
ICPO/MAMC/LNJP	17.4	18.3	15.6	15.1	13.2	11.5	11.4	7527	14.5
MCA	5.8	3.3	6.1	6.2	8.0	7.7	9.4	3532	6.8
Gangaram Hospital	3.6	4.5	5.3	5.8	5.3	5.8	5.8	2708	5.2
RML Hospital	3.9	6.2	6.1	3.9	5.5	4.9	5.7	2691	5.2
Batra Hospital	5.6	4.1	3.8	3.8	3.5	4.0	2.9	2033	3.9
UCMS	4.1	2.5	4.2	3.5	3.3	3.7	2.4	1758	3.4
GB Pant Hospital	3.9	3.6	3.6	3.5	2.5	3.3	2.1	1665	3.2
LHMC	2.9	3.1	2.3	2.6	2.6	2.9	2.8	1433	2.8
ESI Hospital	1.5	2.5	0.8	2.6	2.3	2.8	1.6	1052	2.0
Dharmashila Hospital	0.0	0.0	0.0	0.0	1.5	3.6	4.3	755	1.4
St Stephen's Hospital	1.1	1.3	1.4	1.8	2.0	1.4	0.9	753	1.4
TMH-Mumbai	1.8	1.4	0.2	1.4	1.3	1.9	1.1	682	1.3
NDMC	0.8	0.6	0.0	0.1	1.7	2.0	2.5	599	1.2
IRCH	0.4	0.7	0.6	0.5	2.3	1.1	1.6	557	1.1
Hindu Rao Hospital	1.2	1.3	0.8	1.1	1.5	0.8	0.9	557	1.1
Holy Family Hospital	0.5	0.6	1.1	1.4	1.2	1.4	0.9	542	1.0
MCK	0.9	1.8	1.6	1.4	0.8	0.5	0.4	530	1.0
Total of above								46982	90.8
All Others								5097	9.8
Total All Sources	100	100	100	100	100	100	100	52079	100.0

* 1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 1990-1996.

* 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-3(a): Number of Incident Cancers by Five Year Age Group and Site (ICD-9):
1990-1996 – 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	3	0	1	0	2	1	5	7	10	8	8	11	6	11	5	78	0.30
141	Tongue	2	0	0	3	4	17	40	72	97	137	197	185	207	115	92	74	1242	4.74
142	Salivary Gland	2	1	7	3	4	10	10	6	8	14	22	5	14	7	7	6	126	0.48
143	Gum	0	0	0	2	0	7	6	10	17	22	32	28	22	24	15	9	194	0.74
144	Floor of Mouth	0	0	1	0	0	1	0	1	3	4	10	7	5	6	1	2	41	0.16
145	Other Mouth	1	0	0	1	4	7	26	33	70	58	114	67	70	67	58	43	619	2.36
146	Oropharynx	0	5	1	3	6	4	13	28	45	63	127	97	84	62	30	26	594	2.27
147	Nasopharynx	1	4	7	9	12	5	4	9	14	11	10	15	13	15	7	4	140	0.53
148	Hypopharynx	0	0	0	0	0	1	13	16	39	56	106	80	108	60	51	25	555	2.12
149	Pharynx Etc.	0	0	1	1	1	0	5	2	5	6	11	15	22	18	17	4	108	0.41
150	Oesophagus	0	0	0	2	8	9	29	34	80	125	197	166	190	156	113	99	1208	4.61
151	Stomach	1	0	1	3	5	22	29	46	59	86	128	105	113	81	65	60	804	3.07
152	Small Intestine	0	0	0	0	1	1	2	3	6	1	5	8	8	5	1	5	46	0.18
153	Colon	0	0	0	7	10	14	28	46	50	72	78	58	55	46	40	39	543	2.07
154	Rectum	2	0	4	9	24	24	28	42	48	73	70	72	86	72	43	52	649	2.48
155	Liver	10	5	7	5	7	12	16	25	30	40	59	53	71	52	40	33	465	1.77
156	Gall Bladder	1	1	0	1	2	14	21	35	44	68	99	93	115	104	63	56	717	2.73
157	Pancreas	0	0	0	1	2	6	16	20	34	36	53	63	53	36	43	48	411	1.57
158	Retroperitoneum	0	0	0	3	2	6	7	5	8	4	8	12	7	3	2	2	69	0.26
159	Other Dig System	0	0	0	0	0	2	1	8	3	6	8	7	11	4	8	7	65	0.25
160	Nasal Cavity	2	4	3	3	6	7	8	4	10	6	14	7	11	6	1	9	101	0.39
161	Larynx	0	2	1	4	7	16	35	61	103	187	283	279	336	214	175	117	1820	6.94
162	Lung	0	1	2	2	6	26	45	68	151	221	372	383	406	342	256	182	2463	9.39
163	Pleura	0	0	0	0	1	1	2	0	3	3	3	4	1	4	3	4	29	0.11
164	Thymus	2	0	1	3	5	4	7	1	5	0	8	4	1	1	2	0	44	0.17
165	Other Resp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
170	Bone	13	20	65	104	79	46	25	20	24	23	24	15	16	10	9	15	508	1.94
171	Conn. Tissue	31	18	29	29	29	11	28	28	40	25	31	16	31	16	15	17	394	1.50
172	Skin Melanoma	2	1	0	1	3	1	3	4	8	11	9	4	11	5	5	4	72	0.27
173	Skin. Other	3	2	2	4	7	13	12	17	15	19	27	28	35	31	26	21	262	1.00
175	Breast Male	0	1	0	1	3	4	0	8	18	21	18	20	21	19	10	14	158	0.60
185	Prostate	0	1	0	1	5	7	8	3	11	18	57	95	142	175	224	293	1040	3.97
186	Testis	26	0	2	15	38	42	36	36	13	24	14	10	17	6	6	7	292	1.11
187	Penis Etc.	0	1	0	1	7	11	11	18	20	28	41	28	37	17	16	22	258	0.98
188	URI. Bladder	1	1	3	1	6	10	22	37	51	51	126	157	166	192	142	137	1103	4.21
189	Kidney	53	11	8	4	7	8	14	23	27	38	56	49	58	42	31	21	450	1.72
190	Eye	75	19	7	2	1	1	2	2	5	3	5	5	4	3	0	3	137	0.52
191	Brain	54	98	71	43	67	83	94	117	98	111	88	102	79	73	27	25	1230	4.69
192	Nervous System	6	4	3	1	5	3	2	3	3	1	2	2	0	1	1	2	39	0.15
193	Thyroid Gland	0	1	2	2	19	10	16	14	26	18	31	25	19	7	7	11	208	0.79
194	Oth. Endo. Gland	49	17	5	6	3	5	2	1	3	5	4	2	2	3	1	0	108	0.41
195	Ill Def. Sites	7	4	5	7	12	5	5	20	18	27	39	29	35	18	20	23	274	1.05
196	Sec. Lymph. Node	1	1	1	3	4	14	12	17	39	52	85	59	70	59	39	38	494	1.88
197	Sec. Res. Etc	3	2	2	3	8	8	20	14	27	51	74	51	72	47	41	44	467	1.78
198	Sec. Other	0	0	0	1	2	0	3	7	11	22	27	34	23	18	19	16	183	0.70
199	Prim. Unknown	8	12	13	12	21	23	38	66	99	155	169	225	190	180	173	198	1582	6.03
200	Lymphosarcoma	4	3	1	1	1	2	0	1	3	4	0	3	1	2	0	1	27	0.10
201	Hodgkins. Disease	14	93	63	35	44	62	47	47	33	32	36	28	29	15	15	13	606	2.31
202	Oth. Lymph. Node	32	56	65	64	66	64	65	80	91	73	95	91	120	89	80	71	1202	4.58
203	Mult. Myeloma	0	0	0	1	3	1	10	13	20	31	45	61	69	37	36	32	359	1.37
204	Leuk. Lymphatic	144	140	100	59	51	18	20	16	13	18	24	19	27	20	13	22	704	2.69
205	Leuk. Myelocytic	32	44	47	44	59	63	69	59	55	42	46	33	30	24	27	20	694	2.65
206	Leuk. Monocytic	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	0.01
207	Leuk. Misc.	0	0	1	0	0	2	0	0	0	1	0	0	0	0	0	0	4	0.02
208	Leuk. Unspecified	23	19	24	28	21	17	13	13	15	11	11	6	5	5	6	13	230	0.88
	All Sites	605	595	555	539	688	752	969	1264	1725	2224	3206	3019	3329	2620	2133	1995	26218	100.00

TABLE: DEL-5(a):
Trends in Crude (CR) & Age Adjusted (AAR) Cancer Incidence Rates from 1990 to 1996 - Males
Delhi

ICD-9	Site	1990		1991		1992		1993		1994		1995		1996	
		CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR
140	Lip	0.3	0.5	0.3	0.3	0.3	0.4	0.3	0.5	0.2	0.4	0.1	0.2	0.2	0.3
141	Tongue	3.1	5.6	3.8	6.4	3.5	5.8	4.0	6.8	3.0	5.2	3.7	6.3	3.5	6.0
142	Salivary Gland	0.3	0.5	0.4	0.6	0.3	0.4	0.3	0.4	0.4	0.6	0.4	0.6	0.4	0.7
143	Gum	0.6	0.9	0.5	1.0	0.4	0.7	0.5	0.8	0.6	1.0	0.6	0.9	0.7	1.1
144	Floor of Mouth	0.0	0.0	0.2	0.3	0.1	0.1	0.1	0.2	0.2	0.3	0.1	0.2	0.1	0.3
145	Other Mouth	1.3	2.2	1.7	2.8	1.7	2.9	1.8	3.1	1.9	3.2	1.9	3.2	2.0	3.3
146	Oropharynx	1.9	3.2	1.6	2.7	1.5	2.5	1.7	2.9	1.7	3.0	1.7	2.8	1.7	2.8
147	Nasopharynx	0.6	1.0	0.3	0.4	0.5	0.8	0.4	0.6	0.3	0.5	0.2	0.3	0.4	0.6
148	Hypopharynx	1.8	3.3	1.6	2.7	1.5	2.7	1.4	2.6	1.4	2.4	1.6	2.8	1.7	3.1
149	Pharynx Etc.	0.4	0.7	0.4	0.9	0.3	0.6	0.3	0.5	0.3	0.7	0.2	0.3	0.3	0.5
150	Oesophagus	3.4	6.3	3.1	5.6	3.9	7.0	3.5	6.2	3.6	6.6	3.0	5.6	3.4	6.2
151	Stomach	2.1	3.6	2.2	3.9	2.4	4.2	2.9	4.9	2.5	4.1	1.8	3.0	2.1	3.6
152	Small Intestine	0.1	0.2	0.2	0.3	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.2	0.2	0.4
153	Colon	1.4	2.2	1.3	2.0	1.5	2.5	1.7	2.7	1.5	2.5	1.9	3.2	1.4	2.2
154	Rectum	2.0	3.4	1.6	2.7	1.8	3.1	2.0	3.4	2.2	3.8	1.7	2.8	1.6	2.3
155	Liver	1.2	2.0	1.1	1.9	1.4	2.3	1.4	2.4	1.3	2.2	1.6	2.7	1.2	2.2
156	Gall Bladder	1.7	2.9	1.9	3.7	1.8	3.1	2.3	4.1	2.2	3.8	2.2	3.8	2.1	3.9
157	Pancreas	0.9	1.6	1.2	2.0	0.8	1.5	1.5	2.6	1.3	2.3	1.3	2.2	1.1	2.0
158	Retroperitoneum	0.3	0.4	0.2	0.2	0.3	0.4	0.2	0.3	0.2	0.3	0.1	0.2	0.1	0.2
159	Other Dig System	0.2	0.4	0.0	0.1	0.1	0.2	0.2	0.4	0.2	0.4	0.2	0.4	0.3	0.4
160	Nasal Cavity	0.2	0.3	0.3	0.4	0.3	0.5	0.4	0.5	0.2	0.3	0.2	0.3	0.3	0.5
161	Larynx	5.7	10.5	4.6	8.3	5.1	9.3	5.5	9.7	5.3	9.6	4.6	8.8	5.2	9.3
162	Lung	6.6	12.5	6.7	12.4	6.4	11.7	7.6	14.1	7.3	13.6	6.3	11.4	7.6	14.1
163	Pleura	0.1	0.1	0.1	0.1	0.4	0.7	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
164	Thymus	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1
165	Other Resp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170	Bone	1.2	1.3	1.4	1.5	1.8	2.3	1.6	1.6	1.4	1.5	1.0	1.2	1.6	1.6
171	Conn. Tissue	1.1	1.4	1.0	1.3	1.5	1.9	1.3	1.6	0.7	1.0	1.0	1.3	1.2	1.6
172	Skin Melanoma	0.1	0.1	0.2	0.4	0.3	0.5	0.3	0.4	0.2	0.3	0.2	0.4	0.2	0.2
173	Skin. Other	0.7	1.2	0.9	1.4	0.8	1.4	0.7	1.2	0.6	1.0	0.9	1.5	0.7	1.1
175	Breast Male	0.5	0.9	0.3	0.5	0.6	1.0	0.4	0.7	0.4	0.6	0.5	0.8	0.5	0.9
185	Prostate	2.7	5.8	2.7	6.0	3.0	6.7	3.2	7.0	3.5	7.6	2.9	6.4	2.6	5.7
186	Testis	1.0	1.1	1.0	1.2	0.7	0.8	0.8	0.9	0.6	0.7	0.9	1.0	0.8	0.9
187	Penis Etc.	0.7	1.1	0.8	1.4	0.8	1.2	0.6	0.9	0.8	1.3	0.8	1.3	0.6	1.0
188	URI. Bladder	3.6	7.2	2.9	5.8	3.2	6.4	3.0	5.9	2.7	5.4	3.3	6.2	3.1	5.8
189	Kidney	1.0	1.5	1.0	1.5	1.4	2.1	1.0	1.6	1.5	2.4	1.4	2.3	1.5	2.5
190	Eye	0.3	0.3	0.4	0.5	0.3	0.4	0.3	0.3	0.6	0.7	0.4	0.4	0.4	0.5
191	Brain	3.2	4.2	2.8	3.6	3.8	5.0	3.9	4.9	4.0	4.7	3.3	4.2	3.4	4.2
192	Nervous System	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
193	Thyroid Gland	0.5	0.9	0.6	0.7	0.4	0.6	0.7	0.9	0.6	0.8	0.6	0.9	0.7	0.9
194	Oth. Endo. Gland	0.2	0.2	0.2	0.2	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.5	0.3	0.3
195	Ill Def. Sites	0.9	1.6	0.6	0.9	1.7	2.8	0.7	1.2	0.6	1.0	0.5	0.7	0.5	0.8
196	Sec. Lymph. Node	1.3	2.1	1.2	2.1	1.1	2.0	1.2	2.1	1.6	2.8	1.7	3.1	1.6	2.8
197	Sec. Res. Etc	1.0	1.8	1.8	2.9	1.5	2.8	1.2	2.1	1.7	3.1	1.1	1.9	0.9	1.7
198	Sec. Other	0.7	1.4	0.4	0.6	0.8	1.3	0.5	1.0	0.6	1.1	0.4	0.6	0.3	0.5
199	Prim. Unknown	5.4	9.7	3.8	6.9	4.8	9.0	4.5	8.1	4.4	7.9	3.1	5.5	5.5	9.6
200	Lymphosarcoma	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.0	0.0
201	Hodgkins. Disease	1.6	1.8	1.8	2.1	1.8	2.0	2.2	2.6	2.0	2.2	1.6	1.6	1.2	1.4
202	Oth. Lymph. Node	3.0	4.4	3.0	4.5	3.5	5.2	3.5	4.9	3.9	5.4	3.2	4.4	3.7	5.6
203	Mult. Myeloma	0.7	1.3	1.0	1.9	0.9	1.5	1.1	2.2	1.2	2.2	1.2	2.2	0.9	1.7
204	Leuk. Lymphatic	1.8	2.0	2.0	2.2	2.0	2.3	2.0	2.1	2.0	2.3	2.1	2.4	2.0	2.4
205	Leuk. Myelocytic	1.9	2.4	1.8	2.2	1.9	2.0	1.7	1.8	2.2	2.6	2.3	2.7	2.0	2.5
206	Leuk. Monocytic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
207	Leuk. Misc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
208	Leuk. Unspecified	1.0	1.1	0.5	0.5	0.6	0.7	0.8	1.0	0.8	1.0	0.4	0.4	0.5	0.6
	All Sites	72.4	121.1	69.3	114.6	76.2	125.7	77.8	127.6	76.8	127.0	70.9	116.6	74.5	122.7

