

Chapter 2 – ARUNACHAL PRADESH: Cancer & Health Indicator profile

2.1 Demography of the Population Based Cancer Registry

PBCR Name	Naharlagun	Pasighat
PBCR situated in	Tomo Riba State Hospital, Naharlagun	General Hospital, Pasighat
Coverage Area	Eight Districts: Tawang, West kameng, East kameng, Upper subansiri, Lower subansiri, Kurngkumey, Papumpare and West siang	Two Districts: East Siang and Upper Siang
PBCR Established Year	2011	2011
Number of sources of registration	40	65
Area (in Sq.km)	42095	10193
Urban & Rural covered (%)	25.8 & 74.2	25.4 & 74.6
Population as per 2011 Census		
Males	390350	68815
Females	369665	65719
Total	760015	134534
Major Ethnic groups	Nyishi, Galo, Monpa	Adi, Nepalese, Mishing

Cancer is made notifiable in Arunachal Pradesh from 29th July 2015

2.2 Risk Factor & Health Practices

Risk Factor for Cancer	Urban		Rural		Total	
	Males	Females	Males	Females	Males	Females
Adults (age 15-49 years)						
Literacy (%)	91.4	80.9	81.9	60.1	84.5	65.6
Use of any kind of tobacco (%)	56.6	15.3	61.3	18.6	60.0	17.7
Consumption of alcohol (%)	55.2	22.3	60.5	27.8	59.0	26.3
Proportion attempted to stop smoking or using tobacco in any other form during the past 12 months	34.2	28.3	21.6	15.8	24.9	18.6
Overweight or obese (BMI \geq 25.0 kg/m ²) (%)	26.0	25.7	18.4	16.3	20.6	18.8
Children under age 6 months exclusively breastfed (%)		51.5		58.1		56.5

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 (%)	37.7	24.8	23.5	12.9	27.4	16.0
Have Ever Undergone Examinations of Cervix (%)		10.4		7.9		8.5
Have Ever Undergone Examinations of Breast (%)		7.2		5.4		5.9
Institutional births (%)		81.5		44.2		52.3
Population and Household Profile						
Both Sex						
Households using improved sanitation facility (%)	73.3		57.1		61.3	
Households using clean fuel for cooking (%)	87.4		30.0		45.0	
Households with any usual member covered by a health scheme or health insurance (%)	54.3		59.7		58.3	

Source: NFHS-4 (2015 -16)

2.3 Health Systems at a Glance

Health Facilities	Number
Sub centre	286
Primary Health Centres	117
Community Health Centres	52
Sub Divisional Hospital	0
District Hospitals	14
Mobile Medical Unit	16
AYUSH	24
Cancer treating hospitals *	1
Radiotherapy facilities *	1
Cancer patient welfare schemes *	0
Palliative care centres *	0

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

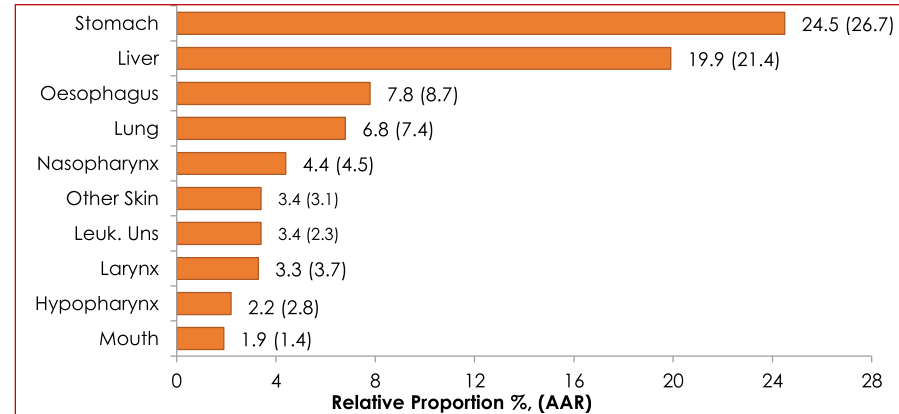
2.4 Number and Age Adjusted Incidence Rate (Reporting years: 2012-14)

Sex	Naharlagun		Papumpare District		Naharlagun excluding Papumpare District		Pasighat	
	Number of New Cancer cases	AAR	Number of New Cancer cases	AAR	Number of New Cancer cases	AAR	Number of New Cancer cases	AAR
Males	735	103.5	299	230.4	436	76.9	175	107.4
Females	704	100.5	333	249.0	371	66.6	159	101.4

