

ICMR-National Centre for Disease Informatics and Research, Bengaluru



Report on Sites of Cancer Associated with Tobacco use in India -

Findings from the National Cancer Registry Programme



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REPORT ON SITES OF CANCER ASSOCIATED WITH TOBACCO USE IN INDIA

Findings from the National Cancer Registry Programme





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Message

I am pleased that ICMR-NCDIR has prepared a 'Report of Cancer sites Associated with Tobacco Use in India: Findings from the National Cancer Registry Programme'. The data generated by the National Cancer Registry Programme (NCRP) has been critical for sustaining cancer surveillance and control in India.

The report provides a comprehensive and detailed description of Tobacco Related Cancers (TRCs) in India for the first time since the inception of NCRP. TRCs constitute about 40-50% of all cancers, and the widespread tobacco use poses a huge avoidable burden on health. The Population and Hospital based registry sites form the very backbone of NCRP. The efforts made by the Principal Investigators, Co-Principal Investigators, registry staff and NCDIR towards translating data into action are worthy of praise.

I wish that the report will be optimally used as an advocacy tool to bring about suitable interventions to control tobacco use and consequently cancer control in the country.

(Balram Bhargava)



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Message

The National Cancer Registry Programme (NCRP) of the Indian Council of Medical Research has played a key role in cancer surveillance in India since 1981. NCRP is presently being implemented through a network of 238 Hospital-based and 38 Population-based cancer registries (HBCRs' and PBCRs), which generate original and high-quality data on cancer incidence and profile in different regions of the country.

Tobacco use and its consequential adverse effects, especially regarding cancer, continue to be a public health problem of concern in India. The '**Report of Cancer sites Associated with Tobacco Use in India: Findings from the National Cancer Registry Programme**' is the first kind that focuses explicitly on Tobacco Related Cancers (TRCs). The report includes a brief description of tobacco use in India, cancer sites associated with tobacco use and findings from the NCRP, based on data generated from 28 Population Based Cancer Registries (PBCRs') and 58 Hospital Based Cancer Registries (HBCRs') for the years 2012 to 2016. The findings are given for all the TRC related body sites and specific sites in terms of incidence rates, mortality rates, cumulative risk, leading anatomic sites, incidence trends, clinical staging and projected estimates in future. In addition, the geographical, gender and age-wise distribution of TRCs' are lucidly presented through well-designed tables and figures.

The report is an outcome of the untiring efforts of the Registry and NCDIR staff in striving to obtain timely and high-quality data. It is hoped that the report will help contribute towards raising awareness for the prevention and control of Tobacco Related Cancers through the concerted efforts of relevant stakeholders and sectors.

Dr G.K.Rath

G.K.Rath
13.5.21



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Acknowledgement

We are pleased to bring out the '**Report of Cancer sites Associated with Tobacco Use in India: Findings from the National Cancer Registry Programme**'. The report reiterates ICMR-NCDIR's commitment towards cancer control by generating reliable and periodic data on cancer magnitude, epidemiologic and clinical profile in India through the National Cancer Registry Programme (NCRP). This is the first of its kind of report on tobacco related cancers in India which is to raise awareness for an avoidable set of cancers.

This is an opportunity to express my gratitude and thanks to the investigators and registry staff of the population and hospital-based registries for their unceasing efforts. The expertise provided by the Research Area Panel (RAP) for cancer and Scientific Advisory Committee (SAC) of NCDIR has been very crucial for the NCRP to fulfil a critical role in cancer surveillance and provide timely data and inputs for programme officials and policymakers and relevant stakeholders. Thanks to the cancer patients whose data in NCRP is helping in tackling cancer.

I would also like to thank the scientific, technical and administrative team of NCDIR for their untiring work to run NCRP. Special thanks to Dr Anita Nath, Mr Sathish Kumar K, Mrs Priyanka Das and Mr KL Sudarshan for preparing this report, and Dr Sravya L, Dr Prachi Phadke, Mr Stephen S, Mr Monesh B Vishwakarma, Mr Sandeep, Ms N Sathya, Mr Sarvanaraj and Mr Solomon T for their assistance.

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Executive Summary

In India, a total of 1.39 million new cancer cases were estimated to occur in 2020. There is ample scientific evidence which establishes the association of tobacco use with many cancers. India is among the countries with a high burden of tobacco use and tobacco-related health problems, especially cancer. Tobacco in all its forms contain a large proportion of carcinogenic nitrosamines, volatile aldehydes, and polynuclear agents. Hence tobacco use forms the foremost preventable cause of cancer incidence and mortality.

The National Cancer Registry Programme (NCRP) of the Indian Council of Medical Research (ICMR) has played a vital role in cancer surveillance since 1981 by collecting and compiling data on cancer epidemiology and clinical profile of cancer cases in the country. The NCRP has been using the International Agency for Research on Cancer (IARC) classification, World Health Organization (WHO) monographs for enlisting the anatomical sites of cancer associated with tobacco use. In this report we continue the earlier listing of tobacco related cancer sites by the IARC to make provision for comparisons with the data described in earlier reports of the NCRP. The sites include- lip (C00), tongue (C01–C02), mouth (C03–C06), oropharynx (C10), hypopharynx (C12–C13), pharynx unspecified (C14), oesophagus (C15), larynx (C32), lung (C33–C34), and urinary bladder (C67). Analysis has been done on the data compiled from 28 Population Based Cancer Registries (PBCRs) and 58 Hospital Based Cancer Registries (HBCRs) under the NCRP for the time 2012-2016. The report includes findings from a pooled analysis of all cancer sites associated with tobacco use and a specific site wise analysis.

Salient findings:

(a) Pooled analysis-All sites of cancer associated with tobacco use

- The highest Age Adjusted Incidence Rate (AAR) of cancer in sites associated with tobacco use is 161.3 per 100,000- males and 58.1 per 100,000- females are reported in the East Khasi Hills district of Meghalaya.
- The probability of developing any cancer type (cumulative risk) in the age group 0 - 74 years is highest in the East Khasi Hills district (1 in 5 for males and 1 in 14 for females).
- The relative proportion of cancer in site associated with tobacco use, to all cancer sites is highest in the East Khasi Hills district of Meghalaya (70.4% in males and 46.5% in females).
- In all the regions, the relative proportion of sites of cancer associated with tobacco use to all cancer sites was higher in males than that of females.
- Lung cancer is the most frequently observed site of cancer associated with tobacco use among males, followed by mouth, tongue and oesophagus in both genders.





- The age-specific incidence rate (ASpR) of cancer in all sites of cancer associated with tobacco use is the highest in the 70 to 74 years age group for both genders in most registries.
- The majority of the cancers in sites associated with tobacco use are reported to have presented in the locoregional stage in both genders.
- Trend analysis of AAR over time indicates a significant increase in Aurangabad, Mizoram state, Kamrup urban, Delhi, Kollam district and Chennai among males and in Bhopal among females. On the other hand, AAR has declined significantly over time in Sikkim state, Dibrugarh district, Mumbai and Barshi rural among males and in Sikkim state, Dibrugarh district, Mumbai, Bangalore and Chennai among females.
- The projected number of incidence cases for cancer in all sites associated with tobacco use by the year 2025 is 427273, of which the number of lung cancer cases would be the highest (111328) and constitute 27.2% of all cancers.

(b) Specific site-wise analysis

- *Lip cancer*: The AAR for males is highest in Kamrup urban (1.2 per 100,000) and females in East Khasi Hills district (1.5 per 100,000)
- *Tongue cancer*: The AAR for males is the highest in East Khasi Hills district (12.8 per 100,000) and females in Bhopal (4.1 per 100,000)
- *Mouth cancer*: The AAR for males is the highest in Ahmedabad urban (19.5 per 100,000) and females in East Khasi Hills district (9.5 per 100,000)
- *Cancer of oropharynx*: The AAR for both genders is highest in Kamrup urban (4.4 per 100,000 in males and 1.7 per 100,000 in females)
- *Cancer of hypopharynx*: The AAR for males is the highest in East Khasi Hills district (21.8 per 100,000) and females in Kamrup urban (3.7 per 100,000)
- *Cancer of the pharynx*: The AAR for males is the highest in East Khasi Hills district (4.4 per 100,000) and females in Sikkim (1.2 per 100,000)
- *Cancer of the oesophagus*: The AAR is highest in East Khasi Hills district (75.4 per 100,000 in males and 33.6 per 100,000 in females)
- *Cancer of the larynx*: The AAR is highest in East Khasi Hills district (13.5 per 100,000 in males and 2.0 per 100,000 in females)
- *Lung cancer*: The AAR for both genders is highest in Aizawl district (38.8 per 100,000 in males and 37.9 per 100,000 in females)
- *Urinary bladder cancer*: The AAR for both genders is the highest in Delhi (6.8 per 100,000 in males and 1.5 per 100,000 in females)

The Government and relevant stakeholders have taken up an extensive range of tobacco and cancer control measures through programme and policy initiatives. Yet, tobacco control and its adverse consequences, one of which is cancer, continue to pose a public health challenge. The report findings should enable programme officials, policymakers, health care providers and community leaders to strengthen the existing measures and develop innovative and evidence based measures to control tobacco use in all its forms.



Abbreviations

AAMR: Age Adjusted Mortality Rate

AAR: Age Adjusted Incidence Rate

APC: Annual Percent Change

ASpR: Age specific Incidence Rate

CMR: Crude Mortality Rate

COTPA: Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act

CR: Crude Incidence Rate

DNA: Deoxyribonucleic acid

ENDS: Electronic Nicotine Delivery Systems

FCTC: Framework Convention of Tobacco Control

FSSAI: Food Safety and Standards Authority of India

GATS: Global Adult Tobacco Surveillance

HBCR: Hospital Based Cancer Registry

IARC: International Agency for Research on Cancer

ICD-10: International Classification of Diseases-10

ICMR: Indian Council of Medical Research

IEC: Information, Education and Communication

LDCT: Low-dose computed tomography

MOHFW: Ministry of Health and Family Welfare

NCD: Noncommunicable Diseases

NCDIR: National Centre for Disease Informatics and Research

NCRP: National Cancer Registry Programme

NNMS: National Noncommunicable Disease Monitoring Survey

NPCDCS: National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases, and Stroke

NTCP: National Tobacco Control Program

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OPMD: Oral Potentially Malignant Diseases

PAH: Poly-Aromatic Hydrocarbons

PAR: Population Attributable Risk

PBCR: Population Based Cancer Registry

PMJAY: Pradhan Mantri Jan Arogya Yojana

RCC: Regional Cancer Centres

SCI: State Cancer Institute

TCCC: Tertiary Cancer Care Centres

TRC: Tobacco Related Cancers

WHO: World Health Organization





1. INTRODUCTION

1.1 Tobacco use in India

1.1.1 Background

There is substantial scientific evidence on the negative impact of tobacco use on health, society and the environment. Tobacco is one of the greatest public health threats globally and also in India. As the second most populated country, India has a considerable share in the global burden of tobacco-related diseases and deaths.¹ The total percent of deaths from tobacco use was 10% in 1990 (14.2% in males and 4.2% in females) and this increased to 13% in 2019 (18.6% in males and 6.8% in females).² The challenges arise with the rising prevalence of tobacco use in the younger population and the predominant use of smokeless tobacco over smoking amongst women.

1.1.2 Prevalence of tobacco use

India was one of the first countries to undertake planned and well-designed tobacco surveillance: Global Adult Tobacco Surveillance (GATS) in 2009-10.³ Over the years, the evidence generated from various surveys has been driving policies and programmes on tobacco control in India.

The National Noncommunicable Disease Monitoring Survey (NNMS) findings released in 2021 reported that 32.8% of adults between 18-69 years used either smoked or smokeless forms of tobacco, and 28% used tobacco daily.⁴ 12.6% per cent of adults smoked, and twice this proportion used smokeless tobacco (24.7%).⁴ Tobacco use is recorded to be more than 40% in the North-eastern states of India, the highest being in Tripura (64.5%).³ GATS-2 also reported a higher prevalence of smokeless tobacco use than smoking across most states and union territories. However, the prevalence of smoking than smokeless tobacco was highest in Meghalaya, Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Haryana, and Andhra Pradesh.³ The predominant use of tobacco in the rural areas and dual-use of tobacco (both smoked and smokeless forms) among men than women is notable.^{2,4} According to the GATS-2, 43% of pregnant women (during the survey period) used tobacco in Mizoram. This was larger than the national prevalence of 7.5%, and the majority used smokeless forms (7.4%) than smoked tobacco (0.7%).³

The average age of initiation of tobacco use is observed to be 21 years.⁴ Older adults aged 65+ years were the highest (41%) proportion of current tobacco users in India.⁴ The prevalence of ever use of tobacco among adolescents was 7%, smokeless tobacco use (5%) was higher than smoking (3.5%).⁴ The prevalence of tobacco use escalated with every



ten years of increasing age and notably, more than two-folds from 12 % in the 15-24 years age group to 30 % in the 25-44 years age group.³ However, from 2000 to 2015, there was a substantial reduction in tobacco use in the country. It is projected to further reduce from 25% in 2020 to 22.3% by 2025.⁵ This would help to attain the national NCD monitoring target of 30% reduction in tobacco use as laid out in the National NCD Action Plan for 2025.⁶

There are various forms of tobacco use. They have been broadly classified as smoking forms of tobacco (cigarette, *bidi*, *hookah*, cigar, cheroot, cigarillos etc.) and smokeless forms of tobacco (*khaini*, *gutka*, betel quid with tobacco, pan masala with tobacco, snuff etc.). Bidis account for the most significant proportion of smoked tobacco consumed every day in India.⁴ Daily, every three in five adults aged 18-69 years smoke bidis and one in five smoke manufactured cigarettes.⁴ Nearly 70% use chewed form of smokeless tobacco followed by paan with tobacco (28%) daily.⁴ The two most commonly used smokeless tobacco products among adults in India are *khaini* (11.2%) and *gutka* (6.8%).³ The former is a mixture of tobacco and lime, while the latter, in addition to the two ingredients, also contains areca nut. The combination of smokeless tobacco and areca nut is a class 1 carcinogen. It is evident from studies that a more significant proportion consumes this combination than any other tobacco form in India.⁷

1.2 Tobacco and Cancer

India had an estimated record of about 1.39 million new cancer cases in 2020.⁸ Among the various cancer risk factors, tobacco is well established and a leading preventable factor worldwide.⁹ Hence tobacco use forms the foremost preventable cause of cancer incidence and mortality. There are over 5000 chemical constituents, of which over 60 chemicals are established carcinogens in tobacco smoke.¹⁰ The carcinogens include hydrocarbons which could be polyaromatic (PAHs), heterocyclic, volatile hydrocarbons, nitro hydrocarbons; amines: aromatic, N-heterocyclic, N-nitrosamines, aldehydes, organic, inorganic compounds and phenolic compounds. The carcinogens in tobacco bring about progression to cancer by altered DNA methylation patterns and altered gene expression. Tobacco smoke appears to have accounted for about half of all cancer deaths in males and an increasing proportion of cancer deaths in females.^{11,12}

During the 1950s', it was reliably established that prolonged cigarette smoking is a significant cause of lung cancer and several other cancer types.¹³ The risk of lung cancer was also affected by the number of cigarettes used per day. Other factors that influence the duration of use include age at initiation, age in current users, and smoking cessation.¹⁴ The significance of the relationship between the duration of smoking and risk for lung cancer was demonstrated in the British Doctors' Study.¹¹ It was estimated that lung cancer



incidence increased by about 100-fold among males who had smoked for 45 years than those with 15 years of smoking history.

According to the International Agency for Research in Cancer (IARC) monograph published in 1986, 1987 and 2004; there exists sufficient evidence that besides lung cancer, smoking was the causal agent for other cancer types: upper gastrointestinal tract, pancreas and urinary bladder.^{15,16,17} Smoking tobacco is also associated with an increased risk of oral leukoplakia, which could progress into oral cancer.^{18,19} Studies have shown that the risk of oesophageal squamous cell carcinoma increased by about 3 - to 7-fold in current smokers compared to non-smokers.²⁰ The risk of oesophageal squamous cell carcinoma is greater than adenocarcinoma in smokers. Evidence from literature indicates that the population attributable risk (PAR) of bladder cancer for smoked tobacco ranges from 50% to 65% in males and 20% to 30% in women.^{21,22} Moreover, current cigarette smoking increases bladder cancer risk by three times more relative to never smoking.

As in smoked tobacco, smokeless tobacco products contain many carcinogenic nitrosamines, volatile aldehydes, and polynuclear agents.²³ The link between smokeless tobacco and cancer was observed as early as 1761, when a British doctor observed 'nasal polyps' suggestive of nasal cancer among users of tobacco snuff.²⁴ Smokeless tobacco has been associated with the high burden of oral potentially malignant diseases (OPMD) and head and neck cancer in South Asia.²⁵ A meta-analysis of the association between smokeless tobacco use and oral cancer estimates that the risk of oral cancer was 4.7 times more in tobacco chewers and 7.1 times more among *paan* with tobacco users in South Asia.²⁶ Tobacco chewing has also been shown to be associated with an increased risk of oesophageal cancer.^{27, 28, 29}

1.3 Tobacco and cancer control initiatives in India

1.3.1 Cancer control programmes

In response to the rising NCD epidemic, the Government of India launched the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases, and Stroke (NPCDCS) in 2010. The major focus of the NPCDCS is to generate awareness for cancer prevention, strengthen cancer care services through population-based screening for common cancers, strengthening of Regional Cancer Centres (RCCs), setting up State Cancer Institutes (SCIs) and Tertiary Cancer Care Centres (TCCCS). The programme adopts a decentralised approach by establishing state and district level NCD cells for effective implementation and monitoring. In addition, the establishment of Health and Family Welfare Centers as a part of 'Ayushman Bharat' and Pradhan Mantri Jan Arogya Yojana (PMJAY)



will address NCDs and afford financial protection to vulnerable families from catastrophic health expenditure.

1.3.2 Tobacco control initiatives

The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act (COTPA) was passed in 2003, before India became a part of the WHO Framework Convention on Tobacco Control in 2005. The Government of India, in 2007-08, launched the National Tobacco Control Program (NTCP) to create awareness on harmful effects of tobacco use, to reduce its production and supply of any form of tobacco products, to ensure the effective implementation of the COTPA, assist in tobacco cessation and to facilitate the implementation of tobacco use prevention and control strategies according to the WHO Framework Convention of Tobacco Control (FCTC)³⁰. The initiatives include smoke free places; restrictions and ban on tobacco advertising, promotion and sponsorship; packaging and labelling of tobacco products; sale restrictions that prohibit its sale within 100 yards of any educational institutions and to persons under the age of 18 years. Presently, NTCP is implemented in all the 36 states and Union Territories.

On 5 December 2019, the Government passed a prohibition on the sale of e-cigarettes, including all Electronic Nicotine Delivery Systems (ENDS) forms, including Heated Tobacco Products, e-Hookah and the like devices.³¹ As a part of tobacco cessation, the Ministry of Health and Family Welfare (MOHFW) has partnered with World Health Organization (WHO) and the International Telecommunication Union (ITU) to implement the mobile technology based 'mCessation programme', which encourages tobacco users to quit the habit by a customized guidance in the form of text messages.³² The programme is reported to have about 2.1 million self-registered users.

The Food Safety and Standards Authority of India (FSSAI) has also banned the use of tobacco and nicotine in food items, which has resulted in the ban of 'gutka' and flavoured smokeless tobacco products.³³ The MOHFW, in partnership with the National Tobacco Testing Laboratories and other stakeholders, are providing support for product testing and capacity building to strengthen the control of smokeless tobacco use.³⁴





1.4 About the Report

The NCRP of the ICMR is implemented by the National Centre for Disease Informatics and Research (NCDIR) in Bengaluru. The NCRP has been playing a vital role in cancer surveillance since 1981 by collecting and compiling data on cancer epidemiology and clinical profile of cancer cases in the country. There are two kinds of registries in the NCRP network: Population and Hospital Based Cancer Registries (PBCRs and HBCRs). The PBCRs, provide data on cancer-related incidence, mortality, trends and survival about cancer in the population of a well-defined geographical area. The HBCRs collate and generate essential information on diagnosis, staging, treatment modalities, and outcomes in patients who avail of care at a specific hospital in any part of the country. Thus, the functioning of PBCRs and HBCRs are complementary to each other.

The NCRP has been using the classification of the International Agency for Research on Cancer (IARC), World Health Organization monographs for enlisting the anatomical sites of cancer associated with tobacco use.^{16,35} The sites include- lip (C00), tongue (C01–C02), mouth (C03–C06), oropharynx (C10), hypopharynx (C12–C13), pharynx unspecified (C14), oesophagus (C15), larynx (C32), lung (C33–C34), and urinary bladder (C67). The present report is based on an analysis of data compiled from 28 PBCRs' and 58 HBCRs' under the NCRP for 2012 to 2016. The data on incidence (crude, age-adjusted and age-specific), mortality (crude and age-adjusted), cumulative risk, leading anatomic sites and trends in incidence over time (> 10 years) have been analysed from PBCR data. In addition, HBCR data has been used to analyse the clinical extent of disease at presentation for all sites of cancer associated with tobacco use. The findings are presented as pooled analysis for all the sites as well as site-wise estimates. The operational definitions and statistical terms are enlisted in Annexure 1.





2. Profile of sites of cancer associated with tobacco use in India- Results of analysis from NCRP

2.1 Incidence and mortality of sites of cancer associated with tobacco use according to geographical area and gender

2.1.1 Incidence

Table 2.1.1: Annual average number of patients of cancer in the sites associated with the use of tobacco, Incidence Rate per 100,000 population, cumulative Risk (0-74 age group) for 28 PBCRs under NCRP

Registry (Reporting year)	Males				Females			
	Number	CR	AAR	Cum Risk	Number	CR	AAR	Cum Risk
North								
Delhi (2012-2014)	4264	46.3	62.1	1 in 13	1197	14.8	18.5	1 in 46
Patiala district (2012-2016)	392	36.9	39.9	1 in 22	160	16.8	16.6	1 in 52
South								
Hyderabad district (2014-2016)	724	35.6	42.6	1 in 20	291	14.8	19.1	1 in 42
Kollam district (2012-2016)	843	67.7	52.9	1 in 15	242	17.2	12.4	1 in 67
Thi'puram district (2012-2016)	977	62.0	49.0	1 in 17	292	16.8	12.5	1 in 66
Bangalore (2012-2014)	1475	29.7	38.7	1 in 20	726	16.3	20.1	1 in 39
Chennai (2012-2016)	1175	49.5	47.6	1 in 18	457	19.2	18.1	1 in 47
East								
Kolkata (2012-2015)	1189	51.3	42.3	1 in 20	353	16.3	13.7	1 in 62
West								
Ahmedabad urban (2012-2016)	1636	50.0	54.3	1 in 16	410	13.9	14.5	1 in 59
Aurangabad (2012-2016)	215	31.6	40.0	1 in 21	65	10.2	12.7	1 in 63
Osmanabad & Beed (2012-2015)	373	16.1	16.5	1 in 54	142	6.7	6.1	1 in 134
Barshi rural (2012-2016)	50	18.5	17.3	1 in 48	24	10.0	8.6	1 in 95
Mumbai (2012-2015)	2542	37.7	41.8	1 in 21	1073	18.4	18.2	1 in 48
Pune (2012-2016)	758	26.4	32.5	1 in 26	330	12.7	14.6	1 in 58
Central								
Wardha district (2012-2016)	203	29.9	27.0	1 in 31	94	14.6	12.7	1 in 65
Bhopal (2012-2015)	490	45.8	55.3	1 in 16	159	16.0	19.6	1 in 42
Nagpur (2012-2016)	550	41.1	41.5	1 in 21	209	16.1	15.8	1 in 55
North East								
Manipur state (2012-2016)	273	17.3	24.7	1 in 31	176	11.3	15.8	1 in 48
Imphal West district (2012-2016)	85	31.7	36.8	1 in 21	57	20.6	22.2	1 in 36
Mizoram state (2012-2016)	374	63.2	89.3	1 in 10	165	28.1	42.3	1 in 19
Aizawl district (2012-2016)	206	97.3	127.1	1 in 7	93	42.6	56.9	1 in 15
Sikkim state (2012-2016)	77	22.9	29.5	1 in 29	41	13.7	19.2	1 in 42
Tripura state (2012-2016)	683	34.9	43.2	1 in 19	208	11.0	13.0	1 in 62
West Arunachal (2012-2016)	60	13.9	26.6	1 in 30	26	6.3	13.7	1 in 59
Papumpare district (2012-2016)	29	28.9	67.7	1 in 12	15	15.1	43.6	1 in 17
Meghalaya (2012-2016)	627	61.9	119.7	1 in 8	244	24.0	44.6	1 in 19
East Khasi Hills district (2012-2016)	406	92.2	161.3	1 in 5	161	35.8	58.1	1 in 14
Nagaland (2012-2016)	110	29.3	51.1	1 in 16	23	6.5	12.5	1 in 63
Pasighat (2012-2016)	19	26.3	36.1	1 in 23	7	9.6	14.5	1 in 52
Cachar district (2012-2016)	504	53.6	71.3	1 in 12	185	20.4	26.9	1 in 32
Dibrugarh district (2012-2016)	263	37.6	48.9	1 in 17	98	14.4	18.2	1 in 45
Kamrup urban (2012-2016)	642	98.2	110.2	1 in 8	225	35.4	43.2	1 in 19

Abbreviations: CR - Crude Incidence Rate; AAR - Age Adjusted Incidence Rate; Cum Risk - Cumulative Risk of Developing cancer at 0-74 years of age.

Note: Thi'puram district - Thiruvananthapuram district; Meghalaya covers East Khasi Hills, West Khasi Hills, Jaintia Hills and Ri Bhoi districts;

Nagaland covers Kohima and Dimapur districts; Pasighat covers East Siang and Upper Siang;

West Arunachal covers Tawang, West Kameng, East Kameng, Upper Subansiri, Lower Subansiri, Kurung Kumey, Papumpare and West Siang districts.



The highest Age Adjusted Incidence Rate (AAR) of cancer in all sites associated with tobacco use was 161.3 per 100,000 in males and 58.1 per 100,000 in females in East Khasi Hills district of Meghalaya, followed by Aizawl district (127.1 per 100,000 in males, 56.9 per 100,000 in females). The probability of developing any cancer (cumulative risk) in the age group of 0 - 74 years, is highest in East Khasi Hills district (1 in 5 for males and 1 in 14 for females). The details regarding the crude and age adjusted incidence and cumulative risk are presented in Table 2.1.1





2.1.2 Mortality

Table 2.1.2: Annual average number of deaths due to cancer in the sites associated with the use of tobacco and mortality rate per 100,000 population for 28 PBCRs under NCRP

Registry (Reporting year)	Males			Females		
	Number	CMR	AAMR	Number	CMR	AAMR
North						
Delhi (2012-2014)	618	6.7	9.2	210	2.6	3.3
Patiala district (2012-2016)	78	7.4	7.9	33	3.4	3.4
South						
Hyderabad district (2014-2016)	77	3.7	4.8	30	1.6	2.0
Kollam district (2012-2016)	488	39.1	30.6	138	9.8	6.9
Thi'puram district (2012-2016)	438	27.5	21.8	118	6.7	5.0
Bangalore (2012-2014)	454	9.9	13.1	223	5.3	6.7
Chennai (2012-2016)	366	15.4	14.9	133	5.6	5.3
East						
Kolkata (2012-2015)	488	21.1	17.4	141	6.3	5.4
West						
Ahmedabad urban (2012-2016)	475	14.5	15.9	119	3.8	4.2
Aurangabad (2012-2016)	34	5.0	7.2	10	1.4	1.9
Osmanabad & Beed (2012-2015)	104	4.4	4.5	41	1.9	1.7
Barshi rural (2012-2016)	37	13.8	12.4	16	6.7	5.5
Mumbai (2012-2015)	1491	21.9	25.1	718	12.1	12.2
Pune (2012-2016)	304	10.5	13.3	150	5.7	6.7
Central						
Wardha district (2012-2016)	142	20.8	18.8	65	10.0	8.8
Bhopal (2012-2015)	198	18.6	23.2	65	6.5	8.2
Nagpur (2012-2016)	89	6.7	6.7	33	2.5	2.5
North East						
Manipur state (2012-2016)	108	6.9	10.0	70	4.5	6.3
Imphal West district (2012-2016)	33	12.3	14.4	22	8.1	8.5
Mizoram state (2012-2016)	222	37.4	54.3	90	15.3	23.2
Aizawl district (2012-2016)	119	56.3	75.0	52	23.9	31.8
Sikkim state (2012-2016)	44	13.1	17.1	23	7.7	11.0
Tripura state (2012-2016)	404	20.6	25.7	112	6.0	7.1
West Arunachal (2012-2016)	15	3.5	6.8	6	1.4	3.7
Papumpare district (2012-2016)	8	8.4	19.1	4	4.0	13.1
Meghalaya (2012-2016)	249	24.5	48.5	97	9.4	17.5
East Khasi Hills district (2012-2016)	164	37.2	66.1	70	15.4	25.1
Nagaland (2012-2016)	27	7.1	12.9	3	0.9	1.8
Pasighat (2012-2016)	5	7.7	11.4	1	1.2	2.0
Cachar district (2012-2016)	101	10.7	14.6	34	3.8	5.1
Dibrugarh district (2012-2016)	61	8.6	11.1	18	2.5	3.5
Kamrup urban (2012-2016)	204	31.0	35.3	58	9.0	11.4

Abbreviations: CMR - Crude Mortality Rate; AAMR - Age Adjusted Mortality Rate.

