Chapter 7 – NAGALAND: Cancer & Health Indicator profile

7.1 Demography of the Population Based Cancer Registry

Nagaland PBCR	
PBCR situated in	Naga Hospital Authority, Kohima
PBCR Name	Nagaland
Coverage Area	Two Districts - Kohima and Dimapur
PBCR Established Year	2010
Number of sources of registration	50
Area (in Sq.km)	2390
Urban & Rural covered (%)	49.3 & 50.7
Population as per 2011 Census	
Males	336360
Females	310439
Total	646799
Major Ethnic groups	Naga, Nepalese, Ahom
Cancer is still not been made notifiable in Nagaland	

7.2 Risk Factor & Health Practices

Risk Factor for Cancer	Urban		Rural		Total	
	Males	Females	Males	Females	Males	Females
Adults (age 15-49 years)						
Literacy (%)	93.2	89.9	80.6	75.1	85.6	81.0
Use of any kind of tobacco (%)	70.8	33.1	68.5	23.9	69.4	27.5
Consumption of alcohol (%)	41.5	4.7	37.3	2.4	39.0	3.3
Proportion attempted to stop smoking or using tobacco in any other form during the past 12 months	47.3	43.9	38.0	46.7	41.8	45.4
Overweight or obese (BMI ≥ 25.0 kg/m²) (%)	16.6	20.7	12.3	13.2	14.0	16.2
Children under age 6 months exclusively breastfed (%)		41.1		45.5		44.5

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 (%)	29.2	15.8	20.5	9.6	23.9	12.2
Have Ever Undergone Examinations of Cervix (%)		17.7		12.5		14.6
Have Ever Undergone Examinations of Breast (%)		2.7		1.5		2.0
Institutional births (%)		56.3		24.0		32.8
Population and Household Profile	**Both Sex**					
Households using improved sanitation facility (%)	68.2		79.0		75.2	
Households using clean fuel for cooking (%)	67.1		14.4		32.8	
Households with any usual member covered by a health scheme or health insurance (%)	4.3		7.0		6.1	

Source: NFHS-4 (2015 -16)

7.3 Health Systems at a Glance

Health Facilities	Number
Sub centre	396
Primary Health Centres	128
Community Health Centres	21
Sub Divisional Hospital	0
District Hospitals	11
Mobile Medical Unit	11
AYUSH	8
Cancer treating hospitals *	11
Radiotherapy facilities *	1
Cancer patient welfare schemes *	0
Palliative care centres *	1

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

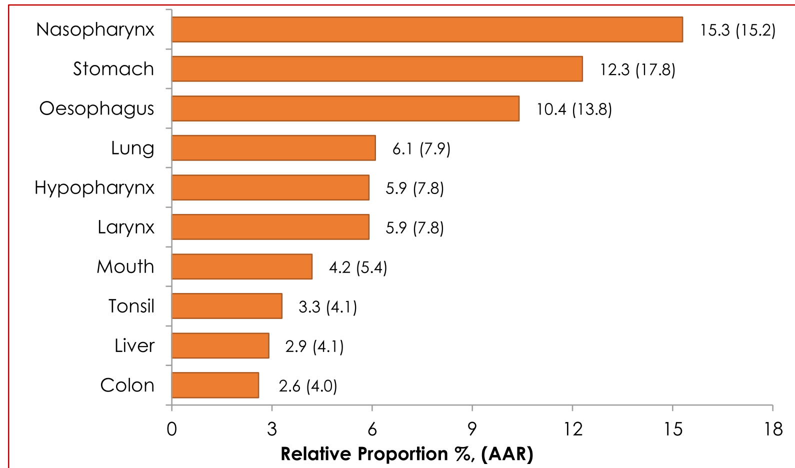
7.4 Number and Age Adjusted Incidence Rate (Reporting years: 2012-14)

