

# POPULATION BASED CANCER REGISTRY, MANIPUR STATE

## Regional Institute of Medical Sciences, Imphal

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Manipur is situated in the north eastern part of India which is the continuation of the great Himalayan ranges. It is an oval shaped valley surrounded by blue hills at an altitude of 790 metres above sea level. It extends between 23.50 and 25.41 degree latitudes north and between 92.59 and 94.45 degree longitudes east. It is the birth place of polo.

The Population Based Cancer Registry (PBCR), RIMS Imphal was established in the department of Pathology, Regional Institute of Medical Sciences (RIMS) in 2003 under National Cancer Registry Programme (NCRP) of the Indian Council of Medical Research (ICMR), New Delhi.

It covers the whole state of Manipur with a total area of 22,327 sq. km. and total population of 27,21,756 (2011 census). The population covered are 75% urban and 25% rural as the overall density of population of the state is 122 persons per sq.km. as compared to 847 persons per sq.km. in the valley. Majority of the population are Hindus with minor contribution from Christian followed by Muslim, Sikh and Jain. There are more than 25 ethnic groups.

We collect and record information of those patients who have been staying within the registry area for at least a year prior to the first date of diagnosis which are usually confirmed microscopically, clinically or radiologically. We register all malignant neoplasm with morphological and behaviour code of '3' and '6' as defined by the 3rd edition of ICD-O according to the primary site and morphology.

Since cancer is not yet a notifiable disease, the method of data collection is entirely active where direct interviews with the patient or their attendants is possible in more than 80% of the cases who come for treatment to the radiotherapy department which is the only centre with cancer treatment facility. Hence the chance of missing a case and the time taken for completion of core proforma is low. Sincere efforts are also being made to make it notifiable soon in the near future. Besides this, our social investigators regularly visit other departments or sections of the base institute. They also collect data on regular basis from more than 25 major sources within the registry area, both private and government set ups.

In order to handle these data smoothly, at present, we are using a very user-friendly software called 'PBCRDM 2.1 version' indigenously developed by the co-ordinating unit of NCRP, Bangalore which enable us to perform various checks on quality, duplicate, range and consistency etc with much flexibility. This has really enhanced the quality and reliability of the data. Various types of reports can also be generated instantly.

The death registration system is inadequate and incomplete for the time being. Efforts are being made to find ways to overcome the shortcomings.

As such we are not running any population based programme on screening specific cancer sites. However, we do conduct free cancer screening camp annually for breast and cervix uteri targeting the women population ranging from age of 35 years to 60 years without fail. The registry prepares annual, biennial and consolidated reports regularly which are being used by the state for cancer control programmes and by the research scholars from various institutes for special studies on cancer epidemiology.

### Main Sources of Registration

1 Regional Institute of Medical Sciences (RIMS), Imphal	8 Eastern Diagnostic Centre (EDC), Imphal	Sanakeithel
2 Babina Diagnostic Centre (BDC), Imphal	9 Lamka Clinical Laboratory, Churachandpur	19 Suba Hospital, Kombirei Keithel
3 Shija Hospitals and Research Institute (SHRI), Langol	10 Langol View Laboratory (LVL), Lamphel	20 Catholic Medical College (CMC), Koirengai
4 Imphal Hospital and Research Centre (IHRC), Imphal	11 Raj Polyclinic, North AOC	21 Divine Clinic, Porompat
5 Aadarsh Clinical Laboratory (ACL), Imphal	12 Imphal Endoscopy Centre, Thangal Bazaar	22 Anand Ultrasound, Porompat
6 Mona Clinical Laboratory (MCL), Lamphel	13 Cecil Medical Laboratory (CML), Lamphel	23 Leishingphung Christian Hospital, Ukhrul
7 Jawaharlal Nehru Institute of Medical Sciences (JNIMS), Porompat	14 Om Clinic	24 Eastern Laboratory, Imphal
	15 New Tech Nursing Home, Thangal Bazaar	25 Chinga Diagnostic Centre (CDC), Singjamei
	16 Padma Medicare, Imphal	26 Public Hospital and Research Institute (PHRI), Hatta
	17 Sapam Imaging Centre, Lamphel	
	18 Shanti Hospital & Research Centre (SHRC),	

### Name of Sources outside Manipur

1 Dr. B Borooah Cancer Institute (BBCI), Guwahati	13 Care Laboratory, Dimapur	26 NIMHANS, Bangalore
2 Down Town Hospital (DTH), Guwahati	14 Madona Lab, Dibrugarh	27 Rapid Diagnostics, Guwahati
3 Guwahati Neurology Research Centre (GNRC), Guwahati	15 Apollo Hospital, New Delhi	28 Ayursundara Medical Centre, Mumbai
4 Tata Memorial Hospital (TMH), Mumbai	16 Clinical Path Diagnostic Centre, Shillong	29 Neuro Day Care Centre, Imphal
5 Catholic Medical College (CMC), Vellore	17 Chittaranjan National Cancer Institute (CNCI), Kolkata	30 North East Cancer Hospital & Research Institute (NECHRI), Guwahati
6 All India Institute of Medical Sciences (AIIMS), N. Delhi	18 Post Graduate Institute (PGI), Chandigarh	31 Dispur Hospital, Guwahati
7 Saharia Path Lab., Guwahati	19 Ranbaxy SRL, Mumbai	32 Fortis Hospital, Mumbai
8 Ecopath Centre, Guwahati	20 Diagnostic Centre, Kohima	33 Piramol Diagnostic
9 Arya Hospital, Guwahati	21 Western Laboratory	34 International Hospital, Guwahati
10 Sky Laboratory, Guwahati	22 NEGRIMS, Shillong	35 B P Kopiralka of Health Sciences, Nepal
11 Genesis Laboratory, Mizoram	23 Dr Lal Path Lab, New Delhi	36 Gangaram Prasad Hospital
12 Civil Hospital, Aizawl	24 Lal Path Lab, Guwahati	37 Others
	25 Sanjay Gandhi Post Graduate Institute (SGPGI), Lucknow	38 Unknown

### Registry Staff: PBCR, Imphal

<b>Dr H. Satyajyoti Singh</b>	: Medical Research Officer	<b>Mr L. Bhopendro Mangang</b>	: Social Investigator
<b>Dr O. Bijaya Devi</b>	: Statistician	<b>Mr Surjit Meitei</b>	: Social Investigator
<b>Mr R.K Budhibanta</b>	: Computer Programmer	<b>Mr Reemo Yurembam</b>	: Data Entry Operator
<b>Mr Kh. Nabachandra Singh</b>	: Social Investigator		

### Main Sources of Registration of Incident Cases of Cancer: 2009-2010 - Manipur State

Name of the Institution	Number	%
Regional Institute of Medical Sciences	1979	68.9
Babina Diagnostic Centre	620	21.6
Cancer Atlas	78	2.7
Mona Clinical Laboratory	72	2.5
Shija Hospitals and Research Institute	50	1.7
Others	72	2.5
<b>Total</b>	<b>2871</b>	<b>100.0</b>

1. Institutions listed have registered at least one percent of all cases in the registry for the combined years 2009-2010.
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.