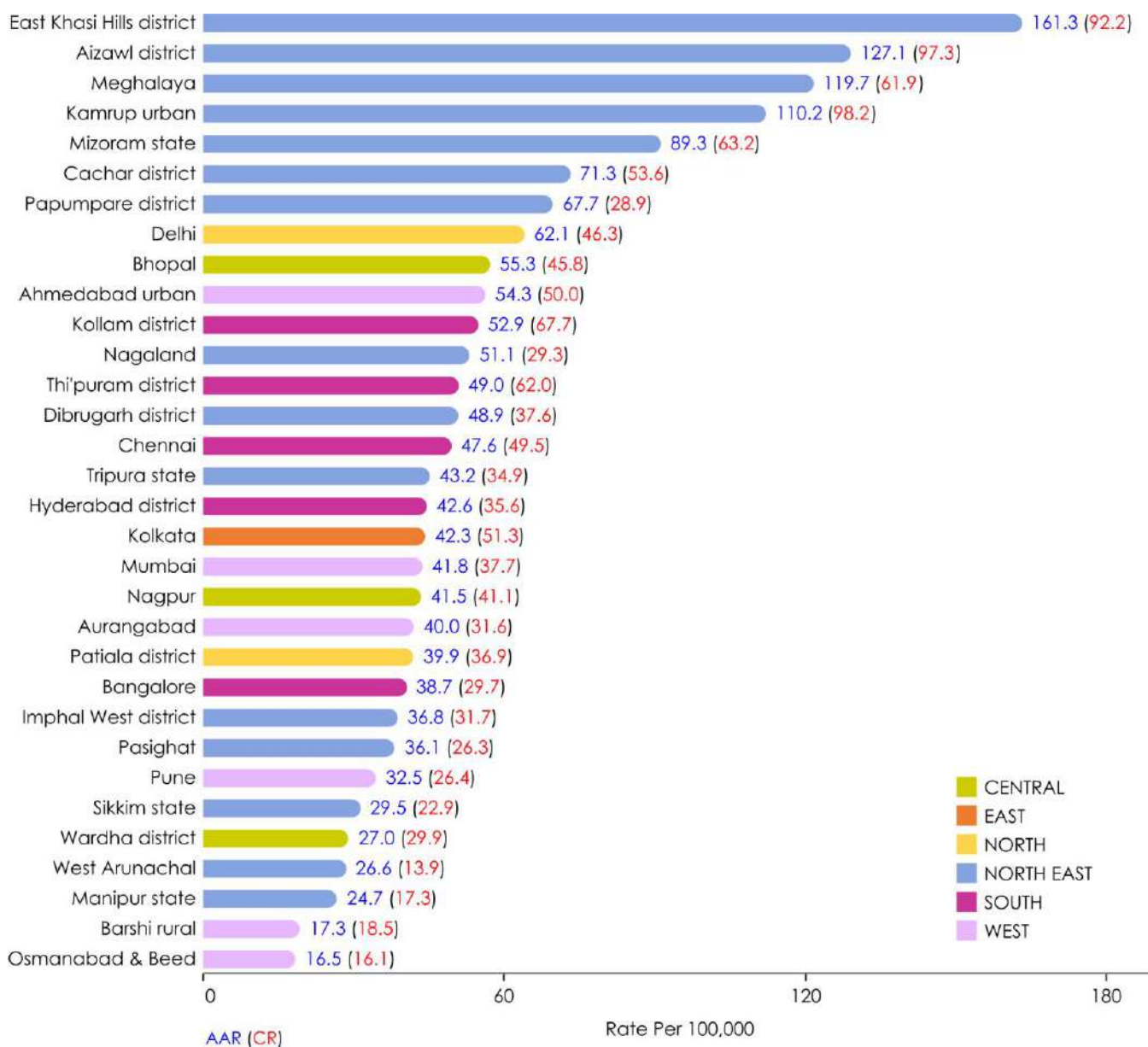
Note: The mortality figures are likely to be inadequate due to incomplete recording of cause of death information.

The Age-Adjusted Mortality Rate is the highest at 75.0 per 1,00,000 males and 31.8 per 100,000 females in Aizawl district in Mizoram.



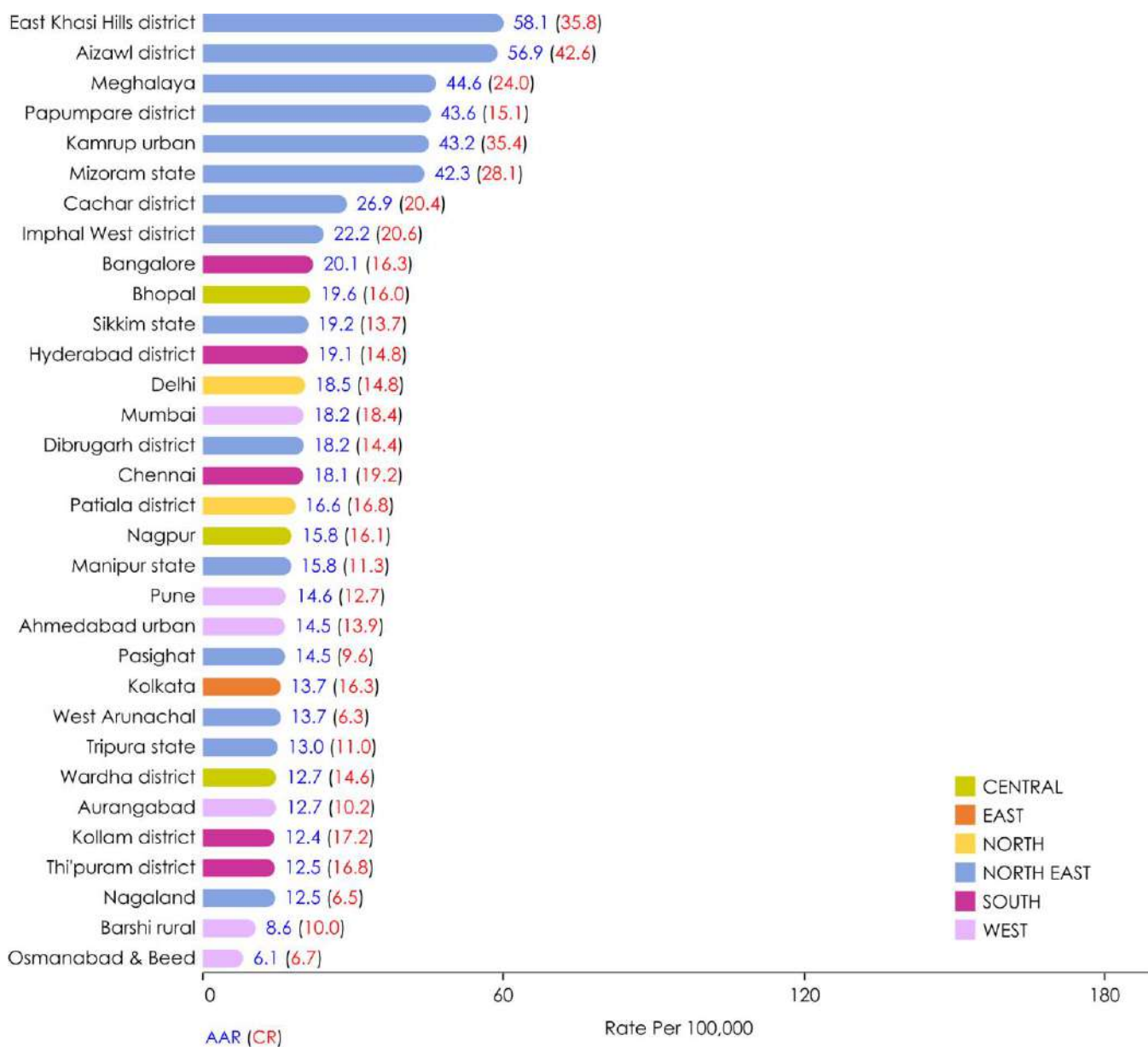
Fig 2.1 Comparison of Age Adjusted Rate (AAR) of cancers in sites associated with tobacco use at PBCRs under NCRP – (ICD-10: C00-C06, C10, C12-C15, C32-C34, C67), 2012-2016

Males





Females





2.2 Relative proportion (%) of cancer sites associated with the use of tobacco to all sites of cancer

Table – 2.2: Relative proportion (%) of cancer sites associated with the use of tobacco to all sites of cancer in 28 PBCRs under NCRP, 2012-2016

Sl.No.	Registry	Males		Females	
		n	%	n	%
North					
1	Delhi	12792	41.2	3590	12.4
2	Patiala district	1961	36.4	798	13.1
South					
3	Hyderabad district	2171	42.2	872	13.5
4	Kollam district	4216	42.5	1211	12.4
5	Thi'puram district	4887	36.1	1459	10.1
6	Bangalore	4424	33.4	2178	14.2
7	Chennai	5877	40.6	2286	13.6
East					
8	Kolkata	4756	46.7	1412	15.4
West					
9	Ahmedabad urban	8179	56.1	2049	18.6
10	Aurangabad	1073	55.8	326	16.3
11	Osmanabad & Beed	1492	41.0	566	12.7
12	Barshi rural	249	34.3	121	14.9
13	Mumbai	10167	38.7	4290	15.6
14	Pune	3789	39.1	1649	15.2
Central					
15	Wardha district	1014	42.4	471	18.6
16	Bhopal	1959	54.9	636	17.7
17	Nagpur	2749	46.2	1044	17.3
North East					
18	Manipur state	1363	36.8	879	19.5
	<i>Imphal West district</i>	424	37.3	287	19.1
19	Mizoram state	1871	43.3	824	22.1
	<i>Aizawl district</i>	1029	47.2	463	24.4
20	Sikkim state	384	32.8	206	18.2
21	Tripura state	3416	52.1	1038	21.1
22	West Arunachal	300	24.5	130	11.1
	<i>Papumpare district</i>	144	30.5	76	14.4
23	Meghalaya	3137	66.9	1220	43.1
	<i>East Khasi Hills district</i>	2031	70.4	804	46.5
24	Nagaland	552	39.3	114	11.5
25	Pasighat	93	29.0	33	10.9
26	Cachar district	2518	54.0	924	23.4
27	Dibrugarh district	1313	51.8	489	21.8
28	Kamrup urban	3209	51.6	1123	23.4

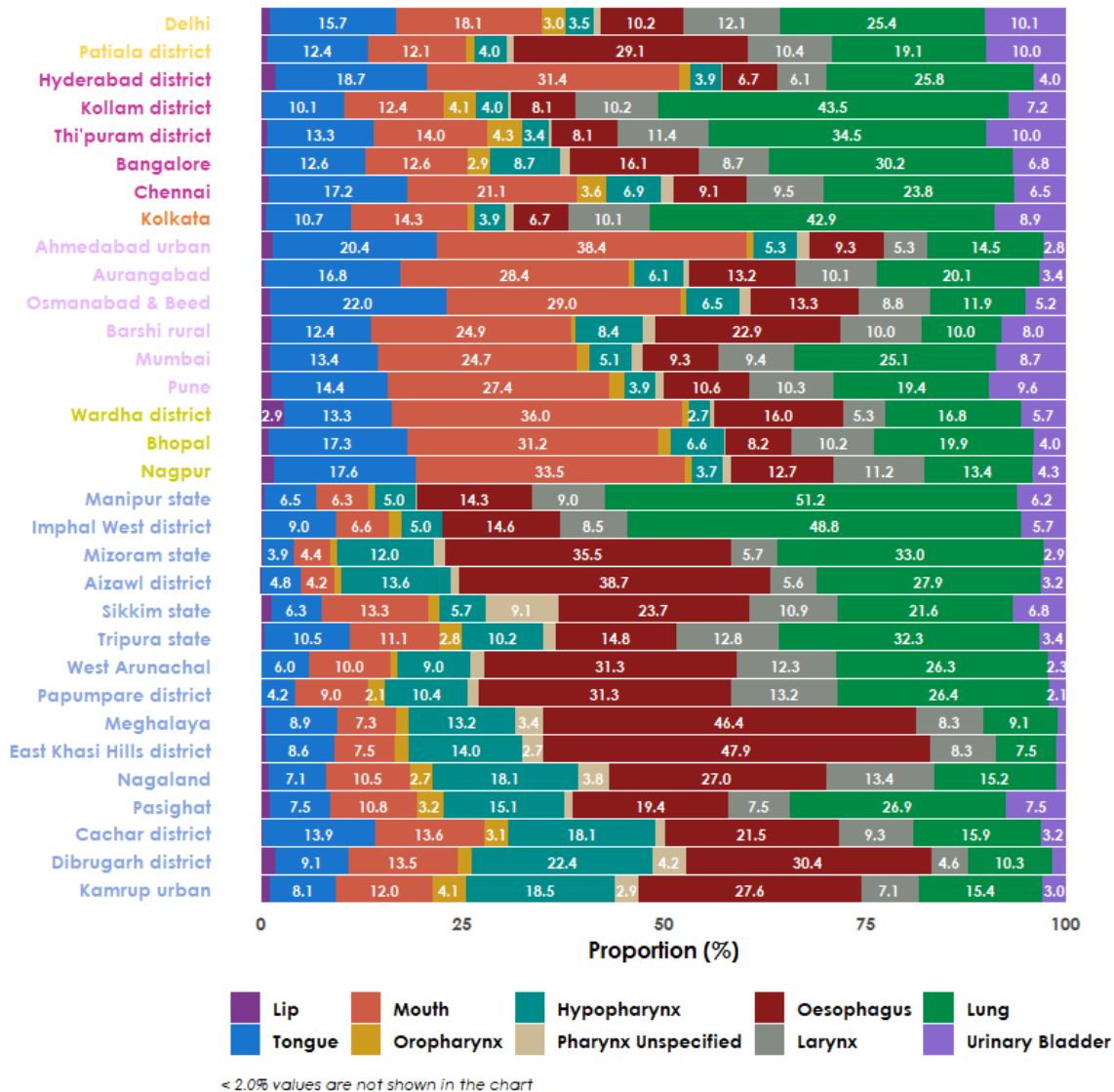
The relative proportion of cancer sites associated with the use of tobacco to all sites is highest in the East Khasi Hills district of Meghalaya (70.4% in males and 46.5% in females). On the other hand, West Arunachal has recorded the lowest relative proportion (24.5%) for males, whereas the lowest relative proportion (10.1%) for females is reported in Thiruvananthapuram district. In all the regions, the relative proportion was higher in males than that of females. The details of the geographic and gender distribution are shown in Table 2.2.



2.3 Relative proportion (%) of specific sites of cancers associated with the use of tobacco

Males

Fig 2.3 (a): Relative proportion (%) of specific sites of cancer associated with the use of tobacco in 28 PBCRs under NCRP, 2012-2016



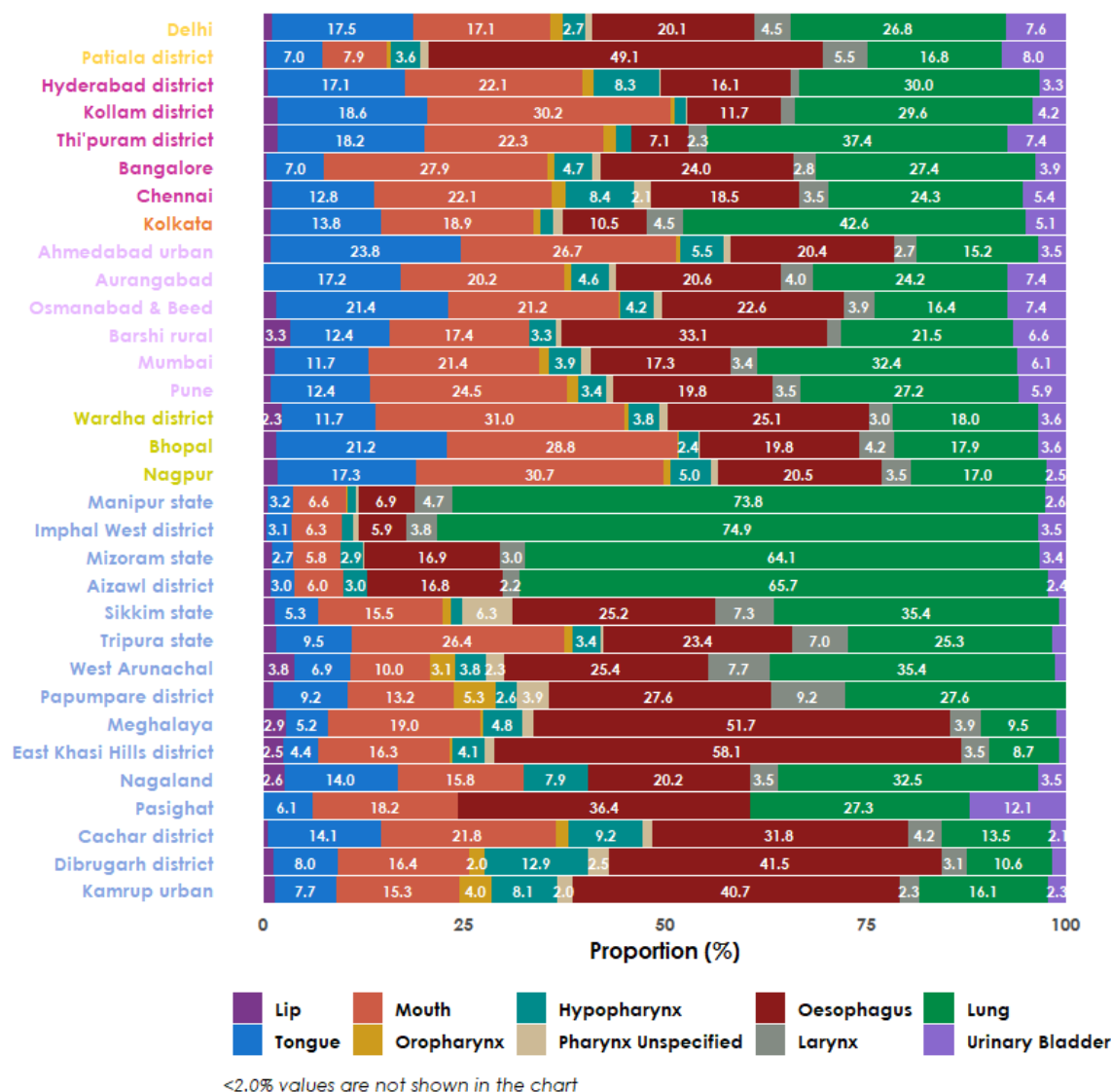
Lung cancer is observed to account for over a quarter of the cancer sites associated with tobacco use in Delhi, Hyderabad district, Kollam district, Thiruvananthapuram district, Bangalore, Mumbai and most of the North-eastern PBCRs except for Sikkim state, Meghalaya, Nagaland and Assam [Figure 2.3 (a)]. Oesophageal cancer accounts for about one-third of the cancers in sites associated with tobacco use in Mizoram state, Aizawl district, West Arunachal, Papumpare district and Dibrugarh district and close to half in Meghalaya and East Khasi Hills district. Mouth cancers constitute over one-third of such cancers in Ahmedabad urban, Wardha district and Nagpur.





Females

Fig 2.3 (b) Relative proportion (%) of specific sites of cancer associated with the use of tobacco in 28 PBCRs, 2012-2016



Nearly three-fourth of the cancer sites associated with tobacco use comprises lung cancer in Manipur state and Imphal West district. Lung cancer accounts for close to two-thirds of such cancers in Mizoram state and Aizawl district [Figure 2.3(b)]. In Hyderabad district, Thiruvananthapuram, Mumbai, Sikkim state, West Arunachal and Nagaland, lung cancer constitutes approximately one-third of cancers in sites associated with tobacco use. More than half of the cancers associated with tobacco use comprises oesophageal cancer in Meghalaya and East Khasi Hills district.

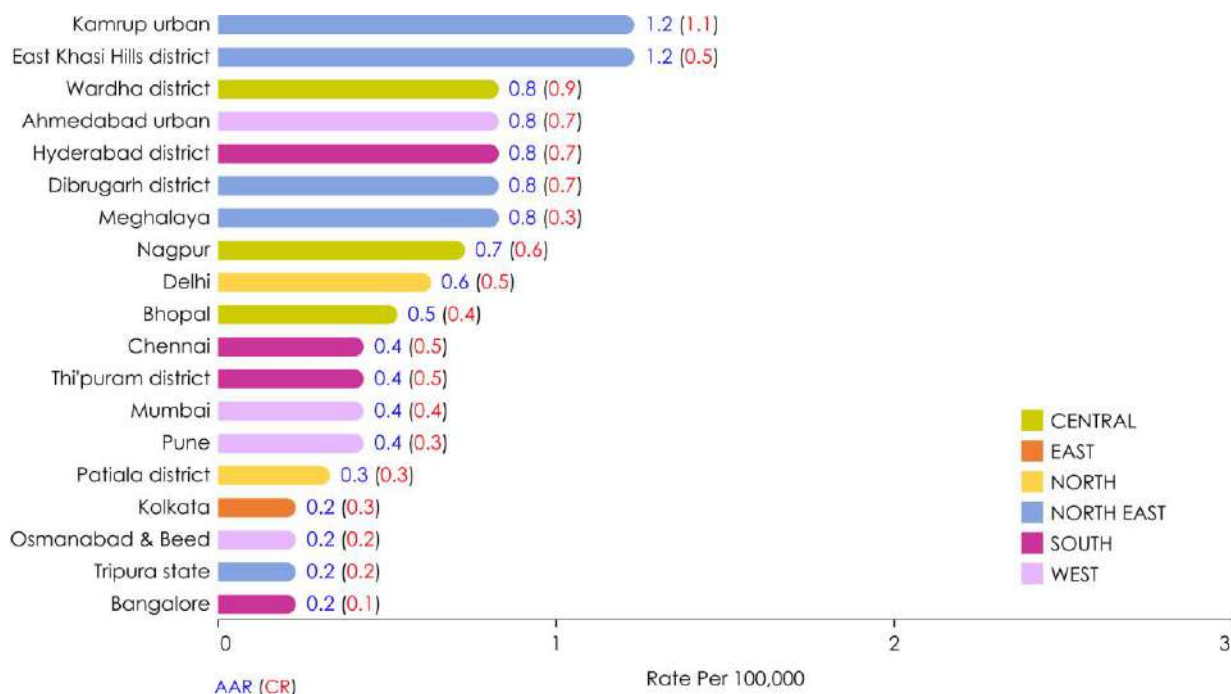




2.4 Anatomic site-wise comparison of Age Adjusted Rate (Per 100,000 population) of cancers in sites associated with use of tobacco, 2012- 2016

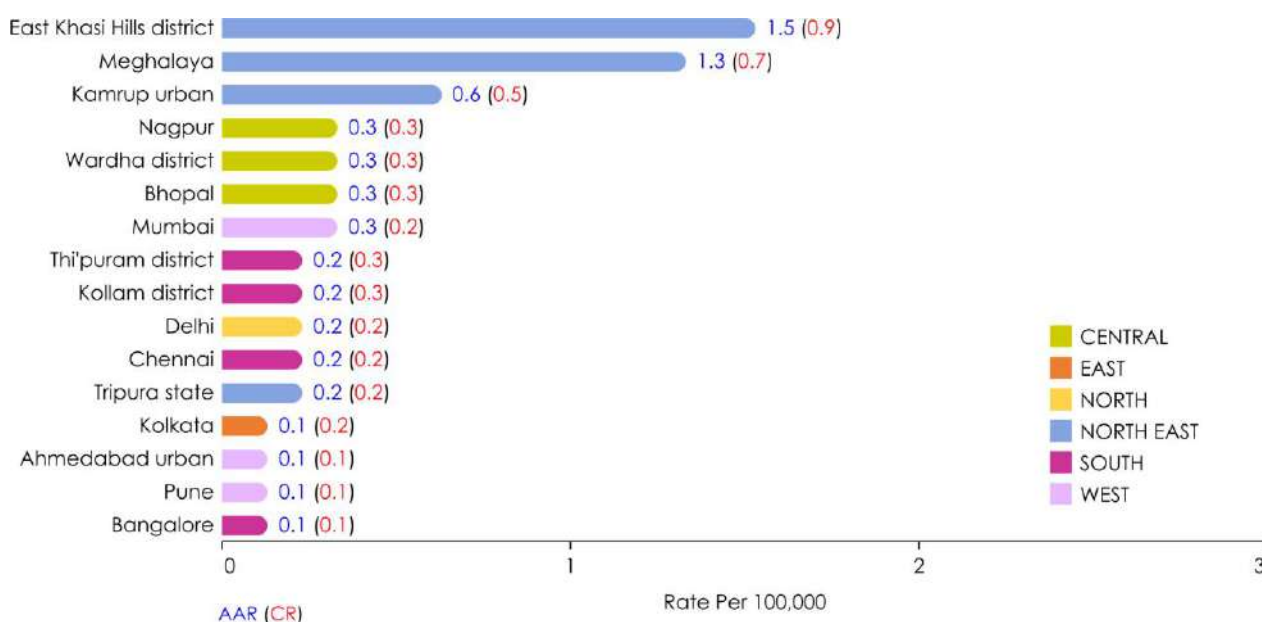
2.4.1 Lip cancer (ICD-10: C00)

Males



Among males, cancer of lip is found to be highest in Kamrup urban (1.2 per 100,000) and East Khasi Hills district (1.2 per 100,000) followed by Wardha district (0.8 per 100,000).

Females



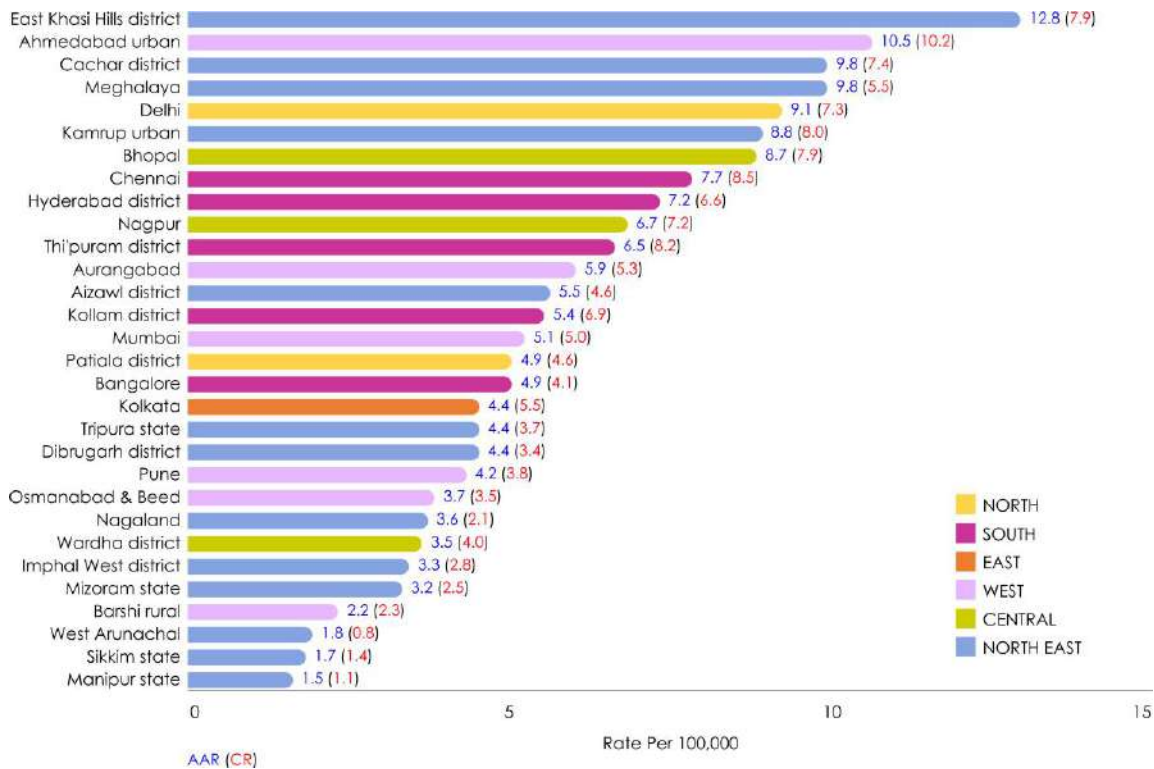
For females, the lip cancer rate is the highest in East Khasi Hills district (1.5 per 100,000) and Meghalaya (1.3 per 100,000).





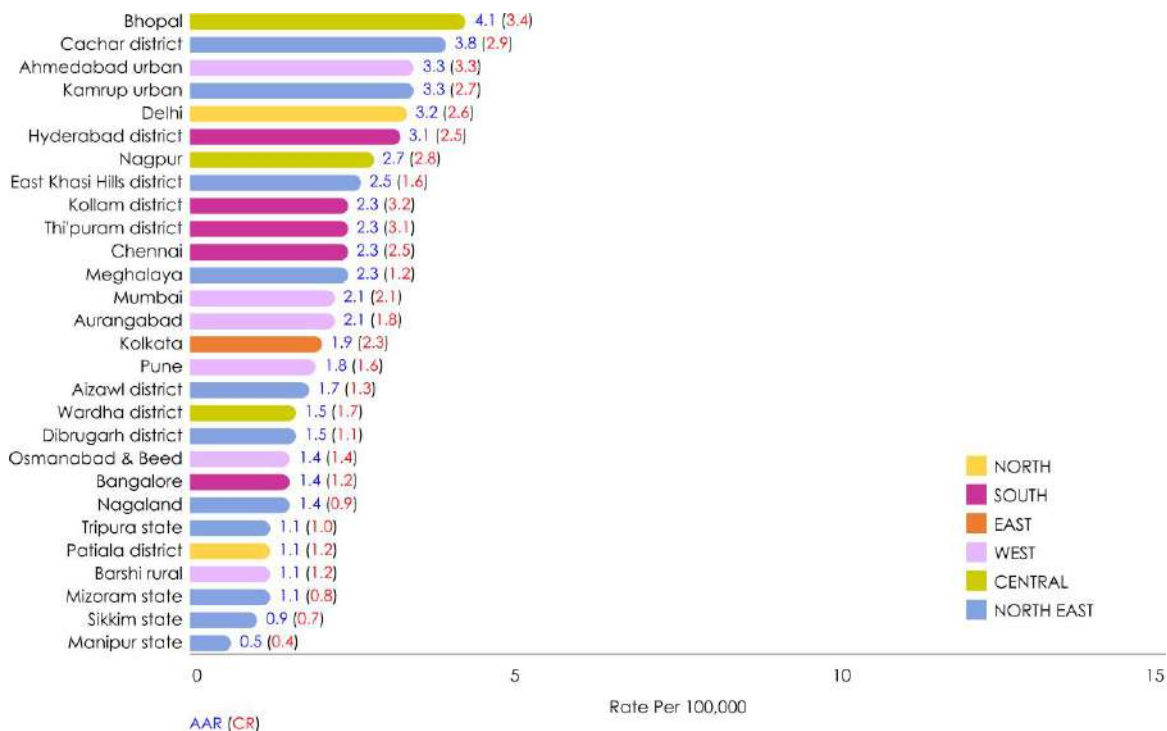
2. 4.2 Tongue (ICD-10: C01-C02)

Males



In males, the incidence of cancer of the tongue is observed to be the highest in East Khasi Hills district (12.8 per 100,000) followed by Ahmedabad urban (10.5 per 100,000).