**TABLE: DEL-5(b):
Trends in Crude (CR) & Age Adjusted (AAR) Cancer Incidence Rates from 1990 to 1996 - Females
Delhi**

ICD-9	Site	1990		1991		1992		1993		1994		1995		1996	
		CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR
140	Lip	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2
141	Tongue	1.3	2.2	1.2	2.1	1.2	2.0	1.0	1.7	1.1	1.8	0.9	1.5	1.2	2.0
142	Salivary Gland	0.4	0.5	0.4	0.8	0.2	0.3	0.4	0.6	0.4	0.5	0.3	0.4	0.3	0.4
143	Gum	0.8	1.4	0.8	1.5	0.2	0.3	0.5	0.9	0.5	0.9	0.5	1.0	0.7	1.0
144	Floor of Mouth	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1
145	Other Mouth	0.7	1.2	0.9	1.6	0.7	1.3	0.9	1.6	1.1	1.9	1.0	1.8	0.7	1.2
146	Oropharynx	0.3	0.4	0.3	0.5	0.3	0.6	0.3	0.5	0.5	0.9	0.4	0.8	0.3	0.4
147	Nasopharynx	0.2	0.3	0.2	0.2	0.3	0.3	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2
148	Hypopharynx	0.6	1.1	0.5	0.8	0.2	0.4	0.5	0.7	0.3	0.5	0.2	0.3	0.2	0.3
149	Pharynx Etc.	0.1	0.2	0.1	0.1	0.1	0.3	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1
150	Oesophagus	2.9	5.2	2.2	4.0	2.7	4.9	2.1	3.8	2.7	4.7	2.5	4.5	2.3	3.9
151	Stomach	1.6	2.6	1.3	2.0	1.7	2.9	1.9	3.2	1.4	2.4	1.1	1.8	1.4	2.4
152	Small Intestine	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1
153	Colon	1.2	2.0	1.1	1.7	1.3	1.9	1.6	2.8	1.2	2.1	1.0	1.7	1.1	1.8
154	Rectum	0.9	1.3	1.3	2.2	1.3	1.9	1.0	1.7	1.6	2.5	1.4	2.0	1.2	2.0
155	Liver	0.9	1.4	0.6	1.0	0.9	1.4	0.7	1.2	0.7	1.2	0.7	1.2	1.0	1.4
156	Gall Bladder	4.0	6.9	4.9	8.6	5.1	9.2	5.4	9.4	5.3	9.4	5.6	9.7	5.2	9.0
157	Pancreas	1.0	1.8	0.9	1.5	0.9	1.7	1.1	1.9	0.8	1.4	1.0	1.8	1.0	1.5
158	Retroperitoneum	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.3	0.2	0.3	0.1	0.2	0.1	0.2
159	Other Dig System	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.6	0.2	0.4	0.1	0.2	0.1	0.1
160	Nasal Cavity	0.3	0.5	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.2
161	Larynx	1.0	1.8	0.8	1.2	0.8	1.3	0.8	1.3	0.8	1.5	0.8	1.4	0.7	1.2
162	Lung	1.9	3.2	1.3	2.2	1.7	3.0	1.7	2.8	1.6	2.9	1.6	2.8	1.7	2.9
163	Pleura	0.1	0.2	0.0	0.0	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164	Thymus	0.1	0.1	0.0	0.1	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
165	Other Resp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170	Bone	1.4	1.5	1.0	1.2	1.5	1.8	1.2	1.5	0.9	0.9	0.6	0.6	1.0	1.1
171	Conn. Tissue	0.9	1.1	0.8	1.1	1.2	1.6	0.9	1.1	1.0	1.3	1.1	1.3	0.8	0.9
172	Skin Melanoma	0.3	0.4	0.2	0.4	0.1	0.2	0.2	0.4	0.2	0.2	0.2	0.3	0.2	0.2
173	Skin. Other	0.5	0.8	0.8	1.2	0.3	0.5	0.6	0.9	0.8	1.2	0.8	1.3	0.7	1.1
174	Breast Female	18.0	27.6	18.4	27.9	18.0	26.9	19.0	28.5	18.3	27.9	19.9	30.1	18.6	27.7
179	Uterus NOS.	0.8	1.4	0.3	0.5	0.7	1.2	0.4	0.6	0.7	1.1	0.8	1.5	0.5	0.8
180	Cervix Uteri	19.2	28.6	17.0	25.9	18.5	28.0	19.6	30.3	17.0	26.4	16.1	25.1	15.3	22.7
181	Placenta	0.3	0.3	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2
182	Corpus Uteri	1.4	2.5	1.3	2.2	1.8	3.0	2.4	4.4	1.6	2.8	1.6	2.7	1.4	2.4
183	Ovary Etc.	4.5	7.0	5.5	8.1	5.2	7.7	5.6	8.4	5.8	8.4	6.0	9.2	6.0	9.0
184	Other Fem Gen.	0.8	1.4	0.8	1.4	0.5	0.8	0.6	1.1	0.6	1.1	0.7	1.1	0.4	0.9
188	URI. Bladder	0.9	1.6	0.9	1.8	0.9	1.7	0.9	1.7	0.8	1.4	0.7	1.2	0.6	1.2
189	Kidney	0.8	1.2	0.8	1.1	1.0	1.4	0.8	1.1	0.8	1.1	0.9	1.4	0.7	1.0
190	Eye	0.1	0.1	0.5	0.5	0.3	0.3	0.5	0.6	0.3	0.3	0.2	0.2	0.4	0.4
191	Brain	2.4	3.1	2.3	2.8	2.5	3.1	2.5	3.4	2.3	2.8	2.4	3.2	2.6	3.3
192	Nervous System	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0
193	Thyroid Gland	1.4	1.9	1.3	1.9	1.4	1.9	1.5	2.1	1.7	2.2	1.8	2.3	1.4	1.8
194	Oth. Endo. Gland	0.2	0.2	0.3	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.4	0.4	0.2	0.2
195	Ill Def. Sites	0.6	1.0	0.6	0.9	1.1	1.7	0.5	0.6	0.4	0.6	0.6	1.0	0.4	0.6
196	Sec. Lymph. Node	0.9	1.5	0.6	0.9	0.6	1.0	0.4	0.6	0.5	0.8	0.5	0.8	0.4	0.5
197	Sec. Res. Etc	1.5	2.4	1.7	2.8	1.3	2.2	1.5	2.5	1.2	2.1	1.1	1.8	1.2	2.2
198	Sec. Other	0.5	0.9	0.4	0.6	0.6	1.0	0.2	0.4	0.5	0.9	0.2	0.4	0.3	0.5
199	Prim. Unknown	4.3	7.3	3.0	5.0	4.6	8.0	5.1	8.6	3.9	6.5	3.8	6.5	4.8	8.3
200	Lymphosarcoma	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
201	Hodgkins. Disease	0.7	1.0	0.8	1.1	0.7	0.9	0.8	1.0	0.5	0.6	0.7	0.8	0.4	0.6
202	Oth. Lymph. Node	2.1	3.1	2.1	3.2	1.7	2.6	1.8	2.7	2.1	3.0	2.1	3.1	1.9	2.9
203	Mult. Myeloma	0.6	1.3	0.9	1.5	0.6	1.2	0.8	1.4	0.9	1.6	0.6	1.1	0.7	1.3
204	Leuk. Lymphatic	1.0	1.0	0.8	0.9	0.9	1.0	1.2	1.3	1.2	1.2	1.2	1.4	1.2	1.2
205	Leuk. Myelocytic	1.2	1.5	1.6	1.9	1.8	2.2	1.4	1.7	2.1	2.3	1.7	2.0	1.6	1.9
206	Leuk. Monocytic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
207	Leuk. Misc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
208	Leuk. Unspecified	0.7	0.9	0.4	0.4	0.4	0.7	0.6	0.6	0.3	0.3	0.3	0.4	0.2	0.3
	All Sites	88.6	137.4	84.1	130.7	88.7	137.5	92.4	143.5	87.6	135.5	86.8	135.6	84.0	128.1

TABLE: DEL-6(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) 1990-1996: Males Delhi

ICD-9	Site	0 - 64 Years		0 - 74 Years	
		Cu.Rate %	Cu.Risk	Cu.Rate%	Cu.Risk
140	Lip	0.02	0.02	0.05	0.05
141	Tongue	0.44	0.44	0.73	0.73
142	Salivary Gland	0.04	0.04	0.06	0.06
143	Gum	0.06	0.06	0.12	0.12
144	Floor of Mouth	0.01	0.01	0.02	0.02
145	Other Mouth	0.19	0.19	0.36	0.36
146	Oropharynx	0.22	0.22	0.34	0.34
147	Nasopharynx	0.04	0.04	0.07	0.07
148	Hypopharynx	0.21	0.21	0.36	0.36
149	Pharynx Etc.	0.03	0.03	0.08	0.08
150	Oesophagus	0.40	0.40	0.77	0.77
151	Stomach	0.26	0.26	0.46	0.46
152	Small Intestine	0.02	0.02	0.02	0.02
153	Colon	0.16	0.16	0.28	0.28
154	Rectum	0.19	0.19	0.35	0.35
155	Liver	0.14	0.14	0.27	0.27
156	Gall Bladder	0.23	0.23	0.46	0.46
157	Pancreas	0.13	0.13	0.24	0.24
158	Retroperitoneum	0.02	0.02	0.03	0.03
159	Other Dig System	0.02	0.02	0.04	0.04
160	Nasal Cavity	0.03	0.03	0.04	0.04
161	Larynx	0.65	0.65	1.19	1.18
162	Lung	0.83	0.83	1.66	1.65
163	Pleura	0.01	0.01	0.02	0.02
164	Thymus	0.01	0.01	0.02	0.02
165	Other Resp.	0.00	0.00	0.00	0.00
170	Bone	0.10	0.10	0.12	0.12
171	Conn. Tissue	0.09	0.09	0.14	0.14
172	Skin Melanoma	0.02	0.02	0.04	0.04
173	Skin. Other	0.07	0.07	0.15	0.15
175	Breast Male	0.05	0.05	0.09	0.09
185	Prostate	0.20	0.20	0.78	0.78
186	Testis	0.07	0.07	0.08	0.08
187	Penis Etc.	0.08	0.08	0.13	0.13
188	URI. Bladder	0.31	0.31	0.78	0.78
189	Kidney	0.13	0.13	0.23	0.23
190	Eye	0.02	0.02	0.03	0.03
191	Brain	0.31	0.31	0.44	0.44
192	Nervous System	0.01	0.01	0.01	0.01
193	Thyroid Gland	0.07	0.07	0.09	0.09
194	Oth. Endo. Gland	0.02	0.02	0.02	0.02
195	Ill Def. Sites	0.08	0.08	0.14	0.14
196	Sec. Lymph. Node	0.16	0.16	0.29	0.29
197	Sec. Res. Etc	0.15	0.15	0.27	0.27
198	Sec. Other	0.06	0.06	0.11	0.11
199	Prim. Unknown	0.46	0.46	0.95	0.95
200	Lymphosarcoma	0.01	0.01	0.01	0.01
201	Hodgkins. Disease	0.13	0.13	0.17	0.17
202	Oth. Lymph. Node	0.30	0.30	0.54	0.54
203	Mult. Myeloma	0.13	0.13	0.23	0.23
204	Leuk. Lymphatic	0.12	0.12	0.17	0.17
205	Leuk. Myelocytic	0.15	0.15	0.22	0.22
206	Leuk. Monocytic	0.00	0.00	0.00	0.00
207	Leuk. Misc.	0.00	0.00	0.00	0.00
208	Leuk. Unspecified	0.04	0.04	0.06	0.06
	All Sites	7.70	7.41	14.34	13.36

**TABLE: DEL-6(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) 1990-1996: 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	0.02	0.02
141	Tongue	0.15	0.15	0.22	0.22
142	Salivary Gland	0.04	0.04	0.05	0.05
143	Gum	0.07	0.07	0.12	0.12
144	Floor of Mouth	0.01	0.01	0.01	0.01
145	Other Mouth	0.11	0.11	0.19	0.19
146	Oropharynx	0.04	0.04	0.07	0.07
147	Nasopharynx	0.02	0.02	0.02	0.02
148	Hypopharynx	0.04	0.04	0.06	0.06
149	Pharynx Etc.	0.01	0.01	0.02	0.02
150	Oesophagus	0.31	0.31	0.53	0.53
151	Stomach	0.17	0.17	0.29	0.29
152	Small Intestine	0.01	0.01	0.01	0.01
153	Colon	0.13	0.13	0.24	0.24
154	Rectum	0.14	0.14	0.22	0.22
155	Liver	0.08	0.08	0.14	0.14
156	Gall Bladder	0.63	0.63	1.06	1.05
157	Pancreas	0.12	0.12	0.20	0.20
158	Retroperitoneum	0.02	0.02	0.02	0.02
159	Other Dig System	0.02	0.02	0.04	0.04
160	Nasal Cavity	0.02	0.02	0.03	0.03
161	Larynx	0.09	0.09	0.17	0.17
162	Lung	0.20	0.20	0.36	0.36
163	Pleura	0.01	0.01	0.01	0.01
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	0.11	0.11
171	Conn. Tissue	0.09	0.09	0.12	0.12
172	Skin Melanoma	0.02	0.02	0.03	0.03
173	Skin. Other	0.07	0.07	0.11	0.11
174	Breast	2.29	2.26	3.05	3.00
179	Uterus NOS.	0.07	0.07	0.12	0.12
180	Cervix	2.16	2.14	2.90	2.86
181	Placenta	0.01	0.01	0.01	0.01
182	Body Uterus	0.20	0.20	0.35	0.35
183	Ovary	0.64	0.64	0.91	0.91
184	Vagina	0.06	0.06	0.14	0.14
188	URI. Bladder	0.09	0.09	0.20	0.20
189	Kidney	0.08	0.08	0.12	0.12
190	Eye	0.02	0.02	0.02	0.02
191	Brain	0.22	0.22	0.31	0.31
192	Nervous System	0.00	0.00	0.00	0.00
193	Thyroid Gland	0.16	0.16	0.22	0.22
194	Oth. Endo. Gland	0.01	0.01	0.01	0.01
195	Ill Def. Sites	0.06	0.06	0.10	0.10
196	Sec. Lymph. Node	0.06	0.06	0.09	0.09
197	Sec. Res. Etc	0.16	0.16	0.26	0.26
198	Sec. Other	0.05	0.05	0.08	0.08
199	Prim. Unknown	0.48	0.48	0.81	0.81
200	Lymphosarcoma	0.00	0.00	0.01	0.01
201	Hodgkins. Disease	0.06	0.06	0.09	0.09
202	Oth. Lymph. Node	0.21	0.21	0.35	0.35
203	Mult. Myeloma	0.09	0.09	0.18	0.18
204	Leuk. Lymphatic	0.06	0.06	0.09	0.09
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. Unspecified	0.03	0.03	0.05	0.05
	All Sites	10.09	9.60	15.10	14.02

TABLE: DEL-7(a): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Method of Diagnosis 1990-1996 - Males
Delhi

ICD-9	Site	Clinical		Microscopic		X-Ray		D.C.O.		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	20	25.6	55	70.5	0	0.0	3	3.8	0	0.0	78	100.0
141	Tongue	124	10.0	1085	87.4	0	0.0	33	2.7	0	0.0	1242	100.0
142	Salivary Gland	21	16.7	103	81.7	0	0.0	2	1.6	0	0.0	126	100.0
143	Gum	24	12.4	167	86.1	0	0.0	3	1.5	0	0.0	194	100.0
144	Floor of Mouth	4	9.8	36	87.8	0	0.0	1	2.4	0	0.0	41	100.0
145	Other Mouth	36	5.8	562	90.8	0	0.0	21	3.4	0	0.0	619	100.0
146	Oropharynx	28	4.7	556	93.6	0	0.0	10	1.7	0	0.0	594	100.0
147	Nasopharynx	17	12.1	119	85.0	0	0.0	4	2.9	0	0.0	140	100.0
148	Hypopharynx	53	9.5	493	88.8	0	0.0	9	1.6	0	0.0	555	100.0
149	Pharynx Etc.	11	10.2	77	71.3	0	0.0	20	18.5	0	0.0	108	100.0
150	Oesophagus	190	15.7	927	76.7	3	0.2	83	6.9	5	0.4	1208	100.0
151	Stomach	150	18.7	566	70.4	2	0.2	80	10.0	6	0.7	804	100.0
152	Small Intestine	5	10.9	37	80.4	0	0.0	4	8.7	0	0.0	46	100.0
153	Colon	105	19.3	387	71.3	0	0.0	48	8.8	3	0.6	543	100.0
154	Rectum	116	17.9	501	77.2	0	0.0	32	4.9	0	0.0	649	100.0
155	Liver	63	13.5	310	66.7	1	0.2	81	17.4	10	2.2	465	100.0
156	Gall Bladder	159	22.2	410	57.2	0	0.0	85	11.9	63	8.8	717	100.0
157	Pancreas	86	20.9	219	53.3	1	0.2	65	15.8	40	9.7	411	100.0
158	Retroperitoneum	20	29.0	40	58.0	0	0.0	9	13.0	0	0.0	69	100.0
159	Other Dig System	18	27.7	25	38.5	1	1.5	20	30.8	1	1.5	65	100.0
160	Nasal Cavity	16	15.8	83	82.2	0	0.0	2	2.0	0	0.0	101	100.0
161	Larynx	321	17.6	1417	77.9	0	0.0	80	4.4	2	0.1	1820	100.0
162	Lung	332	13.5	1799	73.0	39	1.6	258	10.5	35	1.4	2463	100.0
163	Pleura	5	17.2	13	44.8	0	0.0	11	37.9	0	0.0	29	100.0
164	Thymus	9	20.5	30	68.2	1	2.3	3	6.8	1	2.3	44	100.0
165	Other Resp.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
170	Bone	118	23.2	366	72.0	7	1.4	17	3.3	0	0.0	508	100.0
171	Conn. Tissue	69	17.5	314	79.7	0	0.0	10	2.5	1	0.3	394	100.0
172	Skin Melanoma	5	6.9	64	88.9	0	0.0	3	4.2	0	0.0	72	100.0
173	Skin. Other	26	9.9	228	87.0	0	0.0	8	3.1	0	0.0	262	100.0
175	Breast Male	31	19.6	115	72.8	0	0.0	12	7.6	0	0.0	158	100.0
185	Prostate	180	17.3	754	72.5	0	0.0	99	9.5	7	0.7	1040	100.0
186	Testis	60	20.5	223	76.4	0	0.0	9	3.1	0	0.0	292	100.0
187	Penis Etc.	58	22.5	199	77.1	0	0.0	1	0.4	0	0.0	258	100.0
188	URI. Bladder	237	21.5	812	73.6	1	0.1	49	4.4	4	0.4	1103	100.0
189	Kidney	60	13.3	368	81.8	1	0.2	18	4.0	3	0.7	450	100.0
190	Eye	30	21.9	107	78.1	0	0.0	0	0.0	0	0.0	137	100.0
191	Brain	132	10.7	944	76.7	1	0.1	125	10.2	28	2.3	1230	100.0
192	Nervous System	9	23.1	26	66.7	1	2.6	3	7.7	0	0.0	39	100.0
193	Thyroid Gland	32	15.4	168	80.8	0	0.0	8	3.8	0	0.0	208	100.0
194	Oth. Endo. Gland	15	13.9	87	80.6	0	0.0	5	4.6	1	0.9	108	100.0
195	Ill Def. Sites	120	43.8	135	49.3	1	0.4	16	5.8	2	0.7	274	100.0
196	Sec. Lymph. Node	26	5.3	460	93.1	0	0.0	6	1.2	2	0.4	494	100.0
197	Sec. Res. Etc	120	25.7	241	51.6	9	1.9	70	15.0	27	5.8	467	100.0
198	Sec. Other	31	16.9	121	66.1	11	6.0	8	4.4	12	6.6	183	100.0
199	Prim. Unknown	77	4.9	3	0.2	4	0.3	1496	94.6	2	0.1	1582	100.0
200	Lymphosarcoma	0	0.0	24	88.9	0	0.0	3	11.1	0	0.0	27	100.0
201	Hodgkins. Disease	0	0.0	582	96.0	0	0.0	24	4.0	0	0.0	606	100.0
202	Oth. Lymph. Node	1	0.1	1106	92.0	0	0.0	95	7.9	0	0.0	1202	100.0
203	Mult. Myeloma	0	0.0	321	89.4	4	1.1	34	9.5	0	0.0	359	100.0
204	Leuk. Lymphatic	0	0.0	641	91.1	0	0.0	63	8.9	0	0.0	704	100.0
205	Leuk. Myelocytic	0	0.0	599	86.3	0	0.0	95	13.7	0	0.0	694	100.0
206	Leuk. Monocytic	0	0.0	2	100.0	0	0.0	0	0.0	0	0.0	2	100.0
207	Leuk. Misc.	0	0.0	4	100.0	0	0.0	0	0.0	0	0.0	4	100.0
208	Leuk. Unspecified	1	0.4	137	59.6	0	0.0	92	40.0	0	0.0	230	100.0
	All Sites	3371	12.9	19168	73.1	88	0.3	3336	12.7	255	1.0	26218	100.0

