

Chapter 6 – MIZORAM: Cancer & Health Indicator profile

6.1 Demography of the Population Based Cancer Registry

Mizoram State PBCR	
PBCR situated in	Civil Hospital, Aizawl
PBCR Name	Mizoram
Coverage Area	Mizoram State
PBCR Established Year	2003
Number of sources of registration	45
Area (in Sq.km)	21087
Urban & Rural covered (%)	52.1 & 47.9
Population as per 2011 Census	
Males	555339
Females	541867
Total	1097206
Major Ethnic groups	Mizo, Anal, Chakma, Mara
<i>Cancer is still not been made notifiable in Mizoram</i>	

6.2 Risk Factor & Health Practices

Risk Factor for Cancer	Urban		Rural		Total	
	Males	Females	Males	Females	Males	Females
Adults (age 15-49 years)						
Literacy (%)	99.3	98.6	96.3	85.4	98.2	93.5
Use of any kind of tobacco (%)	82.0	59.2	77.7	59.3	80.4	59.2
Consumption of alcohol (%)	52.3	6.7	44.9	2.2	49.6	5.0
Proportion attempted to stop smoking or using tobacco in any other form during the past 12 months	43.0	45.8	38.7	33.1	41.5	40.9
Overweight or obese (BMI \geq 25.0 kg/m ²) (%)	28.1	26.8	9.9	12.3	21.0	21.1
Children under age 6 months exclusively breastfed (%)		59.8		61.7		60.6

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 (%)	71.8	70.9	62.1	58.7	68.2	66.4
Have Ever Undergone Examinations of Cervix (%)		24.4		15.4		20.9
Have Ever Undergone Examinations of Breast (%)		9.2		4.8		7.5
Institutional births (%)		97.2		61.0		80.1
Population and Household Profile						
Both Sex						
Households using improved sanitation facility (%)	90.9		73.1		83.5	
Households using clean fuel for cooking (%)	92.8		29.9		66.6	
Households with any usual member covered by a health scheme or health insurance (%)	42.3		49.9		45.4	

Source: NFHS-4 (2015 -16)

6.3 Health Systems at a Glance

Health Facilities	Number
Sub centre	370
Primary Health Centres	57
Community Health Centres	9
Sub Divisional Hospital	2
District Hospitals	8
Mobile Medical Unit	9
AYUSH	5
Cancer treating hospitals *	5
Radiotherapy facilities *	1
Cancer patient welfare schemes *	3
Palliative care centres *	2

Source: Rural Health Statistics report (2014 -15); * Provided by Cancer registry

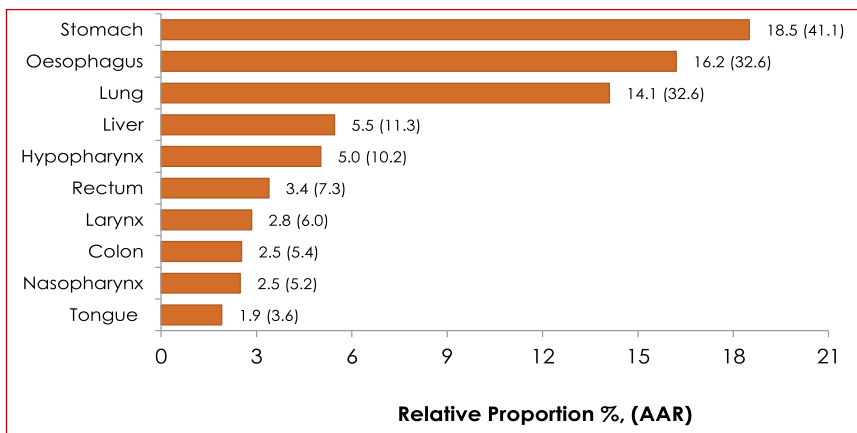
6.4 Number and Age Adjusted Incidence Rate (Reporting years: 2012-14)

Sex	Mizoram State		Aizawl District		Mizoram Excluding Aizawl District	
	Number of New Cancer cases	AAR	Number of New Cancer cases	AAR	Number of New Cancer cases	AAR
Males	2567	211.5	1275	270.7	1292	175.0
Females	2089	165.8	1066	167.3	1023	136.6

