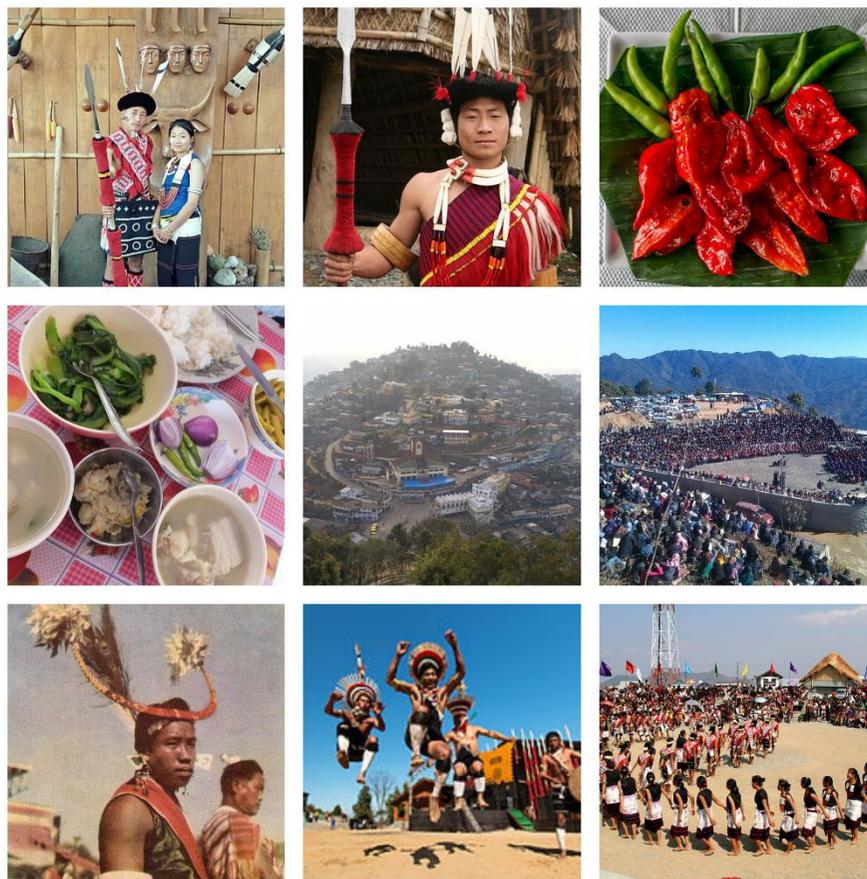




NAGALAND



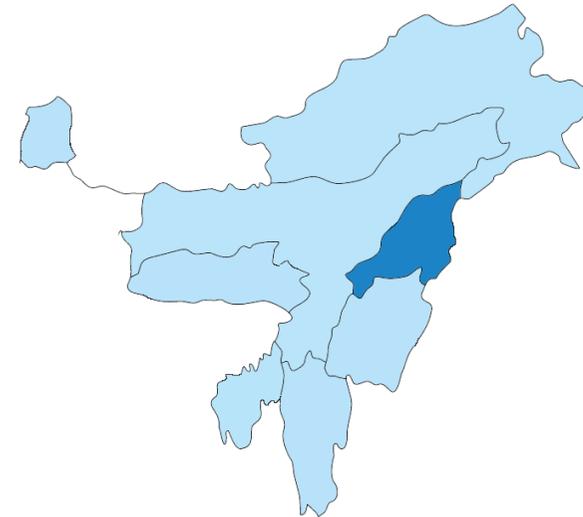


Chapter 7: Cancer and health status profile of Nagaland

A. Health Status Profile

7.1 Socio-demographic profile [1]

Population (Total)	1978502
Number of males	1024649
Number of females	953853
Sex Ratio	931
Literacy rate	
Total	79.6
Males	82.8
Females	76.1



The total population of the region is 1978502, with a sex ratio of 931. The total literacy rate is 79.6%, being 82.8% in males and 76.1% in females.