**TABLE: DEL-7(b): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Method of Diagnosis 1990-1996 - Females
Delhi**

ICD-9	Site	Clinical		Microscopic		X-Ray		D.C.O.		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	3	14.3	17	81.0	1	4.8	0	0.0	0	0.0	21	100.0
141	Tongue	46	13.8	283	84.7	0	0.0	5	1.5	0	0.0	334	100.0
142	Salivary Gland	18	18.0	82	82.0	0	0.0	0	0.0	0	0.0	100	100.0
143	Gum	24	14.4	140	83.8	1	0.6	2	1.2	0	0.0	167	100.0
144	Floor of Mouth	3	25.0	9	75.0	0	0.0	0	0.0	0	0.0	12	100.0
145	Other Mouth	21	8.5	216	87.1	0	0.0	11	4.4	0	0.0	248	100.0
146	Oropharynx	8	8.1	90	90.9	0	0.0	1	1.0	0	0.0	99	100.0
147	Nasopharynx	11	22.9	36	75.0	0	0.0	1	2.1	0	0.0	48	100.0
148	Hypopharynx	23	21.9	79	75.2	0	0.0	3	2.9	0	0.0	105	100.0
149	Pharynx Etc.	1	4.3	16	69.6	0	0.0	6	26.1	0	0.0	23	100.0
150	Oesophagus	120	16.4	561	76.5	2	0.3	46	6.3	4	0.5	733	100.0
151	Stomach	93	21.2	287	65.4	0	0.0	54	12.3	5	1.1	439	100.0
152	Small Intestine	2	8.0	19	76.0	0	0.0	2	8.0	2	8.0	25	100.0
153	Colon	81	22.7	232	65.0	0	0.0	42	11.8	2	0.6	357	100.0
154	Rectum	71	19.3	273	74.4	0	0.0	22	6.0	1	0.3	367	100.0
155	Liver	36	15.9	126	55.8	0	0.0	55	24.3	9	4.0	226	100.0
156	Gall Bladder	327	21.7	909	60.3	4	0.3	132	8.8	136	9.0	1508	100.0
157	Pancreas	68	24.5	157	56.5	0	0.0	39	14.0	14	5.0	278	100.0
158	Retroperitoneum	9	19.6	33	71.7	0	0.0	2	4.3	2	4.3	46	100.0
159	Other Dig System	15	28.8	27	51.9	0	0.0	10	19.2	0	0.0	52	100.0
160	Nasal Cavity	5	8.3	54	90.0	0	0.0	1	1.7	0	0.0	60	100.0
161	Larynx	62	26.5	160	68.4	0	0.0	12	5.1	0	0.0	234	100.0
162	Lung	88	18.4	326	68.2	6	1.3	50	10.5	8	1.7	478	100.0
163	Pleura	2	16.7	5	41.7	0	0.0	5	41.7	0	0.0	12	100.0
164	Thymus	6	26.1	11	47.8	1	4.3	3	13.0	2	8.7	23	100.0
165	Other Resp.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
170	Bone	88	28.7	200	65.1	7	2.3	11	3.6	1	0.3	307	100.0
171	Conn. Tissue	48	17.0	223	79.1	1	0.4	10	3.5	0	0.0	282	100.0
172	Skin Melanoma	4	7.3	50	90.9	0	0.0	1	1.8	0	0.0	55	100.0
173	Skin. Other	27	14.3	159	84.1	0	0.0	3	1.6	0	0.0	189	100.0
174	Breast	807	14.6	4469	81.1	1	0.0	234	4.2	0	0.0	5511	100.0
179	Uterus NOS.	26	15.0	128	74.0	0	0.0	18	10.4	1	0.6	173	100.0
180	Cervix	918	17.8	4131	80.2	2	0.0	92	1.8	10	0.2	5153	100.0
181	Placenta	12	23.1	38	73.1	0	0.0	2	3.8	0	0.0	52	100.0
182	Body Uterus	52	10.6	434	88.2	0	0.0	6	1.2	0	0.0	492	100.0
183	Ovary	377	23.0	1155	70.6	0	0.0	84	5.1	20	1.2	1636	100.0
184	Vagina	41	22.4	140	76.5	1	0.5	1	0.5	0	0.0	183	100.0
188	URI. Bladder	61	25.7	162	68.4	1	0.4	9	3.8	4	1.7	237	100.0
189	Kidney	36	14.9	196	81.3	0	0.0	7	2.9	2	0.8	241	100.0
190	Eye	26	28.0	67	72.0	0	0.0	0	0.0	0	0.0	93	100.0
191	Brain	102	14.3	507	71.0	0	0.0	84	11.8	21	2.9	714	100.0
192	Nervous System	6	60.0	4	40.0	0	0.0	0	0.0	0	0.0	10	100.0
193	Thyroid Gland	106	23.7	322	72.0	0	0.0	18	4.0	1	0.2	447	100.0
194	Oth. Endo. Gland	15	21.1	53	74.6	0	0.0	1	1.4	2	2.8	71	100.0
195	Ill Def. Sites	93	52.2	70	39.3	0	0.0	14	7.9	1	0.6	178	100.0
196	Sec. Lymph. Node	7	4.6	139	90.8	0	0.0	7	4.6	0	0.0	153	100.0
197	Sec. Res. Etc	100	25.3	216	54.7	4	1.0	52	13.2	23	5.8	395	100.0
198	Sec. Other	20	17.9	59	52.7	9	8.0	12	10.7	12	10.7	112	100.0
199	Prim. Unknown	58	4.6	2	0.2	0	0.0	1190	95.0	2	0.2	1252	100.0
200	Lymphosarcoma	0	0.0	13	86.7	0	0.0	2	13.3	0	0.0	15	100.0
201	Hodgkins. Disease	0	0.0	184	93.9	0	0.0	12	6.1	0	0.0	196	100.0
202	Oth. Lymph. Node	0	0.0	550	94.5	0	0.0	32	5.5	0	0.0	582	100.0
203	Mult. Myeloma	0	0.0	188	87.4	11	5.1	15	7.0	1	0.5	215	100.0
204	Leuk. Lymphatic	0	0.0	292	91.5	0	0.0	27	8.5	0	0.0	319	100.0
205	Leuk. Myelocytic	0	0.0	428	88.8	0	0.0	54	11.2	0	0.0	482	100.0
206	Leuk. Monocytic	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
207	Leuk. Misc.	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
208	Leuk. Unspecified	1	0.8	70	58.8	0	0.0	48	40.3	0	0.0	119	100.0
	All Sites	4174	16.1	18799	72.7	52	0.2	2550	9.9	286	1.1	25861	100.0

TABLE: DEL-8(a): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Detailed Microscopic Diagnosis, 1990-1996 - Males : Delhi

ICD-9	Site	Pri. Hist		Sec. Hist		Cytology		Blood Film		Bone Marrow		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	51	65.8	0	0	4	5.1	0	0	0	0	23	29.1	78	100
141	Tongue	1023	82.4	5	0.4	56	4.5	0	0	1	0.1	157	12.6	1242	100
142	Salivary Glands	89	70.6	2	1.6	12	9.5	0	0	0	0	23	18.3	126	100
143	Gum	149	76.8	0	0	18	9.3	0	0	0	0	27	13.9	194	100
144	Floor of Mouth	34	82.9	0	0	2	4.9	0	0	0	0	5	12.2	41	100
145	Other Mouth	536	86.6	2	0.3	24	3.9	0	0	0	0	57	9.2	619	100
146	Oropharynx	524	88.2	3	0.5	29	4.9	0	0	0	0	38	6.4	594	100
147	Nasopharynx	100	71.4	2	1.4	16	11.4	0	0	1	0.7	21	15	140	100
148	Hypopharynx	468	84.3	2	0.4	23	4.1	0	0	0	0	62	11.2	555	100
149	Pharynx Etc	72	66.7	0	0	5	4.6	0	0	0	0	31	28.7	108	100
150	Oesophagus	846	70	8	0.7	72	6	0	0	1	0.1	281	23.3	1208	100
151	Stomach	510	63.4	4	0.5	51	6.3	0	0	1	0.1	238	29.6	804	100
152	Small Intestine	34	73.9	0	0	3	6.5	0	0	0	0	9	19.6	46	100
153	Colon	342	63	5	0.9	40	7.4	0	0	0	0	156	28.7	543	100
154	Rectum	472	72.7	2	0.3	27	4.2	0	0	0	0	148	22.8	649	100
155	Liver	263	56.6	2	0.4	45	9.7	0	0	0	0	155	33.3	465	100
156	Gall Bladder	353	49.2	3	0.4	54	7.5	0	0	0	0	307	42.8	717	100
157	Pancreas	172	41.8	7	1.7	40	9.7	0	0	0	0	192	46.7	411	100
158	Retroperito	36	52.2	0	0	4	5.8	0	0	0	0	29	42	69	100
159	Other Digs	7	10.8	7	10.8	10	15.4	0	0	1	1.5	40	61.5	65	100
160	Nasal Cavity	78	77.2	0	0	5	5	0	0	0	0	18	17.8	101	100
161	Larynx	1311	72	7	0.4	99	5.4	0	0	0	0	403	22.1	1820	100
162	Lung	1383	56.2	47	1.9	368	14.9	0	0	1	0	664	27	2463	100
163	Pleura	13	44.8	0	0	0	0	0	0	0	0	16	55.2	29	100
164	Thymus	28	63.6	0	0	2	4.5	0	0	0	0	14	31.8	44	100
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	Bone	337	66.3	1	0.2	20	3.9	0	0	8	1.6	142	28	508	100
171	Connective	290	73.6	1	0.3	23	5.8	0	0	0	0	80	20.3	394	100
172	Skin Melanoma	59	81.9	0	0	5	6.9	0	0	0	0	8	11.1	72	100
173	Skin Other	218	83.2	0	0	10	3.8	0	0	0	0	34	13	262	100
175	Breast Male	94	59.5	1	0.6	20	12.7	0	0	0	0	43	27.2	158	100
185	Prostate	704	67.7	3	0.3	45	4.3	0	0	2	0.2	286	27.5	1040	100
186	Testis	205	70.2	3	1	15	5.1	0	0	0	0	69	23.6	292	100
187	Penis Etc	190	73.6	0	0	8	3.1	0	0	1	0.4	59	22.9	258	100
188	Uri Bladder	757	68.6	0	0	55	5	0	0	0	0	291	26.4	1103	100
189	Kidney	338	75.1	3	0.7	27	6	0	0	0	0	82	18.2	450	100
190	Eye	103	75.2	0	0	3	2.2	0	0	1	0.7	30	21.9	137	100
191	Brain	931	75.7	1	0.1	12	1	0	0	0	0	286	23.3	1230	100
192	Nervous Sys	24	61.5	0	0	2	5.1	0	0	0	0	13	33.3	39	100
193	Thyroid Glands	152	73.1	0	0	15	7.2	0	0	1	0.5	40	19.2	208	100
194	Oth. Endo. Gland	72	66.7	3	2.8	11	10.2	0	0	1	0.9	21	19.4	108	100
195	Ill Def Site	106	38.7	2	0.7	27	9.9	0	0	0	0	139	50.7	274	100
196	Sec. Lymph. Node	2	0.4	410	83	48	9.7	0	0	0	0	34	6.9	494	100
197	Sec. Res. Etc	0	0	197	42.2	44	9.4	0	0	0	0	226	48.4	467	100
198	Sec. Other	1	0.5	110	60.1	9	4.9	0	0	1	0.5	62	33.9	183	100
199	Prim. Unknown	1	0.1	2	0.1	0	0	0	0	0	0	1579	99.8	1582	100
200	Lymph Sarcoma	24	88.9	0	0	0	0	0	0	0	0	3	11.1	27	100
201	Hodgkins Disease	563	92.9	0	0	17	2.8	0	0	2	0.3	24	4	606	100
202	Oth. Lymph. Node	1055	87.8	0	0	34	2.8	0	0	17	1.4	96	8	1202	100
203	Mult Myeloma	19	5.3	0	0	1	0.3	0	0	301	83.8	38	10.6	359	100
204	Leuk Lympha	12	1.7	0	0	0	0	1	0.1	628	89.2	63	8.9	704	100
205	Leuk Myelocytic	8	1.2	0	0	0	0	0	0	591	85.2	95	13.7	694	100
206	Leuk Monocytic	0	0	0	0	0	0	0	0	2	99.9	0	0	2	100
207	Leuk Oth. Sp	0	0	0	0	0	0	0	0	4	99.9	0	0	4	100
208	Leuk Unspecified	5	1.7	0	0	0	0	3	1.3	129	56.3	93	40.6	230	100
	All Sites	15164	57.8	845	3.2	1460	5.6	4	0	1695	6.5	7050	26.9	26218	100

TABLE: DEL-8(b): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Detailed Microscopic Diagnosis, 1990-1996 - Females : Delhi

ICD-9	Site	Pri. Hist		Sec. Hist		Cytology		Blood Film		Bone Marrow		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	17	81	0	0	0	0	0	0	0	0	4	19	21	100
141	Tongue	271	81.1	1	0.3	11	3.3	0	0	0	0	51	15.3	334	100
142	Salivary Glands	73	73	1	1	8	8	0	0	0	0	18	18	100	100
143	Gum	134	80.2	1	0.6	5	3	0	0	0	0	27	16.2	167	100
144	Floor of Mouth	9	75	0	0	0	0	0	0	0	0	3	25	12	100
145	Other Mouth	207	83.5	2	0.8	7	2.8	0	0	0	0	32	12.9	248	100
146	Oropharynx	86	86.9	1	1	3	3	0	0	0	0	9	9.1	99	100
147	Nasopharynx	31	64.6	0	0	5	10.4	0	0	0	0	12	25	48	100
148	Hypopharynx	76	72.4	0	0	3	2.9	0	0	0	0	26	24.8	105	100
149	Pharynx Etc	15	65.2	0	0	1	4.3	0	0	0	0	7	30.4	23	100
150	Oesophagus	524	71.5	3	0.4	34	4.6	0	0	0	0	172	23.5	733	100
151	Stomach	257	58.5	2	0.5	28	6.4	0	0	0	0	152	34.6	439	100
152	Small Intestine	19	76	0	0	0	0	0	0	0	0	6	24	25	100
153	Colon	215	60.2	2	0.6	15	4.2	0	0	0	0	125	35	357	100
154	Rectum	259	70.6	0	0	14	3.8	0	0	0	0	94	25.6	367	100
155	Liver	107	47.3	0	0	18	8	0	0	1	0.4	100	44.2	226	100
156	Gall Bladder	705	46.8	21	1.4	183	12.1	0	0	0	0	599	39.7	1508	100
157	Pancreas	125	45	3	1.1	29	10.4	0	0	0	0	121	43.5	278	100
158	Retroperito	30	65.2	0	0	3	6.5	0	0	0	0	13	28.3	46	100
159	Other Digs	8	15.4	10	19.2	9	17.3	0	0	0	0	25	48.1	52	100
160	Nasal Cavity	50	83.3	0	0	4	6.7	0	0	0	0	6	10	60	100
161	Larynx	146	62.4	0	0	14	6	0	0	0	0	74	31.6	234	100
162	Lung	247	51.7	2	0.4	77	16.1	0	0	0	0	152	31.8	478	100
163	Pleura	4	33.3	0	0	1	8.3	0	0	0	0	7	58.3	12	100
164	Thymus	10	43.5	0	0	1	4.3	0	0	0	0	12	52.2	23	100
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	Bone	184	59.9	0	0	12	3.9	0	0	4	1.3	107	34.9	307	100
171	Connective	207	73.4	0	0	16	5.7	0	0	0	0	59	20.9	282	100
172	Skin Melanoma	49	89.1	0	0	1	1.8	0	0	0	0	5	9.1	55	100
173	Skin Other	150	79.4	1	0.5	8	4.2	0	0	0	0	30	15.9	189	100
174	Breast Female	3770	68.4	10	0.2	689	12.5	0	0	0	0	1042	18.9	5511	100
179	Uterus NOS.	120	69.4	2	1.2	6	3.5	0	0	0	0	45	26	173	100
180	Cervix	3743	72.6	2	0	385	7.5	0	0	1	0	1022	19.8	5153	100
181	Placenta	36	69.2	0	0	2	3.8	0	0	0	0	14	26.9	52	100
182	Body Uterus	414	84.1	0	0	20	4.1	0	0	0	0	58	11.8	492	100
183	Ovary	941	57.5	26	1.6	187	11.4	1	0.1	0	0	481	29.4	1636	100
184	Vagina	133	72.7	0	0	7	3.8	0	0	0	0	43	23.5	183	100
188	Uri Bladder	145	61.2	1	0.4	15	6.3	0	0	1	0.4	75	31.6	237	100
189	Kidney	185	76.8	0	0	11	4.6	0	0	0	0	45	18.7	241	100
190	Eye	66	71	0	0	1	1.1	0	0	0	0	26	28	93	100
191	Brain	497	69.6	0	0	10	1.4	0	0	0	0	207	29	714	100
192	Nervous Sys	4	40	0	0	0	0	0	0	0	0	6	60	10	100
193	Thyroid Glands	283	63.3	3	0.7	36	8.1	0	0	0	0	125	28	447	100
194	Oth. Endo. Gland	45	63.4	3	4.2	5	7	0	0	0	0	18	25.4	71	100
195	Ill Def Site	55	30.9	0	0	15	8.4	0	0	0	0	108	60.7	178	100
196	Sec. Lymph Node	3	2	124	81	12	7.8	0	0	0	0	14	9.2	153	100
197	Sec. Res. Etc	0	0	164	41.5	52	13.2	0	0	0	0	179	45.3	395	100
198	Sec. Other	2	1.8	51	45.5	6	5.4	0	0	0	0	53	47.3	112	100
199	Prim. Unknown	0	0	1	0.1	1	0.1	0	0	0	0	1250	99.8	1252	100
200	Lymph Sarcoma	12	80	0	0	0	0	0	0	1	6.7	2	13.3	15	100
201	Hodgkins Disease	180	91.8	0	0	4	2	0	0	0	0	12	6.1	196	100
202	Oth. Lymph. Node	519	89.2	0	0	26	4.5	0	0	5	0.9	32	5.5	582	100
203	Mult Myeloma	11	5.1	0	0	0	0	0	0	177	82.3	27	12.6	215	100
204	Leuk Lympha	10	3.1	0	0	0	0	1	0.3	281	88.1	27	8.5	319	100
205	Leuk Myelocytic	6	1.2	0	0	0	0	0	0	422	87.6	54	11.2	482	100
206	Leuk Monocytic	0	0	0	0	0	0	0	0	1	99.9	0	0	1	100
207	Leuk Oth Sp	0	0	0	0	0	0	0	0	1	99.9	0	0	1	100
208	Leuk Unspecified	3	2.5	0	0	0	0	2	1.7	65	54.6	49	41.2	119	100
	All Sites	15398	59.5	437	1.7	2000	7.7	4	0	960	3.7	7062	27.3	25861	100

TABLE: DEL-9(a): Number of Cancer Deaths by Five Year Age Group and Site (ICD-9)
1990-1996 - 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	1	0	0	0	0	0	0	1	1	1	0	1	0	3	0	8	0.11
141	Tongue	0	0	0	0	0	0	5	6	17	21	23	22	23	11	11	11	150	2.11
142	Salivary Gland	0	0	0	0	0	0	1	0	0	0	3	1	1	1	2	0	9	0.13
143	Gum	0	1	0	0	0	0	1	1	1	0	3	2	3	0	0	2	14	0.2
144	Floor of Mouth	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0.03
145	Other Mouth	0	0	0	0	0	0	3	3	11	4	15	12	4	6	4	6	68	0.96
146	Oropharynx	0	0	0	0	0	0	1	6	5	9	10	14	10	4	2	6	67	0.94
147	Nasopharynx	0	1	0	0	2	0	0	2	1	1	1	4	3	2	0	1	18	0.25
148	Hypopharynx	0	1	0	0	0	1	3	4	4	8	15	13	11	7	5	3	75	1.06
149	Pharynx Etc.	0	0	0	0	0	0	0	0	4	4	3	7	4	4	4	2	28	0.39
150	Oesophagus	0	0	0	0	1	1	7	10	22	25	61	46	52	39	35	26	325	4.57
151	Stomach	0	0	0	1	0	8	6	12	17	23	26	32	26	24	26	22	223	3.14
152	Small Intestine	0	0	0	0	0	0	1	0	1	0	3	1	3	1	1	1	12	0.17
153	Colon	0	0	0	2	0	2	3	7	10	15	21	11	16	11	14	16	128	1.8
154	Rectum	0	0	1	1	0	2	3	4	9	10	5	8	19	12	11	10	95	1.34
155	Liver	4	2	1	1	1	1	6	10	10	13	29	21	31	21	11	13	175	2.46
156	Gall Bladder	0	0	0	0	0	2	6	7	10	13	24	26	29	39	18	25	199	2.8
157	Pancreas	0	1	0	0	1	2	4	6	12	19	22	24	26	13	15	17	162	2.28
158	Retroperitoneum	0	0	0	1	1	2	3	0	1	2	4	3	1	1	0	1	20	0.28
159	Other Dig System	0	0	0	0	0	2	1	3	2	2	4	2	5	2	4	4	31	0.44
160	Nasal Cavity	0	0	0	0	1	0	1	1	2	0	1	0	1	0	0	0	7	0.1
161	Larynx	0	0	0	0	2	1	5	9	14	20	37	37	52	25	36	30	268	3.77
162	Lung	2	0	1	0	2	6	12	21	50	69	115	127	119	108	84	65	781	10.99
163	Pleura	0	0	0	0	1	0	1	0	2	3	1	4	1	2	2	2	19	0.27
164	Thymus	1	0	1	0	1	0	0	0	4	0	2	2	0	0	1	0	12	0.17
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	2	8	9	3	5	2	2	5	4	4	3	3	0	2	55	0.77
171	Conn. Tissue	6	3	4	6	2	0	1	3	6	2	4	0	3	0	2	1	43	0.61
172	Skin Melanoma	0	0	0	1	1	1	1	0	1	2	1	0	2	0	2	1	13	0.18
173	Skin. Other	0	0	1	1	1	0	1	1	0	0	0	1	3	1	2	4	16	0.23
175	Breast Male	0	0	0	0	0	0	0	0	2	8	3	3	3	4	1	1	25	0.35
185	Prostate	0	1	0	0	1	0	1	1	4	2	6	13	25	31	54	70	209	2.94
186	Testis	3	0	0	2	7	6	3	3	2	5	2	1	4	0	0	2	40	0.56
187	Penis Etc.	0	0	0	0	0	1	1	1	1	2	0	5	0	1	2	0	14	0.20
188	URI. Bladder	0	0	0	0	0	2	3	3	6	5	21	21	19	26	22	25	153	2.15
189	Kidney	11	2	0	1	2	0	0	4	5	7	10	5	9	7	6	0	69	0.97
190	Eye	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0.11
191	Brain	11	26	13	6	14	16	17	25	27	28	26	31	33	30	11	6	320	4.50
192	Nervous System	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	1	5	0.07
193	Thyroid Gland	0	0	0	0	0	1	0	0	2	3	2	4	3	1	0	3	19	0.27
194	Oth. Endo. Gland	15	5	1	2	0	0	0	0	1	1	1	1	0	0	1	0	28	0.39
195	Ill Def. Sites	3	0	1	1	1	2	1	2	4	4	6	7	9	3	4	6	54	0.76
196	Sec. Lymph. Node	0	0	0	2	0	0	1	1	4	2	8	2	2	6	1	3	32	0.45
197	Sec. Res. Etc	3	0	0	1	3	1	4	1	7	9	13	11	14	13	10	9	99	1.39
198	Sec. Other	0	0	0	0	0	0	0	2	0	3	4	3	4	3	1	4	24	0.34
199	Prim. Unknown	8	14	14	17	27	23	44	72	112	175	187	265	207	206	187	209	1767	24.87
200	Lymphosarcoma	0	1	1	0	0	1	0	0	0	0	0	0	1	0	1	0	5	0.07
201	Hodgkins. Disease	1	8	6	10	3	6	6	10	7	4	8	17	9	5	4	1	105	1.48
202	Oth. Lymph. Node	10	11	13	23	18	15	20	13	19	18	31	26	37	22	27	23	326	4.59
203	Mult. Myeloma	0	0	0	0	1	0	0	0	6	10	15	12	21	11	8	10	94	1.32
204	Leuk. Lymphatic	45	46	35	21	25	12	11	7	6	5	10	3	9	9	2	9	255	3.59
205	Leuk. Myelocytic	12	19	15	13	21	22	23	21	30	14	23	17	14	13	15	10	282	3.97
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. Unspecified	13	12	20	17	13	10	8	12	11	5	8	4	2	4	4	6	149	2.10
	All Sites	153	161	130	139	163	152	224	296	473	581	825	871	880	732	656	669	7105	100.00