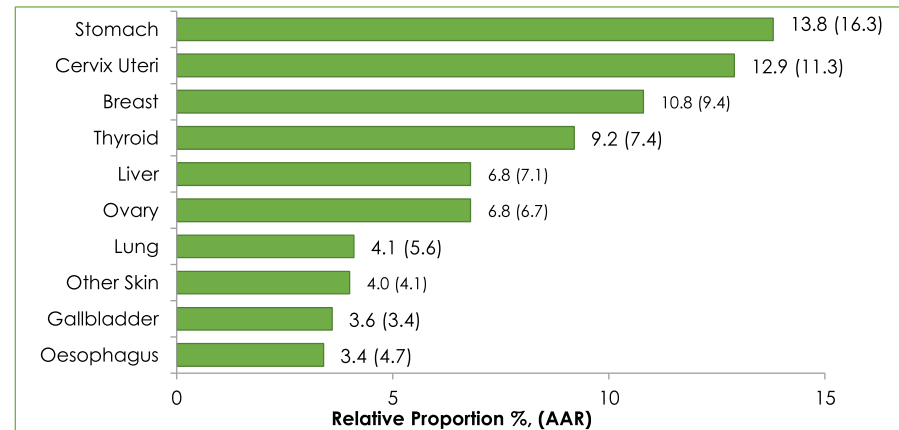
AAR - Age Adjusted Incidence Rate per 1,00,000 population

2.5 Leading Sites of Cancer

Leading Sites of Cancer in Males - Naharlagun



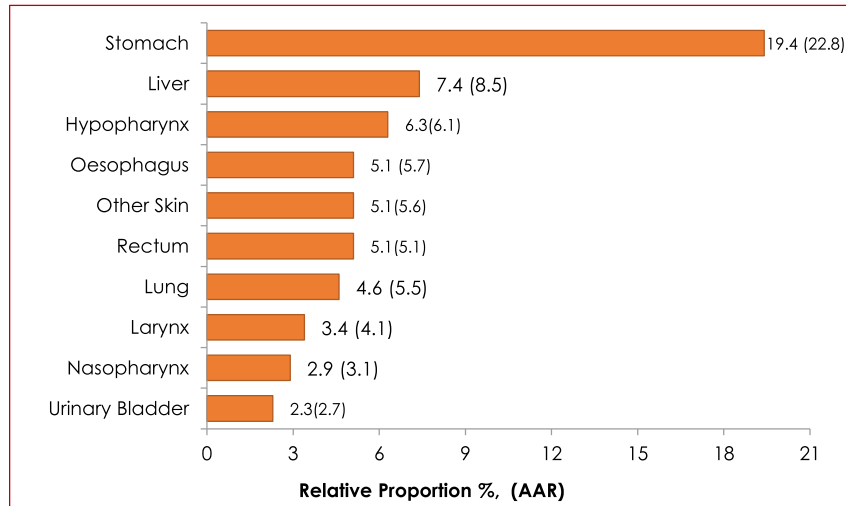
Leading Sites of Cancer in Females- Naharlagun



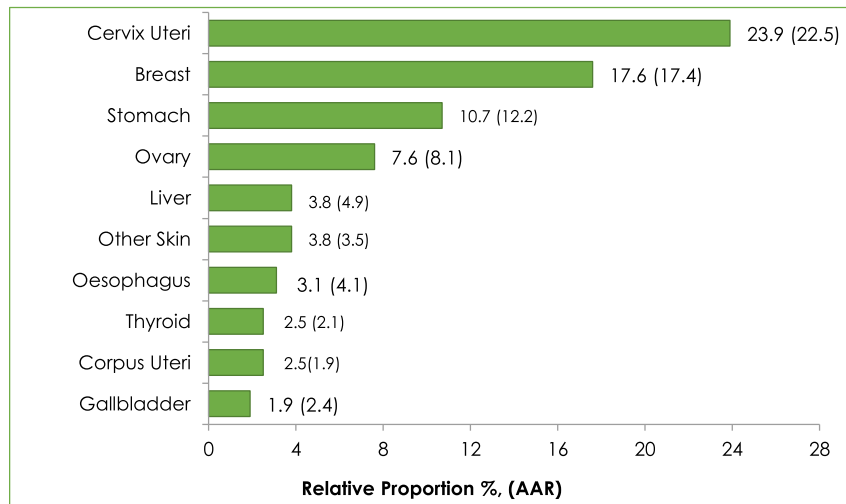
In males, proportion of Stomach cancer is the highest followed by Liver and oesophagus. These three sites contribute more than half (52.2%) of all cancers.

In females, Stomach cancer is the commonest followed by Cervix Uteri and Breast. These three sites contribute more than one third (37.5%) of all cancers.

