

## Chapter 9 – TRIPURA: Cancer & Health Indicator profile

### 9.1 Demography of the Population Based Cancer Registry

Tripura State PBCR	
PBCR situated in	Regional Cancer Centre, Agartala
PBCR Name	Tripura
Coverage Area	Tripura State
PBCR Established Year	2010
Number of sources of registration	55
Area (in Sq.km)	10492
Urban & Rural covered (%)	26.2 & 73.8
Population as per 2011 Census	
Males	1874376
Females	1799541
Total	3673917
Major Ethnic groups	Kayastha, Koibarta, Jogi, Brahmin
<i>Cancer is made notifiable in Tripura from 24th September 2008</i>	

### 9.2 Risk Factor & Health Practices

Risk Factor for Cancer	Urban		Rural		Total	
	Males	Females	Males	Females	Males	Females
<b>Adults (age 15-49 years)</b>						
Literacy (%)	95.2	88.4	87.0	77.0	89.5	80.4
Use of any kind of tobacco (%)	57.5	37.9	72.3	44.0	67.8	42.2
Consumption of alcohol (%)	54.7	0.4	58.9	6.7	57.6	4.8
Proportion attempted to stop smoking or using tobacco in any other form during the past 12 months	13.9	24.7	9.6	16.6	10.7	18.8
Overweight or obese (BMI $\geq$ 25.0 kg/m <sup>2</sup> ) (%)	18.2	23.5	14.9	12.8	15.9	16.0
Children under age 6 months exclusively breastfed (%)		63.4		72.9		70.7

Source: NFHS-4 (2015 -16)

Health practices & Health seeking	Urban		Rural		Total	
	Males	Females	Males	Females	Males	Females
<b>Adults (age 15-49 years)</b>						
Comprehensive knowledge of HIV/AIDS (%)	50.9	44.3	30.5	21.0	36.8	28.0
Have Ever Undergone Examinations of Cervix (%)		7.0		4.3		5.1
Have Ever Undergone Examinations of Breast (%)		1.5		1.2		1.3
Institutional births (%)		92.6		75.7		79.7
<b>Population and Household Profile</b>						
<b>Both Sex</b>						
Households using improved sanitation facility (%)	65.1		59.6		61.3	
Households using clean fuel for cooking (%)	68.6		16		31.9	
Households with any usual member covered by a health scheme or health insurance (%)	31.7		69.5		58.1	

Source: NFHS-4 (2015 -16)

### 9.3 Health Systems at a Glance

Health Facilities	Number
Sub centre	1017
Primary Health Centres	91
Community Health Centres	20
Sub Divisional Hospital	11
District Hospitals	6
Mobile Medical Unit	0
AYUSH	61
Cancer treating hospitals *	1
Radiotherapy facilities *	1
Cancer patient welfare schemes *	0
Palliative care centres *	1

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

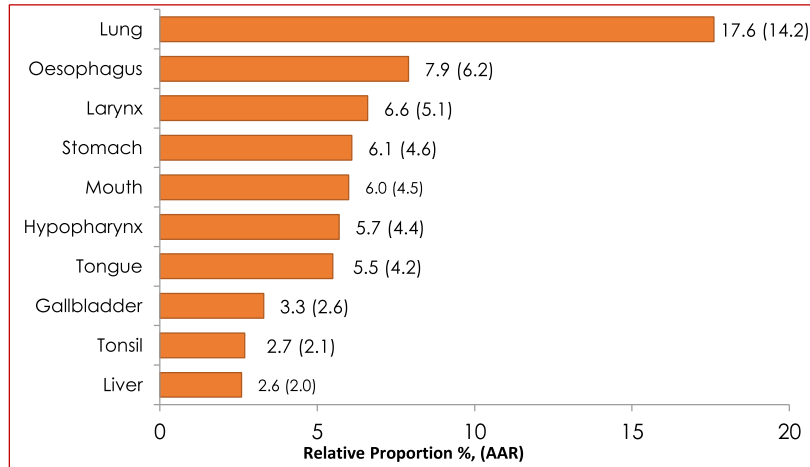
### 9.4 Number and Age Adjusted Incidence Rate (Reporting years: 2012-14)