7.2. NCD related Risk factor profile

Behavioral and lifestyle-related						
Tobacco users ^[2]						
Current tobacco use-smoked and/or smokeless (age 15 years and above) (%)						
Total	43.3					
Males	54.1					
Females	31.7					
Current smoked tobacco use (age 15 or above) (%)						
Total	13.2					
Males	25.5					
Females	0.5					
Current smokeless tobacco use (age 15 or above) (%)						
Total	39.0					
Males	46.0					
Females	31.5					
Alcohol consumption						
Age 15 years or above (%) ^[13]	Urban		Rural		Total	
	Men	Women	Men	Women	Men	Women
	26.8	1.5	22.5	0.7	24.0	0.9
Metabolic risk factors ^[13]						
Overweight/Obese BMI >25 s (age 15-49 years) (%)	31.0	17.1	19.8	13.0	23.9	14.4
Raised blood pressure age 15 years or above (%)	26.0	19.9	30.1	23.6	28.7	22.4
Raised blood glucose (random) age 15 years or above (%)	13.4	9.3	11.9	9.2	12.4	9.3
Air Pollution, DALYs per 100,000 ^[3]	2221.87					

The prevalence of current tobacco use is 43.3%, higher for the smokeless form (39%) than the smoked form (13.2%). The DALYs' due to air pollution is reported to be 2221.87 per 100,000. 24.0% of males over the age of 15 years consumed alcohol, while the proportion of alcohol use in females was negligible. 23.9% of the men in the age group of 15-49 years are obese, which is higher than female prevalence (14.4%). A slightly higher proportion of males (28.7%) have raised blood pressure than females (22.4%). The prevalence of raised blood glucose is 9.3% in women and 12.4% in males.





7.3 Mortality related statistics

Life expectancy (2016) ^[5]	
Males	69.1
Females	74.5
Leading causes of death (MCCD 2018) ^[6]	
Major Cause Group	Percentage
Circulatory System	18.1
Respiratory System	13.9
Certain Infectious & Parasitic Diseases	10.1
Injury, Poisoning and Certain Other Consequences of External Causes	9.2
Neoplasms	9.2
Status of Medical certification of cause of death ^[6]	
Percentage of Medically Certified Deaths to Total Registered Deaths (%)	28.7
Medical Institutions covered under MCCD	11
Medical Institutions Reported MCCD Data as per the National List	5
Ranking of States/UTs in the medical certification of cause of death 2018	18

The life expectancy is marginally higher in females (74.5 years) than males (69.1 years). Diseases of the circulatory system comprise the leading cause of death (18.1%). The percentage of medically certified deaths to total registered deaths is 28.7%. The state ranks eighteenth in the medical certification of cause of death.



7.4 Health seeking behaviour and health practices [13]

	Urban	Rural	Total
History of cancer screening			
Women aged 30-49 ever undergone a breast examination for breast cancer (%)	0.4	0.2	0.3
Women aged 30-49 ever undergone an oral cavity examination for oral Cancer (%)	0.6	0.3	0.4
Women aged 30-49 ever undergone screening for cervical Cancer (%)	0.3	0.3	0.3
Men aged 30-49 ever undergone an oral cavity examination for oral Cancer (%)	0.1	0.3	0.2
Immunization history			
Children aged 12-23 months who have received 3 doses of penta or hepatitis B vaccine (%)	76.5	62.6	66.4
Household profile			
Population living in households that use an improved sanitation facility (%)	82.2	90.4	87.7
Households using clean fuel for cooking (%)	81.1	24.9	43.0
Households with any usual member covered under a health insurance/financing scheme (%)	15.0	23.1	20.5

The proportion of women who have undergone screening is 0.3% for breast cancer, 0.4% for oral cancer and 0.3% for cervical cancer. Only 0.2% of men had a history of screening for oral cancer. As many as 66% of children in 12 to 23 months had received immunization with Penta and hepatitis B vaccine. About 87.7% of the population is living in households that use an improved sanitation facility—only 43.0% of the population are using clean fuel for cooking. The coverage with a health insurance scheme or financing scheme is low at a figure of 20.5%.



7.5 Status of the health system

A. Public sector health facilities ^{[7],[8]}	Number
Sub centres (SC)	397
Health and Wellness Centre - Sub Centre (HWC-SC)	56
Primary Health Centres (PHC)	126
Health and Wellness Centre - Primary Health Centre (HWC-PHC)	05
Community Health Centres (CHC)	21
Sub-district Hospitals (SDH)	00
District Hospitals (DH)	11
Number of government allopathic doctors and dental surgeons	320
B. Tertiary health care facilities	
Medical Colleges ^[9]	00
State cancer institute ^[10]	00
Tertiary cancer care centre ^[10]	01
Regional cancer care centre ^[11]	00
C. State government health scheme ^[18]	Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)

The state has 397 SC, 56 HWC-SCs', 126 PHCs, 05 HWC – PHCs', 21 CHCs' and 11 DHs. There is one Tertiary Cancer Centre. The state is covered under Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY).