Leading Sites of Cancer in Males - Pasighat



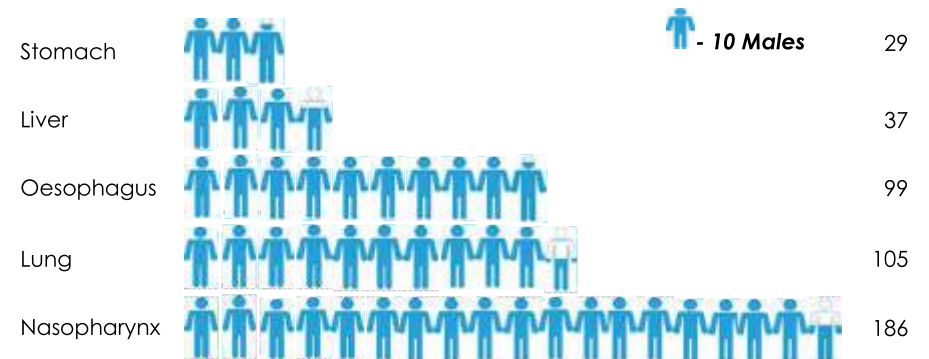
Leading Sites of Cancer in Females – Pasighat



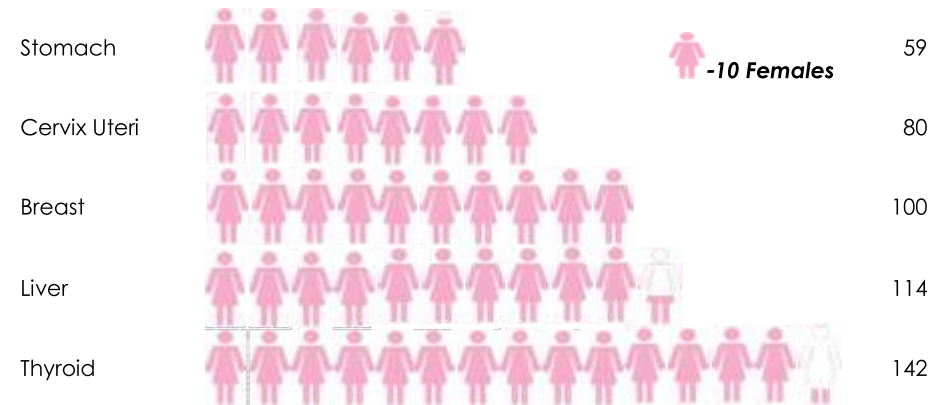
In males, proportion of Stomach cancer is the highest followed by Liver and Hypopharynx. These three sites contribute almost one third (33.1%) of all cancers. In females, Cervix Uteri cancer is the commonest followed by Breast and Stomach. These three sites contribute more than half (52.2%) of all cancers.

