

Chapter 4 – MANIPUR: Cancer & Health Indicator profile

4.1 Demography of the Population Based Cancer Registry

Manipur State PBCR	
PBCR situated in	Regional Institute of Medical Sciences, Imphal
PBCR Name	Manipur State
Coverage Area	Manipur State
PBCR Established Year	2005
Number of sources of registration	75
Area (in Sq.km)	22327
Urban & Rural covered (%)	29.2 & 70.8
Population as per 2011 Census	
Males	1438586
Females	1417208
Total	2855794
Major Ethnic groups	Meitei, Kuki, Tangkhu
Cancer is made notifiable in Manipur from 22nd February 2017	

4.2 Risk Factor & Health Practices

Risk Factor for Cancer	Urban		Rural		Total	
	Males	Females	Males	Females	Males	Females
Adults (age 15-49 years)						
Literacy (%)	97.4	89.9	95.2	81.7	96.0	85.0
Use of any kind of tobacco (%)	66.1	46.0	73.5	50.7	70.6	48.8
Consumption of alcohol (%)	52.9	6.2	52.3	6.1	52.5	6.1
Proportion attempted to stop smoking or using tobacco in any other form during the past 12 months	30.1	34.4	36.5	28.3	34.2	30.7
Overweight or obese (BMI \geq 25.0 kg/m ²) (%)	21.8	31.2	18.5	22.4	19.8	26.0
Children under age 6 months exclusively breastfed (%)		78.9		71.3		73.6

Source: NFHS-4 (2015 - 16)

Health practices & Health seeking	Urban		Rural		Total	
	Males	Females	Males	Females	Males	Females
Adults (age 15-49 years)						
Comprehensive knowledge of HIV/AIDS (%)	65.0	45.8	53.5	37.4	57.9	40.7
Have Ever Undergone Examinations of Cervix (%)		17.4		17.1		17.2
Have Ever Undergone Examinations of Breast (%)		5.7		3.3		4.3
Institutional births (%)		86.3		60.5		69.1
Population and Household Profile						
Both Sex						
Households using improved sanitation facility (%)	47.8		51.3		49.9	
Households using clean fuel for cooking (%)	63.3		28.0		42.1	
Households with any usual member covered by a health scheme or health insurance (%)	3.5		3.7		3.6	

Source: NFHS-4 (2015 - 16)

4.3 Health Systems at a Glance

Health Facilities	Number
Sub centre	421
Primary Health Centres	85
Community Health Centres	17
Sub Divisional Hospital	1
District Hospitals	7
Mobile Medical Unit	9
AYUSH	72
Cancer treating hospitals *	1
Radiotherapy facilities *	0
Cancer patient welfare schemes *	0
Palliative care centres *	1

Source: Rural Health Statistics report (2013 -14); * Provided by Cancer registry

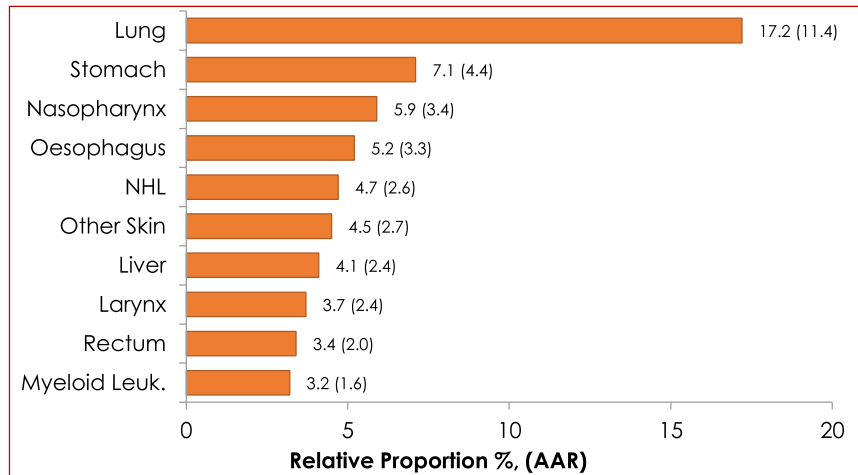
4.4 Number and Age Adjusted Incidence Rate (Reporting years: 2012-14)