Females



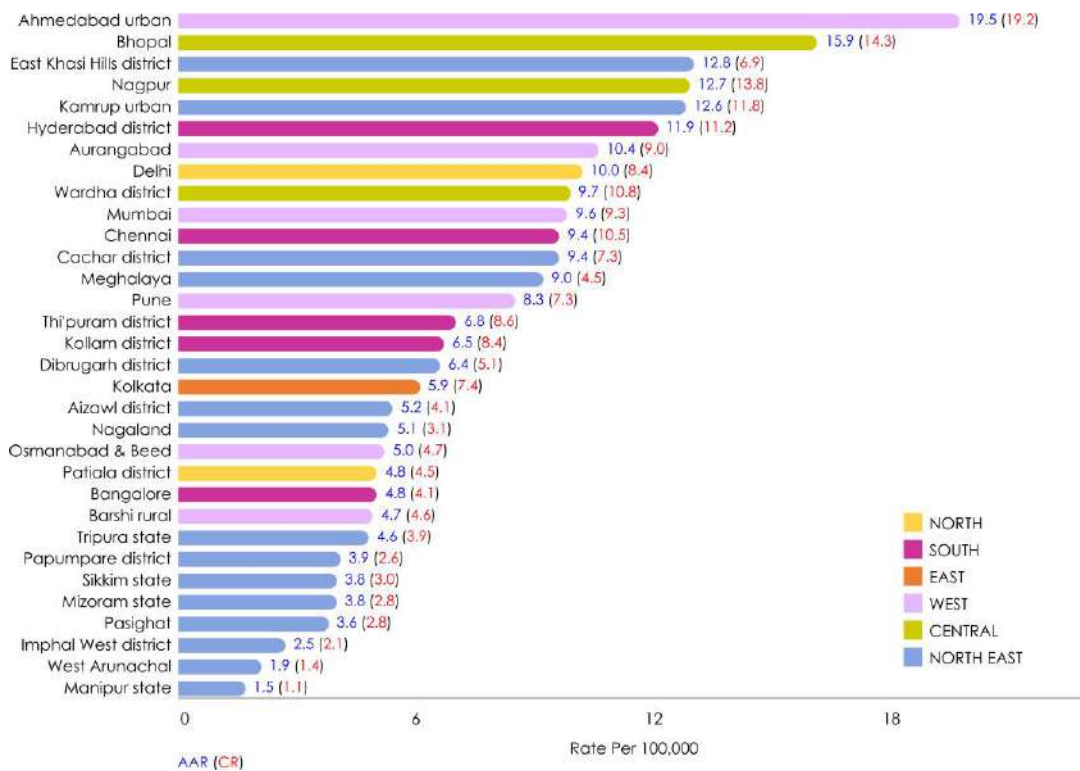
Incidence is highest in Bhopal (4.1 per 100,000) followed by Cachar district (3.8 per 100,000) for females.





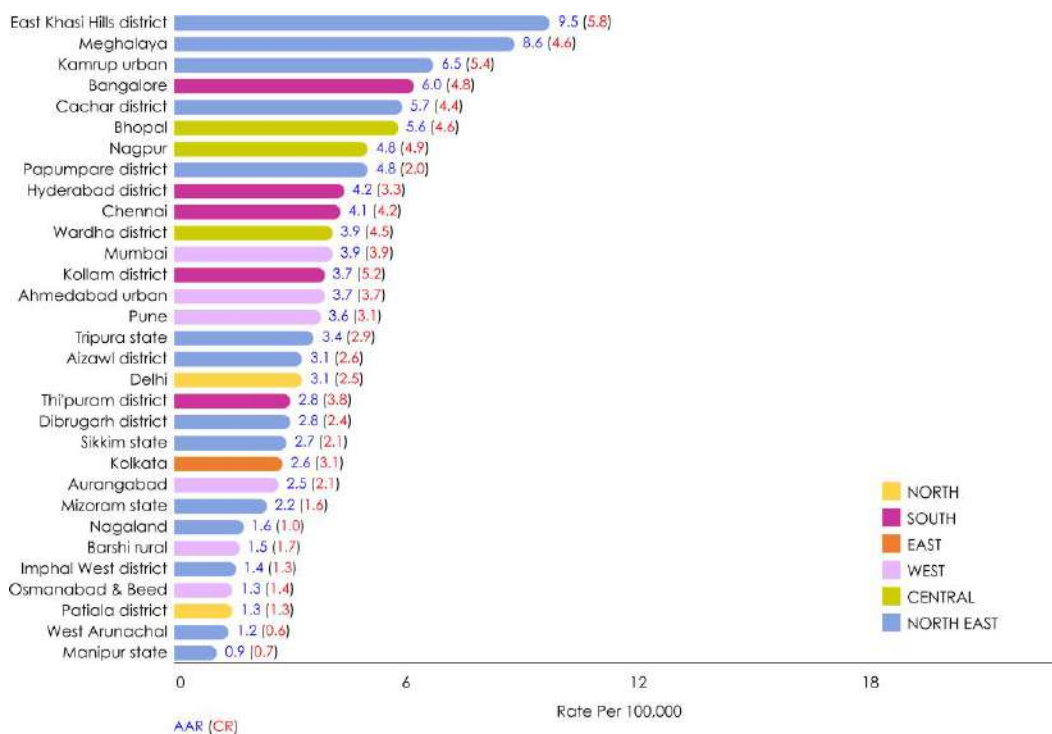
2.4.3 Mouth (ICD-10: C03-C06)

Males



In males, cancer of mouth is found to be highest in Ahmedabad urban (19.5 per 100,000) followed by Bhopal (15.9 per 100,000).

Females



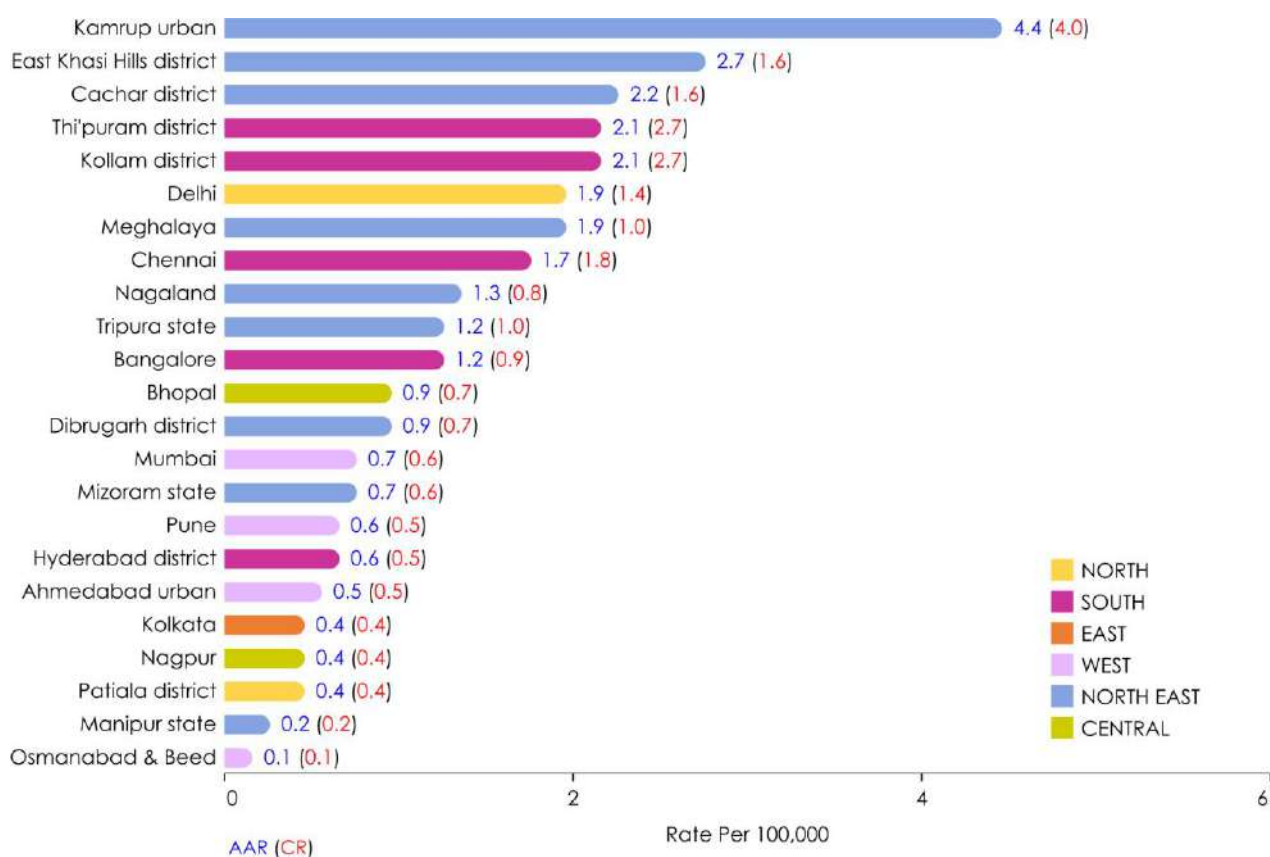
It is highest in East Khasi hills district (9.5 per 100,000) and Meghalaya (8.6 per 100,000) for females.





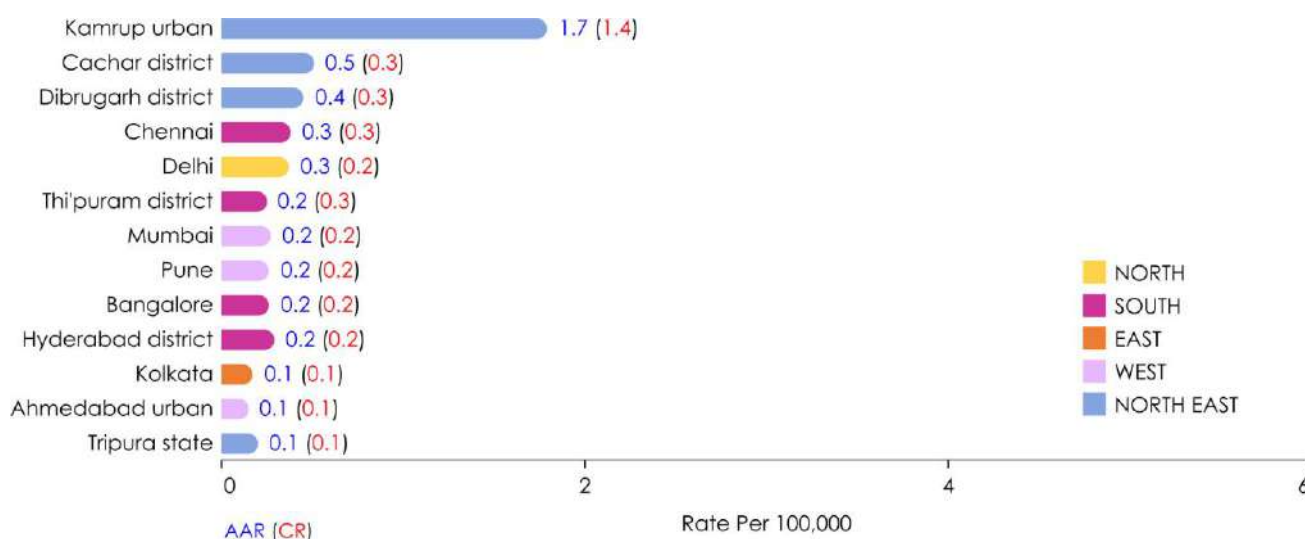
2.4.4 Oropharynx (ICD-10: C10)

Males



In males, cancer of the oropharynx is found to be highest in Kamrup urban (4.4 per 100,000) followed by East khasi Hills district (2.7 per 100,000).

Females



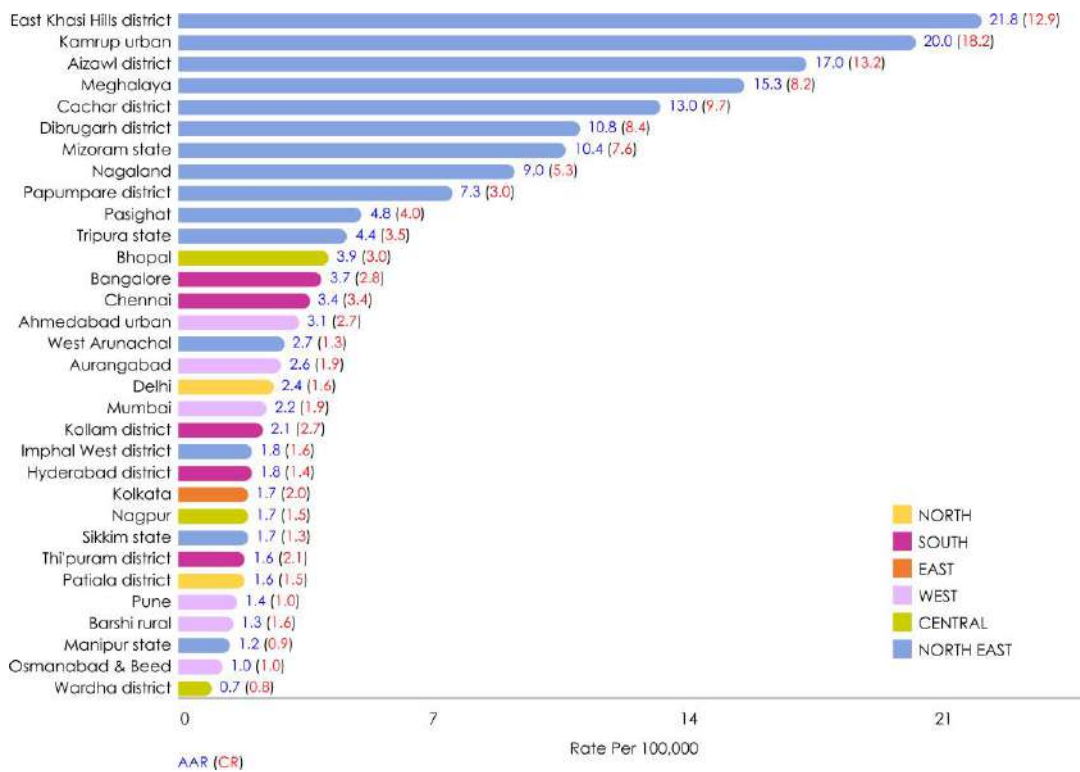
For females, it is highest in Kamrup urban (1.7 per 100,000).





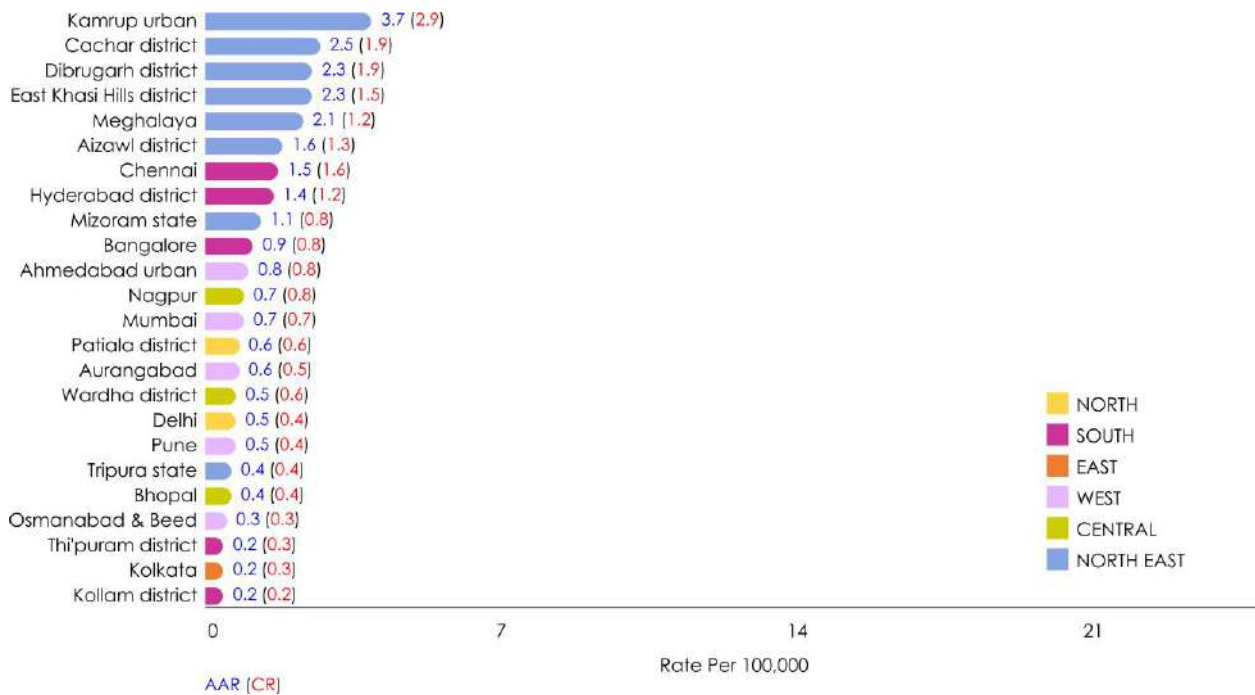
2.4.5 Hypopharynx (ICD-10: C12-C13)

Males



In males, cancer of the hypopharynx is found to be highest in East Khasi Hills district (21.8 per 100,000) followed by Kamrup urban (20.0 per 100,000).

Females



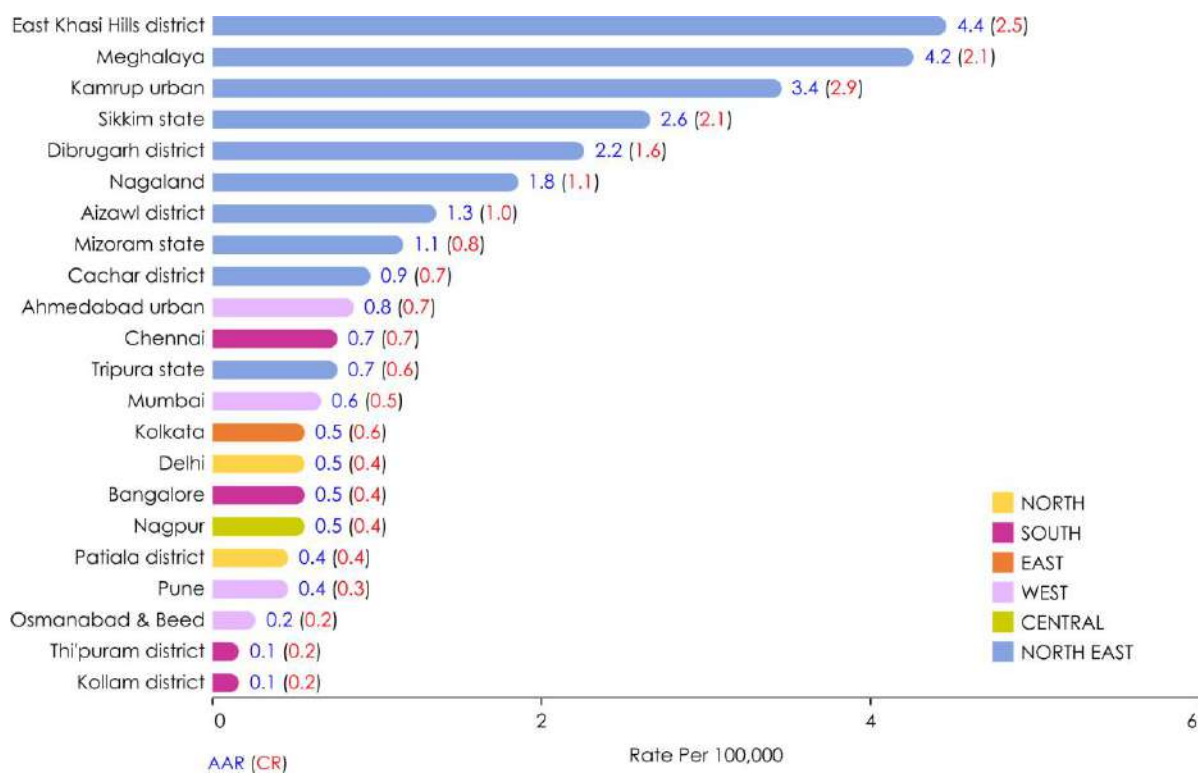
For females, it is the highest in Kamrup urban (3.7 per 100,000) and Cachar district (2.5 per 100,000).





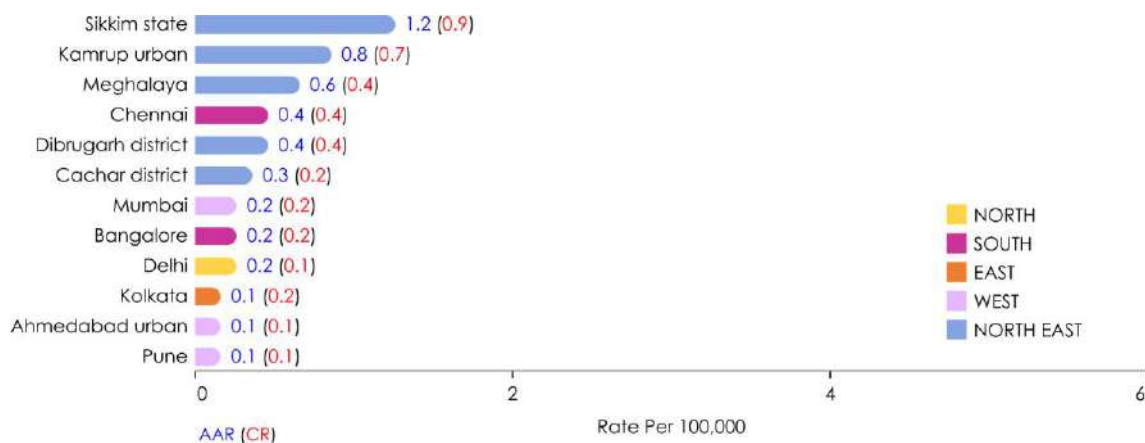
2.4.6 Pharynx Unspecified (ICD-10: C14)

Males



In males, cancer of the pharynx unspecified incidence is the highest in East Khasi Hills district (4.4 per 100,000) followed by Meghalaya (4.2 per 100,000).

Females



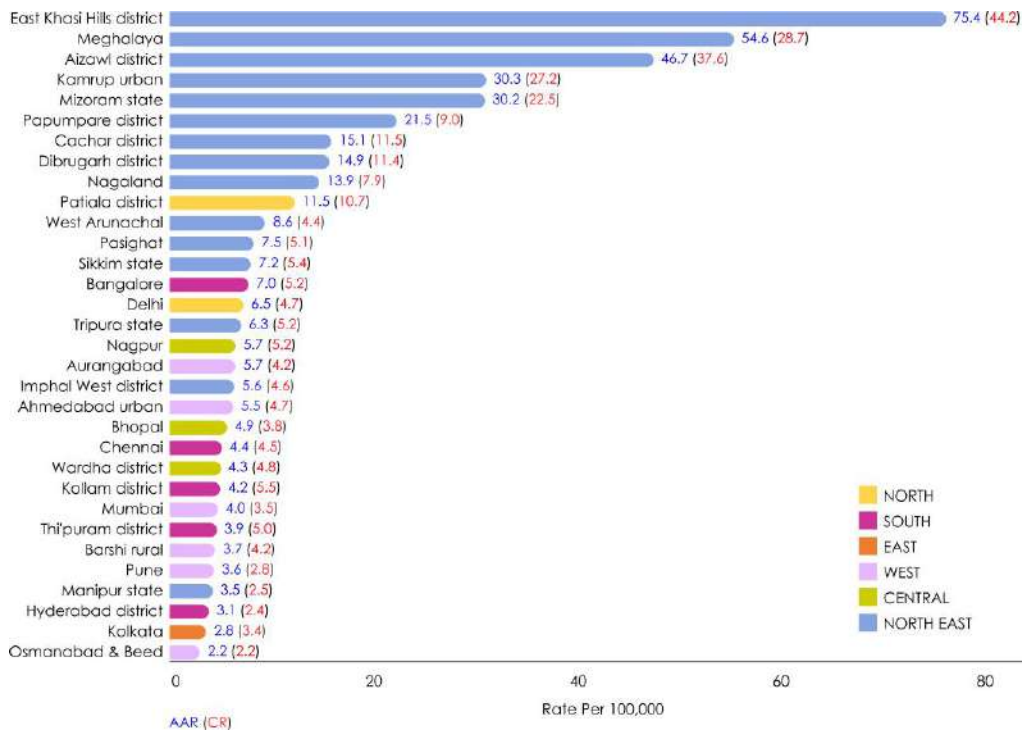
For females, it is highest in Sikkim state (1.2 per 100,000) and Kamrup urban (0.8 per 100,000).





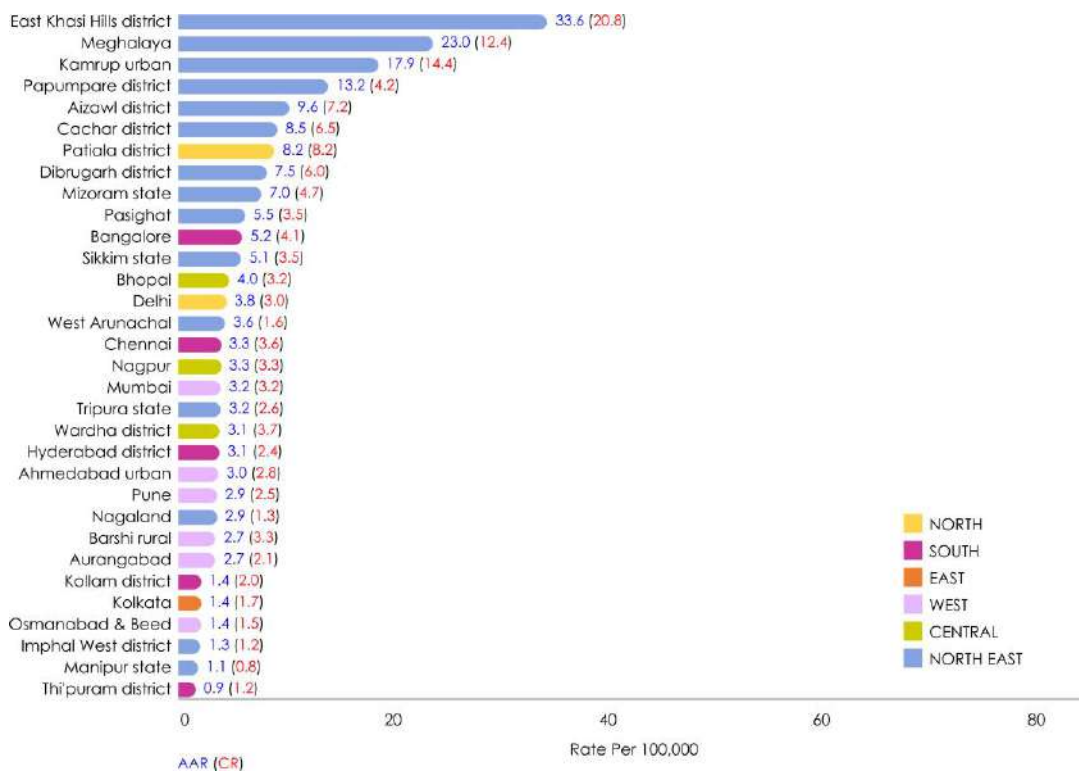
2.4.7 Oesophagus (ICD-10: C15)

Males



In males, cancer of the oesophagus is the highest in the East Khasi Hills district (75.4 per 100,000), followed by Meghalaya (54.6 per 100,000).

Females



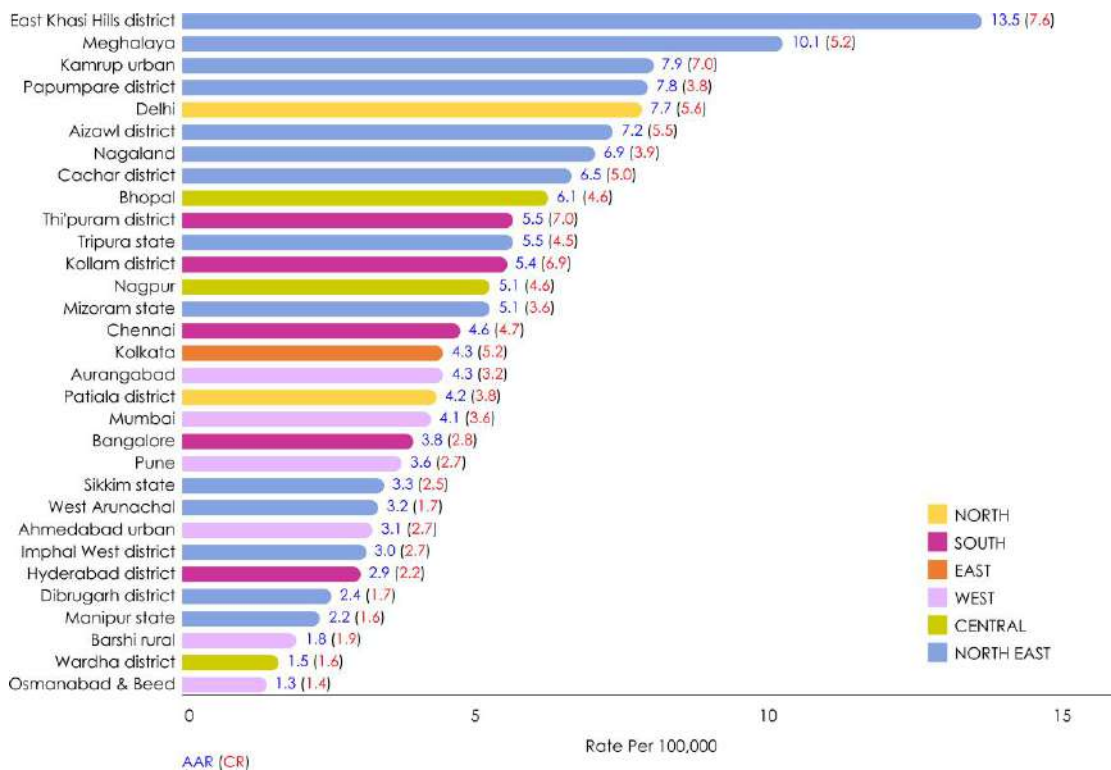
For females, cancer of the oesophagus is the highest in the East Khasi Hills district (33.6 per 100,000), followed by Meghalaya (23.0 per 100).





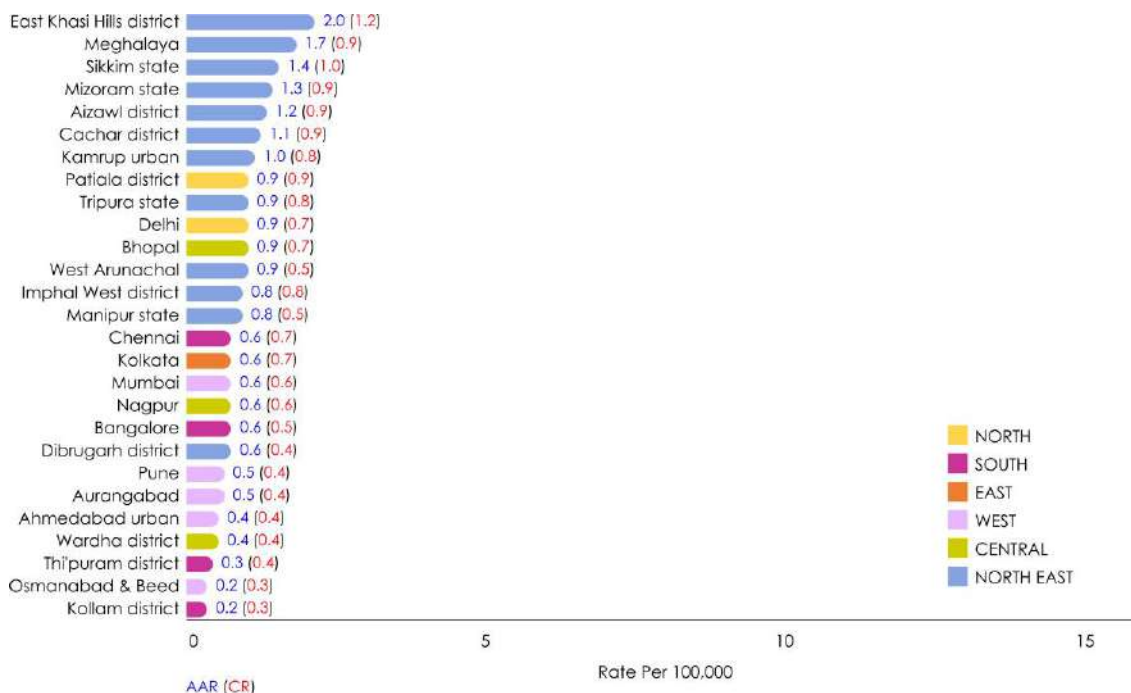
2.4.8 Larynx (ICD-10: C32)

Males



In males, cancer of the larynx incidence is highest in East Khasi Hills district (13.5 per 100,000), followed by Meghalaya (10.1 per 100,000).