**TABLE: DEL-9(b): Number of Cancer Deaths by Five Year Age Group and Site (ICD-9)
1990-1996 - 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	0	0	0	0	0	0	0	0	0	0	0.00
141	Tongue	0	0	0	0	1	0	2	1	3	5	3	10	6	4	1	3	39	0.74
142	Salivary Gland	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	3	0.06
143	Gum	0	0	0	0	1	0	0	0	0	2	0	2	2	3	2	1	13	0.25
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	2	0	1	3	7	4	6	8	2	3	36	0.69
146	Oropharynx	0	0	0	0	0	0	0	0	1	2	2	0	6	0	0	0	11	0.21
147	Nasopharynx	0	0	0	0	1	0	0	0	0	1	2	0	1	0	0	0	5	0.10
148	Hypopharynx	0	0	0	0	0	1	1	0	2	0	3	3	1	1	1	1	14	0.27
149	Pharynx Etc.	0	0	0	0	0	0	0	1	1	0	0	2	1	1	1	2	9	0.17
150	Oesophagus	0	0	0	0	0	4	2	4	11	19	19	17	37	15	16	15	159	3.03
151	Stomach	0	0	0	0	1	7	6	3	9	13	12	19	15	13	10	13	121	2.31
152	Small Intestine	0	0	0	0	1	0	1	0	1	1	1	0	0	1	0	0	6	0.11
153	Colon	0	0	0	0	1	4	2	2	7	8	14	9	11	10	17	10	95	1.81
154	Rectum	0	0	0	0	1	4	2	0	3	3	9	4	8	4	5	7	50	0.95
155	Liver	3	1	1	0	1	2	9	4	8	9	7	14	14	10	6	10	99	1.89
156	Gall Bladder	1	0	0	0	0	5	8	21	27	34	47	55	60	48	27	45	378	7.21
157	Pancreas	0	0	0	0	0	1	0	6	7	11	9	10	17	14	8	8	91	1.74
158	Retroperitoneum	1	0	0	0	0	0	1	2	2	2	2	2	0	0	0	1	13	0.25
159	Other Dig System	0	0	0	0	0	0	1	0	1	1	3	1	3	2	3	6	21	0.40
160	Nasal Cavity	1	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	5	0.10
161	Larynx	0	0	0	0	0	1	0	1	5	5	7	3	0	4	3	4	33	0.63
162	Lung	0	0	0	0	1	1	3	5	9	18	22	26	27	12	13	11	148	2.82
163	Pleura	0	0	0	0	0	0	0	1	1	0	1	1	0	2	1	0	7	0.13
164	Thymus	1	0	1	1	0	1	0	0	0	1	0	1	1	1	0	0	8	0.15
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	5	1	0	2	2	2	0	1	3	2	0	1	1	1	22	0.42
171	Conn. Tissue	2	1	0	4	2	2	3	2	1	0	1	5	2	1	1	0	27	0.52
172	Skin Melanoma	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	0.04
173	Skin. Other	0	0	0	1	1	0	0	2	0	0	3	0	2	0	0	0	9	0.17
174	Breast	0	1	1	2	1	16	37	65	64	87	102	74	63	39	21	35	608	11.6
179	Uterus NOS.	0	0	0	0	0	1	1	3	1	4	5	2	1	1	6	7	32	0.61
180	Cervix	0	0	0	0	0	7	10	28	59	53	45	51	39	18	18	9	337	6.43
181	Placenta	0	0	0	1	3	2	1	0	0	1	0	0	0	0	0	0	8	0.15
182	Body Uterus	0	0	0	1	1	0	0	0	1	5	6	4	4	5	1	1	29	0.55
183	Ovary	0	1	2	4	12	10	18	13	29	35	54	32	33	22	16	17	298	5.69
184	Vagina	0	0	0	0	0	1	0	0	3	3	1	0	1	1	1	0	11	0.21
188	URI. Bladder	0	0	0	0	0	0	0	1	3	2	5	0	8	5	2	3	29	0.55
189	Kidney	17	3	0	0	0	1	0	0	3	1	2	1	3	2	3	1	37	0.71
190	Eye	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0.06
191	Brain	11	11	8	21	7	7	15	19	16	17	16	20	15	13	8	6	210	4.01
192	Nervous System	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.02
193	Thyroid Gland	0	0	0	0	0	1	1	3	3	5	6	8	8	6	2	0	43	0.82
194	Oth. Endo. Gland	11	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	15	0.29
195	Ill Def. Sites	1	1	2	0	0	4	0	1	0	5	1	4	3	3	2	3	30	0.57
196	Sec. Lymph. Node	0	0	0	0	1	0	0	0	2	1	2	3	1	1	0	2	13	0.25
197	Sec. Res. Etc	0	0	0	0	0	1	1	1	2	4	12	9	13	7	6	9	65	1.24
198	Sec. Other	0	0	0	0	0	1	0	1	0	0	3	2	4	2	0	2	15	0.29
199	Prim. Unknown	13	5	8	5	14	31	66	88	113	178	193	185	182	130	86	138	1435	27.39
200	Lymphosarcoma	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	3	0.06
201	Hodgkins. Disease	3	2	1	2	2	1	1	0	1	3	6	3	4	3	4	2	38	0.73
202	Oth. Lymph. Node	1	6	6	8	10	9	8	10	8	7	15	13	15	7	10	2	135	2.58
203	Mult. Myeloma	0	1	0	0	0	2	0	3	4	3	8	9	12	5	3	4	54	1.03
204	Leuk. Lymphatic	19	18	13	11	9	2	8	5	5	1	0	5	5	3	4	4	112	2.14
205	Leuk. Myelocytic	6	5	9	10	15	14	28	15	15	15	9	13	10	7	3	9	183	3.49
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. Unspecified	12	5	4	6	3	4	5	5	5	4	3	3	3	5	2	3	72	1.37
	All Sites	104	65	61	78	90	150	246	318	441	576	673	633	648	442	316	399	5240	100.00

TABLE: DEL-11: Number (#) and Proportion (%) of Types of Childhood Cancers 1990-1996
Delhi

Type of Childhood Cancer	Males		Females	
	#	%	#	%
I. LEUKAEMIAS	547	31.15	247	26.91
(a) Acute lymphocytic leukaemia	362	20.62	167	18.19
(b) Other lymphoid leukaemia	5	0.28	5	0.54
(c) Acute non-lymphocytic leukaemia	90	5.13	40	4.36
(d) Chronic myeloid leukaemia	29	1.65	9	0.98
(e) Other and unspecified leukaemia	61	3.47	26	2.83
II. LYMPHOMAS & OTHER RETICULOENDOTHELIAL	319	18.17	81	8.82
(a) Hodgkin's disease	163	9.28	37	4.03
(b) Non-Hodgkin lymphoma	133	7.57	34	3.70
(c) Burkitt's lymphoma	5	0.28	2	0.22
(d) Unspecified lymphomas	15	0.85	6	0.65
(e) Histiocytosis X	2	0.11	1	0.11
(f) Other reticuloendothelial neoplasms	1	0.06	1	0.11
III. C.N.S.& MISC.INTRACRANIAL & INTRASPINAL NEOP.	234	13.33	138	15.03
(a) Ependymoma	4	0.23	4	0.44
(b) Astrocytoma	63	3.59	39	4.25
(c) Medulloblastoma	54	3.08	19	2.07
(d) Other glioma	61	3.47	35	3.81
(e) Misc.intracranial & intraspinal neop.	52	2.96	41	4.47
IV. SYMPATHETIC NERVOUS SYSTEM TUMOURS	67	3.82	42	4.58
(a) Neuroblastoma & ganglioneuroblastoma	66	3.76	40	4.36
(b) Other	1	0.06	2	0.22
V. RETINOBLASTOMA	80	4.56	48	5.23
VI. RENAL TUMOURS	70	3.99	69	7.52
(a) Wilms' tumour	55	3.13	54	5.88
(b) Renal carcinoma	4	0.23	1	0.11
(c) Other & unsp. malignant renal tumours	11	0.63	14	1.53
VII. HEPATIC TUMOURS	22	1.25	12	1.31
(a) Hepatoblastoma	8	0.46	5	0.54
(b) Hepatic carcinoma	4	0.23	1	0.11
(c) Other & unsp. malignant hepatic tumours	10	0.57	6	0.65
VIII. MALIGNANT BONE TUMOURS	95	5.41	57	6.21
(a) Osteosarcoma	31	1.77	23	2.51
(b) Chondrosarcoma	1	0.06	2	0.22
(c) Ewing's sarcoma	39	2.22	16	1.74
(d) Other & unsp. malignant bone tumours	24	1.37	16	1.74
IX. SOFT-TISSUE(S-T) SARCOMAS(S)	64	3.64	42	4.58
(a) Rhabdomyos. embryonals.& s-t.Ewings tum.	44	2.51	29	3.16
(b) Fibros.neurofibros.&oth.fibromatous neop.	5	0.28	1	0.11
(c) Other soft-tissue sarcoma	15	0.85	12	1.31
X. GERM-CELL TROPHOBLASTIC & OTH GONADAL NEOP.	32	1.82	40	4.36
(a) Non-gonadal gc & trophoblastic neop.	4	0.23	8	0.87
(b) Gonadal gc & trophoblastic neop.	14	0.80	19	2.07
(c) Gonadal carcinoma	3	0.17	1	0.11
(d) Other & unsp.malignant gonadal tumours	11	0.63	12	1.31
XI. CARCINOMA & OTH MALIGNANT EPITHELIAL NEOP.	105	5.98	71	7.73
(a) Adrenocortical carcinoma	0	0.00	0	0.00
(b) Thyroid carcinoma	3	0.17	6	0.65
(c) Nasopharyngeal carcinoma	6	0.34	2	0.22
(d) Malanomatous neoplasms	5	0.28	3	0.33
(e) Other carcinoma	91	5.18	60	6.54
XII. OTHER & UNSP. MALIGNANT NEOPLASMS	106	6.04	56	6.10
OTHERS (Not Classified)	15	0.85	15	1.63
TOTAL (ALL CHILDHOOD CANCERS)	1756	100.00	918	100.00

POPULATION BASED CANCER REGISTRY, MUMBAI

Indian Cancer Society, Mumbai (Bombay)

Dr A. R. Kamat, Principal Investigator

Dr A. P. Kurkure, Deputy Joint Secretary

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 the Biometry Branch of the National Cancer Institute of USA and also received financial support from that 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 five medical colleges. The diagnosis and treatment of cancer is centralised 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 five hospitals while orthovoltage deep X-ray therapy is available in fifteen hospitals in the city.

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 labeled as an 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. The estimated population as on 1 July 1990 of Greater Bombay is 9.7 million. 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 68.8% being Hindus, 14.1% Muslims, 6.3% Christians, 4.8% Neo-Buddhists, and 4.1% Jains, 1.1% Parsis (Zoroastrians) and 0.1% Sikhs.

The reliability of the data and the quality of the registration have considerably improved. At present the percentage of microscopic confirmed cases is 76% and the percentage of cases diagnosed through death certificate alone is 7%. 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. Registry has published numerous articles in indexed journals and in monographs. The registry data is also used by public health workers for epidemiologic and other studies. Being the oldest registry in the country, the registry is a rich data source for studying time trends analysis in cancer incidence and mortality. Registry records follow-up information for selected primary sites.

Figure: MUM-1:
Population Pyramid showing Age Distribution: 1990-1996
Mumbai

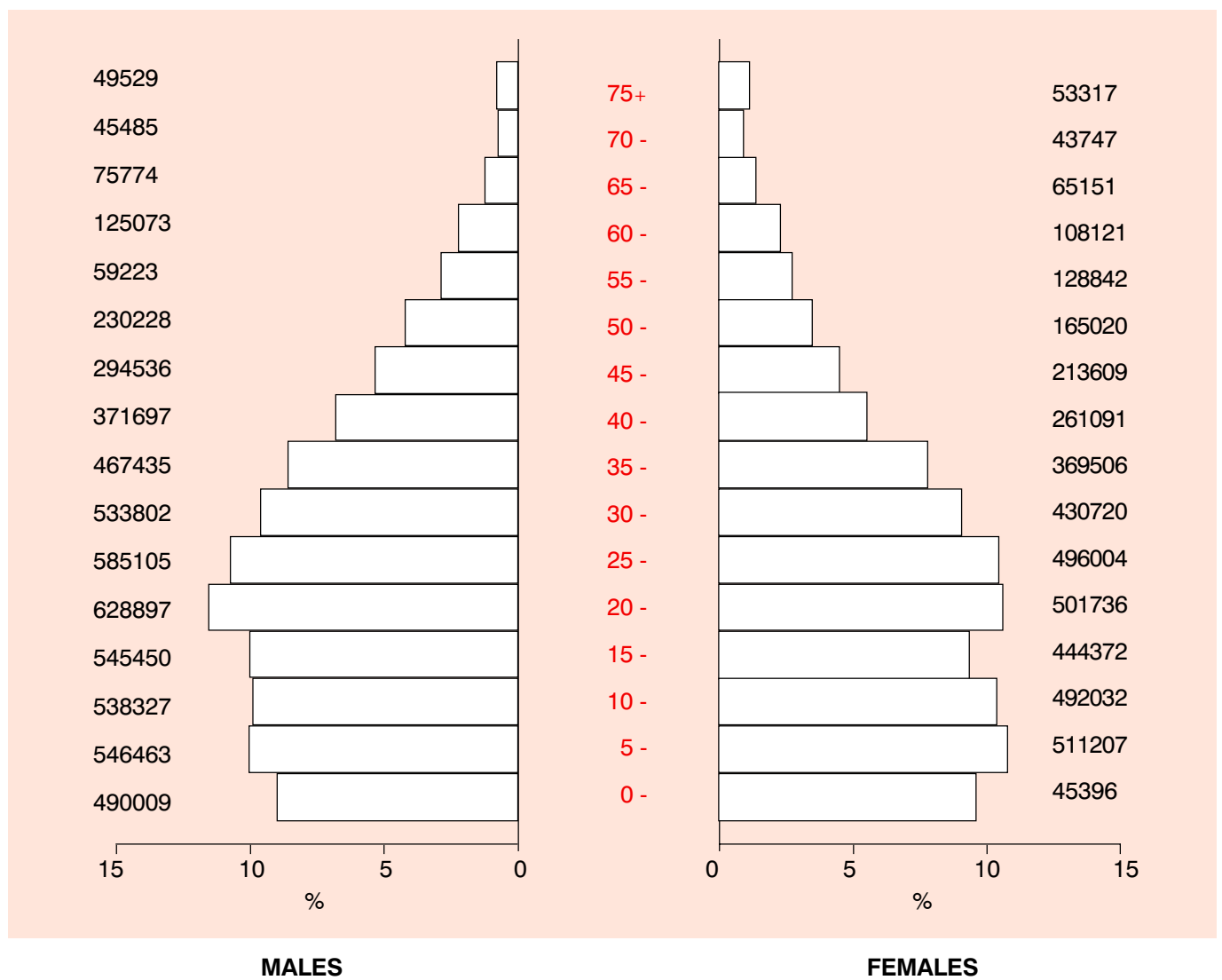


TABLE: MUM-1**Population by Five Year Age Group and Gender : 1990-1996***Number and Relative Proportion (%)***Mumbai**

Age Group	MALES		FEMALES		TOTAL	
	Number	%	Number	%	Number	%
0-4	490009	8.63	453967	9.58	943976	9.06
5-9	546463	9.63	511207	10.79	1057670	10.16
10-14	538327	9.48	492032	10.38	1030359	9.89
15-19	545450	9.61	444372	9.38	989822	9.50
20-24	628897	11.08	501736	10.59	1130633	10.86
25-29	585105	10.31	496004	10.47	1081109	10.38
30-34	522802	9.21	430720	9.09	953522	9.16
35-39	467435	8.24	369506	7.80	836941	8.04
40-44	371697	6.55	261091	5.51	632788	6.08
45-49	294536	5.19	213609	4.51	508145	4.88
50-54	230228	4.06	165020	3.48	395248	3.80
55-59	159223	2.81	128842	2.72	288065	2.77
60-64	125073	2.20	108121	2.28	233194	2.24
65-69	75774	1.33	65151	1.37	140925	1.35
70-74	45485	0.80	43747	0.92	89232	0.86
75+	49529	0.87	53317	1.13	102846	0.99
Total	5676033	100.0	4738442	100.0	10414475	100.0

TABLE: MUM-2**Main Sources* of Registration of Incident Cancers: 1990-1996****Mumbai**

Name of Institution	Year of Diagnosis and Relative Proportion (%)							1990-96	
	1990	1991	1992	1993	1994	1995	1996	Number	%
Tata Memorial Hospital	31.8	30.4	29.2	26.6	28.2	29.4	25.4	16030	28.6
BMC (DCO)	7.7	7.9	7.2	7.4	6.7	6.8	6.1	3964	7.1
Bombay Hospital	7.0	8.2	7.3	5.7	5.5	5.1	6.0	3573	6.4
King Edward Hospital	5.8	5.7	6.5	6.0	6.5	6.2	5.6	3379	6.0
Nanavati Hospital	4.9	4.7	4.3	4.3	4.4	4.6	5.6	2630	4.7
Small Nursing Homes	3.2	1.9	3.4	5.0	4.7	5.3	8.7	2611	4.7
LTMG Sion Hospital	3.6	3.5	3.1	3.6	4.4	4.3	4.6	2170	3.9
BYL Nair Hospital	3.5	3.4	3.3	3.7	4.0	3.4	3.5	1978	3.5
Private Practitioners	0.7	1.8	2.8	3.4	3.0	3.2	1.4	1303	2.3
Jaslok Hospital	3.0	2.6	2.1	2.1	1.7	2.1	2.4	1266	2.3
JJ Hospital	2.6	2.5	1.9	2.4	2.2	2.0	2.0	1241	2.2
National/Hinduja Hospital	1.7	1.7	1.8	2.2	2.2	2.5	2.1	1140	2.0
Ismaili General Hospital	1.2	1.2	1.9	2.2	2.3	2.6	2.0	1084	1.9
Shantiavadena	0.3	2.1	3.0	2.3	1.5	1.5	1.7	1001	1.8
Harkishan Das	2.0	2.2	1.6	1.8	1.7	1.5	1.4	978	1.7
R.N. Cooper Hospital	1.9	1.2	1.4	1.6	1.3	1.3	1.4	809	1.4
Breach Candy Hospital	1.5	1.0	1.2	1.2	1.4	1.5	1.5	755	1.3
Rajawadi Hospital	1.1	1.2	1.3	1.3	1.4	1.2	1.0	682	1.2
Bhatia Hospital	0.9	1.0	1.0	0.9	1.3	1.0	1.3	582	1.0
Lady Ratan Tata	0.1	1.5	0.9	0.9	1.1	1.1	1.5	567	1.0
Sushrusa	1.2	1.0	0.9	0.8	1.2	0.9	1.0	564	1.0
St George's Hospital	1.3	1.1	1.0	0.8	1.3	0.8	0.6	548	1.0
Total of above								48758	87
All Others								7286	13
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	56044	100.0

* 1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 1990-1996.