Sex	Manipur State		Imphal District		Manipur excluding Imphal District	
	Number of New Cancer cases	AAR	Number of New Cancer cases	AAR	Number of New Cancer cases	AAR
Males	2081	60.5	640	92.4	1441	52.2
Females	2542	68.6	823	103.6	1719	59.2

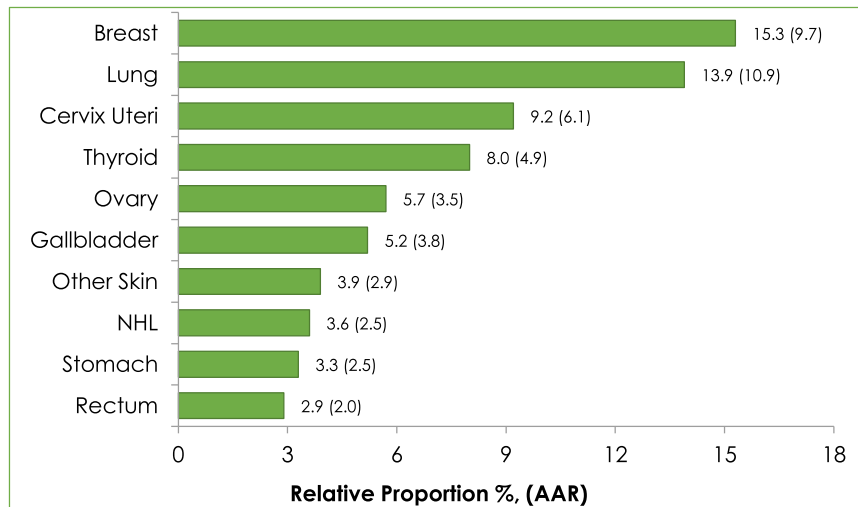
AAR - Age Adjusted Incidence Rate per 1,00,000 population

4.5 Leading Sites of Cancer

Leading Sites of Cancer in Males



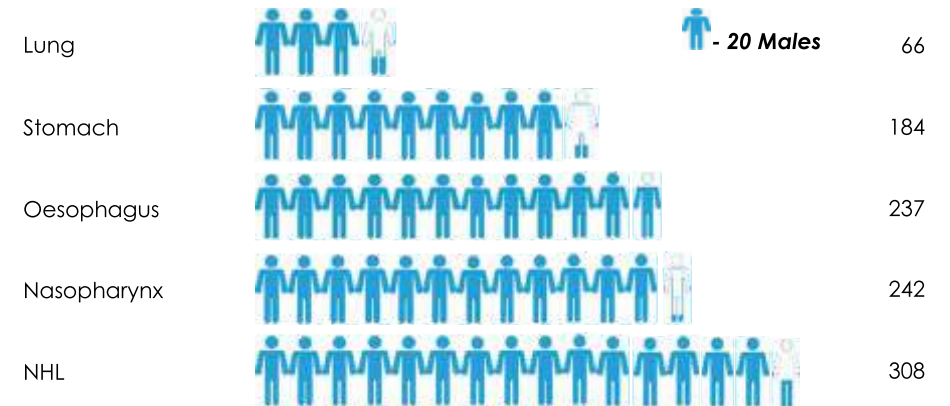
Leading Sites of Cancer in Females



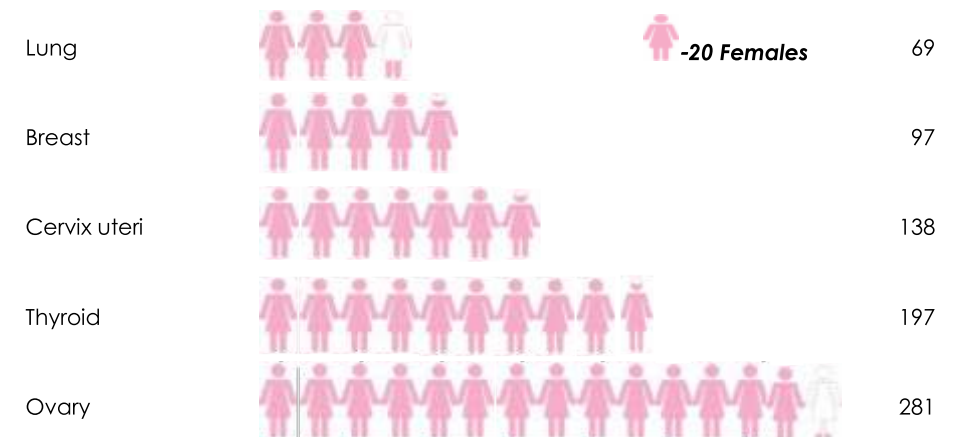
In males, proportion of Lung cancer is the highest followed by Stomach and Nasopharynx. These three sites contribute almost one third (30%) of all cancers. In females, Breast cancer is the commonest followed by Lung and Cervix Uteri. These three sites contribute more than one third (38%) of all cancers.