Females



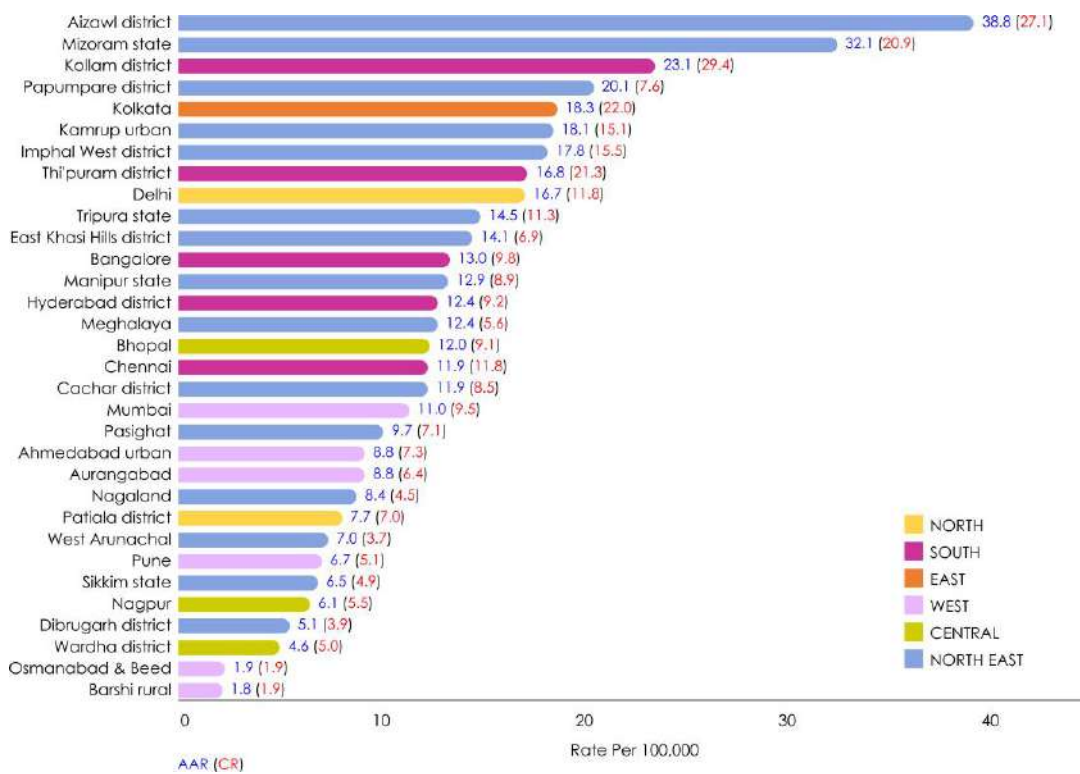
For females, cancer of the larynx incidence is highest in East Khasi Hills district (2.0 per 100,000), followed by Meghalaya (1.7 per 100,000).





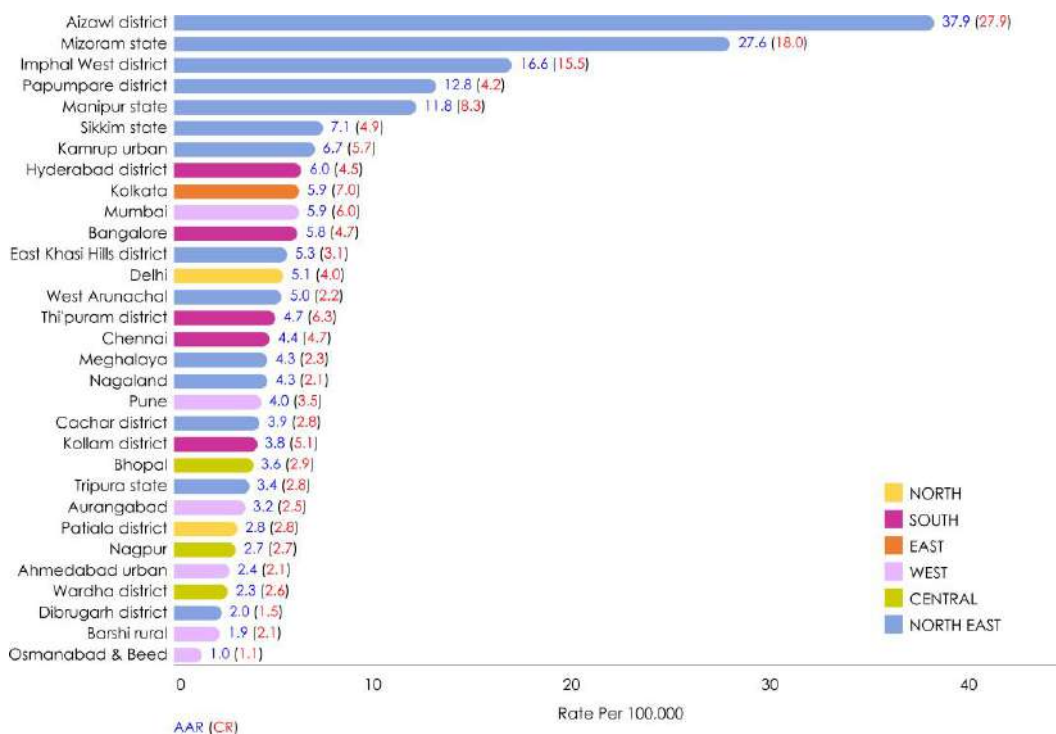
2.4.9: Lung (ICD-10: C33-C34)

Males



In males, lung cancer incidence is recorded to be highest in Aizawl district (38.8 per 100,000), followed by Mizoram state (32.1 per 100,000).

Females



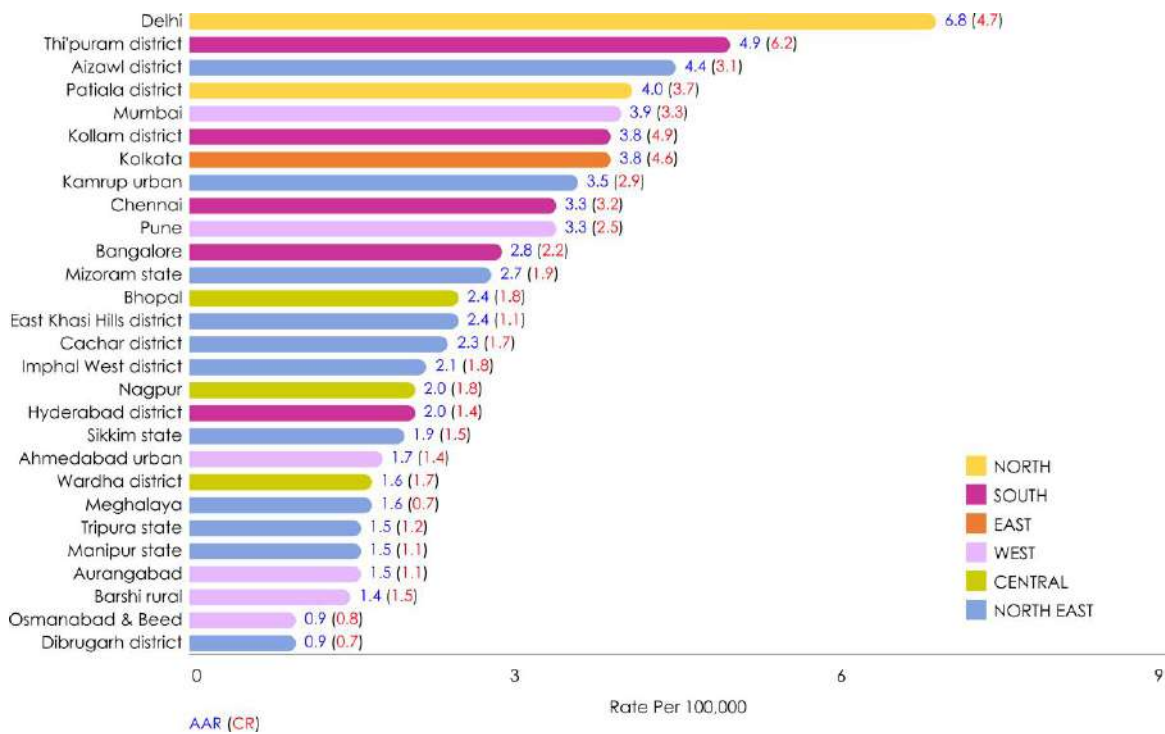
For females, lung cancer incidence is recorded to be highest in Aizawl district (37.9 per 100,000), followed by Mizoram state (27.6 per 100,000).





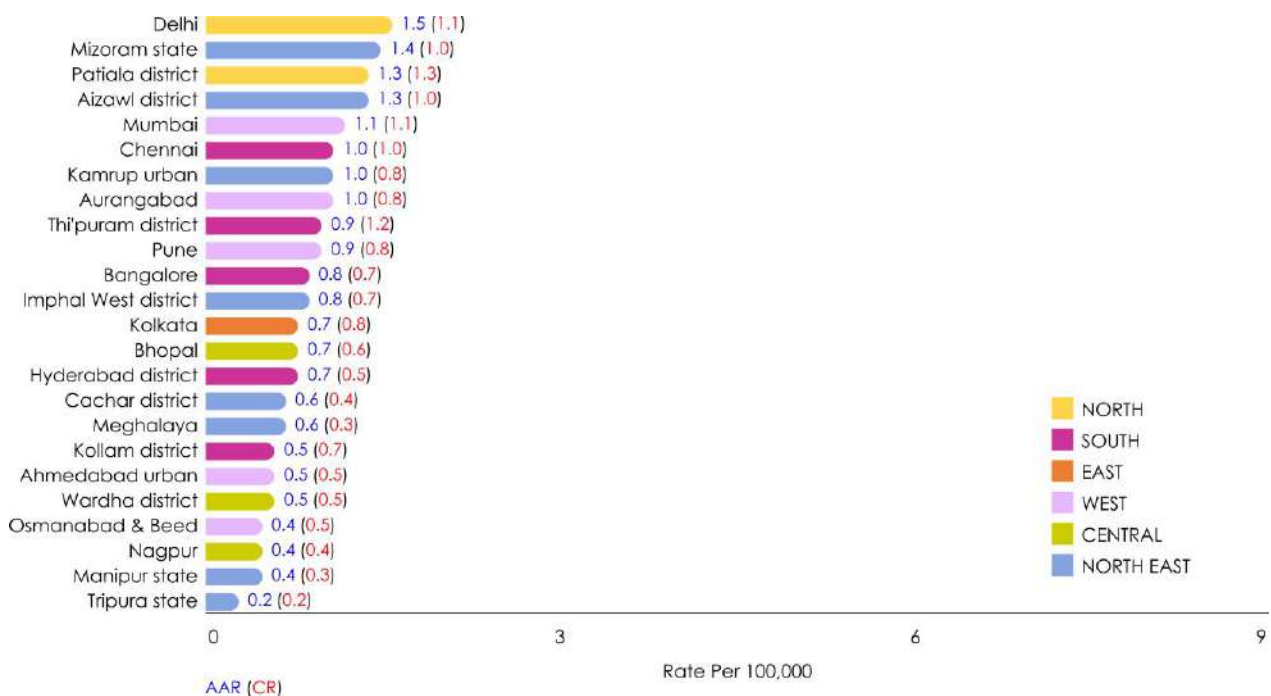
2.4.10 Urinary bladder (ICD-10: C67)

Males



The incidence of cancer of the urinary bladder is highest in Delhi (6.8 per 100,000) followed by Thiruvananthapuram district (4.9 per 100,000) in males.

Females



For females, it is highest in Delhi (1.5 per 100,000) and Mizoram state (1.4 per 100,000).

Note: In all of the above the registries having less than 10 cases have not been included in the analysis.





2.5 Age Specific Incidence Rate, 2012-2016

2.5.1 All sites (ICD-10: C00-C06, C10, C12-C15, C32-C34, C67)

Table – 2.5.1 (a) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - All sites - Males

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.1	0.1	0.1	0.2	2.3	5.4	14.0	26.4	47.6	70.2	129.7	197.8	291.1	360.5	402.2	353.9
	Patiala district	0.0	0.9	0.6	0.2	0.7	2.8	7.0	16.9	33.2	55.6	104.3	152.2	186.4	186.1	205.1	211.8
South	Hyderabad district	0.2	0.0	0.0	0.0	2.1	7.6	20.8	32.2	55.1	78.7	80.6	114.0	167.0	209.1	276.1	178.5
	Kollam district	0.0	0.0	0.0	0.2	0.0	2.6	6.1	12.9	28.2	56.6	104.3	145.4	251.3	361.7	391.1	335.2
	Thi'puram district	0.0	0.0	0.0	0.5	1.0	2.4	5.8	13.8	27.1	51.6	92.5	133.4	244.6	314.9	328.7	335.7
	Bangalore	0.1	0.5	0.3	0.5	1.3	2.1	5.5	11.2	19.6	38.3	83.8	136.7	184.6	287.3	275.5	292.2
	Chennai	0.0	0.4	0.5	0.8	1.4	4.1	13.9	26.0	43.1	63.8	103.2	139.4	197.1	264.4	271.0	310.4
East	Kolkata	0.0	0.0	0.1	0.4	1.6	5.1	11.1	15.0	29.8	46.7	95.1	126.2	171.9	246.9	291.6	281.2
West	Ahmedabad urban	0.1	0.1	0.1	0.3	2.4	6.7	25.6	55.1	71.4	104.1	131.2	152.8	217.4	248.9	261.8	202.5
	Aurangabad	0.0	0.3	0.3	0.6	1.2	4.7	22.8	29.0	45.9	65.8	95.6	106.2	160.0	226.5	205.8	164.8
	Osmanabad & Beed	0.0	0.2	0.0	0.0	0.8	3.6	10.6	16.6	25.5	25.2	34.1	48.3	64.0	80.6	61.1	79.0
	Barshi rural	0.0	0.0	0.0	0.0	0.0	1.8	6.8	9.5	17.3	18.0	29.5	61.3	69.8	110.7	97.2	105.1
	Mumbai	0.2	0.2	0.3	0.3	0.9	2.9	8.6	19.1	32.0	47.4	77.4	116.7	173.4	232.3	284.8	340.0
	Pune	0.0	0.0	0.0	0.1	0.7	1.8	5.7	15.3	25.8	42.8	55.9	94.0	135.5	186.2	235.9	231.4
Central	Wardha district	0.5	0.0	0.0	0.7	1.6	5.0	16.7	18.9	31.0	43.4	57.5	75.5	116.6	115.5	163.5	122.4
	Bhopal	0.0	0.3	0.0	0.4	4.3	9.7	28.5	49.8	49.5	77.1	140.4	185.5	223.3	248.5	316.0	232.7
	Nagpur	0.6	0.6	0.7	0.3	2.0	9.2	28.8	35.9	52.6	61.1	89.7	113.3	162.8	202.9	233.1	168.8
North East	Manipur state	0.0	0.0	0.0	0.1	0.4	0.5	2.3	3.5	7.0	15.3	35.9	62.8	92.3	175.6	253.9	227.7
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	0.0	0.0	3.6	7.8	9.9	23.4	37.7	80.5	145.9	270.5	369.1	385.6
	Mizoram state	0.3	0.0	0.0	0.0	1.4	2.2	7.7	23.1	71.9	139.4	272.9	340.9	362.4	437.8	465.0	511.5
	<i>Aizawl district</i>	1.0	0.0	0.0	0.0	3.6	3.9	11.8	31.8	102.4	182.8	424.2	514.7	516.4	655.8	571.1	654.0
	Sikkim state	0.0	0.0	0.0	0.0	0.5	0.5	5.1	6.5	13.9	33.5	51.8	63.7	133.7	133.8	261.6	307.6
	Tripura state	0.0	0.1	0.1	0.2	0.4	1.2	3.8	8.9	19.7	47.4	90.5	158.1	230.6	241.4	287.7	258.3
	West Arunachal	0.0	0.0	0.0	0.4	0.9	2.4	4.9	6.3	19.3	36.6	78.4	95.2	159.3	178.1	86.5	56.1
	<i>Papumpare district</i>	0.0	0.0	0.0	1.6	0.0	6.2	8.2	15.1	37.2	70.7	217.7	187.6	482.9	511.4	178.5	128.9
	Meghalaya	0.0	0.0	0.0	0.0	1.0	3.9	16.3	64.4	149.1	275.3	381.6	424.8	503.0	475.9	517.1	411.0
	<i>East Khasi Hills district</i>	0.0	0.0	0.0	0.0	0.8	4.4	22.9	89.2	192.4	375.5	513.4	550.9	664.2	666.8	754.5	533.0
	Nagaland	0.0	0.0	0.0	0.5	0.5	3.1	5.0	13.5	46.0	88.1	138.3	197.8	191.9	305.6	282.6	214.8
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	15.1	12.5	8.5	70.1	83.0	117.9	169.2	128.5	268.8	244.9
	Cachar district	0.2	0.0	0.0	0.0	1.8	3.5	8.6	26.3	48.6	110.2	150.3	248.0	324.9	397.1	449.8	394.0
	Dibrugarh district	0.0	0.0	0.0	0.0	0.3	2.1	3.2	18.5	23.6	68.0	112.5	131.1	213.4	291.3	352.8	335.2
Kamrup urban	0.0	0.0	0.0	0.3	1.6	3.6	13.4	30.1	70.0	124.6	221.3	381.2	436.6	640.3	802.9	823.2	

The age-specific incidence rate for cancers in all the sites associated with tobacco use is the highest in the 70 to 74 years age group for both genders in most registries. The highest age-specific incidence rate in the males is recorded in Kamrup urban in the 75 plus age group (823.2 per 100,000).



Table – 2.5.1 (b) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - All sites - Females

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.1	0.0	0.1	0.2	1.2	2.5	3.6	8.1	12.4	22.2	43.9	57.8	84.1	93.2	109.8	127.2
	Patiala district	0.3	0.3	0.0	0.0	0.2	1.5	4.2	7.6	18.7	27.1	54.4	49.5	59.0	90.8	76.0	83.7
South	Hyderabad district	0.0	0.0	0.0	0.0	0.6	2.0	4.8	8.7	18.9	32.7	36.8	72.1	87.8	104.9	107.2	72.2
	Kollam district	0.0	0.0	0.0	0.0	0.4	1.3	0.8	3.3	6.6	14.7	24.8	32.4	54.4	78.3	82.1	103.8
	Thi'puram district	0.0	0.2	0.3	0.2	0.3	1.2	2.2	3.0	7.4	14.3	24.3	35.1	51.5	83.8	82.7	90.9
	Bangalore	0.2	0.1	0.2	0.1	0.4	1.2	3.8	6.1	13.2	30.6	47.0	65.1	87.7	113.5	154.0	142.3
	Chennai	0.6	0.0	0.1	0.0	0.6	1.5	4.2	8.8	16.6	26.9	36.8	50.9	78.5	94.9	110.1	119.7
East	Kolkata	0.0	0.0	0.0	0.1	0.6	2.5	2.1	7.7	8.5	20.4	33.5	42.2	49.4	76.4	79.4	92.2
West	Ahmedabad urban	0.1	0.1	0.1	0.3	0.6	2.8	5.0	10.4	17.9	25.2	37.4	41.1	58.8	77.9	65.1	57.2
	Aurangabad	0.0	0.4	0.0	0.3	1.4	1.2	5.3	6.8	9.8	24.1	32.9	40.7	48.4	66.8	82.7	40.2
	Osmanabad & Beed	0.3	0.0	0.0	0.1	0.2	0.1	2.2	4.3	8.9	12.5	15.6	18.3	25.5	27.7	33.6	17.3
	Barshi rural	0.0	0.0	0.0	0.0	0.0	1.1	3.6	3.6	13.1	12.8	17.1	29.2	31.4	59.9	39.9	34.6
	Mumbai	0.3	0.2	0.1	0.3	0.7	1.6	3.8	7.5	15.5	25.1	31.2	48.0	67.5	101.0	122.2	160.3
	Pune	0.0	0.1	0.3	0.4	0.3	1.3	2.6	5.6	11.5	20.8	31.4	38.0	64.9	92.6	78.6	97.5
Central	Wardha district	0.5	0.0	0.0	1.4	1.3	1.1	5.5	8.5	15.1	20.2	32.2	37.3	48.6	69.8	67.6	42.9
	Bhopal	0.0	0.0	0.0	0.2	0.7	2.2	8.1	9.8	18.4	35.9	55.9	67.7	76.8	93.7	113.9	65.4
	Nagpur	0.2	0.2	0.0	1.1	2.3	2.7	5.6	10.4	23.8	29.9	41.4	41.8	56.9	74.3	74.3	65.5
North East	Manipur state	0.0	0.0	0.1	0.0	0.4	0.5	2.2	1.6	5.0	8.9	24.1	37.9	68.8	113.5	158.2	128.1
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	2.4	0.7	1.6	1.8	12.4	16.8	37.1	52.0	94.4	132.4	204.0	214.2
	Mizoram state	0.0	0.0	0.0	0.4	0.7	0.7	2.4	5.7	12.4	31.6	71.6	114.5	173.3	279.6	377.4	398.8
	<i>Aizawl district</i>	0.0	0.0	0.0	1.0	0.0	0.0	4.9	7.7	15.7	45.4	81.8	145.6	191.8	370.7	497.1	686.9
	Sikkim state	0.0	0.0	0.0	0.0	1.2	0.6	2.3	7.3	7.8	25.6	36.1	55.6	56.9	123.7	164.2	158.5
	Tripura state	0.0	0.1	0.0	0.3	0.3	0.6	2.3	7.0	8.4	18.5	33.4	49.0	64.4	61.9	78.7	56.4
	West Arunachal	0.0	0.0	0.0	0.0	0.5	1.1	0.7	4.7	6.8	23.1	27.2	54.3	64.5	66.3	90.0	76.4
	<i>Papumpare district</i>	0.0	0.0	0.0	0.0	1.6	4.0	0.0	14.0	20.4	50.3	79.0	171.7	236.6	220.7	360.3	196.8
	Meghalaya	0.0	0.0	0.0	0.0	0.4	0.9	3.6	15.2	36.2	70.8	129.1	175.5	208.6	204.4	256.2	192.9
	<i>East Khasi Hills district</i>	0.0	0.0	0.0	0.0	0.0	0.5	4.8	18.9	50.8	83.5	158.1	231.4	282.2	272.4	330.2	266.7
	Nagaland	0.0	0.0	0.0	0.0	0.5	0.0	2.6	6.2	7.2	21.3	42.0	32.4	78.1	63.9	64.2	26.3
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	14.5	23.5	45.5	56.1	79.9	84.4	76.6	0.0
	Cachar district	0.0	0.0	0.0	0.0	0.7	1.5	8.5	16.9	28.3	50.4	84.9	94.8	103.6	126.9	120.3	104.7
	Dibrugarh district	0.0	0.0	0.0	0.6	0.8	0.0	2.9	8.6	16.1	36.4	49.0	71.1	86.3	86.6	89.1	56.7
Kamrup urban	0.0	0.5	0.0	1.1	1.2	4.1	7.5	11.5	26.3	56.9	81.1	159.3	179.8	242.0	318.7	262.0	

The age-specific incidence rate for cancers in all the sites associated with tobacco use among females is in Aizawl district in the 75 plus age group (686.9 per 100,000).



2.5.2 Lip

Table – 2.5.2 (a) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Lip (ICD-10: C00) - Males

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.8	0.9	1.6	2.2	3.6	3.1	3.6	1.5
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	2.8	1.1	0.0	0.7	2.1	2.8
South	Hyderabad district	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	1.0	2.4	1.5	2.3	2.9	3.6	2.8	2.0
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.3	0.0	0.0	0.5	0.0	0.6
	Thi'puram district	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.2	0.2	0.5	0.8	0.6	0.5	2.6	2.2	3.7
	Bangalore	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.7	0.7	1.5	0.0	0.0	0.5
	Chennai	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.1	1.0	1.0	1.4	1.2	2.2	1.5	0.0	0.8
East	Kolkata	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.4	0.4	0.7	0.8	1.0	0.7	0.0	0.4
West	Ahmedabad urban	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.3	0.7	1.8	2.6	2.5	3.3	2.2	4.5	4.3
	Aurangabad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.1	1.4	0.0	0.0	0.0	0.0	0.0
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.7	0.0	0.8	0.0	0.7	0.3	0.8	0.0
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	5.1
	Mumbai	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.1	0.8	1.0	0.7	1.3	1.6	2.0	2.5	1.8
	Pune	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1	0.8	0.6	1.4	1.6	2.1	2.1
Central	Wardha district	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.1	2.0	0.5	2.7	0.7	1.7	6.6	2.3	2.2
	Bhopal	0.0	0.0	0.0	0.0	0.4	0.2	0.3	0.3	0.0	0.4	1.1	2.3	3.4	1.3	0.0	1.5
	Nagpur	0.0	0.0	0.0	0.0	0.2	0.0	0.9	0.2	0.8	0.2	1.1	1.5	2.2	6.0	5.7	2.4
North East	Manipur state	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.3	0.0	0.0	0.0	1.1	0.8
	Imphal West district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	0.0
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.6	0.0	0.0	0.0	0.0	0.0
	Aizawl district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	1.3	0.0	2.5	6.5	0.0	0.0
	Tripura state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.4	0.0	0.7	0.5	2.3	2.4
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Papumpare district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.7	1.0	6.3	9.6	2.8	4.8
	East Khasi Hills district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	10.6	17.1	6.0	5.1
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.1	0.0	0.0	3.0	0.0	7.4	0.0
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.3
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	2.0	0.0	0.0	1.6
Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.9	3.6	3.3	2.0	3.3	2.3	6.4
Kamrup urban	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.7	1.1	0.4	3.8	5.9	0.9	10.6	6.5	8.6

The highest age-specific incidence rate of lip cancer in the males is recorded in Pasighat in the 75 plus age group (22.3 per 100,000).



Table – 2.5.2 (b): Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Lip (ICD-10: C00) - Females

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	
North	Delhi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.2	0.6	1.3	1.2	1.0	1.4	
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.8	0.0	0.0	
South	Hyderabad district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.5	0.0	0.0	2.9	0.9	
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.7	0.2	0.6	1.3	1.1	2.8	
	Thi'puram district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.0	0.7	1.0	0.9	4.7	
	Bangalore	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.2	0.2	0.5	0.4	1.2	0.4	
	Chennai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.5	0.2	1.3	1.4	0.4	1.7	
East	Kolkata	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.6	0.0	0.3	1.2	0.5	0.7	
West	Ahmedabad urban	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.0	0.4	0.3	0.6	0.3	0.0	1.0	
	Aurangabad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.5	0.0	0.0	0.5	0.5	0.0	0.4	
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.6	0.0	0.0	0.0	4.0	0.0	0.0	
	Mumbai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.8	1.0	1.3	2.5	2.2	
	Pune	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.1	0.5	0.0	0.5	1.1	0.5	0.8	
Central	Wardha district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.6	1.5	1.6	3.3	1.2	
	Bhopal	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.3	0.4	0.0	1.9	1.7	0.0	0.0	1.8	0.0	
	Nagpur	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.4	0.6	0.2	0.9	0.8	0.9	0.6	0.0	2.1	
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.0	2.2	
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.2	2.9	2.3	3.1	4.3	
	<i>Aizawl district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.9	0.0	0.0	0.0	10.2	
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Tripura state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.2	0.6	0.4	1.6	0.7	2.5	
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	2.3	0.0	0.0	0.0	0.0	8.2	6.9	
	<i>Papumpare district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.4	0.0	2.7	2.0	3.4	15.8	10.6	12.1
	<i>East Khasi Hills district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.0	5.3	1.9	2.3	15.8	8.4	14.0
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	7.8	0.0	0.0	0.0	
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.4	0.6	0.8	0.0	0.0	0.0	1.6
	Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.7	1.8	0.0	1.7	0.0	0.0
Kamrup urban	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	1.4	1.9	2.7	3.3	0.0	7.6	0.0	

The highest age-specific incidence rate of lip cancer among females is in Meghalaya in the 65-69 years age group (15.8 per 100,000).