B. Profile of Cancer

7.6 Details of Cancer Registries in the State

Population Based Cancer Registry	
Location	Naga Hospital Authority, Kohima
Established Year	2010
Coverage Area	Kohima & Dimapur
Sources of registration	30
Area (in Sq.km)	2390
Urban & Rural (%)	49.3 & 50.7
Hospital Based Cancer Registries: 1. Christian Institute of Health Science and Research, Dimapur 2. Eden Medical Centre, DIMAPUR 3. Naga Hospital Authority, Kohima	

The state has one PBCR and three HBCRs. The Population Based Cancer Registry is located at Naga Hospital, Kohima, covering Kohima and Dimapur through 30 sources of registration.

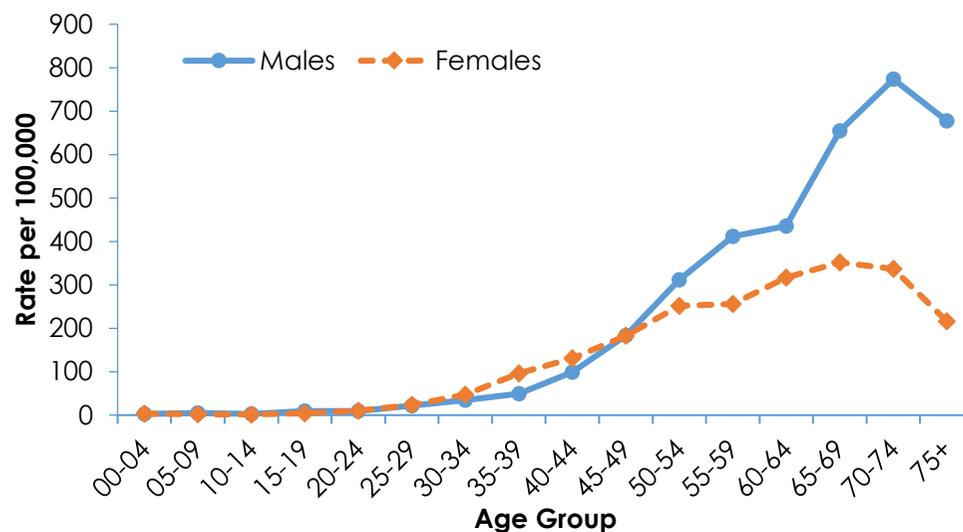


7.7 Number of cancer cases and Age Adjusted Incidence Rate (AAR) per 100,000 population

Gender	Number of New Cancer Cases	AAR
Males	1403	124.5
Females	992	88.2

The AAR was higher in males (124.5 per 100,000 males) than females (88.2 per 100,000 females)

7.8 Age Specific Incidence Rate (ASpR)

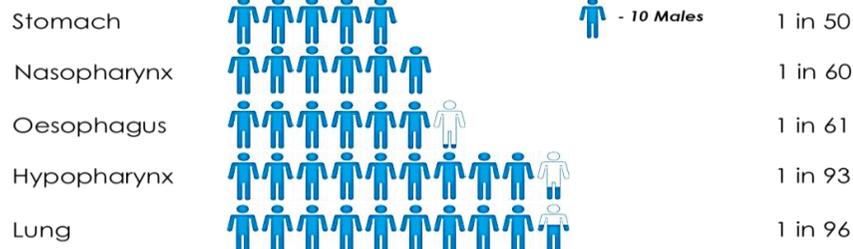


The Age-Specific Incidence Rates in both the genders shows a rise from 25-29 years age-group onwards. In males, the highest Age-Specific Incidence Rate is seen in the 70 to 74 years age-group, while in females, the incidence rates were increased in the 65 to 69 age categories.

