



MEGHALAYA MISSION

CANCER PREVENTION
AND EARLY DETECTION



STATE CANCER SOCIETY OF MEGHALAYA
Government of Meghalaya

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**MEGHALAYA MISSION CANCER
PREVENTION AND EARLY DETECTION**

A message from
Conrad K. Sangma
Chief Minister of Meghalaya



The State of Meghalaya is experiencing a rapid health transition with a rising burden of cancer in the state where East Khasi Hills District ranks 2nd in males in the incidence of cancer with 227.9 cases per 1 Lakhs population and ranks 11th in females in the incidence of cancer with 118.6 cases per 1 Lakhs population as per profile of cancer and related health indicators in the North- East Region- 2021(ICMR –NCDIR). Cancer is quite common in both developing as well as developed countries, but awareness is poor among the general population. Poor awareness may lead to poor uptake of screening modalities and delay in diagnosis. One factor that has been consistently shown to be associated with late diagnosis and treatment is a delay in seeking help for cancer-like symptoms.

With the increasing trend of cancer in the state of Meghalaya, the awareness level is expected to change, so is the attitude towards cancer screening. Awareness about cancers and cancer screening procedures will help in most of the cancers that remain in the precancerous stage for a longer period and early diagnosis will help in reducing mortality. Awareness of early signs of cancer is related to better health-seeking behaviour and early detection of common cancer. To tackle the high incidence of cancer in the state, the Government of Meghalaya has launched the “Meghalaya Mission Cancer Prevention and Early Detection” which is an intervention of making prevention and early detection services more accessible for people in the communities and by collaborating with stakeholders to maximize the effectiveness and reach of the programme.

Cancer remains a healthcare challenge in the state and the financial burden associated with cancer is also growing. To improve the cancer care, the Government has successfully established the DAE-Civil Hospital Cancer Wing which is equipped with the best cancer facilities. Similarly, the “Tura Cancer Wing” will soon be established in Tura Civil Hospital for the cancer patients of Garo Hills..

I congratulate the Department of Health and Family Welfare, Government of Meghalaya and the State Cancer Society of Meghalaya for the initiative of a vision in saving lives across all populations. I appeal to all the citizens of the state to actively participate and involve in the Mission by spreading awareness, adopting healthy lifestyle and ensuring enrolment in screening with a goal to reduce the cancer burden in the state



(Conrad K. Sangma)
Chief Minister
Government of Meghalaya

A message from
James P. K Sangma
Minister Of Health & Family Welfare



The importance of cancer awareness has been emphasised as a means of ensuring behaviour that facilitates early detection, whereas the absence of cancer awareness has been seen as a detriment to this end. Delay in health-seeking is also attributed to factors such as lack of awareness, financial constraints, myths and superstitions. All these go hand-in-hand most of the time.

Screening is an important preventive measure in cancer control. Even though the state programme in Meghalaya has a screening component, it is yet to take root in most part of the district. At present, most of the screening tests are available at higher centres only. The available screening methods to the population are also not adequately utilised.

It is a matter of great pleasure to know that the State Cancer Society of Meghalaya has launch “The Meghalaya Mission Cancer Prevention and Early Detection”. The goal of this mission is to detect cancer at an early stage and to save all lives by focussing on mass awareness, increase screening, human resource development, prevention and early diagnosis, management and treatment on cancer. With this mission the Department of Health and Family Welfare has developed this comprehensive approach on cancer care to provide services to all the population of the state. This mission has made an effort to cover the gaps in service delivery and utilisation, and for that, it is pertinent to understand the attitude of people towards screening practices.

The State Cancer Society of Meghalaya under the Department of Health and Family Welfare has successfully established the DAE-Civil Hospital Cancer Wing with an effort to establish almost free of cost of facilities and ensure that the patients do not encounter any difficulties related with cancer treatment. The hospital is also elevated with scientific and well-equipped Pain Management and Palliative Care Centre.

Tura Cancer Wing also will soon be establishing at Tura Civil Hospital with similar cancer care facilities to cater to the cancer patients of Garo Hills which is a part of the mission objectives.

I wish the State Cancer Society of Meghalaya and all the stakeholders involved in the mission the very best for the successful implementation of the mission.

James P. K Sangma
Minister of Health & Family Welfare
Government of Meghalaya

A message from
D. P. Wahlang
Chief Secretary



Cancer leaves virtually zero lives unaffected. It is, after all, the second-leading cause of death. From the person living with the disease, to their children, parents, siblings, friends, extended family, and colleagues, cancer's reach is long and unremitting. I am pleased to know about the launched of the "Meghalaya Mission Cancer Prevention and Early Detection" by the Department of Health and Family Welfare, Government of Meghalaya with the State Cancer Society of Meghalaya as an implementing agency in collaboration with the National Health Mission, World Economic Forum, Indian Institute of Public Health (IIPH) Gandhinagar, Gujarat and NEIGRIHMS.