2.5.3: Tongue

Table – 2.5.3 (a) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Tongue (ICD-10: C01-C02)- Males

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.8	1.5	4.1	7.7	10.7	13.1	20.0	29.1	39.3	46.0	43.7	36.8
	Patiala district	0.0	0.2	0.0	0.0	0.2	0.8	2.7	2.5	6.6	8.5	15.4	15.5	22.4	17.5	14.8	21.8
South	Hyderabad district	0.0	0.0	0.0	0.0	0.5	2.1	6.9	9.9	14.7	20.6	16.7	17.6	21.1	19.9	33.1	10.1
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.5	2.6	5.0	6.7	10.0	11.8	17.8	19.2	29.3	28.5	17.8
	Thi'puram district	0.0	0.0	0.0	0.0	0.3	0.9	1.6	5.8	10.5	10.9	16.2	17.4	25.5	33.4	26.5	30.8
	Bangalore	0.0	0.0	0.0	0.1	0.4	0.6	1.9	2.3	5.3	6.7	13.5	15.6	19.7	26.0	26.7	20.5
	Chennai	0.0	0.0	0.1	0.1	0.3	1.7	4.2	10.0	12.3	16.1	20.3	21.7	24.7	32.9	29.6	26.0
East	Kolkata	0.0	0.0	0.0	0.0	0.5	1.6	4.2	5.0	7.5	8.7	10.1	13.2	13.8	15.5	13.6	18.3
West	Ahmedabad urban	0.0	0.0	0.1	0.1	0.8	2.3	8.4	17.8	17.9	24.5	24.7	26.7	38.5	38.1	31.7	24.0
	Aurangabad	0.0	0.0	0.0	0.3	0.0	1.3	8.1	9.0	14.0	13.6	12.1	11.1	20.0	25.5	7.2	17.6
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.1	1.5	4.7	5.9	9.2	6.0	6.1	9.2	12.9	15.9	6.0	10.0
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	2.3	1.2	4.9	4.5	6.9	0.0	8.7	12.8	15.3	2.6
	Mumbai	0.1	0.0	0.0	0.0	0.2	1.1	3.0	6.2	8.3	9.2	11.4	14.5	18.5	19.7	23.8	22.8
	Pune	0.0	0.0	0.0	0.0	0.2	0.5	1.8	4.4	8.6	11.6	11.1	11.3	13.3	15.3	14.2	15.9
Central	Wardha district	0.0	0.0	0.0	0.0	0.3	1.0	4.6	6.8	4.0	6.4	9.6	10.1	11.8	7.5	17.5	8.8
	Bhopal	0.0	0.0	0.0	0.0	1.3	2.9	8.9	15.2	13.0	16.2	24.6	21.5	34.1	22.8	29.3	20.9
	Nagpur	0.2	0.2	0.0	0.0	0.3	2.6	10.7	11.2	14.2	11.4	14.4	15.3	20.7	20.7	21.9	17.6
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.8	3.1	2.3	4.2	7.2	7.9	13.5	9.2
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	1.1	6.2	4.5	5.6	11.8	22.5	33.1	23.5
	Mizoram state	0.0	0.0	0.0	0.0	0.3	0.4	0.8	1.0	5.6	8.0	15.3	11.0	11.6	6.8	9.1	6.8
	<i>Aizawl district</i>	0.0	0.0	0.0	0.0	0.9	1.0	2.1	1.3	12.8	13.5	21.1	19.9	23.5	12.1	15.4	5.6
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	2.8	4.6	5.3	1.8	0.0	13.1	12.7	10.1
	Tripura state	0.0	0.0	0.0	0.1	0.2	0.2	0.8	1.5	3.3	7.6	10.1	15.2	23.8	21.9	20.3	21.1
	West Arunachal	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.7	2.8	2.7	2.2	14.2	16.7	7.9	7.0
	<i>Papumpare district</i>	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	3.9	0.0	9.9	35.8	0.0	59.5	0.0
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.9	3.6	8.7	15.7	27.0	35.4	31.2	37.8	27.0	30.4	21.4
	<i>East Khasi Hills district</i>	0.0	0.0	0.0	0.0	0.0	0.5	5.6	10.7	19.5	32.4	49.9	41.9	45.0	47.0	48.3	15.4
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.7	1.7	8.6	7.6	15.7	12.2	19.1	29.7	5.5
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.1	0.0	21.1	0.0	22.4	22.3
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.2	0.9	4.4	6.1	18.5	23.9	38.3	48.4	40.5	58.9	44.0
	Dibrugarh district	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.7	2.6	8.2	9.7	10.9	22.4	26.3	27.3	27.8
Kamrup urban	0.0	0.0	0.0	0.0	0.3	0.6	2.1	2.4	8.3	8.1	17.2	27.1	46.2	37.8	61.1	66.6	

The highest age-specific incidence rate of tongue cancer in the males is recorded in Kamrup urban in the 75 plus age group (66.6 per 100,000)



Table -2.5.3 (b) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Tongue (ICD-10: C01-C02) – Females

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.2	0.4	0.7	1.9	2.5	4.1	7.9	10.5	14.7	12.0	15.1	23.9
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.6	1.8	5.8	2.7	1.7	2.0	4.0	5.8	4.6
South	Hyderabad district	0.0	0.0	0.0	0.0	0.1	0.8	0.4	2.2	4.6	7.9	6.5	10.5	11.8	14.3	16.2	9.1
	Kollam district	0.0	0.0	0.0	0.0	0.2	0.4	0.2	1.0	2.3	3.1	4.4	6.7	8.6	11.9	18.1	16.6
	Thi'puram district	0.0	0.0	0.0	0.2	0.0	0.4	0.2	0.4	1.9	3.6	2.9	8.0	8.2	18.6	12.1	13.8
	Bangalore	0.0	0.0	0.0	0.1	0.0	0.2	0.7	0.6	1.0	1.7	4.6	4.2	7.4	5.2	6.2	8.5
	Chennai	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.1	3.1	4.1	6.8	7.3	10.7	8.1	13.7	9.1
East	Kolkata	0.0	0.0	0.0	0.0	0.0	0.9	0.3	1.6	1.8	3.0	5.0	6.6	8.0	9.8	9.2	6.0
West	Ahmedabad urban	0.0	0.0	0.0	0.2	0.3	0.9	1.3	2.9	5.8	7.1	9.7	10.5	13.2	13.6	10.9	7.0
	Aurangabad	0.0	0.0	0.0	0.0	0.3	0.0	1.1	2.4	2.0	5.1	3.2	7.7	9.2	11.9	11.2	3.5
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	2.8	3.3	3.8	3.7	6.2	5.5	6.1	1.2
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	2.6	3.2	0.0	6.7	1.8	10.0	0.0	2.7
	Mumbai	0.0	0.0	0.0	0.1	0.1	0.3	0.4	1.2	1.5	4.8	5.1	6.1	7.8	9.8	11.8	13.2
	Pune	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.9	1.8	2.8	6.0	4.9	5.7	9.5	11.8	8.8
Central	Wardha district	0.0	0.0	0.0	0.0	0.6	0.0	0.8	2.7	2.5	3.5	2.5	5.7	9.3	3.2	2.2	2.3
	Bhopal	0.0	0.0	0.0	0.0	0.2	0.5	3.3	2.6	3.4	10.1	10.8	9.3	18.1	21.8	17.8	8.5
	Nagpur	0.0	0.0	0.0	0.2	0.2	0.8	0.9	1.6	5.3	5.7	8.2	9.7	9.9	10.9	4.2	9.7
North East	Manipur state	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.4	0.0	0.2	1.2	1.2	4.0	3.1	0.0	2.2
	Imphal West district	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	1.2	1.4	1.8	6.9	3.5	0.0	2.9
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	2.4	3.5	4.4	4.5	9.3	13.0
	Aizawl district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	6.0	8.6	7.4	5.6	7.4	15.3
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.9	0.0	0.0	6.6	4.6	0.0	0.0	5.5	8.6
	Tripura state	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	0.9	2.0	2.1	5.8	4.3	4.7	10.7	4.0
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2.3	5.1	5.4	3.1	0.0	0.0	0.0
	Papumpare district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	5.0	26.3	15.6	18.2	0.0	0.0	0.0
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.4	2.5	1.5	8.8	6.0	11.5	7.9	14.8	12.1
	East Khasi Hills district	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.7	2.5	1.0	9.3	5.8	16.1	12.7	4.2	19.7
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.0	9.3	9.5	2.9	3.9	0.0	0.0	0.0
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0	11.4	0.0	0.0	0.0
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.2	1.8	2.1	2.9	10.3	10.0	13.9	20.7	19.2	8.7	4.7
	Dibrugarh district	0.0	0.0	0.0	0.0	0.3	0.0	0.4	0.4	1.3	2.0	3.5	3.7	8.3	11.9	7.2	4.5
Kamrup urban	0.0	0.0	0.0	0.0	0.0	0.6	1.3	1.0	3.2	3.2	4.5	10.7	10.9	21.2	28.0	21.3	

The highest age-specific incidence rate of tongue cancer among females is in Kamrup urban in the 70-74 years age group (28.0 per 100,000).



2.5.4 Mouth

Table -2.5.4 (a) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Mouth (ICD-10: C03-C06) - Males

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.1	0.5	2.3	6.4	10.0	15.1	17.2	23.9	32.2	38.0	42.0	44.0	34.2
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.4	1.9	4.1	4.8	7.6	14.2	24.9	22.4	14.7	16.9	14.2
South	Hyderabad district	0.2	0.0	0.0	0.0	1.0	3.9	10.5	18.3	26.7	34.9	27.9	33.8	35.2	29.9	33.1	15.2
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.6	6.4	8.7	16.3	18.0	32.1	33.1	38.2	41.3
	Thi'puram district	0.0	0.0	0.0	0.3	0.2	0.2	1.4	1.4	3.6	9.3	16.6	20.1	30.4	36.3	42.2	49.0
	Bangalore	0.0	0.0	0.0	0.0	0.1	0.5	1.4	3.6	5.2	8.2	12.8	18.0	17.1	26.8	18.6	21.4
	Chennai	0.0	0.0	0.1	0.2	0.4	1.5	6.0	11.5	19.5	22.1	21.9	21.5	31.0	38.1	31.9	35.6
East	Kolkata	0.0	0.0	0.0	0.0	0.1	1.6	4.2	5.9	9.7	12.0	17.4	15.4	17.7	25.5	26.2	20.2
West	Ahmedabad urban	0.0	0.0	0.0	0.0	1.3	3.6	14.4	30.5	40.0	49.0	55.6	53.4	66.3	57.9	53.9	32.5
	Aurangabad	0.0	0.3	0.3	0.3	0.6	3.1	9.5	13.7	17.9	28.8	23.5	19.4	31.8	49.5	31.1	22.0
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.4	1.7	4.4	8.3	12.4	12.8	11.5	14.6	12.9	15.6	9.2	9.6
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.9	3.4	6.0	7.4	6.0	8.7	20.4	24.0	21.3	17.9	2.6
	Mumbai	0.0	0.1	0.1	0.0	0.2	0.9	3.6	9.1	15.7	18.7	25.8	31.6	38.7	41.2	36.3	29.5
	Pune	0.0	0.0	0.0	0.0	0.1	0.9	2.8	8.6	11.2	18.3	17.1	30.0	28.9	43.2	34.2	30.0
Central	Wardha district	0.0	0.0	0.0	0.3	0.6	2.0	9.9	8.7	20.1	22.8	19.7	26.6	35.5	30.0	44.4	23.1
	Bhopal	0.0	0.0	0.0	0.2	2.1	5.3	15.3	24.7	22.8	30.7	43.7	52.1	45.2	50.7	61.9	40.3
	Nagpur	0.2	0.0	0.4	0.3	0.9	5.8	14.7	19.0	29.2	27.0	34.3	33.7	34.6	36.0	35.2	23.2
North East	Manipur state	0.0	0.0	0.0	0.0	0.1	0.1	0.5	1.1	1.2	1.2	3.5	3.4	6.7	11.8	6.8	6.1
	Imphal West district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.2	0.0	4.5	3.7	9.4	30.1	11.0	13.4
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.5	6.3	6.0	13.7	15.4	17.3	9.1	15.1	15.9
	Aizawl district	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	4.8	6.8	21.1	22.8	23.5	12.1	30.9	22.4
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.4	3.7	4.6	8.0	20.0	22.3	9.8	8.4	27.0
	Tripura state	0.0	0.1	0.1	0.1	0.0	0.2	1.4	1.8	2.8	7.8	11.4	17.5	20.2	22.4	27.0	21.7
	West Arunachal	0.0	0.0	0.0	0.0	0.5	0.5	0.6	2.8	3.7	6.6	5.3	6.5	8.5	5.6	0.0	0.0
	Papumpare district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.1	6.2	7.9	12.1	29.6	17.9	0.0	0.0	0.0
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.2	1.2	3.8	9.5	17.0	29.8	30.2	40.3	36.6	52.5	33.3
	East Khasi Hills district	0.0	0.0	0.0	0.0	0.0	0.5	1.2	4.3	8.5	22.3	48.5	44.0	52.9	64.1	72.4	46.1
	Nagaland	0.0	0.0	0.0	0.0	0.0	1.5	1.2	0.0	6.9	8.6	9.1	29.2	18.3	38.2	14.9	11.0
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	0.0	15.0	6.4	11.8	0.0	16.1	22.4	22.3
	Cachar district	0.0	0.0	0.0	0.0	0.2	1.2	2.1	6.5	9.1	15.4	20.9	33.7	33.6	54.8	50.7	44.0
	Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.6	1.1	3.7	3.7	8.7	16.9	15.0	26.4	37.9	47.8	38.4
	Kamrup urban	0.0	0.0	0.0	0.3	0.6	1.0	2.8	6.5	12.1	15.8	26.9	45.5	60.7	58.9	72.0	68.8

The highest age-specific incidence rate of mouth cancer among males is recorded in East Khasi Hills district in the 70-74 years age group (72.4 per 100,000).



Table – 2.5.4 (b) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Mouth (ICD-10: C03-C06) - Females

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.4	0.6	1.0	1.9	3.1	3.0	7.8	8.4	14.1	13.7	13.1	23.1
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.9	1.7	5.3	2.2	5.9	7.2	7.0	7.4
South	Hyderabad district	0.0	0.0	0.0	0.0	0.1	0.3	0.4	1.6	4.8	8.2	9.0	18.4	20.3	20.4	19.1	14.6
	Kollam district	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.7	1.9	2.7	5.9	9.0	17.6	23.8	21.9	40.6
	Thi'puram district	0.0	0.0	0.3	0.0	0.0	0.0	0.2	0.6	0.6	1.7	3.5	6.5	11.3	20.3	26.6	26.1
	Bangalore	0.0	0.1	0.0	0.0	0.3	0.2	0.7	1.7	3.5	8.6	13.3	17.2	25.5	33.8	49.9	34.6
	Chennai	0.1	0.0	0.1	0.0	0.0	0.1	0.5	1.0	4.2	6.6	6.6	13.9	19.0	23.6	20.5	25.6
East	Kolkata	0.0	0.0	0.0	0.1	0.4	0.8	0.4	1.7	1.5	4.6	9.2	8.8	7.7	13.8	9.7	13.4
West	Ahmedabad urban	0.0	0.0	0.0	0.0	0.1	0.9	1.8	4.0	5.6	8.4	10.6	9.1	13.9	15.6	14.3	13.0
	Aurangabad	0.0	0.0	0.0	0.0	0.5	0.3	1.1	2.0	2.5	7.0	9.6	4.4	8.1	14.8	6.7	3.5
	Osmanabad & Beed	0.0	0.0	0.0	0.1	0.1	0.0	0.3	1.0	2.0	2.1	3.2	4.1	5.9	4.9	7.4	4.3
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	1.6	7.6	4.5	5.5	8.0	5.7	8.0
	Mumbai	0.1	0.0	0.0	0.1	0.1	0.3	0.9	2.1	5.2	6.8	7.7	12.5	16.5	21.1	19.3	19.5
	Pune	0.0	0.0	0.2	0.0	0.0	0.5	1.0	1.4	2.8	5.6	8.2	10.6	15.9	20.0	21.4	17.7
Central	Wardha district	0.0	0.0	0.0	0.7	0.3	0.0	2.0	2.7	4.6	5.4	11.8	8.9	12.3	26.5	20.0	13.9
	Bhopal	0.0	0.0	0.0	0.0	0.0	1.0	1.5	3.3	6.1	8.8	16.5	20.3	21.6	25.7	35.6	19.9
	Nagpur	0.0	0.2	0.0	0.6	0.9	0.6	1.4	3.6	8.4	10.0	13.4	11.4	13.9	21.8	27.0	16.5
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.4	1.2	1.9	2.0	2.0	4.5	3.1	7.4	4.4
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	3.1	2.4	1.4	1.8	6.9	7.0	14.2	5.7
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.7	6.1	4.9	6.9	7.3	9.0	9.3	23.8
	<i>Aizawl district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.6	12.5	2.0	2.9	18.4	11.2	0.0	45.8
	Sikkim state	0.0	0.0	0.0	0.0	1.2	0.0	0.8	1.8	2.2	6.7	9.9	9.3	6.0	14.6	10.9	8.6
	Tripura state	0.0	0.1	0.0	0.1	0.0	0.1	0.8	3.1	3.1	4.9	9.7	13.6	16.3	13.5	13.6	12.5
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	3.5	1.7	2.7	6.1	5.5	0.0	13.9
	<i>Papumpare district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.0	10.1	8.8	15.6	36.4	0.0	0.0	65.6
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.2	0.9	2.0	5.4	13.0	18.3	22.9	32.1	57.0	61.4	60.3
	<i>East Khasi Hills district</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.2	3.3	6.6	11.1	19.9	27.0	39.0	69.7	58.5	64.6
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.6	2.1	5.3	5.7	8.8	0.0	5.3	8.0	5.3
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	9.7	11.7	0.0	14.0	0.0	0.0	0.0	0.0
	Cachar district	0.0	0.0	0.0	0.0	0.4	0.7	2.3	4.8	7.4	7.8	20.5	17.0	22.4	24.3	31.4	17.2
Dibrugarh district	0.0	0.0	0.0	0.3	0.0	0.0	0.4	2.6	3.1	7.9	9.1	10.2	12.5	11.9	7.2	4.5	
Kamrup urban	0.0	0.0	0.0	0.4	0.6	1.2	0.7	1.6	4.0	9.7	16.1	17.8	26.2	23.0	48.4	55.4	

The highest age-specific incidence rate of mouth cancer among females is recorded in East Khasi Hills district in the 65-69 years age group (69.7 per 100,000).



2.5.5 Oropharynx

Table – 2.5.5 (a) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Oropharynx (ICD-10: C10) - Males

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	
North	Delhi	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.9	2.0	4.0	7.5	9.5	14.1	11.9	8.9	
	Patiala district	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.3	0.0	0.0	0.4	2.2	1.1	2.8	5.3	0.9	
South	Hyderabad district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.2	1.9	2.3	1.8	1.8	2.8	6.1	
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.8	2.6	4.8	6.5	12.8	14.4	12.5	8.4	
	Thi'puram district	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.1	2.4	3.7	5.9	12.1	15.8	12.4	10.7	
	Bangalore	0.0	0.2	0.0	0.0	0.1	0.0	0.2	0.1	0.4	1.1	2.0	5.6	7.3	8.1	6.4	5.2	
	Chennai	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.7	1.7	6.6	6.3	9.5	10.0	7.4	7.6	
East	Kolkata	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.7	1.6	1.2	1.9	2.8	3.0	
West	Ahmedabad urban	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	1.0	1.2	2.3	2.9	2.5	2.3	1.9	
	Aurangabad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	3.5	1.6	4.8	0.0	
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4	0.7	0.9	0.0	1.7	
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	
	Mumbai	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.6	1.1	3.6	3.3	4.8	3.3	4.7
	Pune	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	1.3	2.7	3.9	2.8	4.2	4.0
Central	Wardha district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.1	0.7	0.0	1.9	3.5	0.0	
	Bhopal	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3	0.7	2.0	1.1	1.5	5.1	6.3	3.3	4.5	
	Nagpur	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.7	0.3	0.7	1.8	3.3	1.9	2.4	
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.6	0.0	1.0	1.6	2.3	1.5	
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	4.7	7.5	5.5	3.4	
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	1.9	2.7	2.4	2.2	1.4	2.3	3.0	0.0	
	<i>Aizawl district</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.3	1.6	5.1	2.1	2.8	0.0	6.1	0.0	0.0	
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.3	0.0	0.0	0.0	4.2	6.8	
	Tripura state	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.4	2.6	1.2	6.3	4.0	10.4	6.0	3.6	
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	2.8	0.0	0.0	0.0	
	<i>Papumpare district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1	0.0	17.9	0.0	0.0	0.0	
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.8	2.1	5.0	4.9	9.4	6.3	7.7	8.3	2.4	
	<i>East Khasi Hills district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.6	3.6	2.5	8.1	5.7	12.6	7.9	12.8	12.1	5.1	
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	5.4	7.6	2.2	0.0	14.3	0.0	0.0	
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	10.6	16.1	0.0	0.0	
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3	0.7	3.1	7.5	9.9	6.2	11.9	14.7	12.6	
	Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.4	1.2	5.0	3.0	8.2	0.0	8.5	
Kamrup urban	0.0	0.0	0.0	0.0	0.0	0.3	0.0	2.1	1.5	8.1	9.2	20.5	17.2	18.1	30.5	25.8		

The highest age-specific incidence rate of oropharyngeal cancer is recorded in Kamrup urban among males in the 70-74 years age group (30.5 per 100,000).



Table – 2.5.5 (b) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Oropharynx (ICD-10: C10)- Females

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	
North	Delhi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.3	0.5	0.6	1.3	2.4	1.6	2.5	
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	1.5	0.8	0.0	0.0	
South	Hyderabad district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.8	1.1	0.0	2.0	0.0	2.7	
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.6	0.4	0.0	0.7	
	Thi'puram district	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.5	0.7	0.7	1.0	1.4	1.6	
	Bangalore	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.2	0.4	1.1	2.4	1.2	0.9	
	Chennai	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.6	0.6	0.8	0.4	2.7	1.7	2.7	
East	Kolkata	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.2	0.5	0.0	0.0	1.5	1.5	
West	Ahmedabad urban	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.3	0.6	1.0	0.4	0.0	
	Aurangabad	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Mumbai	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.2	0.1	0.2	1.0	0.9	1.0	3.1
	Pune	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.4	1.0	0.6	0.5	0.0	1.1	2.4
Central	Wardha district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.8	0.0	0.0	0.0	0.0	
	Bhopal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	
	Nagpur	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.5	0.0	0.8	0.4	0.6	0.0	0.0	
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	<i>Aizawl district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	4.3	
	Tripura state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.3	0.4	0.5	2.1	0.5	
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	3.1	5.5	0.0	6.9	
	<i>Papumpare district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.6	18.2	36.8	0.0	32.8	
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	2.3	0.0	0.0	1.5	
	<i>East Khasi Hills district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0	2.8	
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.7	0.4	0.6	0.8	3.3	2.6	1.7	3.1
	Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	2.1	1.8	1.0	1.7	2.4	2.3
Kamrup urban	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	1.3	1.2	1.4	3.2	5.3	2.2	12.4	17.8	12.8	

The highest age-specific incidence rate of oropharyngeal cancer among females is in the 65-69 years age group (36.8 per 100,000) in Papumpare district.



2.5.6 Hypopharynx

Table – 2.5.6 (a) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Hypopharynx (ICD-10: C12-C13) - Males

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.9	2.0	3.6	7.9	12.1	15.9	17.9	18.1
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.3	4.9	7.2	8.2	13.3	6.3	8.5
South	Hyderabad district	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	1.0	1.2	3.3	6.5	10.5	11.8	9.7	11.2
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.2	5.8	5.5	9.6	13.0	15.3	16.2
	Thi'puram district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.7	3.7	4.5	10.8	11.0	10.8	11.2
	Bangalore	0.0	0.0	0.0	0.0	0.2	0.3	0.2	0.6	0.9	2.5	6.4	12.4	18.9	28.7	21.5	28.6
	Chennai	0.0	0.2	0.1	0.2	0.0	0.2	0.4	1.0	1.5	2.8	7.2	10.7	15.2	21.1	22.2	24.8
East	Kolkata	0.0	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.8	1.4	4.9	5.7	6.8	13.0	8.4	9.1
West	Ahmedabad urban	0.0	0.0	0.0	0.0	0.1	0.1	0.2	1.4	2.1	5.0	5.9	9.5	11.9	21.1	19.0	20.5
	Aurangabad	0.0	0.0	0.0	0.0	0.3	0.0	0.4	0.0	2.6	1.6	6.4	8.3	8.2	20.7	23.9	13.2
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.5	0.5	2.1	4.5	8.5	6.8	10.5
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	0.0	0.0	4.5	2.2	12.8	17.9	7.7
	Mumbai	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	1.7	3.2	6.7	10.8	14.4	16.2	22.6
	Pune	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5	1.2	1.8	3.3	5.3	8.4	13.2	14.5
Central	Wardha district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.5	2.2	0.8	7.5	4.7	7.7
	Bhopal	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.5	2.8	3.6	7.6	11.5	22.2	15.2	37.5	17.9
	Nagpur	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	1.3	2.2	1.9	6.0	8.1	10.7	10.5	10.4
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.2	1.7	6.1	4.8	5.5	12.4	8.4
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	1.5	9.4	4.7	11.3	22.0	10.1
	Mizoram state	0.0	0.0	0.0	0.0	0.7	0.4	0.8	4.1	11.9	13.3	45.9	45.1	53.4	34.0	33.2	27.3
	<i>Aizawl district</i>	0.0	0.0	0.0	0.0	1.8	0.0	1.1	5.3	19.2	15.2	84.4	54.0	86.1	60.7	77.2	61.5
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	1.2	2.7	3.6	12.4	9.8	12.7	13.5
	Tripura state	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.8	3.0	4.5	10.1	15.5	23.1	26.0	28.5	22.9
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	3.7	0.9	5.3	8.7	11.4	39.0	7.9	0.0
	<i>Papumpare district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	12.4	0.0	24.2	9.9	35.8	109.6	0.0	0.0
	Meghalaya	0.0	0.0	0.0	0.0	0.0	1.6	4.5	11.1	21.9	34.0	43.0	51.0	70.6	57.8	55.3	49.9
	<i>East Khasi Hills district</i>	0.0	0.0	0.0	0.0	0.0	2.4	6.2	16.4	29.7	51.6	59.9	69.1	100.6	85.5	96.6	56.4
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.5	1.2	3.7	5.2	19.3	33.4	24.7	39.6	43.0	44.6	38.5
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	15.1	0.0	0.0	15.0	6.4	11.8	10.6	16.1	44.8	22.3
	Cachar district	0.0	0.0	0.0	0.0	0.2	0.2	1.8	3.6	6.1	21.3	26.9	49.6	57.0	83.5	63.8	83.2
Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.7	5.5	5.6	15.5	26.6	30.1	46.7	54.3	91.1	66.2	
Kamrup urban	0.0	0.0	0.0	0.0	0.0	0.6	2.8	6.8	14.4	27.7	40.9	74.8	78.8	107.2	128.7	141.9	

The highest age-specific incidence rate of cancer of hypopharynx is recorded in Kamrup urban among males in the 75 plus years age group (141.9 per 100,000)



Table – 2.5.6 (b) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Hypopharynx (ICD-10: C12-C13) - Females

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	1.6	1.6	2.2	1.7	2.3	5.3
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.3	3.0	1.3	1.7	2.0	1.6	0.0	3.7
South	Hyderabad district	0.0	0.0	0.0	0.0	0.1	0.5	1.7	1.8	2.0	2.9	2.0	4.2	5.2	4.1	8.8	2.7
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.2	0.0	0.2	0.2	0.0	1.9	0.9	0.5	0.4
	Thi'puram district	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.3	0.3	0.9	1.1	1.2	0.3	0.0	0.6
	Bangalore	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.4	1.6	2.2	1.7	3.6	3.4	2.0	3.1	6.3
	Chennai	0.2	0.0	0.0	0.0	0.2	0.2	0.7	1.6	2.7	3.5	4.1	4.3	4.5	4.1	5.5	4.7
East	Kolkata	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.6	0.7	1.1	1.2	2.0	1.5
West	Ahmedabad urban	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.9	0.7	1.6	2.4	3.2	3.2	2.0	0.9	3.3
	Aurangabad	0.0	0.0	0.0	0.3	0.0	0.0	0.8	0.4	0.0	1.3	2.4	3.3	1.2	0.0	2.2	1.7
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.7	0.9	0.3	0.8	1.1	2.6	0.4
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	1.8	0.0	5.7	0.0
	Mumbai	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.5	1.0	1.7	2.0	1.0	3.0	3.1	3.7	3.1
	Pune	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	1.1	1.4	2.2	1.2	3.0	1.1	2.0
Central	Wardha district	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.8	1.3	0.0	1.9	0.8	0.8	2.4	2.2	1.2
	Bhopal	0.0	0.0	0.0	0.2	0.0	0.0	0.3	0.0	1.1	2.3	1.3	0.8	0.0	0.0	0.0	2.8
	Nagpur	0.0	0.0	0.0	0.0	0.0	0.3	0.9	0.7	1.4	1.9	2.1	1.2	2.2	1.9	1.7	4.1
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.9	0.4	0.0	0.8	1.1	0.7
	Imphal West district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.4	1.8	0.0	0.0	0.0	2.9
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.5	2.6	2.0	4.1	3.5	5.8	6.8	0.0	0.0
	Aizawl district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	3.1	3.1	8.0	0.0	11.1	11.2	0.0	0.0
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	3.0	0.0	5.5	0.0
	Tripura state	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.6	0.7	1.2	2.6	1.6	2.1	0.7	0.5
	West Arunachal	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	1.7	0.0	3.1	0.0	8.2	6.9
	Papumpare district	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.8
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.9	3.5	8.8	6.0	11.5	9.5	8.5	4.5
	East Khasi Hills district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	4.9	2.0	10.6	7.7	13.8	0.0	12.5	8.4
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.0	2.7	1.9	0.0	15.6	0.0	0.0	0.0
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Cachar district	0.0	0.0	0.0	0.0	0.2	0.0	0.6	1.5	3.3	3.4	6.7	11.6	10.8	11.5	13.9	4.7
Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	3.1	3.0	4.9	10.2	15.6	11.9	9.6	2.3	
Kamrup urban	0.0	0.5	0.0	0.0	0.0	0.3	0.0	1.3	1.2	6.9	5.1	8.9	13.1	37.1	30.6	8.5	

The highest age-specific incidence rate of cancer of hypopharynx among females is in the 65-69 years age group (37.1 per 100,000) in Kamrup urban.



2.5.7 Pharynx unspecified

Table – 2.5.7 (a) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Pharynx Unspecified (ICD-10: C14) - Males

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.3	0.4	0.6	1.2	1.1	3.4	2.5	2.3	1.5
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.3	0.0	0.3	0.8	1.1	2.7	2.1	2.1	0.0
South	Hyderabad district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.9	0.6	0.0	0.0	0.0
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.3	1.0	2.1	1.1
	Thi'puram district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.0	0.4	0.5	1.9
	Bangalore	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.3	2.5	1.7	2.0	1.6	1.2	4.3
	Chennai	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.6	2.1	2.1	2.9	3.3	4.6	8.4
East	Kolkata	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.4	0.8	1.4	1.2	1.5	4.2	6.8
West	Ahmedabad urban	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.7	0.6	0.8	3.0	2.3	3.5	4.4	4.5	4.3
	Aurangabad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.4	1.8	0.0	3.2	0.0	0.0
	Osmanabad & Beed	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.8	1.8	0.0	0.9	1.6	1.3
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	5.1	2.6
	Mumbai	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.6	0.8	2.0	1.9	3.4	4.3	7.4
	Pune	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	1.0	0.8	1.6	2.4	3.2
Central	Wardha district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	1.9	0.0	1.1
	Bhopal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.5	1.5	0.0	0.0	0.0	1.5
	Nagpur	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.2	0.3	2.2	1.3	4.7	4.8	4.0
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.4	0.0	0.0	0.0	0.0
	Imphal West district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	3.3	2.4	12.1	1.4	0.0	6.0	0.0
	Aizawl district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.7	4.2	17.1	0.0	0.0	7.7	0.0
	Sikkim state	0.0	0.0	0.0	0.0	0.5	0.5	0.6	0.0	0.0	1.2	6.6	7.3	7.4	16.3	16.9	33.8
	Tripura state	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.5	1.0	3.7	3.3	4.2	3.8	4.8
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.9	0.0	0.0	2.8	5.6	0.0	0.0
	Papumpare district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	3.9	0.0	0.0	0.0	0.0	0.0	0.0
	Meghalaya	0.0	0.0	0.0	0.0	0.2	0.2	0.6	2.1	3.7	8.0	14.6	12.5	18.9	21.2	13.8	21.4
	East Khasi Hills district	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.1	4.2	9.1	18.5	8.4	18.5	25.6	18.1	15.4
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.7	1.7	4.3	6.1	6.7	12.2	4.8	0.0	5.5
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	0.0	0.0	0.0
	Cochar district	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.7	1.6	0.5	2.0	6.2	3.6	8.2	6.3
	Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	2.3	4.2	4.2	10.2	19.7	18.2
Kamrup urban	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	2.1	8.1	11.0	9.1	24.2	28.4	38.7

The highest age-specific incidence rate of cancer of pharynx unspecified is recorded in Kamrup urban among males in the 75 plus years age group (38.7 per 100,000).



