

# POPULATION BASED CANCER REGISTRY OF BHOPAL

## Gandhi Medical College, Bhopal

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Bhopal is the capital of the state of Madhya Pradesh (India). It is situated at an altitude of 505 metres above the sea level at 23.07° North and 77.12° East with a total area of 350 sq km. Bhopal is known as the “City of Lakes” for its various natural as well as artificial lakes and is also one of the greenest cities in India. The city has a humid subtropical climate, with cool, dry winters, a hot summer and a humid monsoon season.

Under the network of National Cancer Registry Programme, Population Based Cancer Registry, Bhopal was established in the year 1985. The registry is placed in the Department of Pathology, Gandhi Medical College, Bhopal. The collection and compilation of data began from 1<sup>st</sup> January 1986.

Registration of cancer cases is done by active method. Information on cancer patients is obtained from 63 sources which include 7 comprehensive cancer care units, government hospitals, private hospitals, nursing homes and diagnostic centres. Quality of registration and data reliability are regularly monitored using PBCRDM software.

Cancer mortality data are assumed to be incomplete due to incomplete certification of cause of death. Keeping this in mind, efforts have been made to improve this aspect of data. Burial ground and crematorium records of Bhopal are examined and all deaths irrespective of the cause of death mentioned are noted. These are then matched with the cancer morbidity data available in PBCR. The deaths which match are then updated. The deaths where cancer is mentioned as cause of death but could not be matched were traced back by house visits and scrutiny of medical records. Any further matches discovered in this manner are updated. Cancers with no other details, other than those available on the death certificate, are registered as “Death Certificate Only”. Significant improvement in mortality statistics has been found by using this methodology.

In the last two decades of its functioning the registry has observed a very high incidence of tobacco related cancers among males with cancers of tongue, mouth, hypopharynx, lung and oesophagus as the leading sites. High prevalence of tobacco usage in the population underlines the increasing incidence of mouth cancer in the city of Bhopal and is a cause of concern for the cancer control activities in the region. The Government of Madhya Pradesh has imposed ban on tobacco chewing and this has been a significant move towards the control of oral cancer. Among females cancer of breast, genital system and oesophagus are the leading sites of cancers. These malignancies account for more than 55% of the total cancer burden.

Over the years significant rising trends have been observed in cancers of the mouth, larynx and prostate among males. Among females, cancers of the breast, ovary, mouth and gall bladder have shown

a significant rising trend. Similarly significant decreasing trend has been observed in cervical cancer among females. The trends have resulted in a significant change in the load and pattern of these cancers among population of Bhopal. The observed changes in the load and pattern of these cancers will help in redefining the cancer control activities in the region.

#### **Staff of Population Based Cancer Registry, Bhopal**

Research Officer	:	<b>Dr Sunil Surange</b>
Social Investigator	:	<b>Mrs Alka Goley</b>
Social Investigator	:	<b>Mrs Sushma Shrivastava</b>
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#### **Main Sources of Registration of Incident Cases of Cancer: 2012-2013 Bhopal**

<b>Name of the Institution</b>	<b>Number</b>	<b>%</b>
J.L.N. Cancer Hospital	1929	55.7
Hamidia Hospital	593	17.1
Navoday Cancer Hospital	391	11.3
Kasturba Hospital	159	4.6
Sultania Zanana Hospital	107	3.1
Lake City Hospital	91	2.6
Chirayu Hospital	53	1.5
D.C.O.	51	1.5
Tata Memorial Hospital	49	1.4
Others	41	1.2
<b>Total</b>	<b>3464</b>	<b>100.0</b>

- 1. Institutions listed have registered at least one percent of all cases in the registry for Selected Year.*
- 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.*