Sex	Number of New Cancer cases	AAR
Males	3628	76.4
Females	2702	54.9

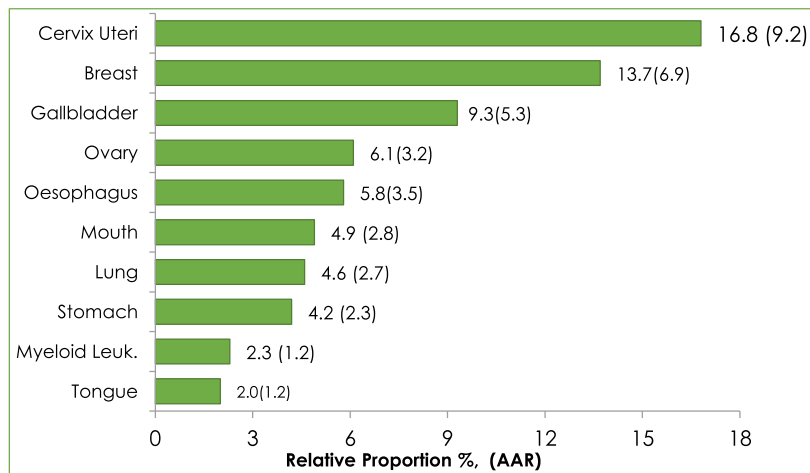
AAR - Age Adjusted Incidence Rate per 1,00,000 population

### 9.5 Leading Sites of Cancer

#### Leading Sites of Cancer in Males



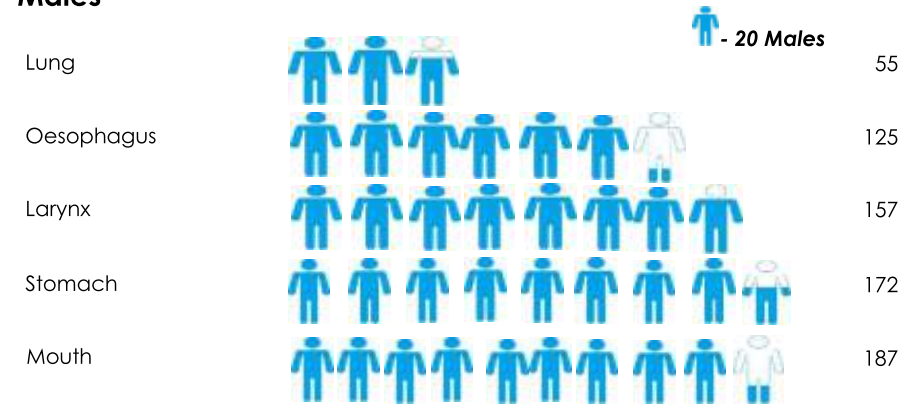
#### Leading Sites of Cancer in Females



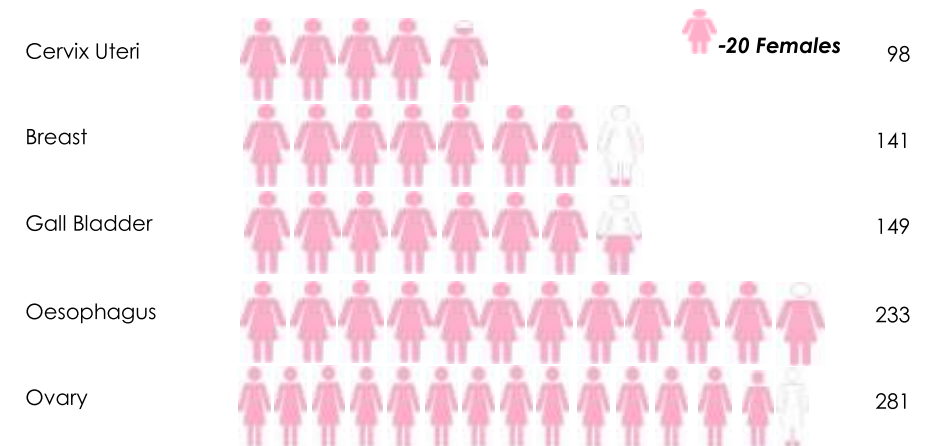
In males, proportion of Lung cancer is the highest followed by Oesophagus and Larynx. These three sites contribute almost one third (32%) of all cancers. In females, Cervix Uteri cancer is the highest followed by Breast and Gallbladder. These three sites contribute more than one third (40%) of all cancers.