Table – 2.5.7 (b) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Pharynx Unspecified (ICD-10: C14) - Females

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+	
North	Delhi	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.4	0.6	0.6	0.5	1.3	0.3	
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	0.0	2.0	0.0	1.2	0.0	
South	Hyderabad district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.5	0.0	
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.5	0.4	
	Thi'puram district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	
	Bangalore	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.3	0.2	0.9	0.3	0.4	2.5	1.3	
	Chennai	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.5	0.3	0.8	2.0	1.7	2.1	5.1	
East	Kolkata	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.7	0.3	0.4	1.5	2.6	
West	Ahmedabad urban	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.5	0.2	1.0	0.0	0.7	
	Aurangabad	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.0	0.0	0.0	0.0	2.2	0.0	
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3	0.0	0.5	0.3	0.0	0.4	
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	
	Mumbai	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.4	0.2	0.3	0.5	0.7	1.0	3.8
	Pune	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.8	0.7	0.4	0.5	0.8
Central	Wardha district	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.4	0.5	0.6	0.0	0.0	0.0	0.0	0.0	
	Bhopal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.0	0.0	0.0	0.0	0.0	
	Nagpur	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.6	0.8	0.0	0.6	0.0	1.4	
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.0	0.0	0.7	
	Imphal West district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	2.9	
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	
	Aizawl district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.9	0.0	1.3	0.0	2.3	3.0	3.6	10.9	21.4	
	Tripura state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.0	0.0	0.0	0.5	
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	2.7	0.0	0.0	8.2	0.0	
	Papumpare district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	15.6	0.0	0.0	51.5	0.0	
	Meghalaya	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.3	1.2	0.5	1.4	3.0	3.4	1.6	2.1	3.0	
	East Khasi Hills district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.8	0.0	1.3	1.9	2.3	3.2	4.2	5.6	
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.7	0.4	0.0	1.5	0.8	1.3	0.0	3.1
Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.4	1.8	4.2	0.0	0.0	2.3	
Kamrup urban	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	1.8	2.6	2.7	2.2	0.0	7.6	10.7	

The highest age-specific incidence rate of cancer of pharynx unspecified among females is in the 70-74 years age group (51.5 per 100,000) in Papumpare district.



2.5.8 Oesophagus

Table – 2.5.8 (a) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Oesophagus (ICD-10: C15) - Males

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.2	0.1	0.7	1.7	4.0	7.0	15.3	21.9	32.3	34.2	44.7	39.5
	Patiala district	0.0	0.0	0.6	0.2	0.0	0.8	1.0	5.7	14.4	16.7	25.2	42.1	47.6	56.7	59.2	69.3
South	Hyderabad district	0.0	0.0	0.0	0.0	0.2	0.3	0.2	0.6	2.2	4.6	6.7	7.4	13.5	16.3	22.1	24.3
	Kollam district	0.0	0.0	0.0	0.2	0.0	0.2	0.7	0.6	1.1	3.5	6.5	13.5	23.1	19.7	37.5	35.1
	Thi'puram district	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	1.8	3.2	5.6	11.9	21.9	26.8	27.0	31.7
	Bangalore	0.0	0.1	0.1	0.0	0.1	0.1	0.4	0.5	1.6	5.3	13.1	22.8	34.3	47.7	50.6	54.2
	Chennai	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.2	1.1	3.2	10.5	14.0	22.0	22.6	26.8	42.0
East	Kolkata	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.4	1.3	3.3	6.5	7.5	12.9	17.0	20.6	21.7
West	Ahmedabad urban	0.0	0.1	0.0	0.0	0.1	0.3	0.8	1.2	3.8	7.4	12.1	17.2	24.9	36.2	35.8	27.5
	Aurangabad	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.4	4.4	7.1	10.7	14.8	25.9	38.3	28.7	48.3
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.9	1.6	4.5	8.5	11.8	12.8	12.5	15.3
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	1.2	3.0	3.5	11.4	15.3	29.8	20.5	43.6
	Mumbai	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.6	1.0	3.1	6.7	11.2	16.9	22.9	32.0	47.0
	Pune	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	1.0	2.6	4.0	10.5	19.5	22.0	31.1	35.7
Central	Wardha district	0.0	0.0	0.0	0.3	0.0	0.0	1.5	1.9	1.6	3.7	10.6	16.5	16.1	23.5	29.2	30.9
	Bhopal	0.0	0.0	0.0	0.0	0.2	0.2	0.6	2.2	2.1	4.0	15.3	18.4	22.2	33.0	27.7	19.4
	Nagpur	0.0	0.0	0.2	0.0	0.2	0.0	1.0	1.6	2.3	6.2	12.0	13.1	29.2	27.4	50.4	42.4
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	1.7	1.7	8.7	13.0	14.4	22.8	28.2	23.0
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.4	2.5	9.1	15.0	28.2	45.1	55.1	23.5
	Mizoram state	0.0	0.0	0.0	0.0	0.3	0.4	1.6	10.8	30.0	82.0	122.4	152.9	101.1	111.1	87.6	63.7
	<i>Aizawl district</i>	0.0	0.0	0.0	0.0	0.9	1.0	3.2	18.6	40.0	113.4	202.6	275.9	156.5	164.0	123.5	61.5
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	2.8	10.4	10.6	12.7	37.1	29.4	88.6	54.1
	Tripura state	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.9	3.0	7.2	15.5	30.8	34.5	28.6	39.1	30.1
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.7	3.7	15.0	26.6	21.6	62.6	44.5	31.4	35.0
	<i>Papumpare district</i>	0.0	0.0	0.0	0.0	0.0	0.0	5.5	3.0	3.1	43.2	66.5	29.6	160.9	146.1	59.5	85.9
	Meghalaya	0.0	0.0	0.0	0.0	0.4	0.5	3.6	26.4	77.4	146.4	186.6	214.5	219.4	192.7	177.0	166.3
	<i>East Khasi Hills</i>	0.0	0.0	0.0	0.0	0.4	0.5	5.6	40.0	105.1	208.5	252.5	276.4	320.2	286.4	199.2	235.7
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	16.5	21.5	38.0	56.2	64.0	57.3	74.4	82.6
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	25.5	35.4	10.6	32.1	67.2	89.1
	Cachar district	0.0	0.0	0.0	0.0	0.7	1.2	2.1	5.9	13.5	24.8	34.8	50.9	67.2	81.1	99.8	65.9
	Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.4	5.5	6.9	20.5	31.5	47.6	69.1	88.9	102.4	98.2
	Kamrup urban	0.0	0.0	0.0	0.0	0.0	0.6	3.2	6.5	20.4	35.8	72.2	107.0	108.7	205.4	194.2	202.0

The highest age-specific incidence rate of cancer of oesophagus is recorded in East Khasi Hills district among males in the 60-64 years age group (320.2 per 100,000).



Table – 2.5.8 (b) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Oesophagus (ICD-10: C15)- Females

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.1	0.4	0.3	0.9	2.5	5.3	8.5	11.4	17.9	18.4	26.9	26.4
	Patiala district	0.0	0.3	0.0	0.0	0.2	1.1	1.8	2.5	10.1	9.1	32.3	21.7	29.8	48.2	42.1	35.9
South	Hyderabad district	0.0	0.0	0.0	0.0	0.0	0.3	0.6	1.8	2.6	5.6	4.1	11.6	11.8	18.3	17.6	18.3
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.5	2.4	3.7	6.2	11.1	11.0	15.2
	Thi'puram district	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0	1.0	1.4	1.5	4.8	7.6	4.2	8.2
	Bangalore	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.8	2.5	7.0	9.5	15.0	20.0	32.2	41.8	43.1
	Chennai	0.0	0.0	0.0	0.0	0.3	0.5	1.1	2.2	2.8	5.0	5.1	7.1	14.5	18.2	23.9	23.6
East	Kolkata	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.7	1.3	2.1	4.5	4.1	7.7	11.8	17.2
West	Ahmedabad urban	0.0	0.0	0.0	0.1	0.1	0.5	0.5	1.1	3.5	4.1	7.4	9.4	11.7	18.2	18.7	14.6
	Aurangabad	0.0	0.0	0.0	0.0	0.3	0.6	0.0	0.0	2.0	2.5	6.4	9.9	8.1	19.3	26.8	12.2
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9	1.4	3.1	2.9	4.8	6.2	6.6	9.2	3.9
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.3	4.8	1.9	11.2	7.4	20.0	25.6	13.3
	Mumbai	0.1	0.0	0.0	0.0	0.1	0.3	0.7	0.9	3.3	3.1	4.2	8.3	12.4	17.1	22.7	31.6
	Pune	0.0	0.0	0.0	0.2	0.0	0.1	0.5	1.1	2.0	4.2	4.8	6.7	11.9	19.3	13.9	28.1
Central	Wardha district	0.0	0.0	0.0	0.0	0.3	0.4	0.4	0.4	3.8	5.4	8.1	6.5	13.1	21.6	22.2	10.4
	Bhopal	0.0	0.0	0.0	0.0	0.5	0.5	1.2	2.0	3.1	4.1	9.5	18.6	15.5	20.5	26.7	12.8
	Nagpur	0.2	0.0	0.0	0.4	0.5	0.2	0.7	2.1	3.1	5.9	7.0	7.7	14.8	18.6	17.7	17.2
North East	Manipur state	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.4	1.2	2.9	0.8	4.0	6.2	14.9	7.4
	Imphal West district	0.0	0.0	0.0	0.0	0.8	0.0	0.8	0.0	0.0	1.2	1.4	0.0	4.6	7.0	23.7	11.4
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	12.8	23.6	25.4	39.3	45.1	34.0	17.3
	Aizawl district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	18.8	27.9	37.1	44.3	73.0	44.5	25.4
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	6.7	9.9	16.2	12.0	50.9	49.3	21.4
	Tripura state	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.8	1.1	4.5	8.1	11.7	19.0	17.7	15.7	12.5
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.4	1.7	2.3	11.9	10.9	12.3	27.6	24.5	20.8
	Papumpare district	0.0	0.0	0.0	0.0	0.0	2.0	0.0	5.6	3.4	5.0	35.1	46.9	36.4	147.1	102.9	32.8
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.2	2.4	7.1	21.0	42.4	69.3	118.7	113.5	77.6	110.1	66.3
	East Khasi Hills district	0.0	0.0	0.0	0.0	0.0	0.0	3.6	9.4	32.8	56.4	95.7	169.7	165.1	120.3	175.5	109.5
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	13.3	8.8	15.6	16.0	24.1	10.5
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	27.3	0.0	34.2	33.8	51.1	0.0
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.5	2.1	6.0	9.6	19.4	32.7	24.7	21.5	42.3	36.6	35.9
	Dibrugarh district	0.0	0.0	0.0	0.3	0.3	0.0	1.8	1.9	5.8	17.7	23.1	31.4	30.1	30.6	45.7	20.4
Kamrup urban	0.0	0.0	0.0	0.0	0.3	0.6	2.3	3.0	10.9	21.7	34.1	73.9	77.4	109.5	127.5	95.9	

The highest age-specific incidence rate of cancer of oesophagus among females is in the 70-74 years age group (175.5 per 100,000) in East Khasi Hills district.



2.5.9 Larynx

Table – 2.5.9 (a) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Larynx (ICD-10: C32) - Males

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.1	0.0	0.1	0.3	0.4	0.7	1.8	4.7	8.1	16.6	26.9	39.0	47.6	49.0	42.5
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.8	3.0	10.1	10.1	18.8	20.2	18.2	18.0	17.1
South	Hyderabad district	0.0	0.0	0.0	0.0	0.2	0.3	0.5	0.0	1.2	2.4	4.1	10.2	15.2	22.6	22.1	14.2
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.4	2.0	6.7	12.3	15.4	23.7	45.6	29.2	35.1
	Thi'puram district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.4	5.4	10.0	16.6	30.4	42.6	38.4	32.6
	Bangalore	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.6	1.4	3.0	6.7	14.1	15.4	30.6	27.3	23.3
	Chennai	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.7	1.9	4.3	9.8	18.5	23.6	25.9	28.2	34.4
East	Kolkata	0.0	0.0	0.0	0.1	0.1	0.5	0.3	0.6	2.0	5.4	10.7	13.4	18.4	25.9	26.6	30.4
West	Ahmedabad urban	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.6	2.1	4.4	7.5	9.8	17.1	14.8	21.3	15.9
	Aurangabad	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.8	2.2	6.0	15.7	19.4	18.8	19.1	26.3	15.4
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.2	1.5	1.1	1.6	2.8	5.6	8.5	10.0	13.5
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	5.2	6.8	8.7	10.6	7.7	15.4
	Mumbai	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.5	1.0	3.4	8.0	11.8	18.6	25.1	33.5	37.9
	Pune	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.3	1.3	2.6	6.0	8.8	18.1	19.9	35.3	30.0
Central	Wardha district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.8	0.5	3.6	10.1	11.3	14.0	6.6
	Bhopal	0.0	0.0	0.0	0.0	0.0	0.5	1.4	1.0	1.8	5.2	16.9	22.2	33.2	30.4	39.1	35.8
	Nagpur	0.0	0.2	0.0	0.0	0.2	0.2	0.5	0.5	1.9	6.7	10.4	16.5	28.3	38.0	30.4	20.0
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.2	2.2	3.2	7.3	9.6	20.5	13.5	15.3
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	4.9	4.5	3.7	23.5	15.0	11.0	33.5
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.5	6.3	5.3	21.7	18.7	23.1	29.5	21.1	11.4
	<i>Aizawl district</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.3	8.0	3.4	33.8	39.8	23.5	42.5	30.9	11.2
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.3	5.3	3.6	14.9	19.6	21.1	54.1
	Tripura state	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.4	2.7	6.2	13.5	18.1	29.7	27.6	36.8	34.9
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	2.2	1.9	12.0	30.3	11.4	11.1	15.7	0.0
	<i>Papumpare district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2	3.9	36.3	69.1	35.8	0.0	59.5	0.0
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.5	1.8	5.9	11.2	21.5	29.8	36.4	42.9	46.2	38.7	38.0
	<i>East Khasi Hills district</i>	0.0	0.0	0.0	0.0	0.0	0.5	3.1	10.0	12.7	26.3	37.1	50.3	55.6	55.6	72.4	56.4
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.2	7.8	11.8	18.2	27.0	24.4	38.2	59.5	11.0
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	0.0	11.8	31.7	16.1	0.0	0.0
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.2	1.2	2.4	6.4	11.8	13.9	20.5	35.9	44.1	26.2	20.4
	Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.9	2.3	4.2	5.0	11.2	13.2	18.2	27.8
Kamrup urban	0.0	0.0	0.0	0.0	0.3	0.0	1.1	1.4	4.2	12.8	13.5	26.4	28.1	51.3	67.6	49.4	

The highest age-specific incidence rate of cancer of larynx is recorded in East Khasi Hills district among males in the 70-74 years age group (72.4 per 100,000).



Table – 2.5.9 (b) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Larynx (ICD-10: C32) - Females

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.3	1.3	2.1	3.9	3.1	4.5	5.9	2.8
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.9	1.7	1.8	2.8	4.9	5.6	1.2	4.6
South	Hyderabad district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.8	0.5	1.3	1.0	1.5	0.0
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.9	0.6	1.3	0.5	2.8
	Thi'puram district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.5	1.5	1.4	1.7	1.4	0.9
	Bangalore	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.3	0.3	1.6	1.3	0.9	2.1	2.8	3.7	4.9
	Chennai	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.3	0.7	0.6	1.3	0.9	3.1	2.7	5.1	5.4
East	Kolkata	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.4	0.7	1.1	1.3	1.9	0.8	2.8	1.5	6.3
West	Ahmedabad urban	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.4	0.5	0.5	1.0	1.0	1.1	3.0	3.0	1.7
	Aurangabad	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	1.9	1.6	1.1	0.0	3.0	0.0	5.2
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.2	0.7	0.6	0.0	0.8	1.6	1.3	0.4
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.0	0.0	0.0
	Mumbai	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.7	0.8	1.2	2.8	3.5	5.4	6.0
	Pune	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.2	0.0	0.7	1.4	3.1	3.8	3.2	3.6
Central	Wardha district	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.6	1.5	4.0	2.2	1.2
	Bhopal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.3	3.2	1.7	3.5	2.6	8.9	1.4
	Nagpur	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.9	1.5	1.2	2.7	3.2	3.4	3.4
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.2	0.3	3.9	3.5	7.0	5.3	3.7
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	2.1	0.0	0.0	5.4	4.6	3.5	4.7	2.9
	Mizoram state	0.0	0.0	0.0	0.0	0.3	0.4	0.0	0.5	0.7	1.3	2.4	3.5	0.0	13.5	12.4	6.5
	<i>Aizawl district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	4.0	0.0	0.0	5.6	22.3	15.3
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	1.3	0.0	6.9	6.0	7.3	10.9	12.9
	Tripura state	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.6	0.8	1.3	2.3	3.2	7.8	3.1	2.9	2.5
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	3.5	1.7	5.4	9.2	0.0	0.0	0.0
	<i>Papumpare district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	10.1	0.0	31.2	36.4	0.0	0.0	0.0
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.2	4.5	8.2	4.0	4.6	3.2	16.9	4.5
	<i>East Khasi Hills district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.6	7.0	8.0	3.9	4.6	3.2	25.1	2.8
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	3.9	5.3	0.0	0.0
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.6	1.1	1.3	4.4	5.4	5.0	3.8	3.5	3.1
Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.5	0.7	2.8	3.1	0.0	2.4	6.8	
Kamrup urban	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.4	0.9	1.9	5.3	5.4	5.3	7.6	4.3	

The highest age-specific incidence rate of cancer of larynx among females is in the 60-64 years age group (36.4 per 100,000) in Papumpare district.



2.5.10 Lung

Table – 2.5.10 (a) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Lung (ICD-10: C33-C34) - Males

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.4	0.5	1.1	2.9	6.9	13.6	33.1	54.1	85.2	109.5	126.7	104.6
	Patiala district	0.0	0.2	0.0	0.0	0.4	0.4	0.5	1.9	2.4	9.5	23.5	27.7	44.8	32.9	53.9	32.3
South	Hyderabad district	0.0	0.0	0.0	0.0	0.2	0.7	1.8	1.9	6.7	10.0	18.6	28.7	59.2	90.5	121.5	76.1
	Kollam district	0.0	0.0	0.0	0.0	0.0	1.0	1.2	3.0	6.9	18.9	41.4	58.9	115.4	179.4	193.8	147.8
	Thi'puram district	0.0	0.0	0.0	0.0	0.3	0.9	1.1	4.0	6.1	15.8	29.5	44.7	91.3	116.0	122.2	113.8
	Bangalore	0.1	0.1	0.1	0.3	0.2	0.5	1.0	2.4	3.6	8.3	22.5	40.2	58.0	100.8	104.6	92.3
	Chennai	0.0	0.1	0.0	0.2	0.4	0.3	1.6	0.7	4.5	10.0	20.4	38.4	53.3	85.0	89.7	86.8
East	Kolkata	0.0	0.0	0.0	0.0	0.6	0.9	1.0	2.1	5.7	12.7	36.0	56.5	85.4	118.4	158.9	136.2
West	Ahmedabad urban	0.0	0.0	0.0	0.1	0.1	0.3	0.6	1.6	3.0	8.5	16.1	25.1	43.0	60.7	73.8	56.9
	Aurangabad	0.0	0.0	0.0	0.0	0.3	0.3	2.9	2.7	3.9	6.0	21.4	24.9	40.0	62.2	76.6	37.4
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.1	0.0	0.8	0.7	0.4	2.7	5.1	6.0	9.0	12.8	10.0	10.5
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	3.0	5.2	9.1	4.4	12.8	7.7	7.7
	Mumbai	0.1	0.1	0.0	0.1	0.3	0.6	0.7	1.6	3.4	7.4	16.0	25.7	47.8	72.5	97.9	112.4
	Pune	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.8	1.8	4.6	10.3	17.8	31.0	51.3	59.0	50.7
Central	Wardha district	0.0	0.0	0.0	0.0	0.0	1.7	0.4	0.4	2.0	5.0	10.1	12.2	29.6	17.8	32.7	32.0
	Bhopal	0.0	0.3	0.0	0.2	0.2	0.2	0.9	2.9	5.3	12.1	26.8	44.5	48.6	76.1	97.7	67.1
	Nagpur	0.0	0.0	0.2	0.0	0.2	0.5	0.9	1.5	1.7	5.8	10.9	18.7	30.1	42.7	53.3	30.4
North East	Manipur state	0.0	0.0	0.0	0.0	0.3	0.3	1.0	0.7	2.5	4.5	13.7	26.1	41.8	96.9	159.1	143.4
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.9	2.2	4.9	13.6	41.2	61.2	124.0	192.8	241.3
	Mizoram state	0.3	0.0	0.0	0.0	0.0	0.4	2.4	3.1	7.5	16.7	44.3	78.1	144.4	224.6	274.8	343.3
	<i>Aizawl district</i>	1.0	0.0	0.0	0.0	0.0	0.0	2.1	2.7	12.8	23.7	50.7	79.6	187.7	309.7	277.8	408.0
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.6	2.8	6.9	5.3	7.3	32.2	29.4	71.7	81.1
	Tripura state	0.0	0.0	0.0	0.0	0.2	0.4	0.1	1.5	3.7	8.5	23.4	45.1	83.9	90.5	117.2	109.0
	West Arunachal	0.0	0.0	0.0	0.0	0.5	2.0	1.8	2.1	4.4	5.6	22.6	21.6	42.7	55.7	23.6	7.0
	<i>Papumpare district</i>	0.0	0.0	0.0	0.0	0.0	6.2	2.7	0.0	6.2	7.9	66.5	29.6	160.9	255.7	0.0	0.0
	Meghalaya	0.0	0.0	0.0	0.0	0.2	0.0	0.6	3.1	6.6	15.0	31.9	35.4	55.5	73.2	110.6	61.8
	<i>East Khasi Hills district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	10.2	16.2	32.8	41.9	47.6	68.4	181.1	76.9
	Nagaland	0.0	0.0	0.0	0.0	0.5	0.5	0.0	3.0	5.2	6.4	16.7	33.7	18.3	81.2	44.6	60.6
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	25.0	25.5	35.4	42.3	16.1	112.0	44.5
	Cachar district	0.2	0.0	0.0	0.0	0.5	0.0	0.0	1.8	3.7	9.4	19.4	33.7	62.5	63.2	112.9	100.5
	Dibrugarh district	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.1	2.1	5.9	12.7	9.2	20.3	37.9	38.7	38.4
Kamrup urban	0.0	0.0	0.0	0.0	0.3	0.3	1.1	2.7	6.1	11.5	25.9	55.7	67.0	108.7	181.1	182.7	

The highest age-specific incidence rate of cancer of the lung is recorded in Aizawl district in the 75 plus age group in males (408.0 per 100,000).



Table – 2.5.10 (b) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Lung (ICD-10: C33-C34) - Females

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.1	0.4	0.9	1.8	2.8	6.3	12.6	16.7	22.5	31.6	28.8	28.4
	Patiala district	0.0	0.0	0.0	0.0	0.0	0.2	0.8	1.7	2.7	2.0	7.5	16.1	6.8	15.3	12.9	17.5
South	Hyderabad district	0.0	0.0	0.0	0.0	0.1	0.0	1.8	1.3	3.6	6.5	12.3	23.1	34.1	39.7	35.3	20.1
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.6	0.4	1.3	1.6	6.6	9.6	9.5	16.7	25.5	21.9	21.5
	Thi'puram district	0.0	0.0	0.0	0.0	0.1	0.4	1.4	1.0	3.3	6.1	12.1	13.4	18.8	28.9	29.4	28.3
	Bangalore	0.0	0.0	0.1	0.0	0.1	0.4	0.8	1.8	3.9	8.3	13.9	19.5	23.7	29.4	38.7	37.7
	Chennai	0.0	0.0	0.0	0.0	0.0	0.3	1.2	2.2	2.2	5.2	10.0	14.1	19.0	25.7	30.3	28.0
East	Kolkata	0.0	0.0	0.0	0.0	0.0	0.6	0.9	3.5	3.3	9.3	12.4	17.3	24.8	33.7	35.3	37.7
West	Ahmedabad urban	0.1	0.0	0.1	0.0	0.1	0.3	0.6	0.7	0.9	2.3	5.1	6.2	11.9	18.6	13.5	11.6
	Aurangabad	0.0	0.0	0.0	0.0	0.3	0.3	1.1	1.6	1.5	5.1	4.0	11.0	16.1	14.8	26.8	14.0
	Osmanabad & Beed	0.3	0.0	0.0	0.0	0.1	0.1	0.2	0.9	1.6	1.9	2.4	4.8	2.2	5.2	3.9	3.5
	Barshi rural	0.0	0.0	0.0	0.0	0.0	1.1	1.2	1.2	3.9	1.6	5.7	6.7	5.5	14.0	2.8	5.3
	Mumbai	0.1	0.1	0.1	0.2	0.2	0.5	1.3	2.0	2.9	6.3	9.3	14.7	19.1	35.8	47.6	62.6
Pune		0.0	0.1	0.1	0.1	0.1	0.3	0.6	1.9	3.0	5.8	7.5	8.2	20.9	29.1	20.8	23.3
Central	Wardha district	0.5	0.0	0.0	0.4	0.0	0.0	1.6	1.5	2.1	3.0	5.6	10.5	8.5	8.8	12.2	10.4
	Bhopal	0.0	0.0	0.0	0.0	0.0	0.2	1.2	1.3	2.7	7.4	9.5	13.5	14.7	19.3	21.4	10.0
	Nagpur	0.0	0.0	0.0	0.0	0.6	0.8	1.2	1.3	3.9	4.0	6.4	7.3	10.8	14.7	16.0	8.3
North East	Manipur state	0.0	0.0	0.1	0.0	0.1	0.4	1.1	0.7	2.5	4.6	16.0	27.7	49.9	90.2	127.4	103.1
	Imphal West district	0.0	0.0	0.0	0.0	0.8	0.0	0.8	0.9	5.2	9.6	31.5	39.4	64.5	104.4	156.7	179.7
	Mizoram state	0.0	0.0	0.0	0.4	0.3	0.0	2.0	2.1	5.2	8.1	30.1	69.4	107.8	191.7	290.8	318.6
	Aizawl district	0.0	0.0	0.0	1.0	0.0	0.0	3.9	3.8	4.7	7.8	27.9	94.1	110.6	252.9	400.6	569.8
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	8.1	9.9	16.2	26.9	47.3	60.2	81.4
	Tripura state	0.0	0.0	0.0	0.1	0.0	0.3	0.6	0.8	1.4	4.0	8.1	10.1	14.0	17.7	31.5	19.0
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.7	4.2	8.1	5.1	21.7	27.6	27.6	40.9	13.9
	Papumpare district	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	13.6	10.1	8.8	31.2	91.0	36.8	205.9	32.8
	Meghalaya	0.0	0.0	0.0	0.0	0.0	0.2	0.0	2.4	1.6	5.0	8.8	13.0	24.1	25.4	27.5	25.6
	East Khasi Hills district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.8	6.0	4.0	13.5	34.4	41.2	37.6	33.7
	Nagaland	0.0	0.0	0.0	0.0	0.5	0.0	0.7	2.3	4.1	2.7	5.7	11.8	31.2	32.0	24.1	10.5
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	9.1	14.0	22.8	50.7	25.5	0.0
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	2.2	5.2	7.8	13.9	16.6	20.5	24.4	31.2
	Dibrugarh district	0.0	0.0	0.0	0.0	0.3	0.0	0.4	0.7	1.3	3.0	2.8	6.5	10.4	13.6	12.0	11.3
Kamrup urban	0.0	0.0	0.0	0.4	0.3	0.6	2.6	2.3	4.5	8.3	10.3	30.3	36.0	28.3	33.1	44.7	

The highest age-specific incidence rate of cancer of the lung among females is in the 75 plus age group (569.8 per 100,000) in Aizawl district.



2.5.11 Urinary bladder

Table – 2.5.11 (a) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Urinary Bladder (ICD-10: C67) - Males

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.1	0.3	0.7	1.3	3.2	5.8	10.4	14.9	28.6	45.6	58.5	66.3
	Patiala district	0.0	0.5	0.0	0.0	0.0	0.0	0.0	1.4	1.5	1.6	6.9	11.6	16.9	27.3	26.4	44.6
South	Hyderabad district	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	1.4	1.2	0.0	4.2	7.0	12.7	29.0	19.3
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.7	0.5	1.1	2.4	3.7	5.3	9.1	15.1	25.9	34.0	31.8
	Thi'puram district	0.0	0.0	0.0	0.2	0.2	0.3	0.5	0.5	2.1	3.4	6.4	11.3	20.4	30.1	46.5	50.4
	Bangalore	0.0	0.0	0.0	0.1	0.1	0.1	0.3	1.1	1.0	2.4	3.5	5.6	10.3	17.1	18.6	41.9
	Chennai	0.0	0.0	0.1	0.0	0.2	0.0	0.1	0.6	0.5	2.1	3.0	5.1	12.8	24.0	30.5	44.0
East	Kolkata	0.0	0.0	0.0	0.3	0.1	0.2	0.3	0.4	2.0	2.0	7.3	10.7	13.6	27.4	30.4	35.0
West	Ahmedabad urban	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.8	1.0	1.6	2.6	4.2	6.0	11.0	14.9	14.7
	Aurangabad	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.4	0.4	1.1	2.9	4.6	11.8	6.4	7.2	11.0
	Osmanabad & Beed	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	2.7	2.8	5.9	4.3	4.0	6.6
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	9.1	6.5	10.6	2.6	15.4
	Mumbai	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.7	1.7	3.8	8.2	15.2	26.3	35.0	53.9
	Pune	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.3	0.9	0.8	2.7	7.4	12.2	18.8	39.5	44.1
Central	Wardha district	0.5	0.0	0.0	0.0	0.6	0.3	0.0	0.0	0.4	1.4	2.7	2.2	10.1	7.5	15.2	9.9
	Bhopal	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.7	2.8	2.7	10.0	9.4	12.7	19.5	23.9
	Nagpur	0.2	0.2	0.0	0.0	0.0	0.2	0.0	0.9	0.6	0.7	4.1	5.6	6.3	13.3	19.0	16.0
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	1.0	1.7	2.3	6.7	8.7	16.9	19.9
	Imphal West district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.9	2.4	15.0	33.1	36.9
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.5	0.6	1.3	3.2	5.5	8.7	20.4	15.1	43.2
	Aizawl district	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.3	1.6	0.0	2.1	2.8	15.6	48.6	7.7	83.8
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.2	5.3	7.3	5.0	0.0	25.3	27.0
	Tripura state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	2.1	3.7	5.7	7.3	9.4	6.8	7.8
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	1.3	4.3	2.8	0.0	0.0	7.0
	Papumpare district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9	17.9	0.0	0.0	43.0
	Meghalaya	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.3	0.4	1.5	4.9	3.1	5.0	3.9	27.7	11.9
	East Khasi Hills district	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.0	7.1	6.3	5.3	4.3	48.3	20.5	
	Nagaland	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.7	0.0	0.0	1.5	2.2	0.0	9.5	7.4	0.0
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	11.8	31.7	16.1	0.0	22.3
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.5	2.0	4.3	2.5	7.3	7.8	14.3	14.7	15.7
	Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.7	0.4	2.3	1.8	0.8	2.0	1.6	6.8	12.8
	Kamrup urban	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.5	2.1	3.8	7.3	19.9	18.1	32.7	38.7

The highest age-specific incidence rate of cancer of the urinary bladder is recorded in Aizawl district in the 75 plus age group in males (83.8 per 100,000).