4.6 Possibility of one in number of person developing cancer in (0-74) years of age

Males



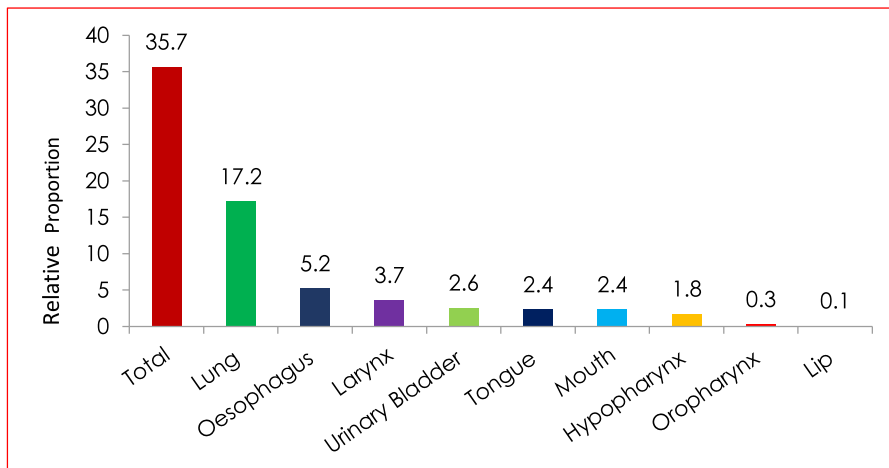
Females



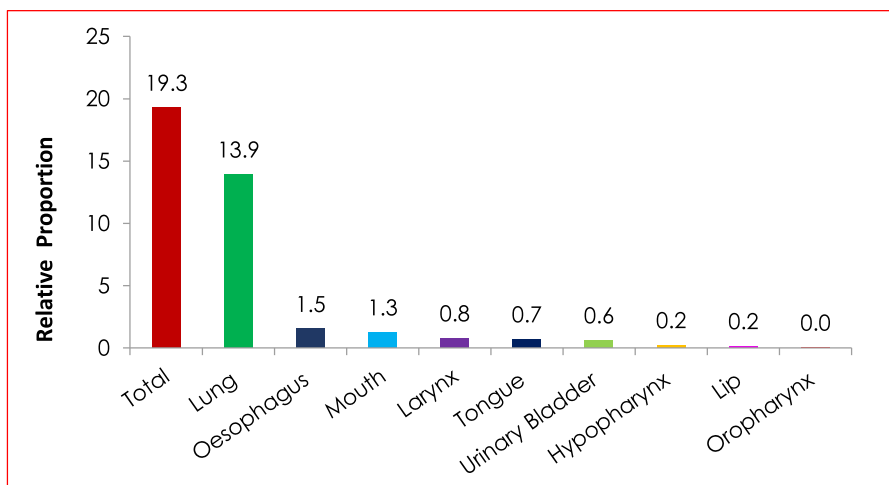
The average risk that a person will develop Lung cancer in their lifetime (0-74 years) is about 1 in 66 for males and 1 in 69 for females.