Sex	Number of New Cancer cases	AAR
Males	815	125.8
Females	546	84.9

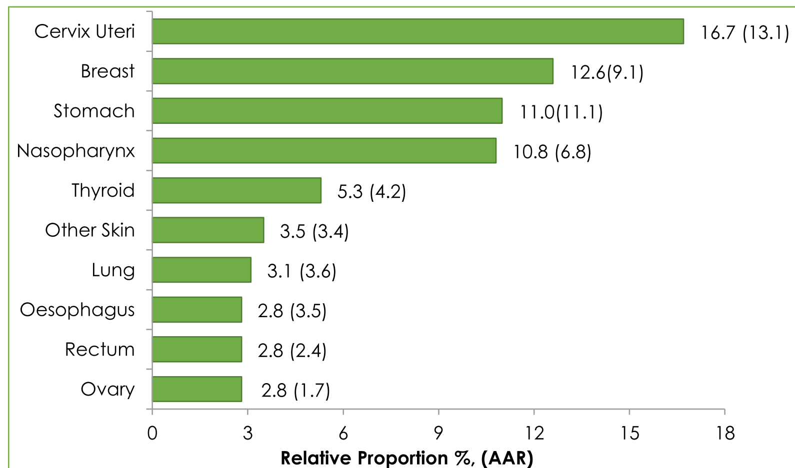
AAR - Age Adjusted Incidence Rate per 1,00,000 population

7.5 Leading Sites of Cancer

Leading Sites of Cancer in Males



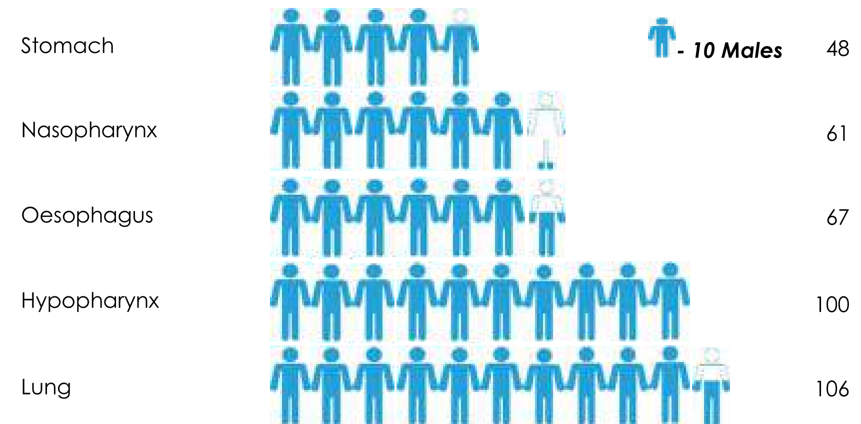
Leading Sites of Cancer in Females



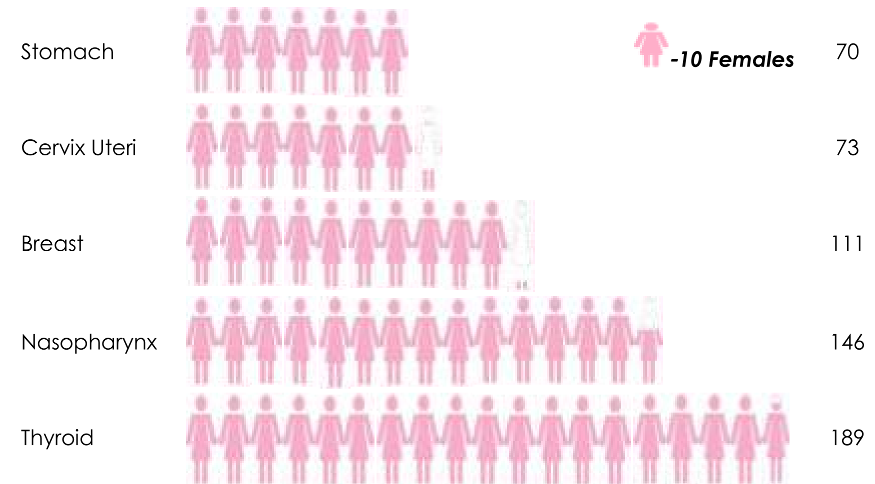
In males, proportion of Nasopharynx cancer is the highest followed by Stomach and Oesophagus. These three sites contribute more than one third (38%) of all cancers. In females, Cervix Uteri cancer is the highest followed by Breast and Stomach. These three sites contribute more than one third (41%) of all cancers.