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

#### Males



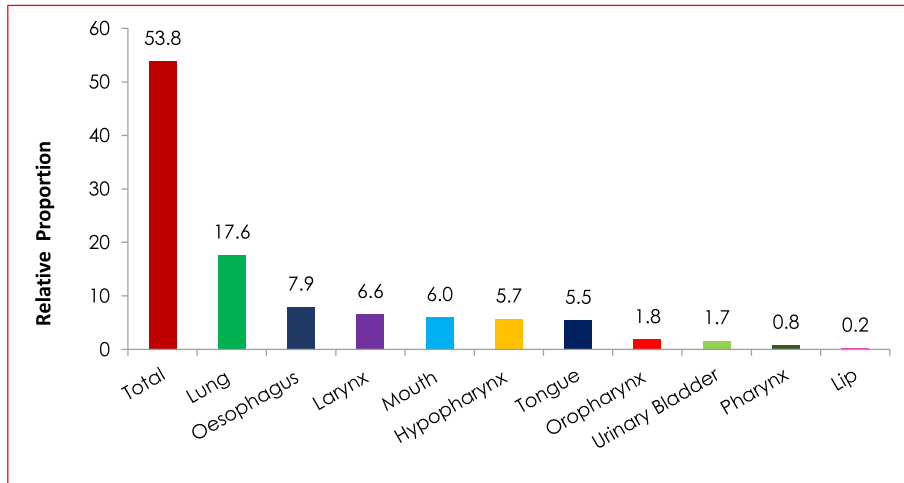
#### Females



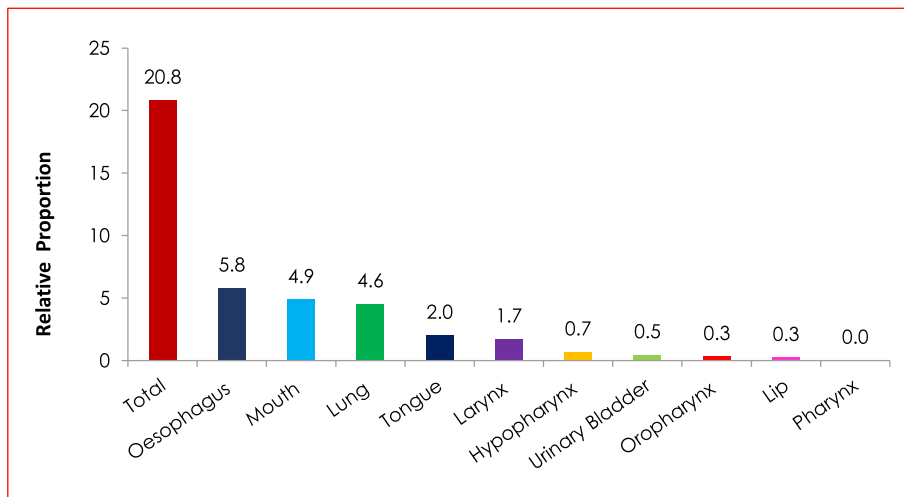
The average risk that a person will develop Lung cancer in their lifetime (0-74 years) is about 1 in 55 for males. Similarly, 1 in 98 females will possibly develop Cervix Uteri cancer in their lifetime (0-74 years).