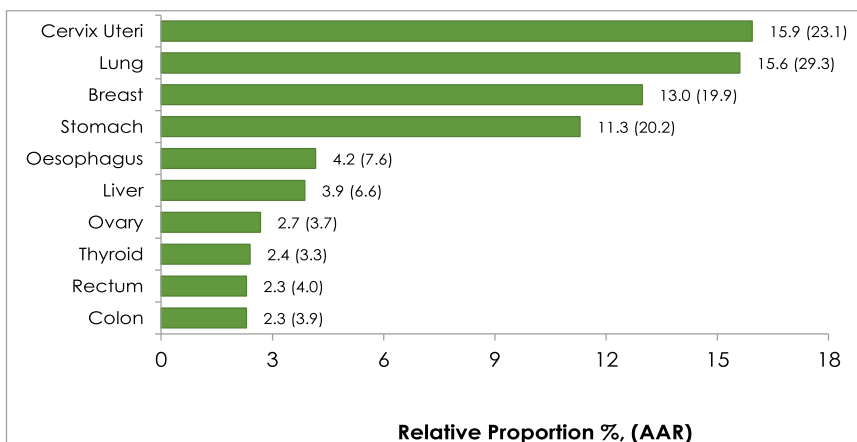
AAR - Age Adjusted Incidence Rate per 1,00,000 population

6.5 Leading Sites of Cancer

Leading Sites of Cancer in Males



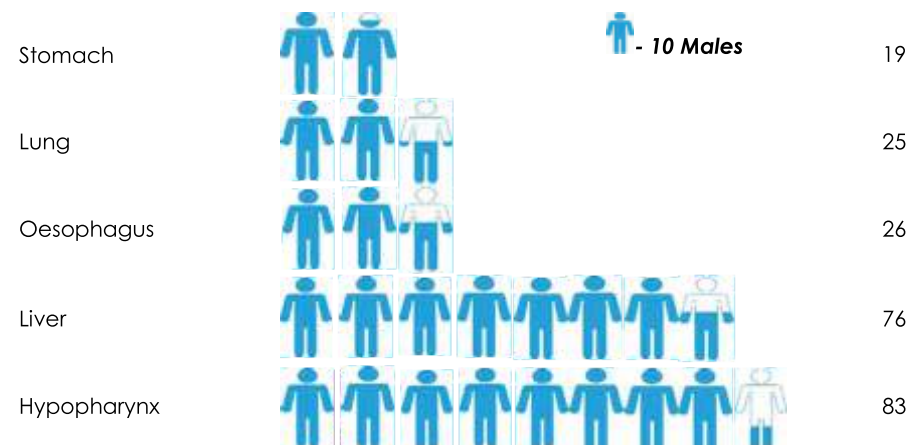
Leading Sites of Cancer in Females



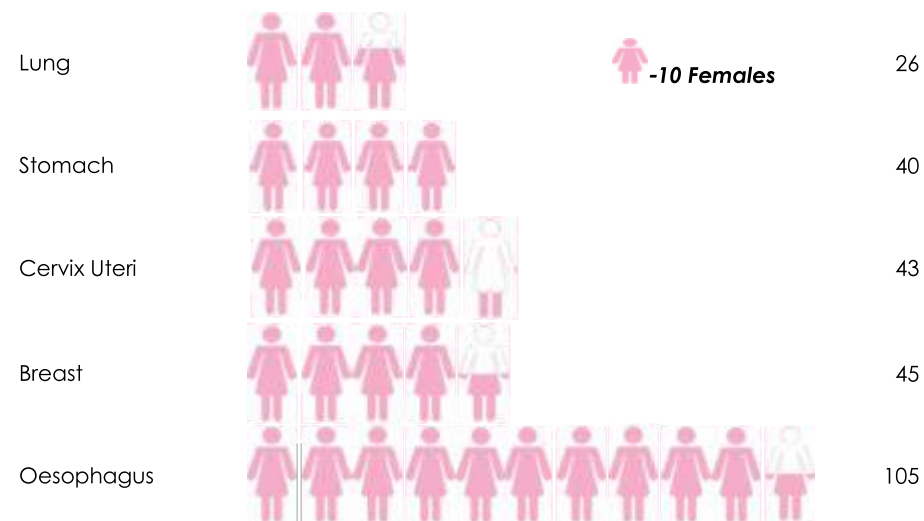
In males, proportion of Stomach cancer is the highest followed by Oesophagus and Lung. These three sites contribute almost half (49%) of all cancers. In females, Cervix Uteri cancer is the highest followed by Lung and Breast. These three sites contribute almost 45% of all cancers.