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

Males - Naharlagun

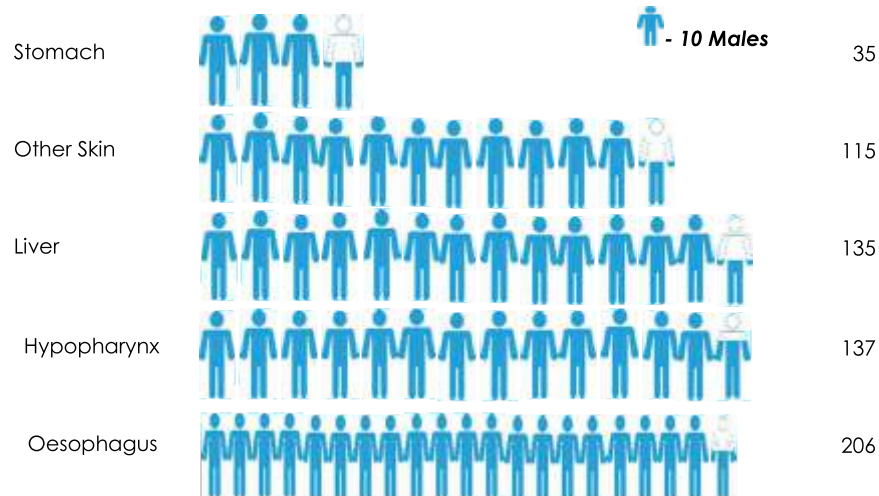


Females - Naharlagun

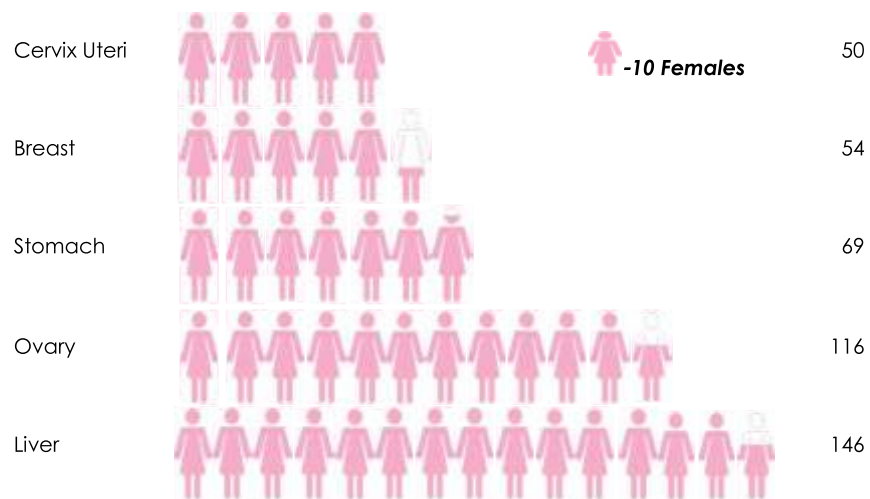


The average risk that a person will develop Stomach cancer in their lifetime (0-74 years) is about 1 in 29 for males. Similarly, 1 in 59 females will possibly develop Stomach cancer in their lifetime (0-74 years).

Males – Pasighat



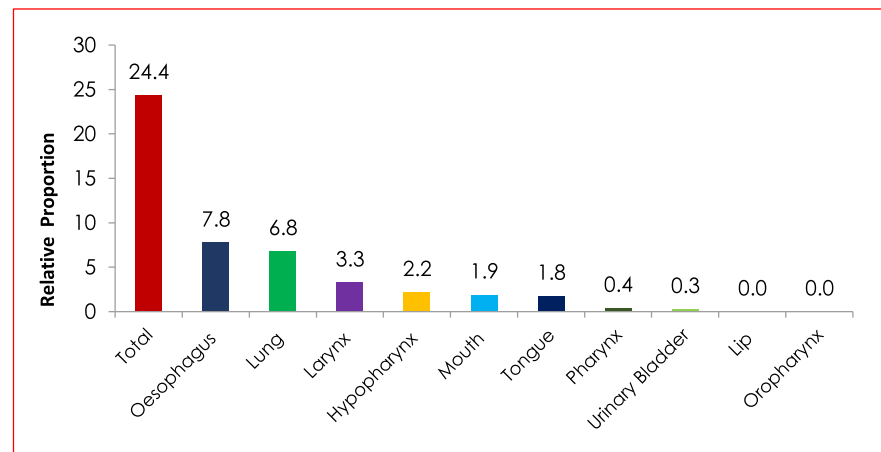
Females – Pasighat



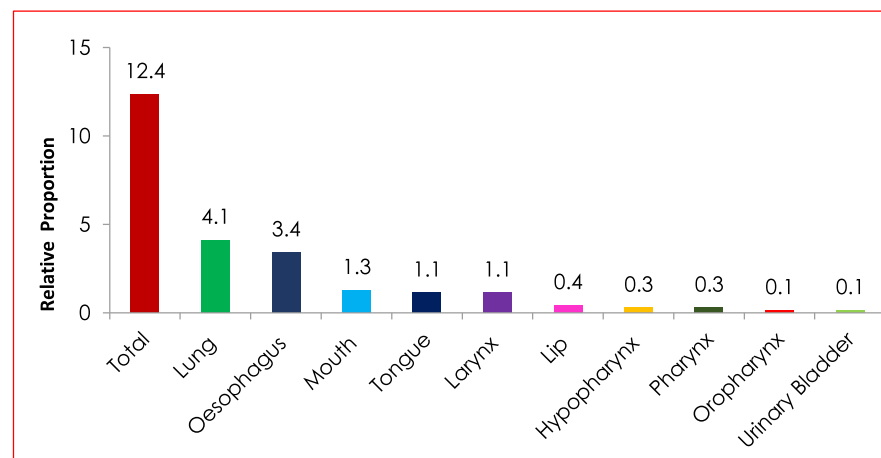
The average risk that a person will develop Stomach cancer in their lifetime (0-74 years) is about 1 in 35 for males. Similarly, 1 in 50 females will possibly develop Cervix Uteri cancer in their lifetime (0-74 years).