* 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-3(a): Number of Incident Cancers by Five Year Age Group and Site (ICD-9):
1990-1996 – 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	1	0	0	0	1	3	5	9	22	12	15	11	4	6	5	94	0.32
141	Tongue	0	1	0	1	1	10	33	78	139	183	232	192	195	164	112	115	1456	5.03
142	Salivary Gland	1	0	1	4	4	8	8	10	17	17	13	12	19	15	11	8	148	0.51
143	Gum	0	0	0	0	2	4	10	16	32	54	54	43	38	31	18	26	328	1.13
144	Floor of Mouth	0	0	0	0	1	1	2	9	12	31	18	25	21	11	7	5	143	0.49
145	Other Mouth	0	0	0	1	11	18	49	101	122	146	170	158	138	105	52	59	1130	3.90
146	Oropharynx	0	0	0	0	1	6	8	32	50	88	109	91	101	72	59	55	672	2.32
147	Nasopharynx	2	4	5	11	8	8	6	10	16	11	18	25	15	18	7	7	171	0.59
148	Hypopharynx	1	0	1	1	5	6	25	48	92	158	204	222	275	197	146	138	1519	5.25
149	Pharynx Etc.	0	0	0	0	0	4	2	10	16	18	36	40	55	38	35	45	299	1.03
150	Oesophagus	0	0	0	2	6	7	21	48	114	168	263	289	319	257	204	264	1962	6.78
151	Stomach	1	1	1	5	9	21	32	52	80	147	216	202	225	206	159	170	1527	5.27
152	Small Intestine	0	0	0	0	2	0	0	5	5	10	11	9	7	11	8	9	77	0.27
153	Colon	0	0	1	4	17	15	29	50	66	87	100	100	124	78	74	100	845	2.92
154	Rectum	0	0	2	3	16	24	33	49	46	85	102	113	89	100	80	90	832	2.87
155	Liver	18	4	3	2	5	2	14	38	38	61	79	101	128	130	84	91	798	2.76
156	Gall Bladder	0	0	0	2	3	3	7	18	29	35	58	55	69	43	41	47	410	1.42
157	Pancreas	0	0	2	0	1	6	9	18	30	48	71	67	80	82	52	53	519	1.79
158	Retroperitoneum	5	0	2	3	0	4	9	2	8	7	12	9	10	5	6	5	87	0.30
159	Other Dig System	0	0	0	0	2	0	0	2	4	3	7	9	8	6	7	7	55	0.19
160	Nasal Cavity	0	2	1	3	5	6	8	13	23	21	38	31	27	22	13	13	226	0.78
161	Larynx	0	1	0	2	7	4	25	48	80	154	192	281	256	243	165	169	1627	5.62
162	Lung	1	0	0	2	13	18	41	59	117	197	326	401	498	418	341	294	2726	9.42
163	Pleura	1	0	0	2	1	0	4	5	4	4	8	8	15	18	7	6	83	0.29
164	Thymus	2	2	3	0	4	4	4	4	5	4	4	3	6	2	3	3	53	0.18
165	Other Resp.	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.00
170	Bone	5	11	33	74	59	18	21	14	6	12	14	22	12	9	8	6	324	1.12
171	Conn. Tissue	22	13	14	20	20	28	21	28	30	32	37	24	37	25	11	25	387	1.34
172	Skin Melanoma	0	0	0	0	1	2	1	2	9	8	16	8	9	6	8	6	76	0.26
173	Skin. Other	1	0	1	3	6	9	18	27	23	34	46	54	39	39	28	51	379	1.31
175	Breast Male	0	0	0	0	0	0	2	5	9	8	11	14	14	15	12	10	100	0.35
185	Prostate	0	1	0	0	1	0	3	4	8	18	50	96	156	250	309	429	1325	4.58
186	Testis	14	3	3	20	41	56	57	33	29	17	14	7	14	7	8	5	328	1.13
187	Penis Etc.	0	0	1	0	4	6	15	36	29	28	47	33	37	42	29	41	348	1.20
188	Uri. Bladder	4	1	2	0	4	7	15	23	26	63	95	100	162	152	132	197	983	3.40
189	Kidney	33	13	3	4	2	4	7	23	32	49	51	64	82	64	41	33	505	1.74
190	Eye	43	7	2	0	1	1	3	3	0	1	6	3	2	0	1	0	73	0.25
191	Brain	45	84	54	39	60	59	77	100	94	97	80	93	64	48	37	39	1070	3.70
192	Nervous System	2	2	3	1	1	1	4	1	1	3	2	4	3	1	1	0	30	0.10
193	Thyroid Gland	0	2	1	3	15	9	13	16	10	22	23	27	19	21	9	22	212	0.73
194	Oth. Endo. Gland	27	10	5	4	3	4	0	3	0	4	0	2	1	1	1	1	66	0.23
195	Ill Def. Sites	3	0	0	2	5	2	3	4	5	9	14	6	11	12	6	10	92	0.32
196	Sec. Lymph. Node	2	0	1	2	7	8	9	13	36	60	81	65	89	62	50	51	536	1.85
197	Sec. Res. Etc	0	1	0	0	5	7	16	26	34	38	65	77	89	80	49	54	541	1.87
198	Sec. Other	2	2	1	2	1	3	7	14	23	29	27	44	52	39	33	32	311	1.07
199	Prim. Unknown	1	3	2	5	2	1	0	5	6	11	16	28	26	27	20	25	178	0.61
200	Lymphosarcoma	4	11	15	10	8	13	22	12	17	14	29	32	26	32	18	16	279	0.96
201	Hodgkins. Disease	14	42	30	22	26	38	24	29	27	27	27	26	21	11	10	9	383	1.32
202	Oth. Lymph. Node	14	22	27	34	49	64	55	63	73	62	92	83	91	90	67	66	952	3.29
203	Mult. Myeloma	0	0	0	0	0	1	2	4	7	26	40	50	42	31	40	25	268	0.93
204	Leuk. Lymphatic	100	86	72	70	42	25	15	10	19	14	23	20	25	21	16	27	585	2.02
205	Leuk. Myelocytic	20	25	27	30	48	61	62	58	61	46	62	50	35	34	23	23	665	2.30
206	Leuk. Monocytic	1	0	0	1	0	1	1	0	0	0	1	0	1	0	0	1	7	0.02
207	Leuk. Misc.	1	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	4	0.01
208	Leuk. Unspecified	17	13	16	22	11	8	8	5	10	7	8	10	5	7	6	5	158	0.55
	All Sites	407	368	335	416	546	617	863	1291	1778	2498	3330	3544	3894	3402	2671	2993	28953	100.00

**TABLE: MUM-3(b):Number of Incident Cancers by Five Year Age Group and Site (ICD-9):
1990-1996 – 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	1	0	1	0	2	1	7	13	10	11	10	1	5	62	0.23
141	Tongue	0	0	0	0	3	7	14	30	42	50	59	76	70	53	35	49	488	1.80
142	Salivary Gland	0	0	2	3	6	6	7	9	8	10	6	2	10	2	5	8	84	0.31
143	Gum	0	0	0	0	1	5	3	13	22	21	38	36	36	27	18	24	244	0.90
144	Floor of Mouth	0	0	0	0	0	0	0	2	2	3	2	2	4	1	4	1	21	0.08
145	Other Mouth	0	1	0	2	6	7	18	40	55	72	97	87	92	63	54	60	654	2.41
146	Oropharynx	0	0	0	0	1	2	3	6	5	5	5	10	11	11	11	13	83	0.31
147	Nasopharynx	1	1	3	4	5	3	2	4	6	4	7	6	6	5	4	6	67	0.25
148	Hypopharynx	0	0	0	1	5	10	15	36	29	52	60	40	66	36	29	32	411	1.52
149	Pharynx Etc.	0	0	0	1	1	3	2	3	5	7	7	11	14	12	7	15	88	0.32
150	Oesophagus	0	0	0	0	5	16	24	41	69	136	184	166	202	179	122	210	1354	5.00
151	Stomach	0	0	0	4	4	9	23	35	47	58	89	69	108	71	68	96	681	2.51
152	Small Intestine	0	0	0	0	3	1	2	2	1	4	7	5	3	4	4	4	40	0.15
153	Colon	1	0	0	2	5	17	20	31	44	62	57	69	85	81	63	86	623	2.30
154	Rectum	0	0	2	4	10	15	13	29	40	64	51	47	67	59	63	58	522	1.93
155	Liver	14	0	0	2	2	6	3	12	17	32	35	28	50	55	41	57	354	1.31
156	Gall Bladder	0	0	0	1	1	9	10	33	37	59	83	65	73	65	43	61	540	1.99
157	Pancreas	0	0	0	0	1	5	8	16	20	23	46	51	39	51	41	41	342	1.26
158	Retroperitoneum	2	1	0	1	1	1	0	3	8	8	8	8	11	12	5	11	80	0.30
159	Other Dig System	0	0	0	0	0	1	0	3	4	4	7	8	4	6	8	11	56	0.21
160	Nasal Cavity	1	0	0	3	5	2	3	4	13	15	26	15	22	13	13	9	144	0.53
161	Larynx	0	2	0	0	1	2	9	12	20	32	29	33	33	32	24	33	262	0.97
162	Lung	0	1	2	1	5	10	18	29	52	67	69	73	99	83	80	103	692	2.55
163	Pleura	0	1	0	1	0	0	3	4	4	5	4	7	9	4	6	13	61	0.23
164	Thymus	3	0	2	2	1	0	1	2	5	1	1	1	3	1	0	1	24	0.09
165	Other Resp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
170	Bone	4	16	26	23	12	11	4	9	7	5	8	6	7	6	9	11	164	0.61
171	Conn. Tissue	14	7	10	12	15	13	9	20	24	18	23	19	25	16	14	6	245	0.90
172	Skin Melanoma	1	0	0	0	2	1	1	5	0	4	6	5	8	5	6	6	50	0.18
173	Skin. Other	0	1	2	4	5	4	12	13	19	28	28	32	32	33	35	37	285	1.05
174	Breast	0	1	1	5	35	146	334	631	844	909	939	772	766	510	392	403	6688	24.69
179	Uterus NOS.	0	0	0	0	1	1	1	7	19	20	25	27	33	20	34	30	218	0.80
180	Cervix	0	0	0	0	18	87	200	444	567	643	604	493	436	291	182	160	4125	15.23
181	Placenta	0	1	1	3	14	20	7	5	1	3	1	0	0	1	1	1	59	0.22
182	Body Uterus	0	0	1	0	3	2	5	16	38	62	74	82	101	69	40	46	539	1.99
183	Ovary	6	12	20	37	44	47	65	122	206	228	250	214	186	126	78	105	1746	6.44
184	Vagina	1	0	0	0	5	4	13	19	22	19	34	24	36	22	34	27	260	0.96
188	Uri. Bladder	3	0	0	1	3	2	2	5	15	16	16	24	34	41	24	51	237	0.87
189	Kidney	26	13	2	3	3	1	7	7	10	20	17	19	31	26	18	14	217	0.80
190	Eye	27	6	2	0	1	0	2	0	2	0	1	0	0	3	0	2	46	0.17
191	Brain	28	45	51	36	33	38	37	43	56	48	48	38	41	30	19	24	615	2.27
192	Nervous System	1	2	5	0	1	1	2	0	0	4	1	0	0	0	2	0	19	0.07
193	Thyroid Gland	0	2	1	14	40	56	68	36	48	41	46	36	40	31	28	28	515	1.90
194	Oth. Endo. Gland	24	3	4	3	2	2	2	2	1	0	1	3	1	2	0	0	50	0.18
195	Ill Def. Sites	6	2	1	4	2	3	2	4	6	7	10	10	12	6	6	21	102	0.38
196	Sec. Lymph. Node	0	2	1	2	1	6	11	11	15	20	29	32	32	29	29	25	245	0.90
197	Sec. Res. Etc	3	1	0	1	3	9	6	18	27	39	56	65	55	57	40	51	431	1.59
198	Sec. Other	0	0	1	0	5	3	7	17	12	22	25	21	26	26	18	24	207	0.76
199	Prim. Unknown	3	0	3	0	5	3	3	6	7	14	18	12	13	21	19	27	154	0.57
200	Lymphosarcoma	2	7	6	4	4	8	3	11	7	10	19	12	19	10	13	12	147	0.54
201	Hodgkins. Disease	3	11	8	6	18	14	12	4	11	15	11	6	12	6	10	5	152	0.56
202	Oth. Lymph. Node	11	13	16	12	12	20	18	33	33	35	45	66	58	54	37	50	513	1.89
203	Mult. Myeloma	0	0	0	0	0	1	1	9	8	17	25	35	32	31	27	18	204	0.75
204	Leuk. Lymphatic	69	52	24	35	7	16	9	11	4	9	11	9	11	16	8	20	311	1.15
205	Leuk. Myelocytic	19	15	20	21	32	36	36	31	26	31	47	39	26	24	18	22	443	1.64
206	Leuk. Monocytic	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	4	0.01
207	Leuk. Misc.	0	0	0	1	0	0	0	1	0	0	1	0	0	0	1	1	5	0.02
208	Leuk. Unspecified	17	15	9	7	6	6	7	2	5	4	5	5	6	11	7	6	118	0.44
	All Sites	290	234	226	267	404	699	1089	1943	2596	3092	3414	3031	3209	2459	1898	2240	27091	100.00

TABLE: MUM-5(a):
Trends in Crude (CR) & Age Adjusted (AAR) Cancer Incidence Rates from 1990 to 1996 - Males
Mumbai

ICD-9	Site	1990		1991		1992		1993		1994		1995		1996	
		CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR
140	Lip	0.4	0.6	0.2	0.2	0.2	0.4	0.3	0.3	0.2	0.3	0.2	0.4	0.2	0.2
141	Tongue	3.9	6.3	3.4	5.4	3.8	6.0	3.5	5.5	3.8	5.7	3.8	5.7	3.6	5.3
142	Salivary Gland	0.4	0.7	0.5	0.7	0.4	0.6	0.3	0.3	0.4	0.5	0.3	0.4	0.4	0.5
143	Gum	0.7	1.0	1.0	1.4	0.8	1.3	0.8	1.1	0.7	0.9	1.1	1.6	0.7	1.1
144	Floor of Mouth	0.5	0.7	0.3	0.4	0.5	0.6	0.3	0.5	0.3	0.5	0.3	0.5	0.4	0.6
145	Other Mouth	3.1	4.5	2.7	3.9	2.7	3.6	2.8	4.2	2.6	3.5	2.8	3.8	3.3	4.5
146	Oropharynx	2.1	3.4	1.8	2.9	1.7	2.7	1.4	2.2	2.0	3.2	1.5	2.3	1.5	2.2
147	Nasopharynx	0.5	0.7	0.4	0.6	0.6	0.8	0.5	0.7	0.4	0.6	0.4	0.5	0.3	0.4
148	Hypopharynx	4.7	7.6	4.0	6.9	3.8	6.3	3.6	6.3	3.4	5.4	3.7	6.0	3.7	6.1
149	Pharynx Etc.	1.0	1.8	0.8	1.5	0.6	1.1	0.8	1.3	0.8	1.5	0.6	1.0	0.8	1.2
150	Oesophagus	5.3	9.1	5.1	8.9	5.0	8.8	5.3	9.1	4.3	7.4	5.2	8.7	4.5	7.6
151	Stomach	4.2	7.1	3.9	6.7	3.8	6.3	3.7	6.1	3.6	6.0	3.7	6.1	4.1	6.6
152	Small Intestine	0.2	0.3	0.1	0.2	0.3	0.4	0.1	0.2	0.2	0.3	0.1	0.2	0.4	0.6
153	Colon	2.4	3.8	1.9	3.2	2.1	3.2	1.9	3.1	2.6	4.2	1.9	2.7	2.0	3.2
154	Rectum	2.3	3.9	2.1	3.4	2.2	3.5	1.8	2.8	1.8	2.7	2.3	3.5	2.2	3.4
155	Liver	1.9	3.6	1.9	3.4	1.8	3.0	2.2	3.7	1.9	3.1	2.1	3.6	2.2	3.6
156	Gall Bladder	1.0	1.7	1.1	1.8	1.0	1.6	1.0	1.6	1.0	1.6	1.1	1.8	1.0	1.7
157	Pancreas	0.9	1.6	1.3	2.2	1.2	2.0	1.8	3.0	1.3	2.2	1.3	2.3	1.3	2.1
158	Retroperitoneum	0.2	0.2	0.3	0.4	0.2	0.3	0.4	0.5	0.2	0.4	0.1	0.2	0.2	0.3
159	Other Dig System	0.0	0.0	0.2	0.3	0.1	0.2	0.1	0.2	0.2	0.3	0.2	0.3	0.1	0.2
160	Nasal Cavity	0.7	1.0	0.7	0.9	0.4	0.7	0.6	1.0	0.7	1.0	0.5	0.7	0.4	0.5
161	Larynx	4.8	8.1	3.8	6.4	4.1	6.9	4.1	7.2	4.1	7.0	4.0	6.7	3.9	6.4
162	Lung	7.5	13.3	7.0	12.2	6.9	12.0	6.4	11.4	6.7	11.8	6.5	11.5	7.1	11.9
163	Pleura	0.1	0.2	0.2	0.2	0.1	0.3	0.3	0.5	0.2	0.4	0.2	0.4	0.3	0.5
164	Thymus	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.2
165	Other Resp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170	Bone	0.8	0.9	0.7	0.8	0.9	1.0	1.1	1.1	0.5	0.6	0.8	0.9	0.9	0.9
171	Conn. Tissue	0.8	1.1	0.9	1.2	1.0	1.2	1.1	1.5	1.1	1.4	0.8	0.9	1.1	1.5
172	Skin Melanoma	0.1	0.3	0.2	0.3	0.2	0.4	0.2	0.4	0.1	0.1	0.2	0.2	0.3	0.5
173	Skin. Other	1.2	2.1	0.8	1.1	1.0	1.4	0.9	1.4	1.0	1.6	0.8	1.3	1.0	1.5
175	Breast Male	0.3	0.7	0.3	0.6	0.4	0.7	0.2	0.2	0.2	0.3	0.2	0.4	0.2	0.3
185	Prostate	3.3	7.2	3.2	6.9	3.3	7.3	3.2	7.1	3.1	6.5	3.2	6.6	4.0	8.2
186	Testis	0.7	0.7	1.0	0.9	0.9	1.0	0.7	0.7	0.9	0.9	0.6	0.7	0.9	0.9
187	Penis Etc.	0.9	1.3	1.0	1.6	0.8	1.3	0.9	1.3	0.9	1.4	0.7	1.2	0.9	1.3
188	Uri. Bladder	2.2	4.2	2.2	4.2	2.8	5.3	2.3	4.3	2.7	4.9	2.5	4.4	2.6	4.7
189	Kidney	1.4	2.2	1.3	2.0	1.3	2.0	1.0	1.7	1.4	2.2	1.3	2.1	1.3	2.1
190	Eye	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.1	0.1
191	Brain	2.4	2.9	2.9	3.8	3.0	3.4	2.7	3.2	2.3	2.8	2.7	3.2	2.9	3.5
192	Nervous System	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
193	Thyroid Gland	0.5	0.6	0.6	0.8	0.6	0.8	0.6	0.8	0.5	0.7	0.5	0.7	0.6	0.8
194	Oth. Endo. Gland	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2
195	Ill Def. Sites	0.2	0.2	0.3	0.5	0.3	0.4	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.4
196	Sec. Lymph. Node	1.5	2.6	1.7	2.8	1.1	1.8	1.5	2.6	1.5	2.5	1.1	1.7	1.1	1.6
197	Sec. Res. Etc	1.5	2.8	1.4	2.4	1.3	2.0	1.4	2.1	1.6	2.7	1.3	2.2	1.1	1.7
198	Sec. Other	1.1	1.9	0.8	1.2	0.6	1.0	0.9	1.4	0.7	1.2	0.7	1.0	0.8	1.3
199	Prim. Unknown	0.4	0.8	0.4	0.6	0.4	0.8	0.5	0.8	0.5	0.8	0.4	0.7	0.6	1.0
200	Lymphosarcoma	0.8	1.1	0.7	1.1	0.9	1.4	0.7	1.0	0.7	1.0	0.6	0.7	0.5	0.7
201	Hodgkins. Disease	1.1	1.3	1.3	1.5	1.0	1.2	1.0	1.1	0.7	0.7	0.8	0.8	0.9	1.0
202	Oth. Lymph. Node	1.9	2.8	1.8	2.5	2.3	3.1	2.5	3.4	2.6	4.0	2.9	3.9	2.7	3.5
203	Mult. Myeloma	0.7	1.2	0.7	1.1	0.8	1.4	0.6	1.0	0.7	1.3	0.5	0.9	0.8	1.3
204	Leuk. Lymphatic	1.0	1.3	1.3	1.6	1.3	1.6	1.8	2.3	1.3	1.6	1.7	2.1	1.7	2.1
205	Leuk. Myelocytic	1.9	2.1	1.4	1.5	1.9	2.4	1.7	2.1	1.8	2.0	1.6	1.8	1.6	1.9
206	Leuk. Monocytic	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
207	Leuk. Misc.	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
208	Leuk. Unspecified	0.4	0.5	0.5	0.5	0.2	0.3	0.3	0.4	0.3	0.4	0.5	0.5	0.6	0.8
	All Sites	76.4	124.8	71.5	115.8	72.9	115.9	72.6	115.6	71.5	113.2	71.0	110.7	74.4	114.5