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

Males



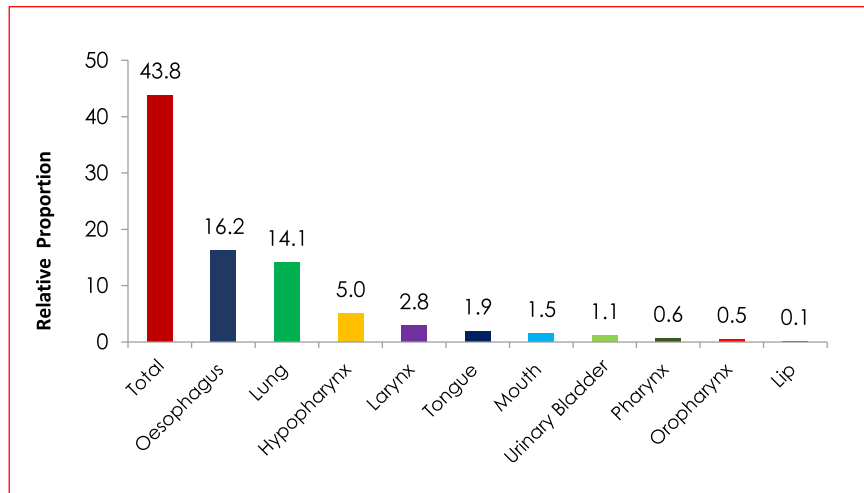
Females



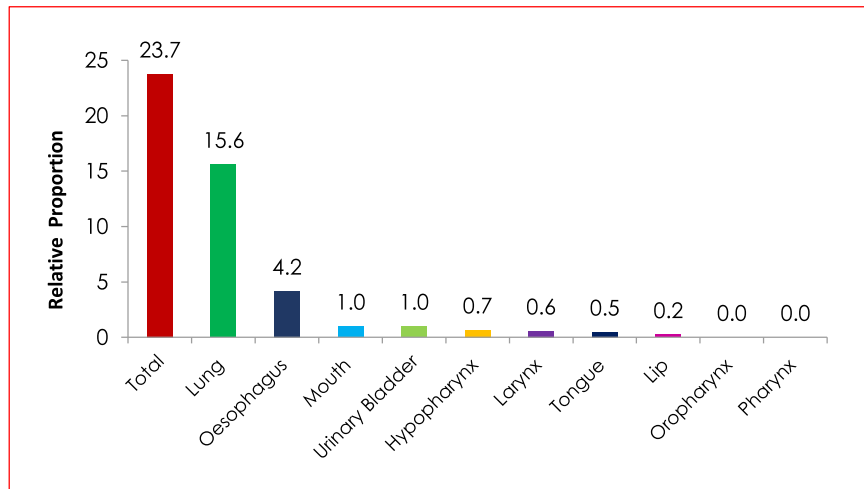
The average risk that a person will develop Stomach cancer in their lifetime (0-74 years) is about 1 in 19 for males. Similarly, 1 in 26 females will possibly develop Lung cancer in their lifetime (0-74 years).