4.7 Proportion of Cancer in Sites known to be associated with use of tobacco

Males

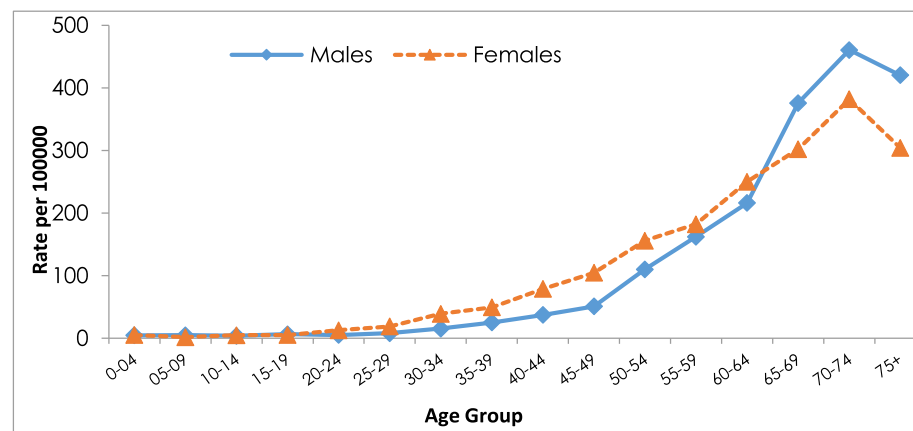


Females



Around 36% and 19% of all cancers in males and females are respectively associated with the use of tobacco. Among these proportion of Lung and Oesophagus are leading in both sexes.

4.8 Age Specific Rate (ASpR)



Age Specific Incidence Rate is highest for both sexes in 70-74 age group. Age specific incidence rates show distinct rise from 30-34 years age onwards.

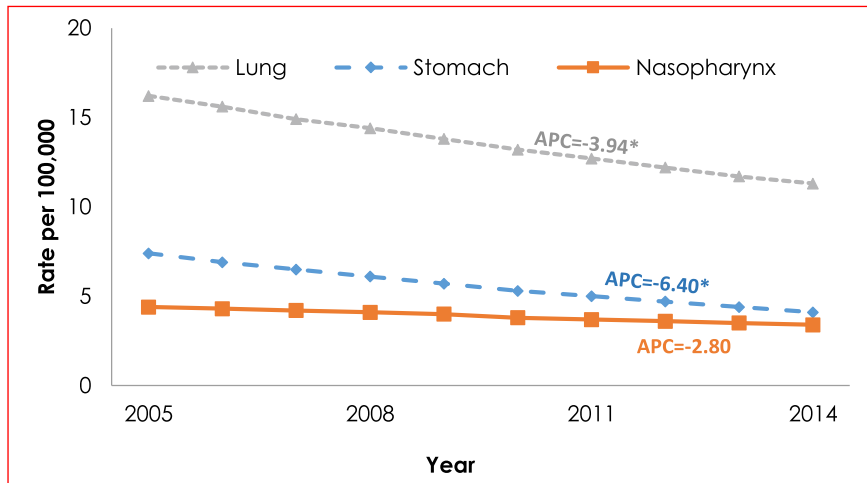
4.9 Ethnicity wise proportion of cancer cases

Cultural Group	Number	%
Meitei	2705	58.5
Kuki	338	7.3
Tangkhu	281	6.1
Rongmei	154	3.3
Paite	122	2.6
Hmar	102	2.2
Naga	66	1.4
Nepalese	65	1.4
Mao	51	1.1
Anal	46	1.0
Others	312	6.7
Missing/Unknown	381	8.2
Total	4623	100.0

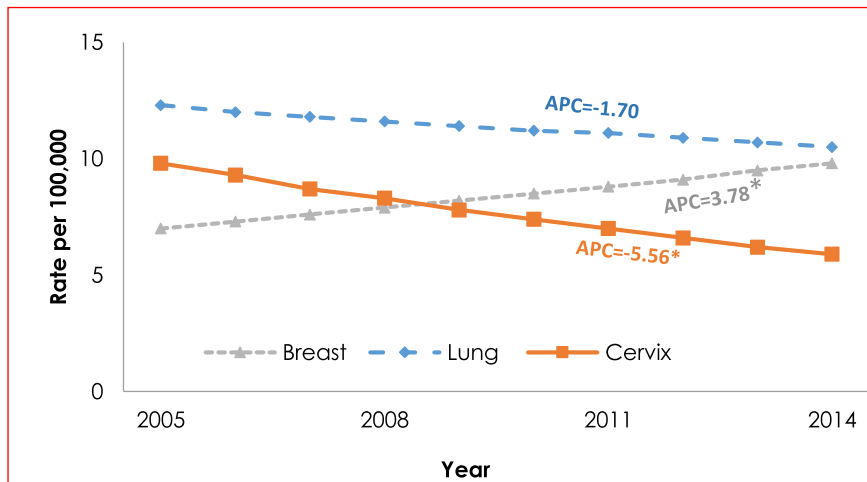
Approximately 59% of the cancer cases belong to Meitei.