TABLE: MUM-5(b):**Trends in Crude (CR)& Age Adjusted (AAR) Cancer Incidence Rates from 1990 to 1996 - Females
Mumbai**

ICD-9	Site	1990		1991		1992		1993		1994		1995		1996	
		CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR	CR	AAR
140	Lip	0.1	0.2	0.2	0.4	0.2	0.4	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3
141	Tongue	1.6	2.5	1.1	1.7	1.6	2.4	1.6	2.5	1.3	1.9	1.3	2.0	1.9	2.7
142	Salivary Gland	0.2	0.3	0.2	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.4
143	Gum	0.7	1.1	0.7	1.1	0.9	1.4	0.8	1.3	0.7	1.2	0.8	1.3	0.5	0.7
144	Floor of Mouth	0.0	0.0	0.0	0.1	0.2	0.3	0.0	0.1	0.0	0.1	0.1	0.2	0.0	0.1
145	Other Mouth	1.9	2.8	2.2	3.4	2.1	3.2	2.2	3.3	1.9	2.9	1.8	2.9	1.8	2.6
146	Oropharynx	0.4	0.6	0.1	0.2	0.2	0.4	0.2	0.3	0.3	0.5	0.4	0.6	0.2	0.3
147	Nasopharynx	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.1	0.1	0.3	0.4
148	Hypopharynx	1.4	2.1	1.4	2.1	1.2	1.8	1.5	2.1	1.1	1.7	1.2	1.8	1.0	1.4
149	Pharynx Etc.	0.2	0.3	0.5	0.8	0.4	0.6	0.3	0.5	0.2	0.3	0.1	0.2	0.2	0.3
150	Oesophagus	4.9	8.1	4.0	6.7	4.5	7.4	4.3	6.7	3.7	6.0	4.2	6.7	3.4	5.4
151	Stomach	2.2	3.4	2.0	3.3	2.2	3.5	1.7	2.7	2.1	3.3	1.9	2.8	2.4	3.8
152	Small Intestine	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.3	0.1	0.2	0.1	0.2	0.1	0.1
153	Colon	2.1	3.4	1.6	2.6	1.8	2.9	1.7	2.6	2.3	3.5	1.9	3.0	1.9	2.9
154	Rectum	1.6	2.6	1.8	3.0	1.5	2.3	1.4	2.1	1.6	2.3	1.5	2.3	1.7	2.6
155	Liver	1.1	1.9	0.9	1.4	1.1	1.7	0.8	1.4	1.0	1.7	1.3	2.1	1.4	2.2
156	Gall Bladder	1.5	2.4	1.7	2.6	1.7	2.9	1.5	2.4	1.6	2.5	1.6	2.4	1.8	2.7
157	Pancreas	0.8	1.3	1.1	1.8	1.0	1.6	1.3	2.3	0.9	1.5	1.2	1.8	1.0	1.6
158	Retroperitoneum	0.3	0.6	0.3	0.5	0.4	0.6	0.2	0.3	0.1	0.2	0.2	0.3	0.2	0.3
159	Other Dig System	0.1	0.2	0.2	0.4	0.2	0.4	0.1	0.2	0.1	0.2	0.2	0.3	0.2	0.3
160	Nasal Cavity	0.5	0.7	0.6	0.9	0.3	0.5	0.6	0.9	0.4	0.6	0.4	0.5	0.3	0.5
161	Larynx	0.7	1.2	0.6	0.9	1.0	1.6	1.0	1.6	0.7	1.1	0.8	1.1	0.8	1.2
162	Lung	1.9	3.0	1.8	2.9	2.5	4.1	2.2	3.5	2.1	3.4	2.1	3.3	2.1	3.4
163	Pleura	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.3	0.2	0.4
164	Thymus	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	Other Resp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170	Bone	0.5	0.6	0.6	0.7	0.6	0.6	0.4	0.4	0.5	0.6	0.5	0.7	0.4	0.5
171	Conn. Tissue	0.7	1.0	0.6	0.8	0.9	1.1	0.8	1.1	0.9	1.1	0.6	0.8	0.7	0.8
172	Skin Melanoma	0.2	0.4	0.2	0.3	0.2	0.3	0.0	0.1	0.1	0.2	0.2	0.3	0.2	0.2
173	Skin. Other	0.8	1.1	0.7	1.0	1.1	1.6	0.9	1.5	0.8	1.3	0.8	1.2	1.0	1.7
174	Breast Female	19.5	27.9	21.6	30.8	20.9	29.1	19.9	28.3	20.0	28.5	19.8	27.4	20.3	28.5
179	Uterus NOS.	0.6	1.1	0.7	1.1	0.7	1.2	0.5	0.9	0.8	1.3	0.9	1.5	0.4	0.7
180	Cervix Uteri	12.9	18.0	14.3	19.5	13.6	18.8	12.5	17.3	11.5	15.9	11.2	15.1	11.9	16.3
181	Placenta	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.3	0.2	0.1	0.1
182	Corpus Uteri	1.7	2.8	1.4	2.3	1.4	2.2	1.7	2.7	1.9	3.0	1.4	2.3	1.8	2.9
183	Ovary Etc.	4.6	6.4	4.7	6.7	5.4	7.4	6.6	9.0	5.2	7.4	5.1	7.3	5.4	7.2
184	Other Fem Gen.	1.0	1.5	0.7	1.2	0.9	1.2	0.8	1.2	0.6	0.9	0.7	1.0	0.9	1.3
188	Uri. Bladder	0.6	1.2	0.5	0.9	0.7	1.2	0.7	1.2	0.8	1.2	1.1	1.8	0.6	1.0
189	Kidney	0.5	0.7	0.6	1.0	0.7	1.1	0.8	1.2	0.5	0.8	0.7	1.1	0.7	1.1
190	Eye	0.2	0.3	0.1	0.2	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2
191	Brain	2.0	2.5	1.6	1.9	1.8	2.2	1.7	2.1	1.9	2.2	1.8	2.1	2.2	2.7
192	Nervous System	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.2	0.0	0.0
193	Thyroid Gland	1.8	2.3	1.3	1.6	1.6	2.1	1.4	1.7	1.5	1.9	1.7	2.0	1.6	1.9
194	Oth. Endo. Gland	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
195	Ill Def. Sites	0.2	0.3	0.4	0.6	0.2	0.4	0.4	0.6	0.3	0.4	0.3	0.5	0.3	0.4
196	Sec. Lymph. Node	0.7	1.0	0.7	1.1	0.7	1.2	0.7	1.2	1.0	1.6	0.7	1.1	0.7	1.0
197	Sec. Res. Etc	1.5	2.2	1.4	2.4	1.3	2.0	1.6	2.4	1.2	1.9	1.2	2.1	1.0	1.7
198	Sec. Other	0.5	0.8	0.7	1.0	0.5	0.8	0.7	1.1	0.7	1.2	0.6	1.0	0.5	0.8
199	Prim. Unknown	0.4	0.6	0.2	0.4	0.5	0.7	0.4	0.7	0.7	1.1	0.6	0.9	0.5	0.8
200	Lymphosarcoma	0.4	0.5	1.0	1.4	0.2	0.2	0.7	1.0	0.5	0.7	0.2	0.3	0.3	0.4
201	Hodgkins. Disease	0.4	0.5	0.5	0.7	0.7	0.8	0.3	0.3	0.4	0.5	0.6	0.8	0.3	0.4
202	Oth. Lymph. Node	1.2	1.8	1.1	1.5	1.4	2.1	1.6	2.4	1.9	2.8	1.8	2.3	1.9	2.8
203	Mult. Myeloma	0.5	0.8	0.6	1.1	0.7	1.1	0.4	0.7	0.6	1.0	0.8	1.3	0.8	1.2
204	Leuk. Lymphatic	0.9	1.1	1.0	1.2	0.9	1.1	0.9	1.0	0.9	1.0	1.1	1.4	1.0	1.2
205	Leuk. Myelocytic	1.3	1.6	1.1	1.4	1.2	1.6	1.5	1.9	1.3	1.5	1.4	1.7	1.5	1.8
206	Leuk. Monocytic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
207	Leuk. Misc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
208	Leuk. Unspecified	0.3	0.4	0.4	0.4	0.2	0.3	0.4	0.5	0.4	0.5	0.4	0.5	0.5	0.6
	All Sites	80.8	119.2	82.9	121.1	84.8	123.5	83.5	121.0	80.6	117.1	81.1	116.1	81.5	116.7

TABLE: MUM-6(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) 1990-1996: 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	0.36	0.36	0.69	0.69
142	Salivary Gland	0.03	0.03	0.06	0.06
143	Gum	0.08	0.08	0.14	0.14
144	Floor of Mouth	0.04	0.04	0.06	0.06
145	Other Mouth	0.29	0.29	0.47	0.47
146	Oropharynx	0.17	0.17	0.33	0.33
147	Nasopharynx	0.04	0.04	0.07	0.07
148	Hypopharynx	0.39	0.39	0.81	0.81
149	Pharynx Etc.	0.07	0.07	0.16	0.16
150	Oesophagus	0.47	0.47	1.03	1.02
151	Stomach	0.35	0.35	0.80	0.80
152	Small Intestine	0.02	0.02	0.04	0.04
153	Colon	0.2	0.20	0.39	0.39
154	Rectum	0.18	0.18	0.40	0.40
155	Liver	0.18	0.18	0.43	0.43
156	Gall Bladder	0.1	0.10	0.21	0.21
157	Pancreas	0.12	0.12	0.28	0.28
158	Retroperitoneum	0.02	0.02	0.03	0.03
159	Other Dig System	0.01	0.01	0.03	0.03
160	Nasal Cavity	0.06	0.06	0.10	0.10
161	Larynx	0.40	0.40	0.89	0.89
162	Lung	0.66	0.66	1.59	1.58
163	Pleura	0.02	0.02	0.05	0.05
164	Thymus	0.01	0.01	0.02	0.02
165	Other Resp.	0.00	0.00	0.00	0.00
170	Bone	0.06	0.06	0.08	0.08
171	Conn. Tissue	0.08	0.08	0.12	0.12
172	Skin Melanoma	0.02	0.02	0.04	0.04
173	Skin. Other	0.08	0.08	0.16	0.16
175	Breast Male	0.02	0.02	0.06	0.06
185	Prostate	0.16	0.16	0.88	0.88
186	Testis	0.06	0.06	0.07	0.07
187	Penis Etc.	0.07	0.07	0.16	0.16
188	Uri. Bladder	0.20	0.20	0.55	0.55
189	Kidney	0.12	0.12	0.25	0.25
190	Eye	0.01	0.01	0.02	0.02
191	Brain	0.21	0.21	0.32	0.32
192	Nervous System	0.01	0.01	0.01	0.01
193	Thyroid Gland	0.05	0.05	0.08	0.08
194	Oth. Endo. Gland	0.01	0.01	0.01	0.01
195	Ill Def. Sites	0.02	0.02	0.04	0.04
196	Sec. Lymph. Node	0.13	0.13	0.27	0.27
197	Sec. Res. Etc	0.13	0.13	0.28	0.28
198	Sec. Other	0.08	0.08	0.16	0.16
199	Prim. Unknown	0.04	0.04	0.10	0.10
200	Lymphosarcoma	0.06	0.06	0.12	0.12
201	Hodgkins. Disease	0.07	0.07	0.10	0.10
202	Oth. Lymph. Node	0.19	0.19	0.38	0.38
203	Mult. Myeloma	0.07	0.07	0.16	0.16
204	Leuk. Lymphatic	0.09	0.09	0.14	0.14
205	Leuk. Myelocytic	0.13	0.13	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. Unspecified	0.03	0.03	0.04	0.04
	All Sites	6.46	6.26	13.89	12.97

TABLE: MUM-6(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) 1990-1996: 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	0.15	0.15	0.27	0.27
142	Salivary Gland	0.02	0.02	0.03	0.03
143	Gum	0.08	0.08	0.14	0.14
144	Floor of Mouth	0.01	0.01	0.01	0.01
145	Other Mouth	0.20	0.20	0.36	0.36
146	Oropharynx	0.02	0.02	0.05	0.05
147	Nasopharynx	0.02	0.02	0.03	0.03
148	Hypopharynx	0.13	0.13	0.22	0.22
149	Pharynx Etc.	0.02	0.02	0.05	0.05
150	Oesophagus	0.39	0.39	0.78	0.78
151	Stomach	0.19	0.19	0.38	0.38
152	Small Intestine	0.01	0.01	0.02	0.02
153	Colon	0.17	0.17	0.36	0.36
154	Rectum	0.14	0.14	0.31	0.31
155	Liver	0.09	0.09	0.21	0.21
156	Gall Bladder	0.16	0.16	0.30	0.30
157	Pancreas	0.09	0.09	0.22	0.22
158	Retroperitoneum	0.02	0.02	0.04	0.04
159	Other Dig Sys	0.01	0.01	0.03	0.03
160	Nasal Cavity	0.05	0.05	0.08	0.08
161	Larynx	0.07	0.07	0.15	0.15
162	Lung	0.18	0.18	0.41	0.41
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	0.03	0.03	0.05	0.05
171	Conn. Tissue	0.07	0.07	0.11	0.11
172	Skin Melanoma	0.01	0.01	0.03	0.03
173	Skin. Other	0.07	0.07	0.17	0.17
174	Breast	2.09	2.07	3.29	3.24
179	Uterus NOS.	0.06	0.06	0.14	0.14
180	Cervix	1.33	1.32	1.95	1.93
181	Placenta	0.01	0.01	0.01	0.01
182	Body Uterus	0.18	0.18	0.32	0.32
183	Ovary	0.54	0.54	0.81	0.81
184	Vagina	0.07	0.07	0.15	0.15
188	URI. Bladder	0.06	0.06	0.14	0.14
189	Kidney	0.06	0.06	0.12	0.12
190	Eye	0.01	0.01	0.01	0.01
191	Brain	0.15	0.15	0.21	0.21
192	Nervous System	0.00	0.00	0.01	0.01
193	Thyroid Gland	0.13	0.13	0.21	0.21
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	0.15	0.15
197	Sec. Res. Etc	0.12	0.12	0.25	0.25
198	Sec. Other	0.06	0.06	0.11	0.11
199	Prim. Unknown	0.03	0.03	0.09	0.09
200	Lymphosarcoma	0.04	0.04	0.07	0.07
201	Hodgkins. Disease	0.04	0.04	0.06	0.06
202	Oth. Lymph. Node	0.14	0.14	0.26	0.26
203	Mult. Myeloma	0.06	0.06	0.14	0.14
204	Leuk. Lymphatic	0.06	0.06	0.09	0.09
205	Leuk. Myelocytic	0.11	0.11	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. Unspecified	0.02	0.02	0.05	0.05
	All Sites	7.92	7.61	13.73	12.83

TABLE: MUM-7(a): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Method of Diagnosis 1990-1996 - Males
Mumbai