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

Males

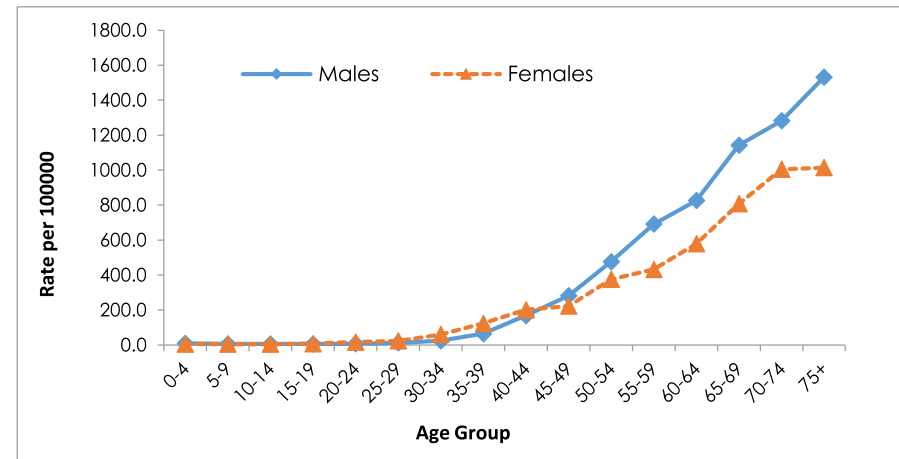


Females



Around 44% and 24% of all cancers in males and females are respectively associated with the use of tobacco. Among these proportion of Oesophagus and Lung are leading in both sexes.

6.8 Age Specific Rate (ASpR)



Age Specific Incidence Rate is highest for males in 75 years + age group. For females, it is observed in 5 years earlier. Age specific incidence rates show distinct rise from 35- 39 years age onwards in both sexes.

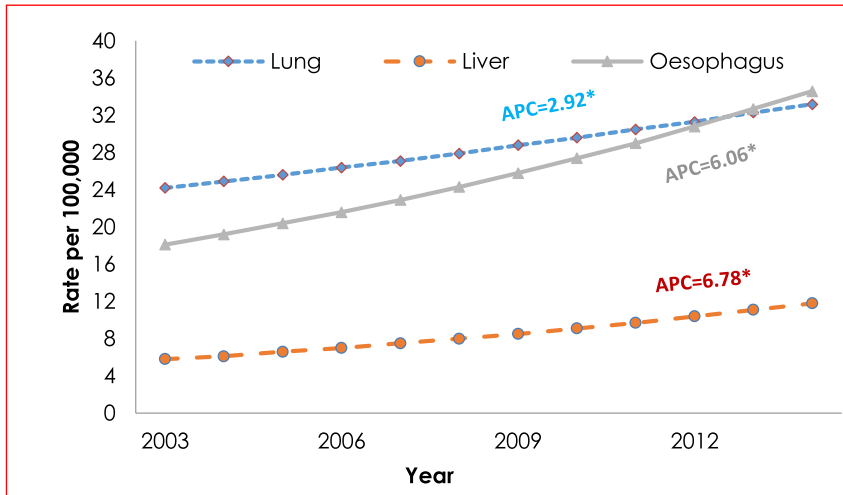
6.9 Ethnicity wise proportion of cancer cases

Cultural Group	Number	%
Mizo	4264	91.6
Anal	116	2.5
Chakma	67	1.4
Mara	57	1.2
Others	81	1.7
Missing/Unk	71	1.5
Total	4656	100.0

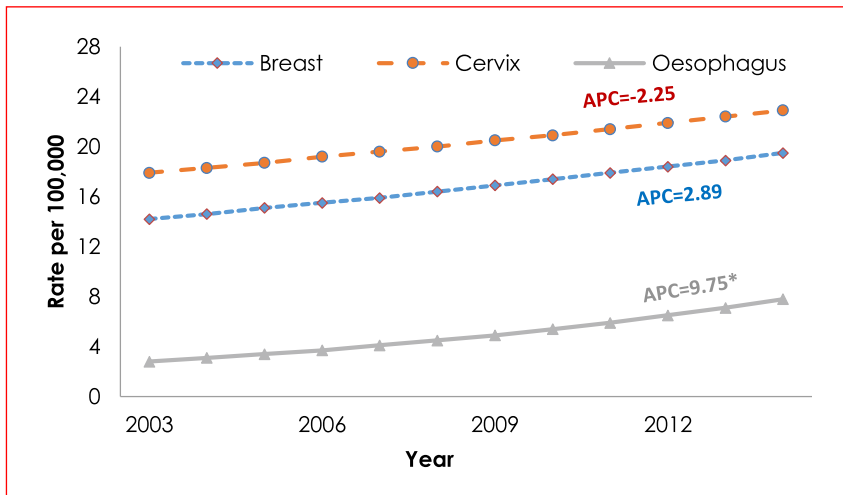
Almost 92% of the cancer cases belong to Mizo.