4.10 Trends over time in Cancer Incidence

Males



Females



* Significant Joinpoint model & Annual Percent Change (APC) ($p < 0.05$)

In Males, cancers of Stomach, Nasopharynx and Lung are decreasing over the years; similarly, in females Breast cancers is increasing and Cervix & Lung Cancers are decreasing. Trends of lung and Stomach cancers in male and Breast and Cervix cancers in female are statistically significant.

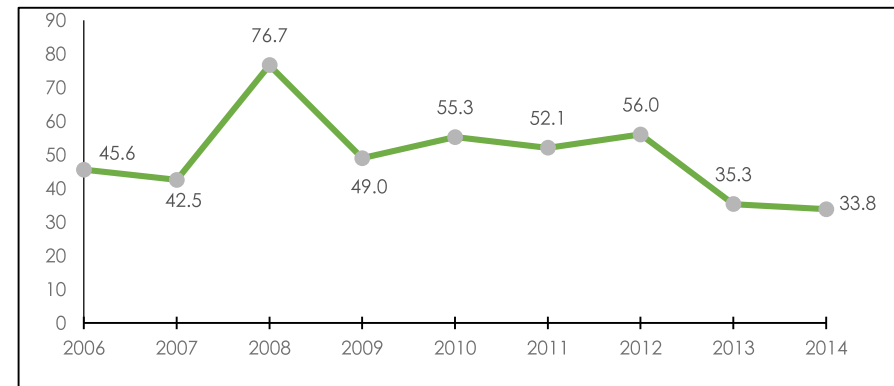
4.11 Cancer Deaths

Case Fatality Ratio (CFR)			
Manipur State	Incidence	Death	CFR (%)
Males	2081	560	26.9
Females	2542	495	19.5
Both Sexes	4623	1055	22.8

Approximately 23% cancer deaths are reported related to newly diagnosed case of cancer.

4.12 Status of Medical Certification of Cause of Death *

Implementation status of MCCD	
Existing Allopathic Medical Institutions	114
Medical Institutions Covered under MCCD	38
Medical Institutions reported MCCD data as per the National list	21
Ranking of States/UTs in the medical certification of cause of death, 2014	14



Trend in proportion of medically certified deaths to total registered deaths in Sikkim, 2006-14

Rank	Cause of death	Percentage
1	Circulatory System	23.9
2	Symptoms, Signs & Abnormal Findings	15.4
3	Digestive system	14.2
4	Certain Infectious & Parasitic Diseases	10.2
5	Respiratory System	6.8
6	Neoplasms	5.5
7	Certain Conditions Originating in Perinatal Period	4.7
8	Injury Poisoning	4.5
9	Other groups	14.9

* Report on Medical Certification of Cause of Death (MCCD), 2008 -14, Office of the Registrar General of India, Government of India.

The coverage of institutions and reporting of MCCD have to be improved. Conditions of the Circulatory system is the leading cause of death. Quality of cause of death information has to be further improved as the group 'Symptoms, signs and Abnormal findings' has been reported as the second leading cause.



Advocacy Points

- Cancer of Lung, Stomach, Liver and Nasopharynx are most common in men.
- Cancer of Breast, Lung and Cervix are most common in women
- More than one third of cancers in men and nearly one fifth of cancers in women are associated with the use of tobacco.
- Cancer cases start rising from 30 -34 years and reach peak at 70 -74 years affecting the economically productive age group.
- High burden of risk factors such as tobacco, alcohol, obesity etc needs to be addressed through appropriate prevention programme and health education.
- Use of clean fuel needs to be promoted in rural sectors to minimize indoor air pollution.
- Coverage of screening for Breast and Cervix cancer needs to be improved.
- Cancer treatment facilities particularly radiotherapy, palliative care etc need to be established and strengthened.
- Strengthening the reporting of cause of death is required to generate accurate mortality estimates.
- Cancer patient welfare and other relevant health insurance scheme need to be in place to improve affordability and access to health care.