ICD-9	Site	Clinical		Microscopic		X-Ray		D.C.O.		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	8	8.5	82	87.2	0	0.0	3	3.2	1	1.1	94	100.0
141	Tongue	164	11.3	1201	82.5	8	0.5	79	5.4	4	0.3	1456	100.0
142	Salivary Gland	11	7.4	131	88.5	0	0.0	3	2.0	3	2.0	148	100.0
143	Gum	39	11.9	275	83.8	1	0.3	10	3.0	3	0.9	328	100.0
144	Floor of Mouth	10	7.0	132	92.3	0	0.0	1	0.7	0	0.0	143	100.0
145	Other Mouth	121	10.7	964	85.3	5	0.4	29	2.6	11	1.0	1130	100.0
146	Oropharynx	65	9.7	557	82.9	6	0.9	37	5.5	7	1.0	672	100.0
147	Nasopharynx	26	15.2	134	78.4	4	2.3	5	2.9	2	1.2	171	100.0
148	Hypopharynx	165	10.9	1232	81.1	63	4.1	45	3.0	14	0.9	1519	100.0
149	Pharynx Etc.	28	9.4	179	59.9	0	0.0	89	29.8	3	1.0	299	100.0
150	Oesophagus	330	16.8	1147	58.5	156	8.0	258	13.1	71	3.6	1962	100.0
151	Stomach	222	14.5	1019	66.7	31	2.0	126	8.3	129	8.4	1527	100.0
152	Small Intestine	7	9.1	59	76.6	0	0.0	7	9.1	4	5.2	77	100.0
153	Colon	113	13.4	593	70.2	17	2.0	52	6.2	70	8.3	845	100.0
154	Rectum	109	13.1	630	75.7	6	0.7	45	5.4	42	5.0	832	100.0
155	Liver	116	14.5	506	63.4	20	2.5	114	14.3	42	5.3	798	100.0
156	Gall Bladder	92	22.4	209	51.0	17	4.1	43	10.5	49	12.0	410	100.0
157	Pancreas	143	27.6	186	35.8	25	4.8	70	13.5	95	18.3	519	100.0
158	Retroperitoneum	11	12.6	61	70.1	1	1.1	6	6.9	8	9.2	87	100.0
159	Other Dig Sys	11	20.0	33	60.0	0	0.0	8	14.5	3	5.5	55	100.0
160	Nasal Cavity	25	11.1	179	79.2	8	3.5	11	4.9	3	1.3	226	100.0
161	Larynx	248	15.2	1110	68.2	36	2.2	184	11.3	49	3.0	1627	100.0
162	Lung	478	17.5	1694	62.1	145	5.3	321	11.8	88	3.2	2726	100.0
163	Pleura	20	24.1	56	67.5	2	2.4	3	3.6	2	2.4	83	100.0
164	Thymus	11	20.8	37	69.8	2	3.8	3	5.7	0	0.0	53	100.0
165	Other Resp.	0	0.0	1	100.0	0	0.0	0	0.0	0	0.0	1	100.0
170	Bone	12	3.7	279	86.1	4	1.2	26	8.0	3	0.9	324	100.0
171	Conn. Tissue	7	1.8	373	96.4	1	0.3	4	1.0	2	0.5	387	100.0
172	Skin Melanoma	1	1.3	74	97.4	0	0.0	1	1.3	0	0.0	76	100.0
173	Skin. Other	10	2.6	361	95.3	1	0.3	6	1.6	1	0.3	379	100.0
175	Breast Male	14	14.0	80	80.0	2	2.0	3	3.0	1	1.0	100	100.0
185	Prostate	197	14.9	921	69.5	30	2.3	103	7.8	74	5.6	1325	100.0
186	Testis	26	7.9	273	83.2	6	1.8	11	3.4	12	3.7	328	100.0
187	Penis Etc.	52	14.9	272	78.2	0	0.0	6	1.7	18	5.2	348	100.0
188	URI. Bladder	90	9.2	784	79.8	16	1.6	48	4.9	45	4.6	983	100.0
189	Kidney	34	6.7	423	83.8	14	2.8	12	2.4	22	4.4	505	100.0
190	Eye	2	2.7	63	86.3	2	2.7	1	1.4	5	6.8	73	100.0
191	Brain	45	4.2	946	88.4	17	1.6	40	3.7	22	2.1	1070	100.0
192	Nervous System	2	6.7	25	83.3	1	3.3	2	6.7	0	0.0	30	100.0
193	Thyroid Gland	13	6.1	175	82.5	6	2.8	10	4.7	8	3.8	212	100.0
194	Oth. Endo. Gland	6	9.1	54	81.8	1	1.5	2	3.0	3	4.5	66	100.0
195	Ill Def. Sites	31	33.7	13	14.1	1	1.1	33	35.9	14	15.2	92	100.0
196	Sec. Lymph. Node	31	5.8	471	87.9	5	0.9	22	4.1	7	1.3	536	100.0
197	Sec. Res. Etc	106	19.6	295	54.5	39	7.2	27	5.0	74	13.7	541	100.0
198	Sec. Other	46	14.8	211	67.8	29	9.3	17	5.5	8	2.6	311	100.0
199	Prim. Unknown	69	38.8	44	24.7	0	0.0	57	32.0	8	4.5	178	100.0
200	Lymphosarcoma	1	0.4	275	98.6	0	0.0	3	1.1	0	0.0	279	100.0
201	Hodgkins. Disease	1	0.3	377	98.4	0	0.0	4	1.0	1	0.3	383	100.0
202	Oth. Lymph. Node	3	0.3	937	98.4	0	0.0	12	1.3	0	0.0	952	100.0
203	Mult. Myeloma	1	0.4	262	97.8	0	0.0	5	1.9	0	0.0	268	100.0
204	Leuk. Lymphatic	1	0.2	574	98.1	0	0.0	10	1.7	0	0.0	585	100.0
205	Leuk. Myelocytic	1	0.2	645	97.0	0	0.0	19	2.9	0	0.0	665	100.0
206	Leuk. Monocytic	1	14.3	6	85.7	0	0.0	0	0.0	0	0.0	7	100.0
207	Leuk. Misc.	0	0.0	3	75.0	0	0.0	1	25.0	0	0.0	4	100.0
208	Leuk. Unspecified	2	1.3	148	93.7	0	0.0	8	5.1	0	0.0	158	100.0
	All Sites	3378	11.7	21771	75.2	728	2.5	2045	7.1	1031	3.6	28953	100.0

TABLE: MUM-7(b): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Method of Diagnosis 1990-1996 - Females
Mumbai

ICD-9	Site	Clinical		Microscopic		X-Ray		D.C.O.		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	13	21.0	48	77.4	0	0.0	1	1.6	0	0.0	62	100.0
141	Tongue	53	10.9	397	81.4	4	0.8	28	5.7	6	1.2	488	100.0
142	Salivary Gland	4	4.8	73	86.9	1	1.2	3	3.6	3	3.6	84	100.0
143	Gum	25	10.2	197	80.7	2	0.8	17	7.0	3	1.2	244	100.0
144	Floor of Mouth	8	38.1	12	57.1	0	0.0	1	4.8	0	0.0	21	100.0
145	Other Mouth	74	11.3	529	80.9	3	0.5	46	7.0	2	0.3	654	100.0
146	Oropharynx	11	13.3	66	79.5	1	1.2	5	6.0	0	0.0	83	100.0
147	Nasopharynx	10	14.9	52	77.6	2	3.0	3	4.5	0	0.0	67	100.0
148	Hypopharynx	37	9.0	335	81.5	21	5.1	11	2.7	7	1.7	411	100.0
149	Pharynx Etc.	12	13.6	45	51.1	0	0.0	31	35.2	0	0.0	88	100.0
150	Oesophagus	197	14.5	799	59.0	104	7.7	213	15.7	41	3.0	1354	100.0
151	Stomach	113	16.6	401	58.9	17	2.5	91	13.4	59	8.7	681	100.0
152	Small Intestine	1	2.5	35	87.5	0	0.0	4	10.0	0	0.0	40	100.0
153	Colon	85	13.6	414	66.5	16	2.6	56	9.0	52	8.3	623	100.0
154	Rectum	62	11.9	401	76.8	8	1.5	34	6.5	17	3.3	522	100.0
155	Liver	49	13.8	195	55.1	7	2.0	86	24.3	17	4.8	354	100.0
156	Gall Bladder	101	18.7	294	54.4	15	2.8	69	12.8	61	11.3	540	100.0
157	Pancreas	84	24.6	139	40.6	14	4.1	57	16.7	48	14.0	342	100.0
158	Retroperitoneum	15	18.8	57	71.3	1	1.3	6	7.5	1	1.3	80	100.0
159	Other Dig System	12	21.4	26	46.4	0	0.0	15	26.8	3	5.4	56	100.0
160	Nasal Cavity	18	12.5	108	75.0	1	0.7	15	10.4	2	1.4	144	100.0
161	Larynx	35	13.4	170	64.9	5	1.9	43	16.4	9	3.4	262	100.0
162	Lung	129	18.6	387	55.9	43	6.2	115	16.6	18	2.6	692	100.0
163	Pleura	11	18.0	39	63.9	4	6.6	5	8.2	2	3.3	61	100.0
164	Thymus	2	8.3	19	79.2	0	0.0	1	4.2	2	8.3	24	100.0
165	Other Resp.	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
170	Bone	11	6.7	127	77.4	2	1.2	20	12.2	4	2.4	164	100.0
171	Conn. Tissue	3	1.2	237	96.7	3	1.2	1	0.4	1	0.4	245	100.0
172	Skin Melanoma	0	0.0	50	100.0	0	0.0	0	0.0	0	0.0	50	100.0
173	Skin. Other	2	0.7	275	96.5	1	0.4	4	1.4	3	1.1	285	100.0
174	Breast	769	11.5	5374	80.4	81	1.2	314	4.7	150	2.2	6688	100.0
179	Uterus NOS.	36	16.5	76	34.9	2	0.9	96	44.0	8	3.7	218	100.0
180	Cervix	467	11.3	3425	83.0	18	0.4	161	3.9	54	1.3	4125	100.0
181	Placenta	3	5.1	51	86.4	2	3.4	1	1.7	2	3.4	59	100.0
182	Body Uterus	26	4.8	493	91.5	3	0.6	5	0.9	12	2.2	539	100.0
183	Ovary	274	15.7	1262	72.3	18	1.0	92	5.3	100	5.7	1746	100.0
184	Vagina	28	10.8	216	83.1	5	1.9	8	3.1	3	1.2	260	100.0
188	Uri. Bladder	26	11.0	180	75.9	2	0.8	15	6.3	14	5.9	237	100.0
189	Kidney	12	5.5	175	80.6	5	2.3	18	8.3	7	3.2	217	100.0
190	Eye	4	8.7	42	91.3	0	0.0	0	0.0	0	0.0	46	100.0
191	Brain	41	6.7	519	84.4	15	2.4	31	5.0	9	1.5	615	100.0
192	Nervous System	0	0.0	19	100.0	0	0.0	0	0.0	0	0.0	19	100.0
193	Thyroid Gland	38	7.4	449	87.2	4	0.8	11	2.1	13	2.5	515	100.0
194	Oth. Endo. Gland	6	12.0	43	86.0	0	0.0	0	0.0	1	2.0	50	100.0
195	Ill Def. Sites	25	24.5	34	33.3	2	2.0	32	31.4	9	8.8	102	100.0
196	Sec. Lymph. Node	18	7.3	216	88.2	1	0.4	5	2.0	5	2.0	245	100.0
197	Sec. Res. Etc	56	13.0	279	64.7	19	4.4	29	6.7	48	11.1	431	100.0
198	Sec. Other	42	20.3	125	60.4	20	9.7	6	2.9	14	6.8	207	100.0
199	Prim. Unknown	49	31.8	46	29.9	0	0.0	48	31.2	11	7.1	154	100.0
200	Lymphosarcoma	0	0.0	143	97.3	0	0.0	4	2.7	0	0.0	147	100.0
201	Hodgkins. Disease	0	0.0	150	98.7	0	0.0	2	1.3	0	0.0	152	100.0
202	Oth. Lymph. Node	1	0.2	507	98.8	0	0.0	5	1.0	0	0.0	513	100.0
203	Mult. Myeloma	1	0.5	197	96.6	0	0.0	6	2.9	0	0.0	204	100.0
204	Leuk. Lymphatic	0	0.0	301	96.8	0	0.0	10	3.2	0	0.0	311	100.0
205	Leuk. Myelocytic	0	0.0	430	97.1	0	0.0	13	2.9	0	0.0	443	100.0
206	Leuk. Monocytic	0	0.0	4	100.0	0	0.0	0	0.0	0	0.0	4	100.0
207	Leuk. Misc.	0	0.0	4	80.0	0	0.0	1	20.0	0	0.0	5	100.0
208	Leuk. Unspecified	0	0.0	108	91.5	0	0.0	10	8.5	0	0.0	118	100.0
	All Sites	3099	11.4	20795	76.8	472	1.7	1904	7.0	821	3.0	27091	100.0

TABLE: MUM-8(a): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Detailed Microscopic Diagnosis, 1990-1996 - Males : Mumbai

ICD-9	Site	Pri. Hist		Sec. Hist		Cytology		Blood Film		Bone Marrow		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	82	87.2	0	0	0	0	0	0	0	0	12	12.8	94	100
141	Tongue	1050	72.1	84	5.8	65	4.5	0	0	1	0.1	256	17.6	1456	100
142	Salivary Glands	109	73.6	3	2	19	12.8	0	0	0	0	17	11.5	148	100
143	Gum	269	82	4	1.2	2	0.6	0	0	0	0	53	16.2	328	100
144	Floor of Mouth	126	88.1	3	2.1	3	2.1	0	0	0	0	11	7.7	143	100
145	Other Mouth	924	81.8	30	2.7	10	0.9	0	0	0	0	166	14.7	1130	100
146	Oropharynx	490	72.9	49	7.3	18	2.7	0	0	0	0	115	17.1	672	100
147	Nasopharynx	74	43.3	48	28.1	12	7	0	0	0	0	37	21.6	171	100
148	Hypopharynx	1001	65.9	144	9.5	87	5.7	0	0	0	0	287	18.9	1519	100
149	Pharynx Etc	164	54.8	8	2.7	7	2.3	0	0	0	0	120	40.1	299	100
150	Oesophagus	1031	52.5	38	1.9	77	3.9	0	0	0	0	816	41.6	1962	100
151	Stomach	874	57.2	104	6.8	38	2.5	0	0	1	0.1	510	33.4	1527	100
152	Small Intestine	52	67.5	5	6.5	2	2.6	0	0	0	0	18	23.4	77	100
153	Colon	544	64.4	37	4.4	12	1.4	0	0	0	0	252	29.8	845	100
154	Rectum	610	73.3	12	1.4	8	1	0	0	0	0	202	24.3	832	100
155	Liver	403	50.5	10	1.3	86	10.8	0	0	1	0.1	298	37.3	798	100
156	Gall Bladder	169	41.2	22	5.4	18	4.4	0	0	0	0	201	49	410	100
157	Pancreas	105	20.2	43	8.3	37	7.1	0	0	1	0.2	333	64.2	519	100
158	Retroperito	49	56.3	2	2.3	10	11.5	0	0	0	0	26	29.9	87	100
159	Other Digs	14	25.5	18	32.7	1	1.8	0	0	0	0	22	40	55	100
160	Nasal Cavity	163	72.1	7	3.1	9	4	0	0	0	0	47	20.8	226	100
161	Larynx	994	61.1	68	4.2	48	3	0	0	0	0	517	31.8	1627	100
162	Lung	960	35.2	236	8.7	496	18.2	0	0	1	0	1033	37.9	2726	100
163	Pleura	25	30.1	4	4.8	27	32.5	0	0	0	0	27	32.5	83	100
164	Thymus	31	58.5	4	7.5	2	3.8	0	0	0	0	16	30.2	53	100
165	Other Resp	1	99.9	0	0	0	0	0	0	0	0	0	0	1	100
170	Bone	268	82.7	5	1.5	6	1.9	0	0	0	0	45	13.9	324	100
171	Connective	348	89.9	10	2.6	15	3.9	0	0	0	0	14	3.6	387	100
172	Skin Melanoma	64	84.2	10	13.2	0	0	0	0	0	0	2	2.6	76	100
173	Skin Other	354	93.4	3	0.8	4	1.1	0	0	0	0	18	4.7	379	100
175	Breast Male	69	69	3	3	8	8	0	0	0	0	20	20	100	100
185	Prostate	873	65.9	36	2.7	11	0.8	0	0	0	0	405	30.6	1325	100
186	Testis	241	73.5	21	6.4	11	3.4	0	0	0	0	55	16.8	328	100
187	Penis Etc	248	71.3	18	5.2	5	1.4	0	0	1	0.3	76	21.8	348	100
188	Uri Bladder	765	77.8	5	0.5	14	1.4	0	0	0	0	199	20.2	983	100
189	Kidney	369	73.1	29	5.7	24	4.8	0	0	0	0	83	16.4	505	100
190	Eye	60	82.2	0	0	2	2.7	0	0	0	0	11	15.1	73	100
191	Brain	941	87.9	2	0.2	3	0.3	0	0	0	0	124	11.6	1070	100
192	Nervous Sys	25	83.3	0	0	0	0	0	0	0	0	5	16.7	30	100
193	Thyroid Glands	128	60.4	15	7.1	32	15.1	0	0	0	0	37	17.5	212	100
194	Oth. Endo. Gland	42	63.6	10	15.2	1	1.5	0	0	1	1.5	12	18.2	66	100
195	Ill Def Site	10	10.9	0	0	3	3.3	0	0	0	0	79	85.9	92	100
196	Sec Lymph Node	5	0.9	378	70.5	87	16.2	0	0	0	0	66	12.3	536	100
197	Sec Resp Et	1	0.2	206	37.1	87	16.1	0	0	0	0	247	45.7	541	100
198	Sec Other	4	1.3	196	63	11	3.5	0	0	0	0	100	32.2	311	100
199	Prim Unknown	23	12.9	18	10.1	1	0.6	0	0	0	0	136	76.4	178	100
200	Lymph Sarcoma	260	93.2	0	0	2	0.7	1	0.4	12	4.3	4	1.4	279	100
201	Hodgkins Disease	366	95.6	0	0	2	0.5	1	0.3	8	2.1	6	1.6	383	100
202	Oth. Lymph. Node	869	91.3	1	0.1	35	3.7	6	0.6	24	2.5	17	1.8	952	100
203	Mult Myeloma	37	13.8	0	0	2	0.7	8	3	215	80.2	6	2.2	268	100
204	Leuk Lympha	13	2.2	0	0	0	0	358	61.2	203	34.7	11	1.9	585	100
205	Leuk Myeloi	14	2.1	0	0	2	0.3	422	63.5	207	31.1	20	3	665	100
206	Leuk Monocy	1	14.3	0	0	0	0	4	57.1	1	14.3	1	14.3	7	100
207	Leuk Oth Sp	0	0	0	0	0	0	2	50	1	25	1	25	4	100
208	Leuk Uns	4	2.5	0	0	0	0	105	66.5	39	24.7	10	6.3	158	100
	All Sites	16717	57.7	1949	6.7	1462	5.1	907	3.1	717	2.5	7201	24.9	28953	100

TABLE: MUM-8(b): Number (#) and Proportion (%) of Cancers by Site (ICD-9) and Detailed Microscopic Diagnosis, 1990-1996 - Females : Mumbai

ICD-9	Site	Pri. Hist		Sec. Hist		Cytology		Blood Film		Bone Marrow		Others		Total	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
140	Lip	46	74.2	0	0	2	3.2	0	0	0	0	14	22.6	62	100
141	Tongue	367	75.2	21	4.3	9	1.8	0	0	0	0	91	18.6	488	100
142	Salivary Glands	61	72.6	2	2.4	10	11.9	0	0	0	0	11	13.1	84	100
143	Gum	190	77.9	3	1.2	4	1.6	0	0	0	0	47	19.3	244	100
144	Floor of Mouth	11	52.4	1	4.8	0	0	0	0	0	0	9	42.9	21	100
145	Other Mouth	514	78.6	10	1.5	5	0.8	0	0	0	0	125	19.1	654	100
146	Oropharynx	59	71.1	5	6	2	2.4	0	0	0	0	17	20.5	83	100
147	Nasopharynx	24	35.8	23	34.3	5	7.5	0	0	0	0	15	22.4	67	100
148	Hypopharynx	297	72.3	20	4.9	18	4.4	0	0	0	0	76	18.5	411	100
149	Pharynx Etc	39	44.3	4	4.5	2	2.3	0	0	0	0	43	48.9	88	100
150	Oesophagus	725	53.5	17	1.3	57	4.2	0	0	0	0	555	41	1354	100
151	Stomach	346	50.8	40	5.9	15	2.2	0	0	0	0	280	41.1	681	100
152	Small Intestine	34	85	0	0	0	0	0	0	0	0	6	15	40	100
153	Colon	375	60.2	24	3.9	15	2.4	0	0	0	0	209	33.5	623	100
154	Rectum	387	74.1	7	1.3	7	1.3	0	0	0	0	121	23.2	522	100
155	Liver	151	42.7	10	2.8	34	9.6	0	0	0	0	159	44.9	354	100
156	Gall Bladder	218	40.4	53	9.8	23	4.3	0	0	0	0	246	45.6	540	100
157	Pancreas	79	23.1	42	12.3	18	5.3	0	0	0	0	203	59.4	342	100
158	Retroperito	44	55	3	3.8	10	12.5	0	0	0	0	23	28.8	80	100
159	Other Digs	11	19.6	10	17.9	5	8.9	0	0	0	0	30	53.6	56	100
160	Nasal Cavity	105	72.9	0	0	3	2.1	0	0	0	0	36	25	144	100
161	Larynx	152	58	11	4.2	7	2.7	0	0	0	0	92	35.1	262	100
162	Lung	215	31.1	52	7.5	120	17.3	0	0	0	0	305	44.1	692	100
163	Pleura	19	31.1	0	0	20	32.8	0	0	0	0	22	36.1	61	100
164	Thymus	13	54.2	0	0	6	25	0	0	0	0	5	20.8	24	100
165	Other Resp	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	Bone	124	75.6	1	0.6	2	1.2	0	0	0	0	37	22.6	164	100
171	Connective	211	86.1	15	6.1	11	4.5	0	0	0	0	8	3.3	245	100
172	Skin Melanoma	44	88	5	10	1	2	0	0	0	0	0	0	50	100
173	Skin Other	265	93	4	1.4	6	2.1	0	0	0	0	10	3.5	285	100
174	Breast Female	4734	70.8	154	2.3	484	7.2	0	0	1	0	1315	19.7	6688	100
179	Uterus NOS.	73	33.5	3	1.4	0	0	0	0	0	0	142	65.1	218	100
180	Cervix	3344	81.1	29	0.7	52	1.3	0	0	0	0	700	17	4125	100
181	Placenta	48	81.4	2	3.4	0	0	0	0	0	0	9	15.3	59	100
182	Body Uterus	484	89.8	7	1.3	2	0.4	0	0	0	0	46	8.5	539	100
183	Ovary	941	53.9	172	9.9	147	8.4	1	0.1	0	0	485	27.8	1746	100
184	Vagina	203	78.1	6	2.3	7	2.7	0	0	0	0	44	16.9	260	100
188	Uri Bladder	171	72.2	4	1.7	5	2.1	0	0	0	0	57	24.1	237	100
189	Kidney	157	72.4	10	4.6	8	3.7	0	0	0	0	42	19.4	217	100
190	Eye	39	84.8	1	2.2	2	4.3	0	0	0	0	4	8.7	46	100
191	Brain	512	83.3	3	0.5	1	0.2	0	0	0	0	99	16.1	615	100
192	Nervous Sys	18	94.7	0	0	1	5.3	0	0	0	0	0	0	19	100
193	Thyroid Glands	367	71.3	27	5.2	55	10.7	0	0	0	0	66	12.8	515	100
194	Oth. Endo. Gland	31	62	10	20	2	4	0	0	0	0	7	14	50	100
195	Ill Def Site	32	31.4	0	0	2	2	0	0	0	0	68	66.7	102	100
196	Sec Lymph Node	0	0	188	76.7	28	11.4	0	0	0	0	29	11.8	245	100
197	Sec Resp Et	1	0.2	192	44.5	85	19.7	0	0	0	0	153	35.5	431	100
198	Sec Other	1	0.5	117	56.5	6	2.9	0	0	0	0	83	40.1	207	100
199	Prim Unknown	23	14.9	19	12.3	2	1.3	0	0	0	0	110	71.4	154	100
200	Lymph Sarcoma	138	93.9	0	0	1	0.7	0	0	4	2.7	4	2.7	147	100
201	Hodgkins Disease	148	97.4	0	0	1	0.7	0	0	1	0.7	2	1.3	152	100
202	Oth. Lymph. Node	481	93.8	0	0	8	1.6	0	0	18	3.5	6	1.2	513	100
203	Mult Myeloma	33	16.2	0	0	0	0	1	0.5	163	79.9	7	3.4	204	100
204	Leuk Lympha Node	2	0.6	0	0	0	0	195	62.7	104	33.4	10	3.2	311	100
205	Leuk Myelocytic	16	3.6	0	0	0	0	253	57.1	161	36.3	13	2.9	443	100
206	Leuk Monocytic	1	25	0	0	0	0	2	50	1	25	0	0	4	100
207	Leuk Oth Sp	2	40	0	0	0	0	2	40	0	0	1	20	5	100
208	Leuk Uns	7	5.9	0	0	0	0	84	71.2	17	14.4	10	8.5	118	100
	All Sites	17133	63.2	1327	4.9	1316	4.9	538	2	470	1.7	6307	23.3	27091	100