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

Males



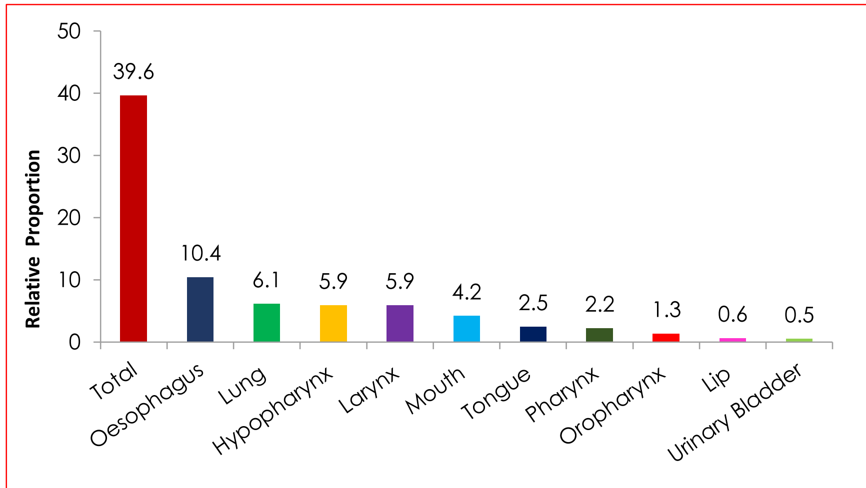
Females



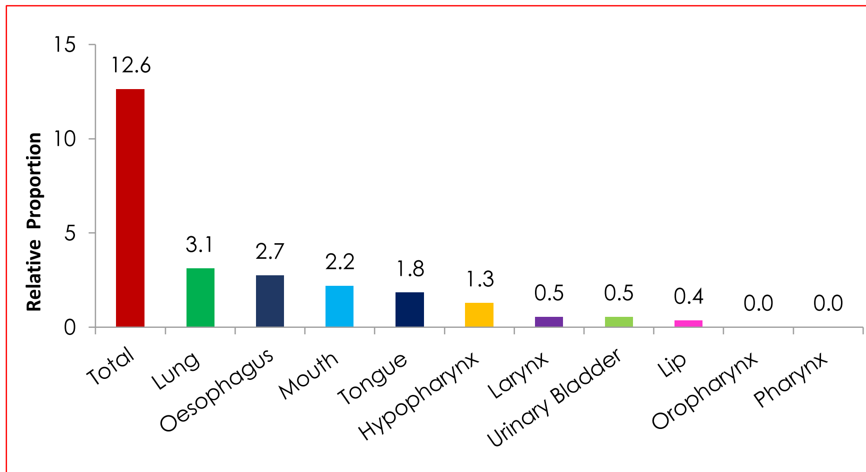
The average risk that a person will develop stomach cancer in their lifetime (0-74 years) is about 1 in 48 for males and 1 in 70 for females.

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

Males

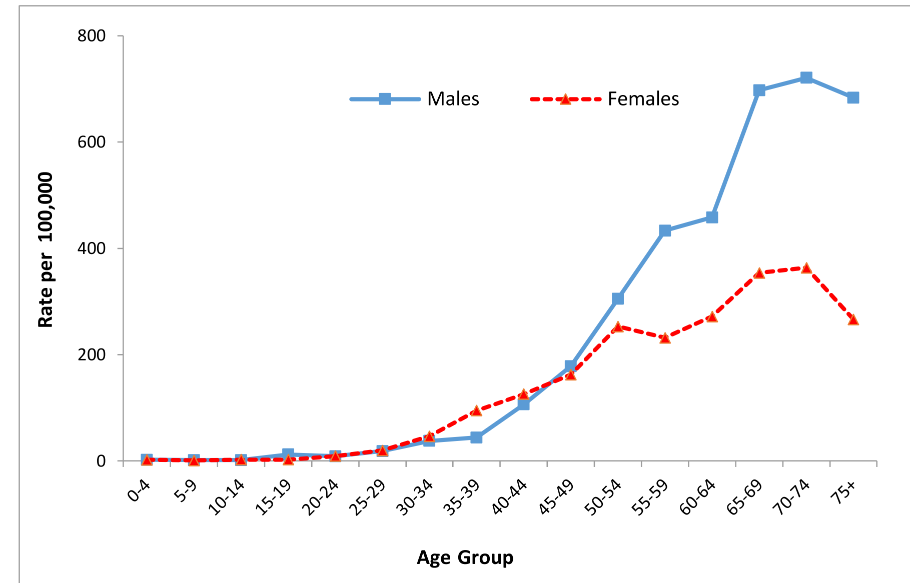


Females



Around 40% and 13% 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.