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

#### Males

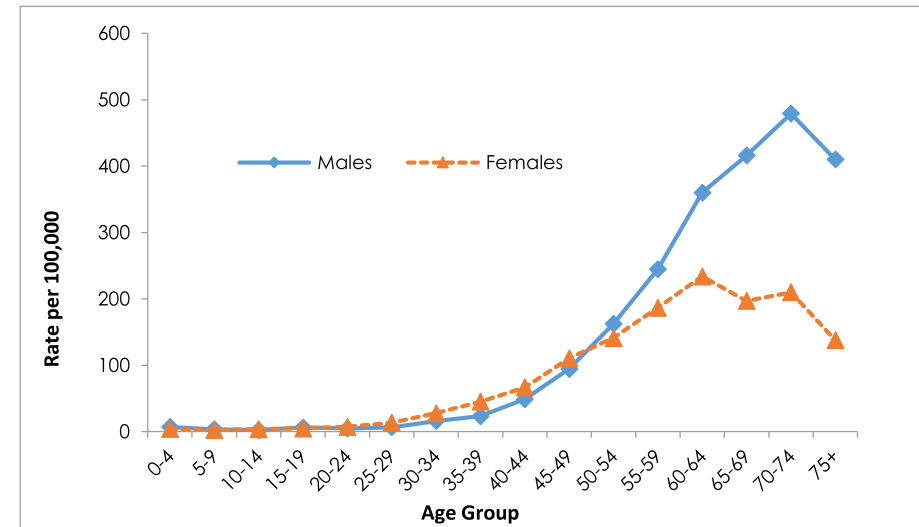


#### Females



Around 54% and 21% of all cancers in males and females are respectively associated with the use of tobacco. Among these proportion of Lung, Oesophagus and Mouth are high in both sexes.

### 9.8 Age Specific Rate (ASpR)



Age Specific Incidence Rate is highest for males in 70-74 age group. For females, it is observed in 5 years earlier (60-64 yrs). Age specific incidence rates show distinct rise from 30-34 years age onwards in both sexes.

### 9.9 Ethnicity wise proportion of cancer cases

Cultural Group	Number	Proportion
Kayastha	2645	41.8
Koibarta	836	13.2
Jogi	617	9.7
Brahmin	327	5.2
Bishnupriy	65	1.0
Others	901	14.2
Missing/Unknown	939	14.8
<b>Total</b>	<b>6330</b>	<b>100.0</b>

Approximately 42% of the cancer cases belong to Kayastha.

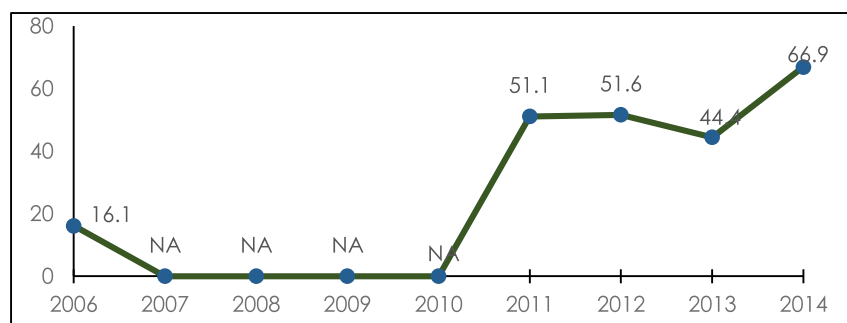
## 9.10 Cancer Deaths

Case Fatality Ratio (CFR)			
Sex	Incidence case	Death	CFR (%)
Males	3628	1778	49.0
Females	2702	1082	40.0
Both Sexes	6330	2860	45.2

Approximately 45% cancer deaths are reported related to newly diagnosed case of cancer.

## 9.11 Status of Medical Certification of Cause of Death \*

Implementation status of MCCD	
Existing Allopathic Medical Institutions	112
Medical Institutions Covered under MCCD	107
Medical Institutions reported MCCD data as per the National list	107
Ranking of States/UTs in the medical certification of cause of death,2014	4



NA- Not Available Data

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

Rank	Cause of death	Percentage
1	Circulatory System	28.4
2	Respiratory System	24.9
3	Symptoms, Signs & Abnormal Findings	17.6
4	Certain Infectious & Parasitic Diseases	9.3
5	Injury Poisoning	6.5
6	Neoplasms	4.2
7	Certain Conditions Originating in Perinatal Period	1.3
8	Digestive system	0.6
9	Other groups	7.3

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

Coverage of institutions and reporting of MCCD are satisfactory. 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 third leading cause.



### Advocacy Points

- Cancer of Lung, Oesophagus and Larynx are most common in men.
- Cancer of Cervix, Breast, and Gall Bladder are most common in women.
- More than half of cancers in men 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 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, cervix and oral 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 needs to be in place to improve affordability and access to health care.