**TABLE: MUM-9(a): Number of Cancer Deaths by Five Year Age Group and Site (ICD-9)
1990-1996 - 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	0	0	0	0	1	2	3	1	3	6	1	2	1	2	22	0.15
141	Tongue	0	0	0	1	1	3	9	25	38	66	110	75	93	85	66	79	651	4.48
142	Salivary Gland	0	0	0	0	0	0	1	0	2	5	4	4	10	5	4	4	39	0.27
143	Gum	0	0	0	0	0	0	1	5	6	13	13	11	8	8	8	6	79	0.54
144	Floor of Mouth	0	0	0	0	1	0	0	3	0	3	7	3	5	5	1	5	33	0.23
145	Other Mouth	0	0	0	0	3	3	12	16	24	36	32	40	46	35	26	27	300	2.07
146	Oropharynx	0	0	0	0	0	3	2	5	12	28	31	39	42	23	27	24	236	1.63
147	Nasopharynx	0	1	1	4	3	1	0	1	8	5	8	9	8	9	3	3	64	0.44
148	Hypopharynx	0	0	0	0	3	1	7	13	28	33	56	50	61	63	56	48	419	2.89
149	Pharynx Etc.	0	0	0	0	2	2	2	16	7	36	39	59	69	62	63	62	419	2.89
150	Oesophagus	0	0	0	2	3	4	10	19	58	100	158	208	215	208	179	249	1413	9.73
151	Stomach	0	0	0	2	5	7	13	22	30	66	94	110	116	125	105	113	808	5.57
152	Small Intestine	0	0	0	0	1	0	1	1	2	4	3	5	4	9	5	8	43	0.3
153	Colon	0	0	1	5	1	5	9	14	24	38	36	49	48	46	48	79	403	2.78
154	Rectum	0	0	1	0	8	6	12	12	10	25	30	37	42	40	37	70	330	2.27
155	Liver	10	2	2	0	1	1	12	23	30	46	63	83	102	114	81	86	656	4.52
156	Gall Bladd.	0	0	0	0	1	1	3	2	11	16	19	26	37	29	25	34	204	1.41
157	Pancreas	0	0	1	0	0	5	2	9	18	29	48	52	69	55	44	49	381	2.62
158	Retroperitoneum	0	0	1	1	2	0	5	1	2	3	5	3	6	8	5	3	45	0.31
159	Other Dig System	0	0	0	0	1	2	0	1	2	2	10	13	4	7	9	6	57	0.39
160	Nasal Cavity	0	0	0	0	0	1	1	3	2	8	6	9	11	8	4	8	61	0.42
161	Larynx	1	0	0	1	2	4	7	16	35	74	98	153	138	163	118	167	977	6.73
162	Lung	1	0	0	3	10	10	22	38	68	103	187	252	331	325	245	248	1843	12.7
163	Pleura	1	0	0	2	0	0	1	2	3	2	5	5	10	12	5	4	52	0.36
164	Thymus	1	0	1	1	0	3	0	1	3	1	4	4	2	5	2	2	30	0.21
165	Other Resp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
170	Bone	4	4	15	33	16	6	8	5	9	21	18	17	21	27	16	9	229	1.58
171	Conn. Tissue	4	8	3	5	3	10	4	10	6	3	4	5	4	7	1	7	84	0.58
172	Skin Melanoma	0	0	0	0	0	0	0	3	3	0	3	4	5	2	3	2	25	0.17
173	Skin Other	0	0	0	0	2	0	1	5	6	1	7	4	5	4	6	13	54	0.37
175	Breast Male	0	0	0	1	0	0	0	0	1	3	0	1	1	0	4	8	19	0.13
185	Prostate	0	0	0	0	1	0	1	0	3	6	18	29	45	74	127	279	583	4.02
186	Testis	7	1	0	5	17	16	11	9	13	6	2	1	7	1	7	2	105	0.72
187	Penis	0	0	1	0	0	2	5	1	10	7	12	10	9	10	8	17	92	0.63
188	Uri. Bladder	1	0	2	0	1	0	2	8	9	15	25	28	46	50	55	86	328	2.26
189	Kidney	5	3	1	2	0	2	3	1	4	15	18	22	29	28	18	19	170	1.17
190	Eye	10	1	2	0	1	1	0	1	2	1	2	3	1	1	1	1	28	0.19
191	Brain	14	27	17	11	15	12	19	25	30	29	40	45	41	33	24	27	409	2.82
192	Nervous System	0	0	0	0	0	0	0	0	0	1	1	3	1	1	0	0	7	0.05
193	Thyroid Gland	0	0	0	0	1	1	0	2	1	7	8	6	10	7	6	16	65	0.45
194	Oth. Endo. Gland	10	4	1	0	1	1	1	2	0	3	0	0	0	0	1	1	25	0.17
195	Ill Def. Sites	2	4	2	1	5	1	3	8	12	19	30	27	23	22	15	32	206	1.42
196	Sec. Lymph Node	0	1	1	1	0	1	1	3	6	11	16	17	27	17	14	21	137	0.94
197	Sec. Res. Etc	0	0	0	0	0	0	2	3	7	4	13	17	30	31	14	21	142	0.98
198	Sec. Other	2	0	0	0	0	0	1	1	2	4	6	7	13	5	16	13	70	0.48
199	Prim. Unknown	4	5	5	6	4	3	7	19	21	38	59	65	72	61	44	58	471	3.24
200	Lymphosarcoma	3	1	2	0	1	0	2	0	2	2	3	1	2	1	1	5	26	0.18
201	Hodgkins. Disease	2	2	2	3	6	6	4	5	13	5	7	11	4	5	6	2	83	0.57
202	Oth. Lymph	11	13	14	13	24	20	23	25	40	26	42	48	55	56	49	42	501	3.45
203	Mult. Myeloma	0	0	0	0	1	0	0	0	3	10	19	28	24	18	34	21	158	1.09
204	Leuk. Lymphatic	44	44	34	50	25	17	9	8	10	11	12	15	10	15	13	26	343	2.36
205	Leuk. Myelocytic	15	14	15	27	24	35	41	37	36	37	33	36	24	24	20	20	438	3.02
206	Leuk. Monocytic	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3	0.02
207	Leuk. Misc.	1	0	0	0	1	0	0	1	0	0	0	0	1	0	1	0	5	0.03
208	Leuk. Unspecified	14	12	23	14	7	5	9	4	9	6	8	7	10	5	5	7	145	1
	All Sites	168	147	148	194	204	201	290	436	684	1034	1475	1762	1999	1956	1676	2142	14516	100

**TABLE: MUM-9(b): Number of Cancer Deaths by Five Year Age Group and Site (ICD-9)
1990-1996 - 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	0	1	2	1	1	3	1	2	11	0.09
141	Tongue	0	0	0	0	0	3	7	6	14	20	19	28	28	21	21	37	204	1.66
142	Salivary Gland	0	0	0	0	0	1	0	0	1	1	0	0	2	2	0	7	14	0.11
143	Gum	0	0	0	0	0	1	1	3	5	7	6	8	9	10	11	8	69	0.56
144	Floor of Mouth	0	0	0	0	0	0	0	1	0	4	1	3	4	0	2	0	15	0.12
145	Other Mouth	0	0	0	1	0	1	7	8	13	16	16	27	35	24	18	41	207	1.68
146	Oropharynx	0	0	0	0	0	1	0	1	0	2	3	6	3	7	4	6	33	0.27
147	Nasopharynx	0	1	0	0	0	0	1	2	1	1	2	1	4	1	4	5	23	0.19
148	Hypopharynx	0	0	0	0	1	4	5	9	8	13	11	10	10	8	11	12	102	0.83
149	Pharynx Etc.	0	0	0	1	1	2	3	4	8	10	6	9	19	20	12	26	121	0.98
150	Oesophagus	0	0	0	1	2	8	10	22	39	68	115	120	137	146	102	196	966	7.85
151	Stomach	0	0	0	3	2	6	11	12	31	34	49	42	45	59	51	86	431	3.5
152	Small Intestine	0	0	0	0	1	0	0	1	1	3	2	5	1	3	5	6	28	0.23
153	Colon	0	0	0	1	2	9	6	10	16	24	32	26	35	46	45	77	329	2.67
154	Rectum	0	0	1	3	4	9	6	13	8	21	15	18	34	33	32	51	248	2.01
155	Liver	5	0	0	0	1	5	7	9	18	23	42	34	46	57	49	65	361	2.93
156	Gall Bladder	0	0	0	1	0	2	5	12	22	24	32	37	42	40	26	50	293	2.38
157	Pancreas	0	0	0	0	1	1	6	13	15	14	34	33	31	43	29	40	260	2.11
158	Retroperitoneum	1	0	1	0	0	0	0	1	2	2	4	3	5	3	1	10	33	0.27
159	Other Dig System	0	0	0	0	1	1	1	3	5	5	8	7	5	6	10	18	70	0.57
160	Nasal Cavity	0	0	0	0	0	1	2	2	2	7	5	4	5	5	5	7	45	0.37
161	Larynx	0	0	0	1	0	2	0	6	11	10	12	20	22	34	24	38	180	1.46
162	Lung	0	0	2	2	5	4	12	19	35	45	57	60	62	63	61	107	534	4.34
163	Pleura	1	0	0	1	1	0	1	1	2	2	2	3	4	4	3	9	34	0.28
164	Thymus	0	0	1	0	1	1	1	1	1	0	2	0	1	0	1	2	12	0.1
165	Other Resp.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.01
170	Bone	4	4	18	13	5	5	4	5	6	11	5	8	14	8	18	26	154	1.25
171	Conn. Tissue	9	2	1	5	2	4	2	3	6	0	4	2	11	0	5	5	61	0.5
172	Skin Melanoma	1	0	0	0	1	0	0	1	0	2	2	1	1	1	1	3	14	0.11
173	Skin. Other	0	0	0	0	1	1	2	0	1	1	2	5	4	2	8	13	40	0.32
174	Breast	0	0	0	0	7	38	83	159	250	302	356	299	257	221	182	276	2430	19.74
179	Uterus Nos.	0	0	0	0	2	4	5	11	26	43	40	60	66	46	65	64	432	3.51
180	Cervix	0	0	0	0	6	14	33	81	116	151	153	154	161	122	95	106	1192	9.68
181	Placenta	0	0	0	0	3	2	3	4	1	1	0	0	0	0	0	0	14	0.11
182	Body Uterus	0	0	0	0	1	0	0	0	2	2	3	2	7	9	7	4	37	0.3
183	Ovary	1	1	4	9	12	11	21	43	79	94	112	112	111	88	55	76	829	6.73
184	Vagina	0	0	0	0	1	1	3	1	7	12	8	3	6	7	13	14	76	0.62
188	Uri. Bladder	1	0	1	0	0	0	2	2	2	2	2	8	14	12	13	29	88	0.71
189	Kidney	4	2	1	2	1	0	3	3	6	5	11	6	10	9	12	12	87	0.71
190	Eye	5	4	1	0	1	0	0	1	1	1	3	1	1	2	1	2	24	0.19
191	Brain	12	15	18	10	10	11	13	6	17	30	20	27	22	20	18	19	268	2.18
192	Nervous System	1	0	0	0	0	0	0	0	0	1	0	0	0	2	1	1	6	0.05
193	Thyroid Gland	0	0	0	0	0	3	2	2	2	8	8	9	16	18	10	21	99	0.8
194	Oth. Endo. Gland	5	3	2	1	2	0	0	0	1	1	1	2	2	1	0	0	20	0.16
195	Ill Def. Sites	3	1	0	1	1	2	3	4	11	9	17	13	16	15	18	32	146	1.19
196	Sec. Lymph. Node	0	1	0	0	1	0	0	2	1	7	4	3	9	7	7	9	51	0.41
197	Sec. Res. Etc	0	0	0	0	0	2	3	2	3	6	15	12	13	11	22	22	111	0.9
198	Sec. Other	0	1	0	0	0	1	1	1	0	2	4	5	8	8	3	6	40	0.32
199	Prim. Unknown	3	1	6	2	3	7	9	12	22	32	34	50	38	46	47	49	361	2.93
200	Lymphosarcoma	1	0	0	2	0	0	0	2	0	1	3	1	2	2	1	1	16	0.13
201	Hodgkins. Disease	0	0	1	3	7	3	1	0	2	5	4	6	5	6	1	2	46	0.37
202	Oth. Lymph. Node	6	3	7	9	4	13	9	12	16	15	24	38	37	29	31	44	297	2.41
203	Mult. Myeloma	0	0	0	0	0	0	2	4	1	5	9	20	14	20	18	16	109	0.89
204	Leuk. Lymphatic	35	35	14	17	6	12	7	8	4	5	8	3	9	17	8	14	202	1.64
205	Leuk. Myelocytic	9	13	14	16	20	26	21	18	23	26	32	28	19	15	15	18	313	2.54
206	Leuk. Monocytic	0	0	1	0	0	0	1	1	0	0	0	1	1	0	0	1	6	0.05
207	Leuk. Misc.	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	1	4	0.03
208	Leuk. Unspecified	16	9	4	7	7	4	9	4	2	6	8	7	5	7	11	10	116	0.94
	All Sites	123	96	98	113	127	227	334	551	865	1143	1369	1391	1470	1389	1215	1802	12313	100.00

TABLE: MUM-11: Number (#) and Proportion (%) of Types of Childhood Cancers 1990-1996
Mumbai

Type of Childhood Cancer	Males		Females	
	#	%	#	%
I. LEUKAEMIAS	368	33.15	234	31.16
(a) Acute lymphocytic leukaemia	250	22.52	142	18.91
(b) Other lymphoid leukaemia	4	0.36	3	0.40
(c) Acute non-lymphocytic leukaemia	56	5.05	49	6.52
(d) Chronic myeloid leukaemia	12	1.08	2	0.27
(e) Other and unspecified leukaemia	46	4.14	38	5.06
II. LYMPHOMAS & OTHER RETICULOENDOTHELIAL	175	15.77	77	10.25
(a) Hodgkin's disease	85	7.66	22	2.93
(b) Non-Hodgkin lymphoma	56	5.05	31	4.13
(c) Burkitt's lymphoma	6	0.54	6	0.80
(d) Unspecified lymphomas	28	2.52	18	2.40
(e) Histiocytosis X	0	0.00	0	0.00
(f) Other reticuloendothelial neoplasms	0	0.00	0	0.00
III. C.N.S.& MISC.INTRACRANIAL & INTRASPINAL NEOP.	189	17.03	131	17.44
(a) Ependymoma	7	0.63	6	0.80
(b) Astrocytoma	84	7.57	46	6.13
(c) Medulloblastoma	59	5.32	28	3.73
(d) Other glioma	22	1.98	30	3.99
(e) Misc.intracranial & intraspinal neop.	17	1.53	21	2.80
IV. SYMPATHETIC NERVOUS SYSTEM TUMOURS	46	4.14	38	5.06
(a) Neuroblastoma & ganglioneuroblastoma	42	3.78	36	4.79
(b) Other	4	0.36	2	0.27
V. RETINOBLASTOMA	44	3.96	29	3.86
VI. RENAL TUMOURS	47	4.23	38	5.06
(a) Wilms' tumour	39	3.51	34	4.53
(b) Renal carcinoma	3	0.27	2	0.27
(c) Other & unsp. malignant renal tumours	5	0.45	2	0.27
VII. HEPATIC TUMOURS	24	2.16	17	2.26
(a) Hepatoblastoma	14	1.26	12	1.60
(b) Hepatic carcinoma	7	0.63	3	0.40
(c) Other & unsp. malignant hepatic tumours	3	0.27	2	0.27
VIII. MALIGNANT BONE TUMOURS	47	4.23	47	6.26
(a) Osteosarcoma	12	1.08	20	2.66
(b) Chondrosarcoma	0	0.00	1	0.13
(c) Ewing's sarcoma	27	2.43	17	2.26
(d) Other & unsp. malignant bone tumours	8	0.72	9	1.20
IX. SOFT-TISSUE(S-T) SARCOMAS(S)	59	5.32	38	5.06
(a) Rhabdomyos. embryonals.& s-t.Ewings tum.	32	2.88	22	2.93
(b) Fibros.neurofibros.&oth.fibromatous neop.	7	0.63	2	0.27
(c) Other soft-tissue sarcoma	20	1.80	14	1.86
X. GERM-CELL TROPHOBLASTIC & OTH GONADAL NEOP.	27	2.43	42	5.59
(a) Non-gonadal gc & trophoblastic neop.	7	0.63	7	0.93
(b) Gonadal gc & trophoblastic neop.	17	1.53	30	3.99
(c) Gonadal carcinoma	0	0.00	0	0.00
(d) Other & unsp.malignant gonadal tumours	3	0.27	5	0.67
XI. CARCINOMA & OTH MALIGNANT EPITHELIAL NEOP.	52	4.68	38	5.06
(a) Adrenocortical carcinoma	2	0.18	2	0.27
(b) Thyroid carcinoma	3	0.27	2	0.27
(c) Nasopharyngeal carcinoma	9	0.81	2	0.27
(d) Malanomatous neoplasms	0	0.00	1	0.13
(e) Other carcinoma	38	3.42	31	4.13
XII OTHER & UNSP. MALIGNANT NEOPLASMS	22	1.98	18	2.40
OTHERS (Not Classified)	10	0.90	4	0.53
TOTAL (ALL CHILDHOOD CANCERS)	1110	100.00	751	100.00