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

Males - Naharlagun



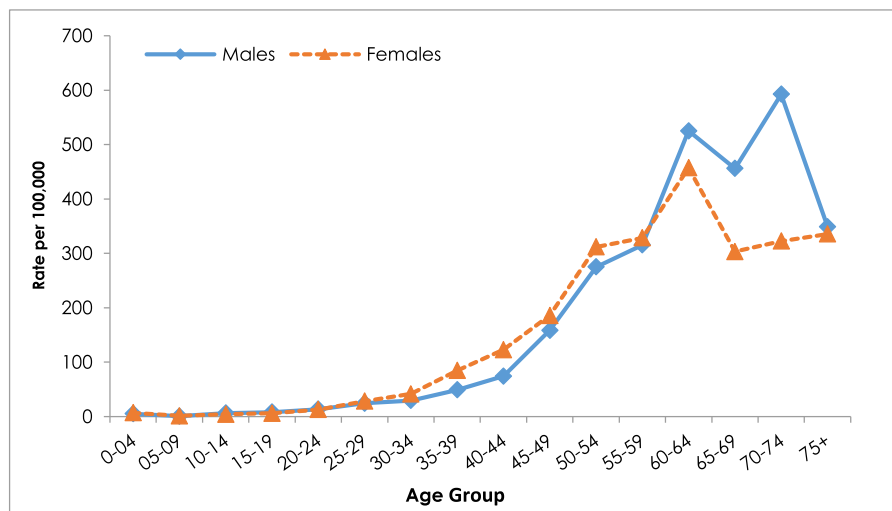
Females - Naharlagun



Around 24% and 12% 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.

2.8 Age Specific Rate (ASPR)

Naharlagun



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.

2.9 Ethnicity wise proportion of cancer cases

Naharlagun

Cultural Group	Number	%
Nyishi	478	33.2
Galo	208	14.5
Monpa	109	7.6
Apatani	108	7.5
Tagin	86	6
Adi	85	5.9
Nepalese	85	5.9
Ahom	43	3
Others	159	11
Missing/Unk	78	5.4
Total	1439	100

Pasighat

Cultural Group	Number	%
Adi	211	63.2
Nepalese	29	8.7
Mishing	8	2.4
Ahom	5	1.5
Boro	4	1.2
Others	39	11.7
Missing/Unknown	38	11.4
Total	334	100

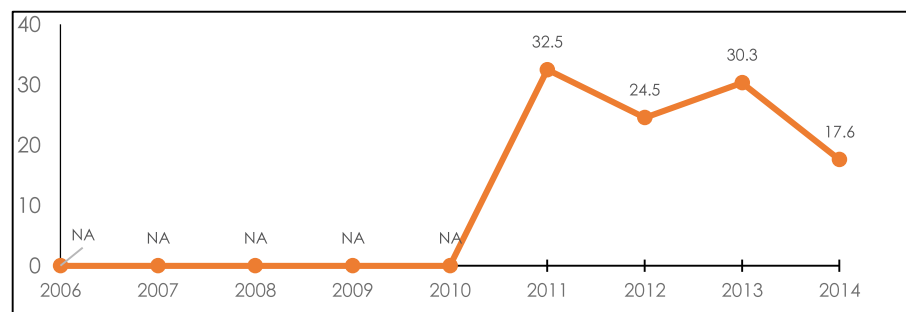
Approximately 33 % of the cancer cases belong to Nyishi in Naharlagun and 63 % of the cancer cases belong to Adi in Pasighat

2.10 Cancer Deaths

Case Fatality Ratio (CFR)			
Naharlagun	Incidence	Death	CFR (%)
Males	735	212	28.8
Females	704	127	18.0
Both Sexes	1439	339	23.6
Pasighat			
Males	175	39	22.3
Females	159	28	17.6
Both Sexes	334	67	20.1

2.11 Status of Medical Certification of Cause of Death *

Implementation status of MCCD	
Existing Allopathic Medical Institutions	188
Medical Institutions Covered under MCCD	156
Medical Institutions reported MCCD data as per the National list	0
Ranking of States/UTs in the medical certification of cause of death, 2014	19



NA- Not Available Data

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

Rank	Leading causes of death	Percentage
1	Circulatory System	27.5
2	Digestive system	19.3
3	Certain Infectious & Parasitic Diseases	17.2
4	Certain Conditions Originating in Perinatal Period	7.7
5	Respiratory System	5.8
6	Symptoms, Signs & Abnormal Findings	1.2
7	Injury Poisoning	0.2
8	Neoplasms	0.0
9	Other groups	21.0

* 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 can be further improved.



Advocacy Points

- Cancer of Stomach and Liver are most common in men.
- Cancer of Stomach, Cervix and Breast are most common in women.
- Cancer incidence rate is highest in Papumpare district in females and second highest in males among Indian registries.
- One fourth of the cancers in men are associated with the use of tobacco.
- 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 have 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.