Table – 2.5.11 (b) Age Specific Incidence Rate per 100,000 population in 28 PBCRs under NCRP - Urinary Bladder (ICD-10: C67) - Females

Region	Registry	00-04	05-09	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
North	Delhi	0.0	0.0	0.0	0.0	0.2	0.3	0.1	0.6	0.6	1.0	2.5	3.3	6.5	7.3	13.8	13.1
	Patiala district	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.6	1.5	3.4	2.2	3.3	4.4	7.2	5.8	10.1
South	Hyderabad district	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.8	0.7	1.2	2.1	3.3	4.1	4.4	3.7
	Kollam district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.7	1.3	1.9	1.5	2.1	6.6	2.8
	Thi'puram district	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.4	1.0	0.9	2.4	2.1	4.3	4.3	6.5	6.6
	Bangalore	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.3	0.7	2.1	3.1	3.7	4.8	5.6	4.5
	Chennai	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.3	0.5	1.6	1.5	3.8	6.8	6.8	13.8
East	Kolkata	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.3	0.6	1.9	1.2	2.2	5.7	6.1	5.2
West	Ahmedabad urban	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.3	0.2	0.8	0.5	0.6	2.3	4.6	3.5	4.3
	Aurangabad	0.0	0.4	0.0	0.0	0.0	0.0	0.4	0.0	1.5	0.6	4.0	3.3	5.8	3.0	6.7	0.0
	Osmanabad & Beed	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.6	0.2	1.5	0.7	2.4	1.6	3.1	2.7
	Barshi rural	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.3	0.0	0.0	0.0	5.5	2.0	0.0	5.3
	Mumbai	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.4	0.9	1.3	2.9	3.6	7.6	7.2	15.5
	Pune	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.5	0.6	1.0	2.4	4.5	6.4	4.3	10.0
Central	Wardha district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.0	1.2	0.8	1.5	1.6	3.3	2.3
	Bhopal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.5	2.5	0.8	3.5	3.9	1.8	10.0
	Nagpur	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.5	1.2	0.8	1.3	1.3	4.2	2.8
North East	Manipur state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.6	1.2	2.5	3.1	2.1	2.9
	<i>Imphal West district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.4	0.0	0.0	6.9	7.0	4.7	2.9
	Mizoram state	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.0	0.7	0.7	1.6	1.2	5.8	6.8	18.6	15.2
	<i>Aizawl district</i>	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.3	1.6	0.0	4.0	0.0	0.0	11.2	22.3	5.1
	Sikkim state	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	5.5	0.0
	Tripura state	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.5	0.7	0.6	0.8	1.0	0.7	2.0
	West Arunachal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	6.9
	<i>Papumpare district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Meghalaya	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	2.7	0.0	2.3	6.3	4.2	3.0
	<i>East Khasi Hills district</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	6.3	4.2	5.6
	Nagaland	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	1.9	0.0	0.0	5.3	8.0	0.0
	Pasighat	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.0	9.1	14.0	11.4	0.0	0.0	0.0
	Cachar district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.7	1.7	5.4	2.5	1.3	0.0	0.0
	Dibrugarh district	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.7	0.9	1.0	3.4	2.4	2.3
Kamrup urban	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.3	0.8	1.4	1.3	1.8	3.3	5.3	10.2	8.5

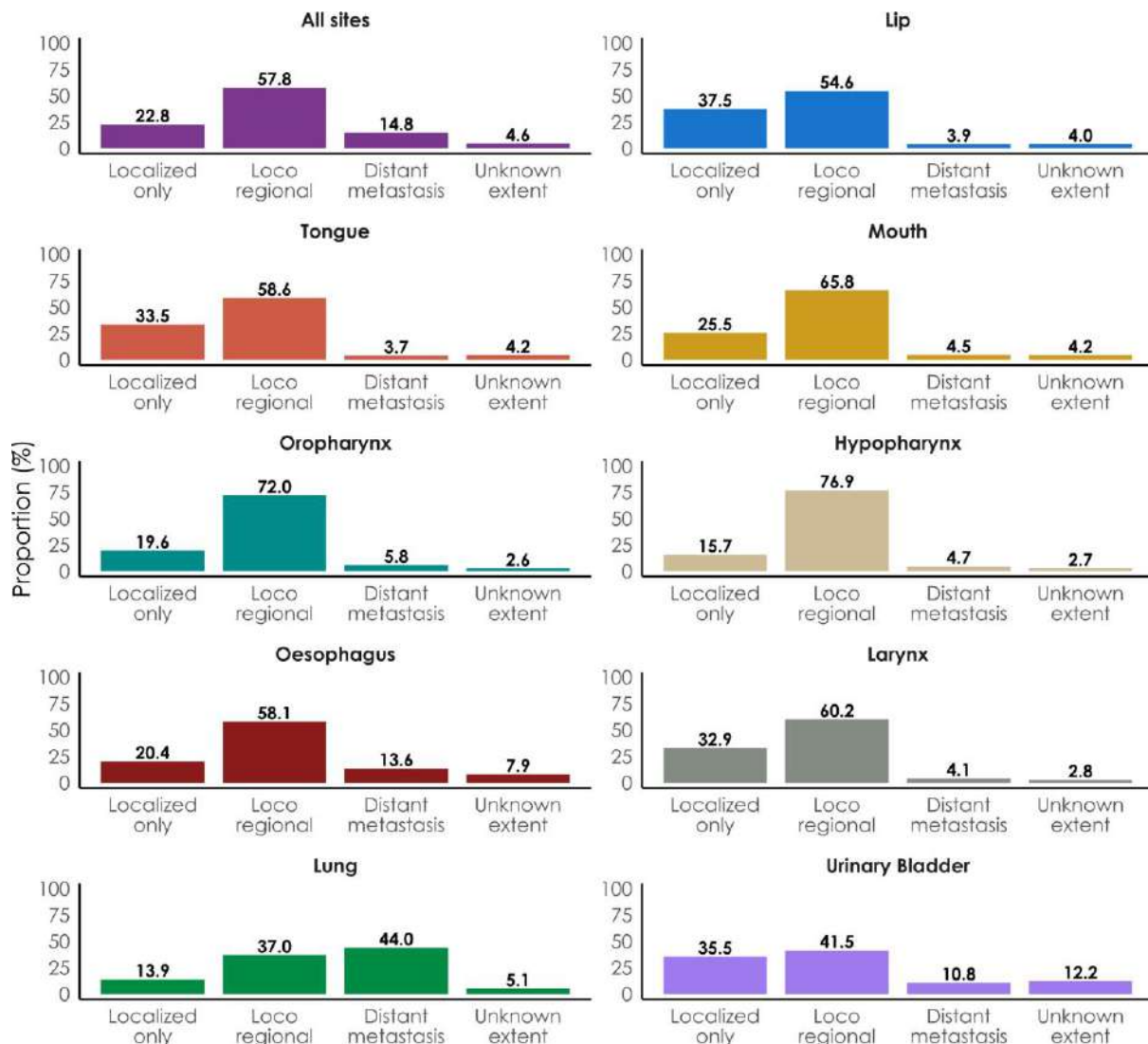
The highest age-specific incidence rate of cancer of the urinary bladder among females is in the 70-74 years age group (22.3 per 100,000) in Aizawl district.



2.6 Clinical extent of disease

Figure 2.6 Relative proportion (%) of clinical extent of disease of cancer in specific sites (Treated only at 58 reporting HBCRs under NCRP) 2012-2016

Males

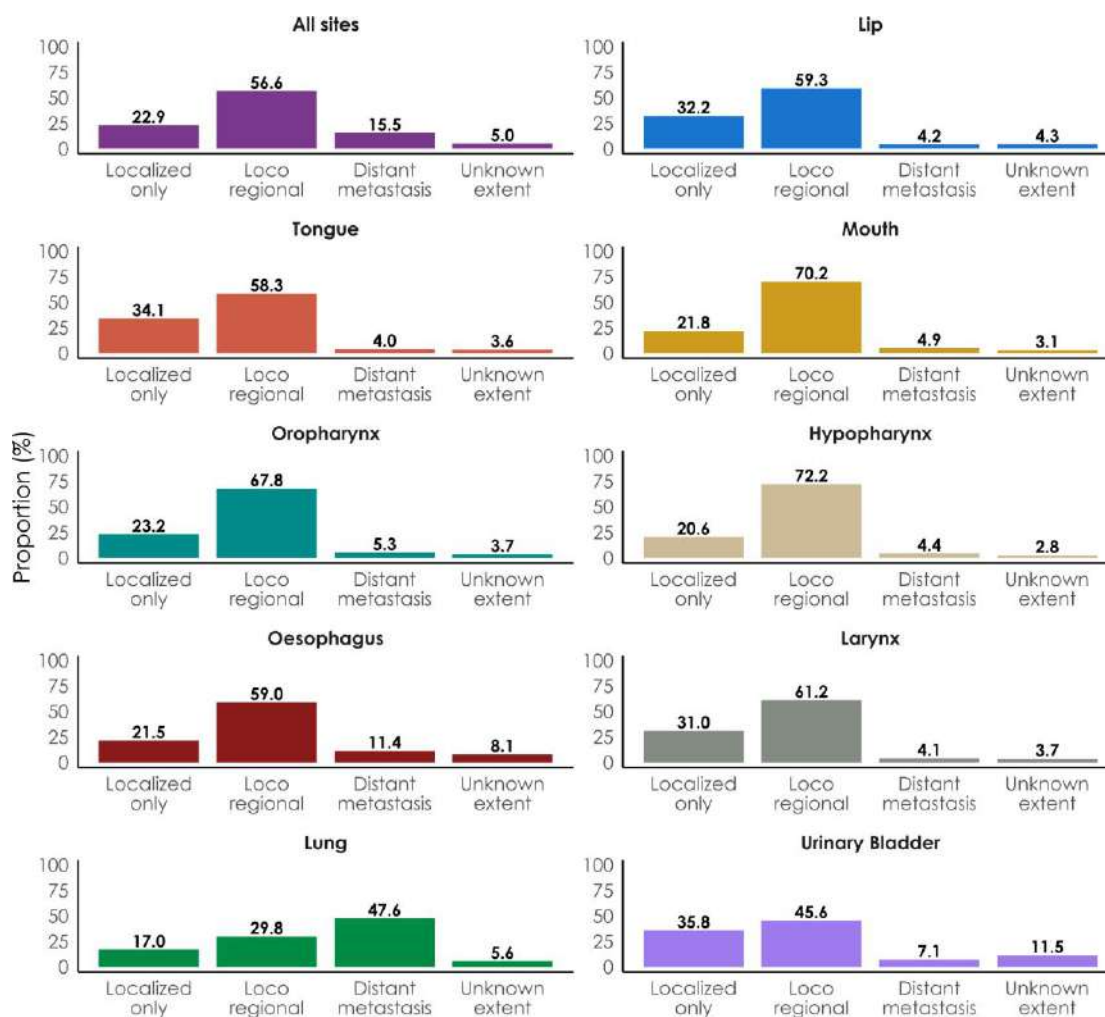


Note: ICD -10s have been regrouped as per NCRP, 2020 report; Lip (C00), Tongue (C02), Mouth (C03-C04, C06), Oropharynx (C0, C05, C10, C14), Hypopharynx (C12-C13), Oesophagus (C15), Larynx (C32), Lung (C33-C34) and Urinary Bladder (C67); All sites (ICD-10: C00-C06, C10, C12-C15, C32-C34, C67)





Females



Note: ICD -10s have been regrouped as per NCRP, 2020 report; Lip (C00), Tongue (C02), Mouth (C03-C04, C06), Oropharynx (C0, C05, C10, C14), Hypopharynx (C12-C13), Oesophagus (C15), Larynx (C32), Lung (C33-C34) and Urinary Bladder (C67); All sites (ICD-10: C00-C06, C10, C12-C15, C32-C34, C67)

Except for lung cancer, most cancers are reported to have presented in the locoregional stage in both genders. Close to half of the lung cancer patients (44.0 % in males; 47.6% in females) presented with distant metastasis.

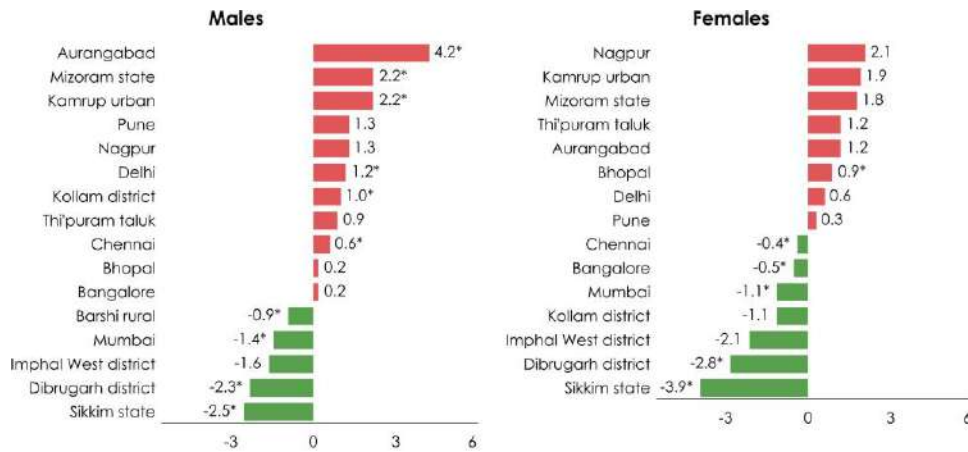




2.7. Trends in Age Adjusted incidence Rate for cancers in the sites associated with the use of tobacco

2.7.1 All sites (ICD-10: C00-C06, C10, C12-C15, C32-C34, C67)

Fig 2.7.1 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period - All sites



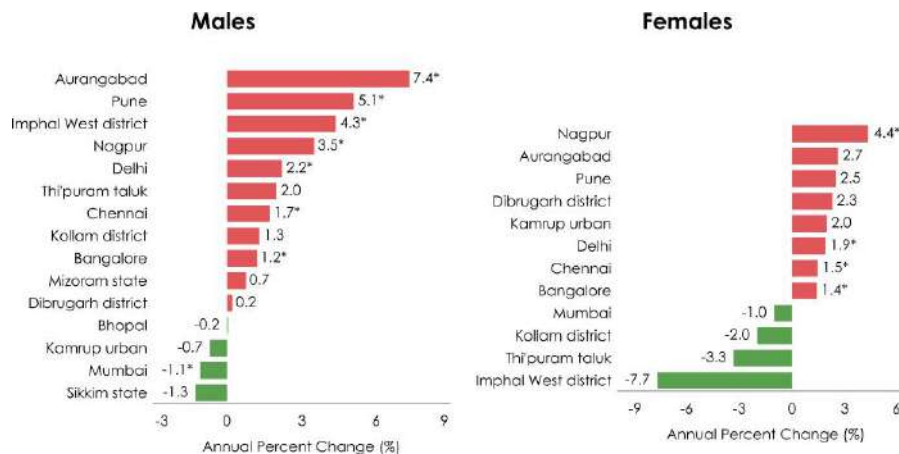
Increase in APC, Decrease in APC ; *Significant increase or decrease in APC at 95% confidence level

Cancers in males showed a statistically significant increase in AAR in Aurangabad, Mizoram state, Kamrup urban, Delhi, Kollam district and Chennai, whereas in females a statistically significant increase was observed in Bhopal.

In males, the AAR for cancers showed a statistically significant decline in Sikkim state, Dibrugarh district, Mumbai and Barshi rural, while the AAR showed a statistically significant decrease for females in Sikkim state, Dibrugarh district, Mumbai, Bangalore and Chennai.

2.7.2 Tongue

Fig 2.7.2 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period – Tongue (ICD-10: C01-C02)



Increase in APC, Decrease in APC ; *Significant increase or decrease in APC at 95% confidence level

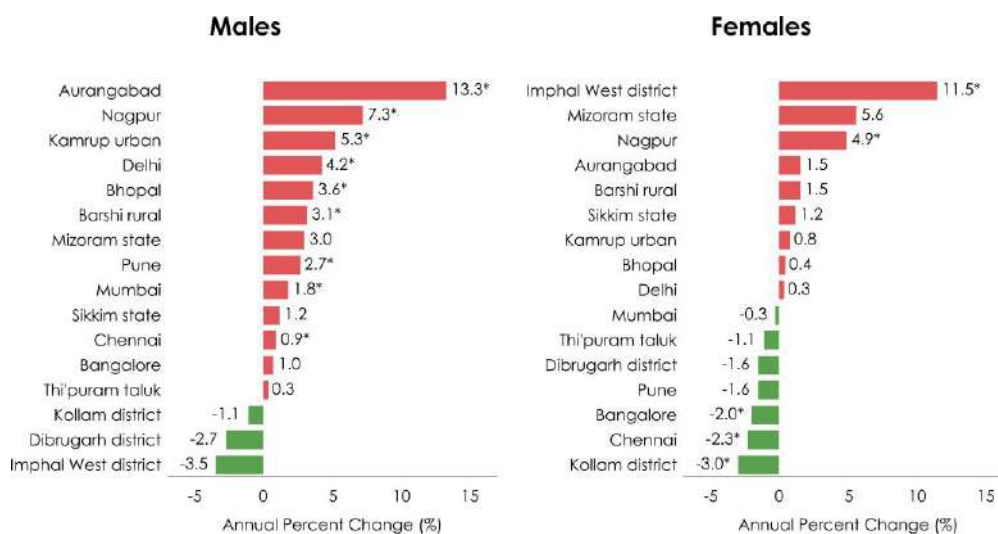
Cancer of tongue in males showed a statistically significant increase in AAR in Aurangabad, Pune, Imphal West district, Nagpur, Delhi, Chennai and Bangalore, whereas a statistically significant decrease was observed in Mumbai. In females, a statistically significant increase in AAR was observed in Nagpur, Delhi, Chennai and Bangalore.





2.7.3 Mouth

Fig 2.7.3 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period – Mouth (ICD-10: C03-C06)

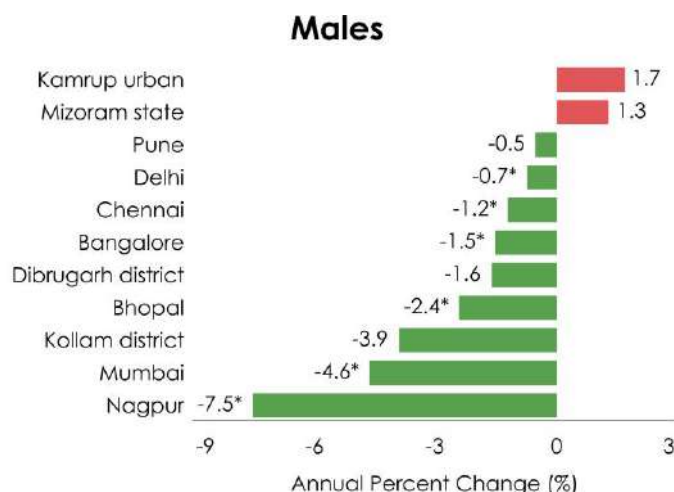


Increase in APC, Decrease in APC ; *Significant increase or decrease in APC at 95% confidence level

Cancer of mouth in males showed a statistically significant increase in AAR in Aurangabad, Nagpur, Kamrup urban, Delhi, Bhopal, Barshi rural, Pune, Mumbai and Chennai. In females, a statistically significant increase in AAR was observed in Imphal West district and Nagpur, and a statistically significant decline was observed in Kollam district, Chennai and Bangalore.

2.7.4 Hypopharynx

Fig 2.7.4 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period – Hypopharynx (ICD-10: C12-C13)



Increase in APC, Decrease in APC ; *Significant increase or decrease in APC at 95% confidence level

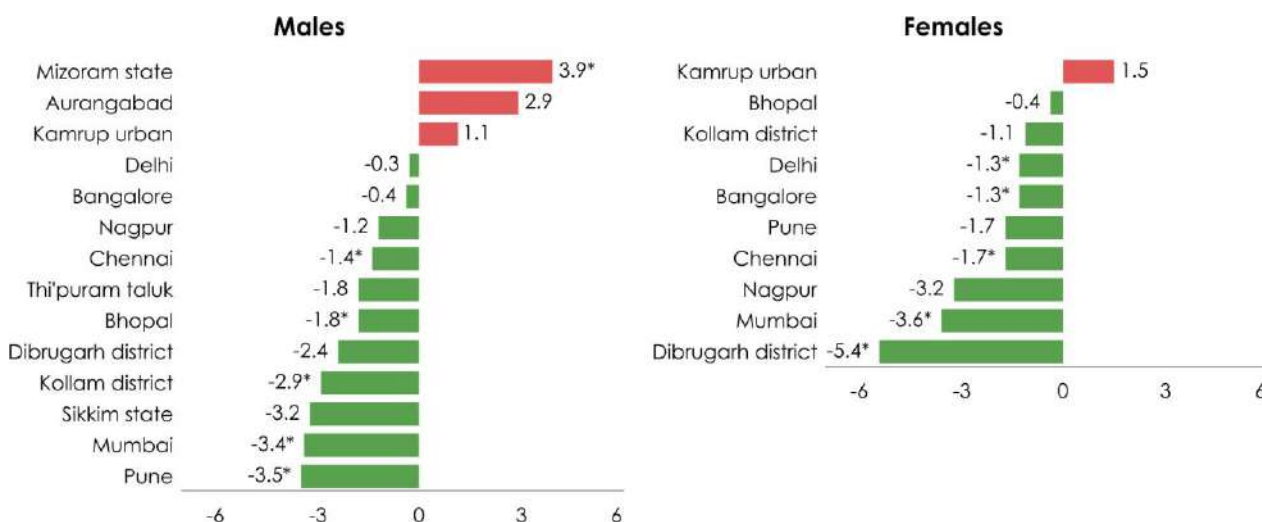
Cancer hypopharynx in males showed a statistically significant decline in AAR for Nagpur, Mumbai, Bhopal, Bangalore, Chennai and Delhi.





2.7.5 Oesophagus

Fig 2.7.5 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period – Oesophagus (ICD-10: C15)

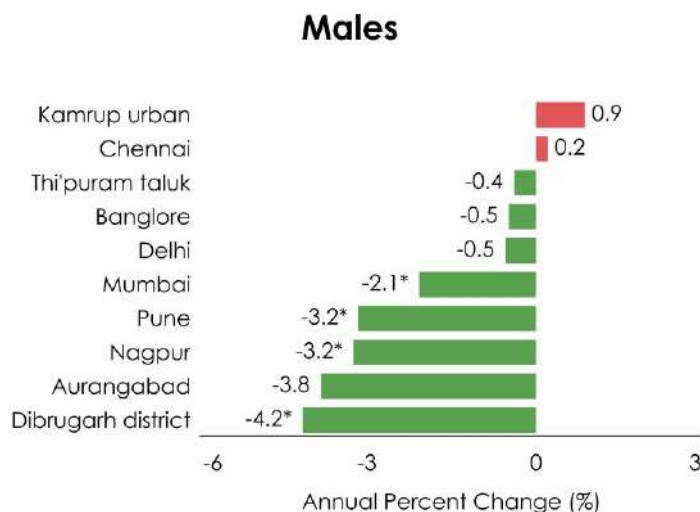


Increase in APC, Decrease in APC ; *Significant increase or decrease in APC at 95% confidence level

Cancer of oesophagus in males showed a statistically significant increase in AAR in Mizoram state, whereas a statistically significant decline was observed in Pune, Mumbai, Kollam district, Bhopal and Chennai. A statistically significant decline was observed in females in Mumbai, Dibrugarh district, Chennai, Bangalore and Delhi.

2.7.6 Larynx

Fig 2.7.6 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period – Larynx (ICD-10: C32)



Increase in APC, Decrease in APC ; *Significant increase or decrease in APC at 95% confidence level

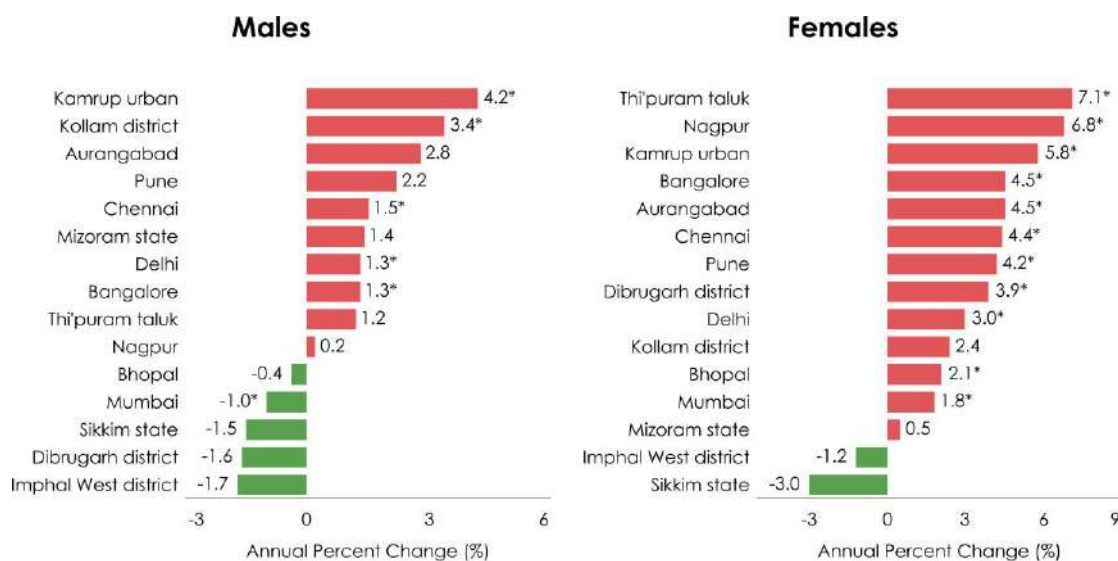
Cancer of larynx in males showed a statistically significant decline in AAR for Dibrugarh district, Nagpur, Pune and Mumbai.





2.7.7 Lung

Fig 2.7.7 Annual Percent Change (APC) in Age Adjusted Incidence Rates (AAR) over the Time Period – Lung (ICD-10: C33-C34)



Increase in APC, Decrease in APC ; *Significant increase or decrease in APC at 95% confidence level

Cancer of lung in males showed a statistically significant increase in AAR for Kamrup urban, Kollam district, Chennai, Delhi and Bangalore, whereas in females statistically significant increase was observed in Thiruvananthapuram district, Nagpur, Kamrup urban, Bangalore, Aurangabad, Chennai, Pune, Dibrugarh district, Delhi, Bhopal and Mumbai. A statistically significant decline in males was observed in Mumbai.





2.8 Projected number of incidence cases of cancers associated with tobacco use in India for 2025

Anatomical Sites	Males		Females		Both Sexes	
	No. of Cases	(%)	No. of Cases	(%)	No. of Cases	(%)
LIP (C00)	3000	0.4	1302	0.2	4302	0.3
TONGUE (C01-C02)	44861	5.9	15747	2.0	60608	3.9
MOUTH (C03-C06)	64519	8.4	25541	3.2	90060	5.7
OROPHARYNX (C10)	8076	1.1	1445	0.2	9521	0.6
HYPOPHARYNX (C12-C13)	17840	2.3	5284	0.7	23124	1.5
PHARYNX UNSPECIFIED (C14)	3408	0.4	1262	0.2	4670	0.3
OESOPHAGUS (C15)	36850	4.8	22996	2.9	59846	3.8
LARYNX (C32)	30725	4.0	3781	0.5	34506	2.2
LUNG (C33-C34)	81219	10.6	30109	3.7	111328	7.1
URINARY BLADDER (C67)	23148	3.0	6160	0.8	29308	1.9
TOTAL (ICD-10: C00-C06, C10, C12-C15, C32-C34, C67)	313646	41.1	113627	14.1	427273	27.2

The projected number of cancers in the sites associated with tobacco use in 2025 is estimated to be 427273 (313646 in males; 113627 in females). Cancers in these sites will contribute to 27.2% of India's total projected cancer cases, in which the proportion of males (41.1%) is expected to be more than females (14.1%). In both genders, the number of lung cancer cases is projected to be the highest (81219 in Males and 30109 in Females) by 2025.



3. The Way Forward

India is among the countries with a high burden of tobacco use and tobacco-related health problems, especially cancer. The government and relevant stakeholders have taken up an extensive range of measures for tobacco control. However, despite such efforts, a considerable level of tobacco consumption appears to be continuing. India is the first country to have developed national targets and indicators to reduce the number of global premature deaths from NCDs by 25% by 2025. [6] One of the targets is to achieve a 30% relative reduction in the prevalence of current tobacco use. The data in the present report reflects upon the rising incidence and growing concern of cancers in the sites associated with tobacco use in the country. The report findings should enable programme officials, policymakers, health care providers and community leaders to strengthen the existing measures and develop innovative and evidence measures to control tobacco use in all its forms.

Promotion of Information, Education and Communication (IEC) for prevention and quitting use

The National Tobacco Control Programme has IEC as one of its major components. Social media, the internet, and other mass media channels and communication must actively disseminate anti-tobacco messages. Specific groups such as students, employees in the organized and unorganized sectors must be sensitized about the harmful effects of tobacco and the need to keep the workplace tobacco-free. School-based education on tobacco hazards is of paramount importance in sensitizing children and adolescents at an early age. Traditional healthcare providers could be involved in imparting community-based tobacco-related education as they may find wider acceptability.

Strengthening of tobacco cessation activities

At present, most tobacco cessation services are provided by trained health professionals at the existing health services. Training non-health professionals in tobacco cessation activities would add value to the current mode of implementation. In addition, tobacco cessation activities could be extended beyond the boundaries of health facilities to educational institutions, industries and community-based organizations. Community-based tobacco cessation services may help female tobacco users, who often hesitate to avail of facility-based tobacco cessation services.