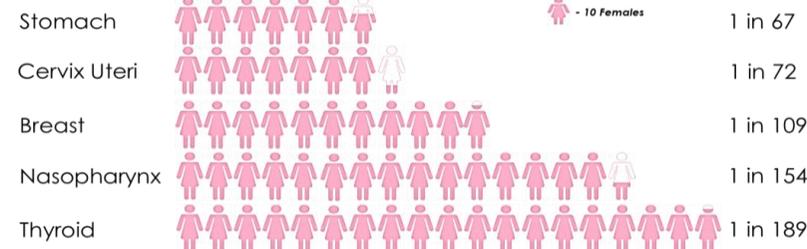


7.9 Probability of One in number of Persons developing cancer in 0-74 years age

Males

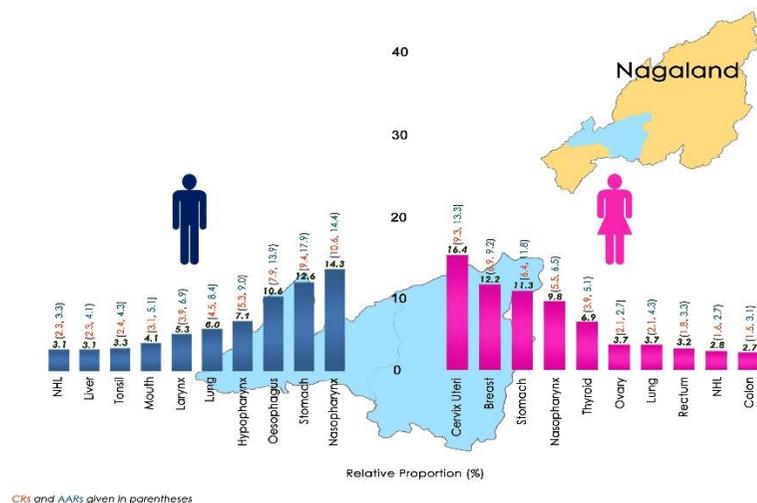


Females



The probability of developing stomach cancer is the highest in both the genders (1 in every 50 males and 1 in every 67 females), followed by nasopharyngeal cancer in males (1 in every 60 males) and cancer of cervix-uteri in females (1 in every 72 females).

7.10 Leading Anatomical Sites of Cancer



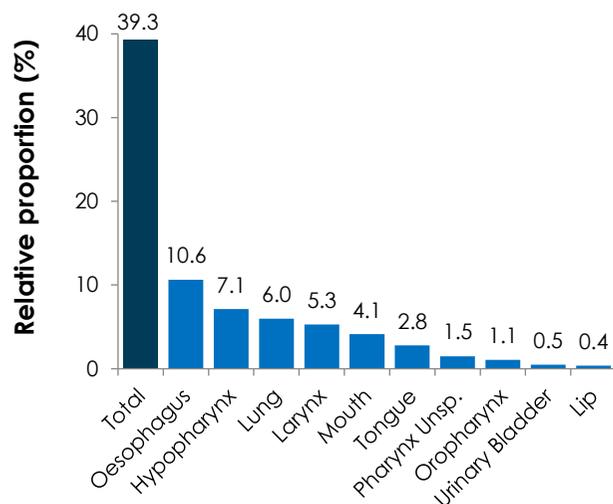
The proportion of nasopharyngeal cancer (14.3%) is highest among males, followed by stomach cancer (12.6%) and oesophageal cancer (10.6%). In Females, cervix-uteri is the leading cancer site (16.4%) followed by breast (12.2%) and stomach (11.3%).



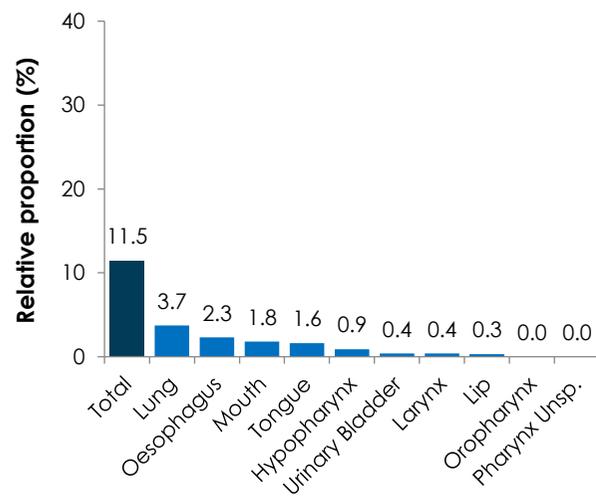


7.11 Relative Proportion (%) of Cancer sites Associated with the Use of Tobacco

Males



Females



Over a third (39.3 %) of cancers in males and 11.5% in females are related to tobacco use related cancer sites. Among these, oesophagus (10.6%) and lung (3.7%) are leading sites in males and females.

7.12 Mortality - Incidence Ratio (MI %)

Mortality - Incidence Ratio (MI %)			
Nagaland	Incidence	Mortality	MI %
Males	1403	298	21.2
Females	992	119	12.0
Total	2395	417	17.4

The total Mortality - Incidence ratio is 17.4%, higher in males (21.2%) than females (12.0 %).





Key observations

- Cancer ranks among the top five leading causes of death in the state.
- The risk of developing stomach cancer is highest in both genders.
- Cancer of the nasopharynx is the leading site in males.
- Current tobacco use is present in nearly half of the population, while about one-fourth consume alcohol and are overweight/obese and hypertensive.
- The Mortality - Incidence ratio due to cancer is almost double in men than women.
- The cause of less than one-third of the deaths is medically certified.
- Less than a quarter of the population is covered by health insurance.
- The state has a shortage of tertiary cancer care facilities.