6.10 Trends over time in Cancer Incidence

Males



Females



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

In Males, cancers of Lung, Liver and Oesophagus are significantly increasing over the years; similarly, in females cancer of Oesophagus is showing an increasing trend which is statistically significant.

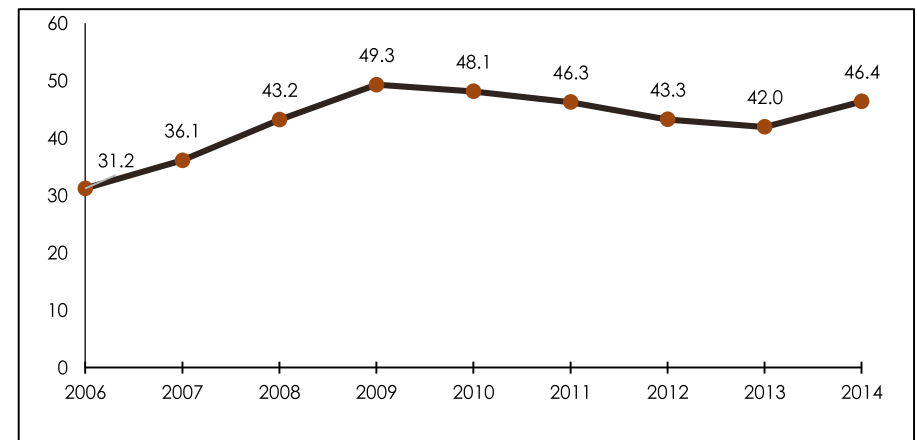
6.11 Cancer Deaths

Case Fatality Ratio (CFR)	Mizoram State			Aizawl District			Mizoram Excluding Aizawl District		
	Incidence case	Death	CFR (%)	Incidence case	Death	CFR (%)	Incidence case	Death	CFR (%)
Males	2567	1346	52.4	1275	647	50.7	1275	647	50.7
Females	2089	830	39.7	1066	410	38.5	1066	410	38.5
Both Sexes	4656	2176	46.7	2341	1057	45.2	2341	1057	45.2

Approximately 47% cancer deaths are reported related to newly diagnosed case of cancer.

6.12 Status of Medical Certification of Cause of Death *

Implementation status of MCCD	
Existing Allopathic Medical Institutions	134
Medical Institutions Covered under MCCD	84
Medical Institutions reported MCCD data as per the National list	53
Ranking of States/UTs in the medical certification of cause of death, 2014	9



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

Rank	Cause of death	%
1	Certain Infectious & Parasitic Diseases	18.7
2	Circulatory System	14.7
3	Digestive system	14.3
4	Respiratory System	12.5
5	Certain Conditions Originating in Perinatal Period	12.1
6	Neoplasms	7.7
7	Injury Poisoning	3.5
8	Symptoms, Signs & Abnormal Findings	3.1
9	Other groups	13.2

* 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 (1st) and Neoplasms (6th) are leading causes of death. Quality of cause of death information has to be further improved.



Advocacy Points

- Cancer of Stomach, Oesophagus and Lung are most common in men.
- Cancer of Cervix, Lung and Breast are most common in women.
- More than one third of cancers in men and more than one fifth cancers in women are associated with the use of tobacco.
- Cancer cases start rising from 35 years and reach peak at 75 years affecting the economically productive age group.
- High burden of risk factors such as tobacco, alcohol, obesity etc. need 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 further strengthened.
- Cancer patient welfare and other relevant health insurance scheme needs to be utilized further to improve affordability and access to health care.
- Strengthening the reporting of cause of death is required to generate accurate mortality estimates.
- Notifiability of Cancer needs to be considered to ensure completeness of cancer reporting in the state.