7.8 Age Specific Rate (ASpR)



Age Specific Incidence Rate is rising sharply from ages 25–29 to 70–74 (males) and from ages 20–24 to 70–74 (females) followed by a decline

7.9 Ethnicity wise proportion of cancer cases

Cultural Group	Number	Proportion
Naga	1004	73.8
Nepalese	36	2.6
Ahom	35	2.6
Mao	30	2.2
Bhutias	28	2.1
Chamars	21	1.5
Kuki	15	1.1
Others	80	5.9
Missing/Unknown	112	8.2
Total	**1361**	**100.0**

Approximately 3/4th of the cancer cases belong to Naga.

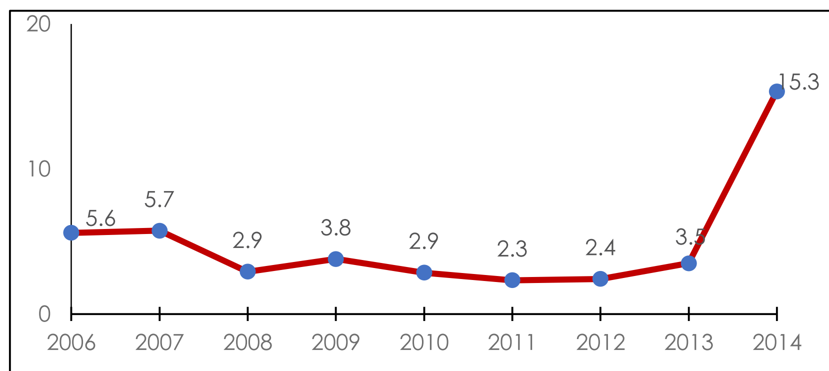
7.10 Cancer Deaths

Case Fatality Ratio (CFR)			
Sex	**Incidence case**	**Death**	**CFR (%)**
Males	815	153	18.8
Females	546	55	10.1
Both Sexes	1361	208	15.3

Approximately 15% cancer deaths are reported related to newly diagnosed case of cancer.

7.11 Status of Medical Certification of Cause of Death *

Implementation status of MCCD	
Existing Allopathic Medical Institutions	216
Medical Institutions Covered under MCCD	59
Medical Institutions reported MCCD data as per the National list	23
Ranking of States/UTs in the medical certification of cause of death,2014	20



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

Rank	Cause of death	Percentage
1	Circulatory System	16.8
2	Respiratory System	11.6
3	Certain Infectious & Parasitic Diseases	10.9
4	Injury Poisoning	10.9
5	Digestive system	9.6
6	Neoplasms	7.9
7	Certain Conditions Originating in Perinatal Period	3.6
8	Symptoms, Signs & Abnormal Findings	0.0
9	Other groups	28.7

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

Nagaland ranks way below in MCCD reporting and the coverage of institutions and reporting of MCCD have to be improved. Death registration should also be strengthened. Conditions of the Circulatory system is the leading cause of death. Quality of cause of death information has to be further improved.

Advocacy Points

- Cancer of Nasopharynx, Stomach, and oesophagus are most common in men.
- Cancer of Cervix, Breast, and Stomach are most common in women.
- More than one third of cancers in men are associated with the use of tobacco.
- Cancer cases start rising from 25 years and reach peak at 70-74 years affecting the economically productive age group.
- High burden of risk factors such as tobacco, alcohol 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 cancers needs to be improved.
- Cancer treatment facilities particularly radiotherapy, palliative care etc need to be established and strengthened.
- Cancer patient welfare and other relevant health insurance scheme needs to be in place 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.