Integration with other national health programmes

Tobacco control activities could be integrated with developmental programmes for rural upliftment, livelihood, woman, child and tribal welfare. Also, tobacco cessation could be





provided at NCD clinics operated under the NPCDCS and Adolescent Friendly Health Services (AFHS) under the Reproductive and Child Health programme.

Strengthening the implementation of tobacco control laws

The 2020 amendment in COTPA is proposed to address certain lacunae in the existing law and strengthen its implementation. The amendment bill includes the following revisions (i) removal of designated smoking places in hotels and restaurants (ii) Prohibition of tobacco advertisements on social media and the internet, (iii) Prohibition of production and distribution of illicit tobacco products and (iv) increasing the minimum age of sale of tobacco products to 21 years. [36]

Prioritize for screening for cancers in sites associated with tobacco use

Tobacco users constitute a high-risk group for cancer, and hence cancer screening should be emphasized in this population group as the risk perception of getting cancer could be less. Cancer screening could be combined with IEC and behavioural change interventions and tobacco cessation activities to increase uptake and acceptance in this high-risk group. Dentists and clinicians could be sensitized to undertake oral cancer screening in tobacco users during routine visits. Screening for lung cancer among current and past smokers could be beneficial since various trials have shown that Low-dose computed tomography (LDCT) could reduce mortality in lung cancer patients in developed countries.[37] However, India needs a cost-effective lung cancer screening programme that could be useful in low resource settings.

Promoting Research

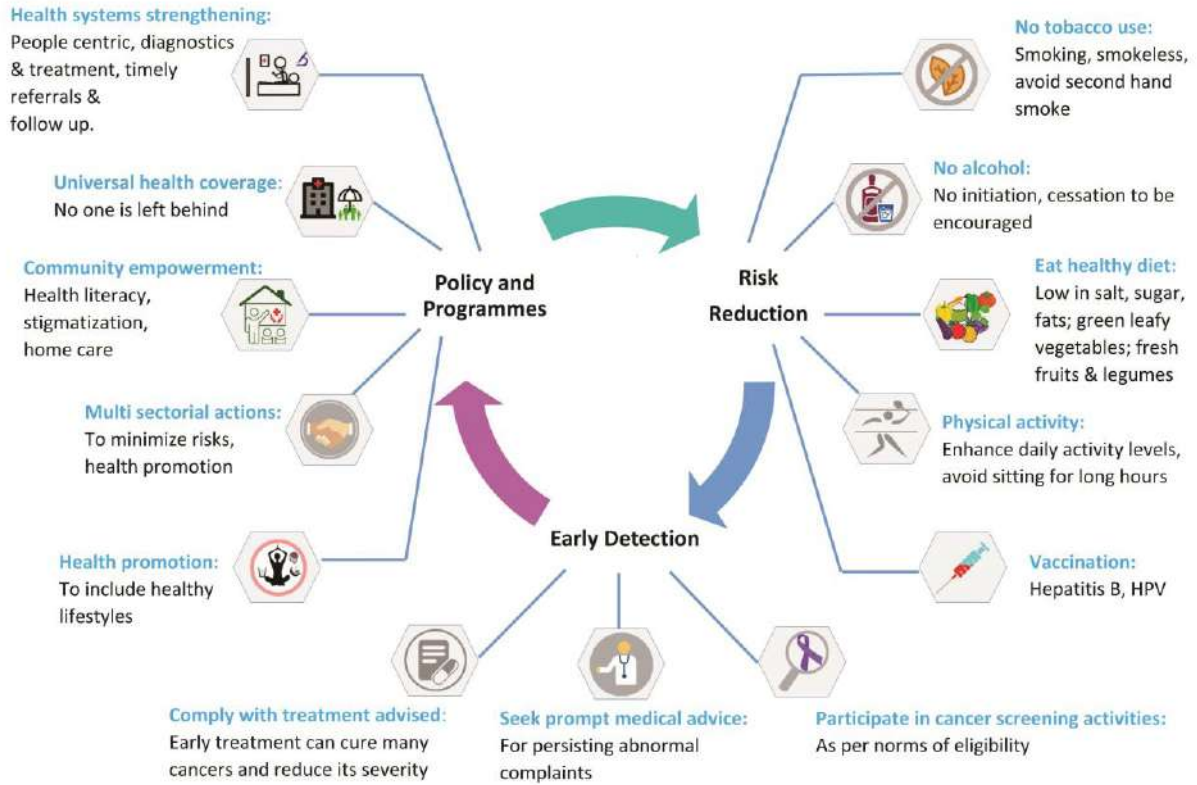
There is a need for broader evidence on effective strategies for imparting tobacco-related health education, communication and behavioural change, which calls for experimental research, including cluster randomized controlled trials and field trials. In addition, behavioural change and IEC packages should be region-specific and culturally acceptable to ensure optimal outcomes. Also, formative research is needed to identify the socio-economic and socio-cultural barriers in tobacco cessation and uptake of screening services. Health technology research could help to identify and develop cost-effective screening interventions for lung cancer. Furthermore, research in molecular biomarkers is required to validate their importance in lung cancer screening. Finally, policy analysis, monitoring, and evaluation of policy and programme components will help assess interventions' impact.

The prevention and control of cancers in the sites associated with tobacco use is a concerted effort by a wide range of stakeholders and multidisciplinary health care professionals. The need of the hour is to evaluate the impact of existing control measures,



strengthen and scale up effective strategies, identify, design and develop evidence-based interventions to address the challenge imposed by cancers arising from tobacco use in India.

Ways for Cancer Prevention and Control





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Annexure I

Definitions, Statistical Terms and Methods

Cancer Registration may be defined as the process of continuing, systematic collection of data on the occurrence and characteristics of reportable neoplasms to help assess and control the impact of malignancies on the community.

Cancer Case refers to all neoplasms with a behaviour code of '3' as defined by the International Classification of Diseases - Oncology, third edition (ICD-O-3) are considered reportable and are registered in NCRP.

Cancer Registry is the office or institution that attempts to collect, store, analyse and interpret data on cancer patients.

Population Based Cancer Registries (PBCRs) systematically collect information on a reportable neoplasm from multiple sources in a geographically defined population residing in the area for one year.

Hospital Based Cancer Registries (HBCRs) are concerned with recording of information on the treatment, management and outcome of cancer patients registered in a particular hospital.

Sources of Registration will usually be hospitals or cancer centres but, depending on the local circumstances, a population-based registry will also involve private clinics, general practitioners, laboratories, health insurance systems, HBCRs, screening programmes and Vital statistics Department.

Data Processing Data Processing involves importing or downloading data from the registries into the local database at ICMR-NCDIR. Quality of the data is checked for errors that may have been committed at data collection, abstraction or entry. Identification and elimination of duplicates is done through deterministic approach and by identifying names that are phonetically the same. Multiple combination of variables is used to generate the probable list. Duplicate deletion is done without any loss of information. Mortality data is linked/matched with incidence and the unmatched mortality cases are identified as either Death Certificate Notification (DCN)/ Death Certification Only (DCO). Clarification at each step is sought from each registry and the data is finalized for further analysis.



Age-Group used for estimating populations as well as grouping cancer cases as per the WHO guidelines which is 0-4, 5-9, 10-14....75+.

Cancer Incidence denotes new cases diagnosed in a defined population in a specified time period.

Cancer Mortality denotes the number of cancer deaths occurring in a specified population during a specified time period.

Rates for cancer are always expressed per 100,000 population.

Crude Incidence Rate (CR) refers to the rate obtained by division of the total number of cancer cases by the corresponding estimated population (mid-year) and multiplying by 100,000.

$$CR = \frac{\text{New Cases of cancer of a particular year}}{\text{Estimated population of the same year}} \times 100,000$$

Age Specific Rate (ASpR) refers to the rate obtained by division of the total number of cancer cases by the corresponding estimated population in that age group and gender/ site/geographic area/time period and multiplying by 100,000.

$$ASpR = \frac{\text{New Cases of cancer of a particular year in the given age group}}{\text{Estimated population of the same year for the give age group}} \times 100,000$$

Age Adjusted or Age Standardised Rate (AAR) Cancer incidence increases as age increases.

In order to make rates of cancer comparable between countries/population, a world standard population (given below) that takes this into account is used to arrive at age adjusted or age standardised rates. This is calculated according to the direct method by obtaining the age specific rates and applying these rates to the standard population in that age group. The world standard population approximates the proportional age distribution of the world and is given below:



Age Distribution of World Standard Population (Segi.et.al)

Age Group	World Standard Population
00-04	12,000
05-09	10,000
10-14	9,000
15-19	9,000
20-24	8,000
25-29	8,000
30-34	6,000
35-39	6,000
40-44	6,000
45-49	6,000
50-54	5,000
55-59	4,000
60-64	4,000
65-69	3,000
70-74	2,000
75+	2,000
All Ages	100,000

$$AAR = \frac{\sum_{i=1}^A (a_i w_i)}{\sum_{i=1}^A w_i}$$

Where,

a_i is the age specific rate (ASpR) in age class i ;

w_i is the standard population in age class i ;

A represents the number of age intervals.

Or expressed in simpler terms thus:

$$AAR = \frac{\sum (ASpR) \times (\text{No. of persons in Std. world population in that 5 yr. age group})}{100,000}$$

Mortality rate Crude Mortality Rate (CMR) and Age Adjusted Mortality Rate (AAMR) were calculated using the same above formula. However, the numerator is death cases.

Cumulative Risk refers to the probability that the person will develop a particular cancer during a certain age period in the absence of any other cause of death. The Cumulative Rate (CuR) is an approximation of the cumulative risk. It is obtained by adding the annual age-specific incidence rates for each five-year age interval (up to 74 years of age or for whatever age group is to be used to calculate the cumulative risk) multiplied by 5 (representing the five-year age interval) times 100/100,000.



$$CuR = \frac{5 \times \sum(ASpR) \times 100}{100,000}$$

And cumulative risk is expressed as

$$Cumulative Risk = 100 \times [1 - \exp(-\frac{CuR}{100})]$$

$$Probability \text{ one in number} = \left(\frac{1}{Cumulative Risk} \right) \times 100$$

About Joinpoint Regression Program- Joinpoint Regression Program, Version 4.7.0, is a statistical software for the analysis of trends using Joinpoint models, i.e, where several different regression lines are connected together at the “Joinpoints”. The software takes trend data (e.g. cancer rates) and fits the simplest Joinpoint model that the data allow. The program starts with the minimum number of Joinpoints (e.g. 0 Joinpoint, which is a straight line) and tests whether more Joinpoints are statistically significant and must be added to the model (upto that maximum number). In this report we have seen Annual Percent Change (APC) of straight line for a specified period of time.

For example, if the APC is 1%, and the rate is 50.0 per 100,000 in 2000, the rate is $50 \times 1.01 = 50.50$ in 2001 and $50.5 \times 1.01 = 51.005$ in 2002.

Rates that change at a constant percentage every year, change linearly on a log scale. For this reason, to estimate the APC for a series of data, the following regression model is used.

$$\log(R_y) = \beta_0 + \beta_1 y$$

Where, $\log(R_y)$ is the natural log of the rate in year y .

The APC from year y to year $y + 1 = \frac{(R_{y+1} - R_y)}{R_y} \times 100$



Annexure II

Principal Investigators of HBCRs

SI No	HBCR Name	Principal Investigator
1	A.J. Hospital & Research Centre, Mangalore	1. Dr. Prashanth Marla K, Medical Director
2	Acharya Harihar Regional Cancer Centre, Cuttack	1. Prof. Pramod Chandra Pathy, HoD, Dept. of Head & Neck Oncology 2. Dr. Dillip Kumar Agarwalla, Asst. Professor (till July 2019)
3	Amrita Institute of Medical Sciences and Research, Kochi	1. Dr. Prem Nair, Medical Director
4	Apollo Hospital, Bhubaneswar	1. Dr. Manas Baisakh, Sr. Consultant Histopathology 2. Dr. Sarala Das (till Sept 2018)
5	Asian Institute of Medical Sciences, Faridabad	1. Dr. Neetu Singhal, Sr. Consultant & HoD, Dept of Radiation Oncology
6	Assam Medical College, Dibrugarh	1. Prof. (Dr.) Sanjeeb Kakati, Principal and Project Chief 2. Dr. H. K. Goswami, Principal-cum-Chief Superintendent (from Sept 2017 to Nov 2020) 3. Dr. Kotokey (from Feb 2016 to Jun 2017) 4. Dr. A.K. Adhikari, Principal and Project Chief (from Dec 2012 to Jan 2016) 5. Dr. Pranab Baruah, Principal and Project Chief (from Jan 2012 to Nov 2012)
7	BPS Government Medical College for Women, Khanpur Kalan, Sonapat	1. Dr. Uma Garg, Prof & Head, Department of ENT & HNS
8	Cachar Cancer Hospital, Silchar	1. Dr. Ravi Kannan, Director
9	Cancer Hospital & Research Institute, Gwalior	1. Dr. B.R. Shrivastava, Director
10	Cancer Institute (WIA), Chennai	1. Dr.R. Swaminathan, Associate Director & Head, Department of Biostatistics and Cancer Registry 2. Dr. V. Shanta (till Mar 2013)
11	Chittaranjan National Cancer Institute, Kolkata	1. Dr. Syamsundar Mandal, HoD, Dept. of Epidemiology & Biostatistics
12	Dr. B Borooah Cancer Institute, Guwahati	1. Dr. Manigreeva Krishnatreya, Scientific Officer 'D', Dept. of Cancer Registry & Epidemiology 2. Dr. Jagannath D. Sharma, Prof. & Head, Dept of Pathology (till Nov 2020)
13	Dr. B.R. Ambedkar Institute Rotary Cancer Hospital, New Delhi	1. S.V. Suryanarayana Deo, Prof & Head, Dept. of Surgical Oncology
14	Erode Cancer Centre, Thindal, Erode	1. Dr. K. Velavan, Director Consultant Oncologist
15	Father Muller Medical College Hospital, Mangalore	1. Dr. Dinesh Shet, Associate Professor of Medical Oncology



16	Fortis memorial Research Institute, Gurgaon	1. Dr. Vinod Raina, Chairman Oncosciences, Executive Director & Head of Medical Oncology & Haematology & Head-Cancer Registry
17	Gandhi Medical College. Bhopal	1. Mr. Atul Shrivastava, Research Officer, Dept of Pathology
18	General Hospital, Ernakulam	1. Dr. Balamuralikrishna K S, Consultant in Oncology
19	Government Medical College, Jammu	1. Dr. Ashutosh Gupta, Prof & Head, Dept. of Radiation Oncology 2. Dr. Dinesh Kumar, Prof & Head, Department of Community Medicine (till Nov 2020)
20	Government Medical College, Thrissur	1. Dr. Shehna A Khader, Associate Professor (CAP) 2. Dr. K.L. Jayakumar, Prof & Head, Dept. of Radiotherapy (till May 2020) 3. Dr. Mahadevan R, Prof & Head, Department of Radiotherapy (till Jul 2018)
21	Govt Arignar Anna Memorial Cancer Hospital & Research Institute, Kanchipuram	1. Dr. Sakthi Usha Devi, Dept of Surgical Oncology
22	HCG Bangalore Institute of Oncology, Bengaluru	1. Dr. B S Ajaikumar, Chairman & CEO
23	HCG NMR Cancer Centre, Hubli	1. Dr. Prasad Gunari, Medical Oncologist (Till Mar 2019)
24	Indira Gandhi Institute of Medical Sciences, Patna	1. Dr. Dinesh Kumar Sinha, Additional Professor, Dept. of Radiation Oncology 2. Dr. Rajesh Kumar Singh, Prof & Head, Dept. of Radiation Oncology (till April 2021)
25	Indo-American Cancer Institute & Research Centre, Hyderabad	1. Dr. K.Kalpana Raghunath, Associate Director & Medical Superintendent
26	International Cancer Centre, Neyyoor	1. Dr. V.G. Sudhakaran MD, Head, Dept of Oncology
27	JIPMER, Regional Cancer Centre, Puducherry	1. Dr. Gunaseelan K, Additional Professor, Dept. of Radiation Oncology
28	Kidwai Memorial Institue of Oncology, Bengaluru	1. Dr. C Ramachandra, Director 2. Dr. K.B. Linge Gowda, Director (till Jul 2018) 3. Dr. M. Vijayakumar, Director (till Dec 2014)
29	Mahavir Cancer Sansthan and Research Centre, Patna	1. Dr. Rita Rani, Senior Consultant, Radiation oncologist 2. Dr. Anita Kumari, Consultant Radiation Oncologist (From Jul 2013 to Jun 2015) 3. Dr. Preeti Jain, Consultant Onco-surgeon, (From Jan 2012 to Jun 2013)
30	Malabar Cancer Centre, Kannur	1. Dr.Saina Sunilkumar , Lecturer/HOD Dept.Cancer Registry & Epidemiology 2. Dr. Satheesan B, Professor & Director (till Mar 2017)
31	Mandya Institute of Medical Sciences, Mandya	1. Dr Venkatesh N, Associate Professor, Dept. of Surgical Oncology





32	Max Super Speciality Hospital, New Delhi	1. Dr. Anil Kumar Anand, Director, Radiation Oncology
33	Max Super Speciality Hospital, PPG, Delhi	1. Dr. Geeta Kadayaprath, Director, Breast Services (Surgical Oncology) 2. Dr Harit Chaturvedi, Chairman (till Jan 2018)
34	Medanta Cancer Centre, Gurgaon	1. Dr. Tejinder Kataria, Radiation Oncologist
35	MES Medical College & Hospital, Perinthalmanna	1. Dr. Muhammed Sajid, Medical Superintendent 2. Dr.Mujeeb Rahman, Medical Superintendent (Jun 2020)
36	Mizoram State Cancer Institute (Civil Hospital), Aizwal	1. Dr. B. Zothankima, Head, Dept. of Radiation Oncology
37	Narayana Hrudayalaya Health City, Bengaluru	1. Dr. Alben Sigamani, Head, Clinical Research 2. Dr. Bhavana Sirohi, Head, Medical Oncology (till Nov 2015) 3. Dr. Sandeep Jain Head, Radiation Oncology(till Aug 2014)
38	North east Cancer Hospital & Research Institute, Guwahati	1. Dr. Gazi Naseem Ahmed, Consultant Histo, Cyto Moleculer Pathologist
39	Postgraduate Institute of Medical Education and Research, Chandigarh	1. Dr. Sushmita Ghosal, Prof & Head, Dept. of Radiation Oncology 2. Dr. S.C. Sharma, Prof & Head, Dept. of Radiation Oncology (From Jan 2011 to Aug 2014)
40	Pravara Rural Hospital & Rural Medical College, Loni	1. Dr. Vandana Jain, Prof & Head, Dept. of Radiation Oncology 2. Dr. K.K. Singh, Prof & Head (till Apr 2015)
41	Rajiv Gandhi Cancer Institute and Research Centre, New Delhi	1. Dr Col. (Retired) Anurag Mehta, Director - Dept. Of Lab. & Transfusion Services and Director Research 2. Dr. A.K Dewan, Director, Surgical Oncology (till Sep 2016)
42	Regional Cancer Centre Kamala Nehru Memorial Hospital, Allahabad	1. Dr. B.Paul Thaliath, Addl. Director & Head, Dept. of Radiation Oncology
43	Regional Cancer Centre, Agartala	2. Dr. Gautam Majumdar, Medical Superintendent
44	Regional Cancer Centre, Indira Gandhi Medial College, Shimla	1. Dr. Manish Gupta, Prof & Head, Dept. of Radiation Oncology 2. Dr. Rajeev Kumar Seam, Prof & Head, Dept. of Radiation Oncology (till Jun 2018)
45	Regional Cancer Centre, Raipur	1. Dr. Vivek Choudhary, Director
46	Regional Cancer Centre, Thiruvananthapuram	1. Dr. Aleyamma Mathew, Prof & Head, Division of Cancer Epidemiology and Biostatistics 2. Dr. Paul Sebastian, Director (Till Aug 2018)
47	Regional Institute of Medical Sciences, Imphal	1. Dr. Sushma Khurajiam, Prof. & HOD Dept. Of Pathology 2. Prof. Ph. Madhubala Devi, Prof & Head, Dept. of Pathology (From Apr 2017 to Oct 2020) 3. Dr Kaushik Debnath Prof & Head, Dept of Pathology (till April 2017)



48	RST Regional Cancer Hospital, Cancer Relief Society, Nagpur	<ol style="list-style-type: none"> 1. Dr. Anjali Kohle, Lab Director & HOD Department of Pathology 2. Dr. B.K. Sharma, Joint Director (Aug 2020)
49	Rural Development Trust, Bathalapalle	<ol style="list-style-type: none"> 1. Dr. N. Hariharanadha Sarma, Senior Consultant Pathologist and Medical Superintendent
50	Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow	<ol style="list-style-type: none"> 1. Prof. Punita Lal, Professor & Head, Dept of Radiation Oncology 2. Dr. Neeraj Rastogi, Professor, Dept of Radiation Oncology (till Apr 2013)
51	SDM College of Dental Sciences and Hospital, Dharwad	<ol style="list-style-type: none"> 1. Dr. Kaveri Hallikeri , Prof. of Oral Pathology
52	Shakuntala Memorial Hospital & Research Centre, Hubli	<ol style="list-style-type: none"> 1. Dr. Vinay Gadigi, Onco Surgeon
53	Sher-I-Kashmir Institute of Medical Sciences, Srinagar	<ol style="list-style-type: none"> 1. Dr. Fiz Afroz, Prof & Head, Dept of Radiation Oncology 2. Dr. M Maqbool Lone, Prof & Head, Dept. of Radiation Oncology (till July 2020)
54	St. Johns Medical Hospital, Bengaluru	<ol style="list-style-type: none"> 1. Dr. Rakesh S Ramesh, Associate Professor & HOD - Department of Surgical Oncology 2. Dr. Elizabeth Vallikad, Prof & Head, Dept of Gynaecologic Oncology. (Till Mar 2018)
55	Tata Medical Centre, Kolkata	<ol style="list-style-type: none"> 1. Dr. Indranil Mallick ,Senior Consultant, Radiation Oncology
56	Tata Memorial Hospital, Mumbai	<ol style="list-style-type: none"> 1. Dr. R A Badwe, Director
57	The Gujarat Cancer & Research Institute, Ahmedabad	<ol style="list-style-type: none"> 1. Dr. Shashank Pandya, Director 2. Dr. Rakesh Vyas, Director (till Feb 2018) 3. Dr. Shilin Shukla, Director (till Sep 2013)
58	Vydehi Institute of Medical Sciences, Bengaluru	<ol style="list-style-type: none"> 1. Dr. M.S. Ganesh, Prof & Head, Department of Medical Oncology





Annexure III Principal Investigators of PBCRs

Sl. No	PBCR Name	Centre Name	Investigators
1	Delhi, NCT of Delhi	Dr. B.R. Ambedkar Institute Rotary Cancer Hospital, All India Institute of Medical Sciences, New Delhi, NCT of Delhi	1. Dr. S.V. Suryanarayana Deo, Prof & Head, Dept. of Surgical Oncology, Delhi Cancer Registry 2. Dr. N.K. Shukla, Prof & Head, Dept. of Surgical Oncology, (till November 2017)
2	Patiala district, Punjab state	Government Medical College and Rajindra Hospital, Patiala, Punjab state	1. Dr. Vijay Kumar Bodal, Associate Professor, Dept. of Pathology (from March 2015) 2. Dr. Manjit Singh Bal, Prof & Head, Dept. of Pathology (till March 2015)
3	Hyderabad district, Telangana state	Nizam's Institute of Medical Sciences, Hyderabad, Telangana state	1. Dr. G. Sadashivudu, Additional Professor & Head Dept. of Medical Oncology, (from December 2013) 2. Dr. D. Raghunadharao, Professor of Medical Oncology, (till December 2013)
4	Kollam district, Kerala state	Regional Cancer Centre, Thiruvananthapuram, Kerala state	1. Dr. Rekha G Nair, Director 2. Dr. Paul Sebastian, Director (till August 2018)
5	Thiruvananthapuram district, Kerala state	Regional Cancer Centre, Thiruvananthapuram, Kerala state	1. Dr. Aleyamma Mathew, Prof & Head, Division of Cancer Epidemiology & Biostatistics
6	Bangalore, Karnataka state	Kidwai Memorial Institute of Oncology, Bengaluru, Karnataka state	1. Dr. Ramachandra, Director 2. Dr. K. B. Linge Gowda, Director (till July 2018) 3. Dr. M. Vijayakumar, Director (till December 2014)
7	Chennai, Tamil Nadu state	Cancer Institute (WIA), Chennai, Tamil Nadu state	1. Dr. R. Swaminathan, Assistant Director, Prof & Head, Dept. of Epidemiology, Biostatistics and Cancer Registry (from April 2013) 2. Dr. V. Shanta, Chairman (till March 2013)
8	Kolkata, West Bengal state	Chittaranjan National Cancer Institute (CNCI) and Saroj Gupta Cancer Centre & Research Institute (SGCCRI), Kolkata, West Bengal state	1. Dr. Syamsundar Mandal, Head, Epidemiology & Biostatistics (from September 2018) 2. Dr. Ranjit Kumar Mandal, Head, Epidemiology & Biostatistics (from February 2018 to September 2018) 3. Dr. Tapas Maji, Director-in-charge, (from January 2017 to February 2018) 4. Prof.(Dr.) Jaydip Biswas, Director (from January 2012 to January 2017)
9	Ahmedabad urban, Gujarat state	Gujarat Cancer & Research Institute,	1. Dr. Shashank Pandya, Director, GCRI (from May 2018)



		Ahmedabad, Gujarat state	<ol style="list-style-type: none"> 2. Dr. Rakesh Vyas Director, GCRI (till February 2018) 3. Dr. Shilin Shukla Director, GCRI (till September 2013)
10	Aurangabad, Maharashtra state	Indian Cancer Society, Parel, Mumbai, Maharashtra state	<ol style="list-style-type: none"> 1. Dr. Vinay Deshmane, Jt. Hon. Secretary and Medical Director
11	Osmanabad & Beed, Maharashtra state	Nargis Dutt Memorial Cancer Hospital, Barshi, Maharashtra state	<ol style="list-style-type: none"> 1. Mr B S Shukala, Treasurer, Director - Ashwini Rural Cancer Research & Relief Society (ARCRRRC), Barshi (from June 2020) 2. (Late) Dr. Bhagwan M. Nene, Chairman, ARCRRRC, Medical Director Nargis Dutt Memorial Cancer Hospital Barshi. (till Jan 2020)
12	Barshi rural, Maharashtra state	Tata Memorial Hospital, Mumbai and Nargis Dutt Memorial Cancer Hospital, Barshi, Maharashtra state	<ol style="list-style-type: none"> 1. Dr. R A Badwe, Director, Tata Memorial Centre
13	Mumbai, Maharashtra state	Indian Cancer Society, Parel, Mumbai, Maharashtra state	<ol style="list-style-type: none"> 1. Dr. Vinay Deshmane, Hon. Secretary and Medical Director
14	Pune, Maharashtra state	Indian Cancer Society, Parel, Mumbai, Maharashtra state	<ol style="list-style-type: none"> 1. Dr. Vinay Deshmane, Hon. Secretary and Medical Director
15	Wardha district, Maharashtra state	Mahatma Gandhi Institute of Medical Sciences, Sevagram, Wardha Maharashtra state	<ol style="list-style-type: none"> 1. Dr. Nitin Gangane, Dean, Director Professor of Dept. of Pathology
16	Bhopal, Madhya Pradesh state	Gandhi Medical College, Bhopal, Madhya Pradesh state	<ol style="list-style-type: none"> 1. Dr. Reeni Malik, Professor and Head, Dept. of Pathology 2. Dr. Neelkamal Kapoor, Professor and Head, Dept. of Pathology (Till July 2013)
17	Nagpur, Maharashtra state	Indian Cancer Society, Parel, Mumbai, Maharashtra state	<ol style="list-style-type: none"> 1. Dr. Vinay Deshmane, Hon. Secretary and Medical Director
18	Manipur state	Regional Institute of Medical Sciences, Imphal	<ol style="list-style-type: none"> 1. Dr. Sushma Khurajam Professor & Head (from 2020) 2. Prof. Ph. Madhubala Devi, Prof & Head, Dept. of pathology, (from April 2017 to 2020) 3. Dr. Kaushik Debnath, Prof & Head, Dept. of Pathology (From March 2012 to April 2017) 4. Dr. Y. Mohen Singh, Prof & Head, Dept. of Pathology (till March 2012)
19	Mizoram state	Civil Hospital, Aizawl, Mizoram	<ol style="list-style-type: none"> 1. Dr. Eric Zomawia, Pathologist



20	Sikkim state	Sir Thutob Namgyal Memorial Referral Hospital, Gangtok, Sikkim	<ol style="list-style-type: none"> 1. Dr. T.W Bhutia, Head, Dept of Pathology (from January 2018) 2. Dr. Prakash Kumar Pradhan, Chief Consultant & Head, Dept. of Pathology, (From April 2015 to December 2017) 2. Dr. Yogesh Verma (till March 2015)
21	Tripura state	Cancer Hospital, Regional Cancer Centre, Agartala, Tripura	<ol style="list-style-type: none"> 1. Dr. Gautam Majumdar, Medical Superintendent
22	West Arunachal Pradesh state	Tomo Riba State hospital, Naharlagun, Arunachal Pradesh	<ol style="list-style-type: none"> 1. Dr. Sopai Tawsik, Selection Grade Specialist (Pathology)
23	Pasighat	General Hospital, Pasighat, Arunachal Pradesh	<ol style="list-style-type: none"> 1. Dr. Kaling Jerang, Senior Pathologist (from January 2015) 2. Dr. Tapi Ering, Sr. Pathologist (till January 2015)
24	Meghalaya	Civil Hospital, Shillong, Meghalaya	<ol style="list-style-type: none"> 1. Dr. W. B. Langstieh, Pathologist (from July 2014) 3. Dr. R. S Dympep, Sr. Pathologist, Pasteur Institute, Shillong (till February 2014)
25	Nagaland	Naga Hospital Authority, Kohima	<ol style="list-style-type: none"> 1. Dr. V Khamo, Head Dept. of Pathology
26	Cachar district, Assam state	Silchar Medical College, Silchar	<ol style="list-style-type: none"> 1. Dr. Shah Alam Sheikh, Associate Professor, Dept. of Pathology (from July 2019) 2. Dr. Sekhar Chakravarty, Vice Principal (till July 2019)
27	Dibrugarh district, Assam state	Assam Medical College, Dibrugarh	<ol style="list-style-type: none"> 1. Dr. Projnan Saikia, Professor, Dept of Pathology (From June 2016) 2. Dr. M.S. Ali, Sr. Statistician & Principal Investigator (till May 2016)
28	Kamrup urban, Assam state	Dr. B Borooah Cancer Institute, Guwahati, Assam	<ol style="list-style-type: none"> 1. Dr. Debabrata Barmon, Deputy Director, (Academics), Professor & In-charge. Department of Gyn. Oncology (from April 2021) 2. Dr. Jagannath Dev Sharma, Prof & Head, Dept. of pathology (till March 2021)

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