The goal of this mission is to detect cancer at an early stage and to save lives across all populations. In India, the incidence of cancer is increasing rapidly; therefore, it is important to step up cancer literacy and knowledge amongst the population. According to the report from the National Cancer Registry Programme India 2020, it states that the East Khasi Hills District of Meghalaya had the highest relative proportion of cancers associated with the use of tobacco.

Hence, this mission is designed to reduce the burden of cancer in the state by creating mass awareness, increase screening, provision of basic diagnostic tools at all district hospitals, human resource development, prevention and early diagnosis, management and treatment on cancer.

I convey my regards and well wishes to the State Cancer Society of Meghalaya for their efforts to reduce the cancer burden through appropriate interventions. We hope that this will lead to early detection which is important in the management and treatment of cancer and also prevention by encouraging for behavioural change and to adopt healthy lifestyle.

D. P. Wahlang, IAS
Chief Secretary
Government of Meghalaya

A message from
Sampath Kumar
Principal Secretary



Cancer diagnosis is one of the most feared events. Meghalaya has a high incidence of cancer with around 227 males and around 118 females per one lakhs population getting newly diagnosed every year. The continued use of tobacco products, Alcohol consumption, Betel nut chewing and other factors has led to high incidence of cancer amongst the people of Meghalaya.

Meghalaya commenced the cancer treatment facility at Civil Hospital Shillong in May 2006 with a Cobalt machine for Radiotherapy. Seeing the need of a comprehensive cancer treatment facility in the state, efforts were made by the then cancer specialists with the help from the Ministry of Health and Family Welfare, Government of India on April 2005, under the National Cancer Control Programme (NCCP) had successfully purchased and installed one unit of Tele-cobalt machine at Civil Hospital Shillong.

The STATE CANCER SOCIETY OF MEGHALAYA under the Department of Health & Family Welfare, Government of Meghalaya was registered under the Meghalaya Societies Registration Act, 12 of 1983 on 13th January 2004 to strengthen the Cancer care services in the state. With support from the Department of Atomic Energy (DAE) and the Government of Meghalaya, "The DAE-Civil Hospital Cancer Wing" was established at Civil Hospital Shillong.

However, cancer treatment is not the only solution to fight against this dreaded disease. In order to improve the health scenario in our state we also need to reduce the incidence of cancer. The Government of Meghalaya through the Department of Health & Family Welfare has taken the initiative to address the issues of cancer in the state with the aim to reduce the burden of cancer and focus on strengthening infrastructure, human resource development, prevention and early diagnosis, management and treatment.

The state government has launched the "Meghalaya Mission Cancer Prevention and Early Detection" which is an intervention programme developed to tackle and reduced the burden of cancer in the state. The mission will encompass the whole state of Meghalaya both rural and urban with the involvement of all the stakeholder which includes the Village Health Council, traditional healers, Health and Wellness Centres, District Hospitals, Community Health Centres and Primary Health Centres. All the stakeholders have a vital role to play in combatting the burden of cancer in the state by creating mass awareness, mass screening and adopting of healthy lifestyle and behavioural change. All basic cancer diagnostic equipments will be made available at all District Hospital and will be gradually upscaled to all community Health Centres and Primary Health Centre. This Mission will offer free services to all the population of the state especially the High Risk Group, BPL and APL families.

The establishment of state of the art well-equipped cancer center in East Khasi Hills District “The DAE-Civil Hospital Cancer Wing”, Civil Hospital Shillong will change the cancer management scenario in the state. The “Tura Cancer Wing” to be established soon in Tura Civil Hospital with the same cancer care facilities like the DAE-Civil Hospital Cancer Wing which will cater to the cancer population of Garo Hills. These health infrastructures are being designed specifically for cancer treatment from the initial stage of diagnosis till the completion of treatment and rehabilitation.

DAE-Civil Hospital Cancer Wing will now function as a comprehensive cancer care centre to ease the emotional, financial and psychological burden of cancer for the people of Meghalaya. With the OPD, IPD and Day care chemotherapy services, the DAE-Civil Hospital Cancer centre will provide a much-needed relief to the cancer patients who travelled outside the state for cancer treatment due to lack of infrastructure and were uncertain about where to obtain the correct diagnosis, prognosis, and treatment recommendations. The Radiotherapy Equipments will also soon be installed in The DAE-Civil Hospital Cancer Wing.

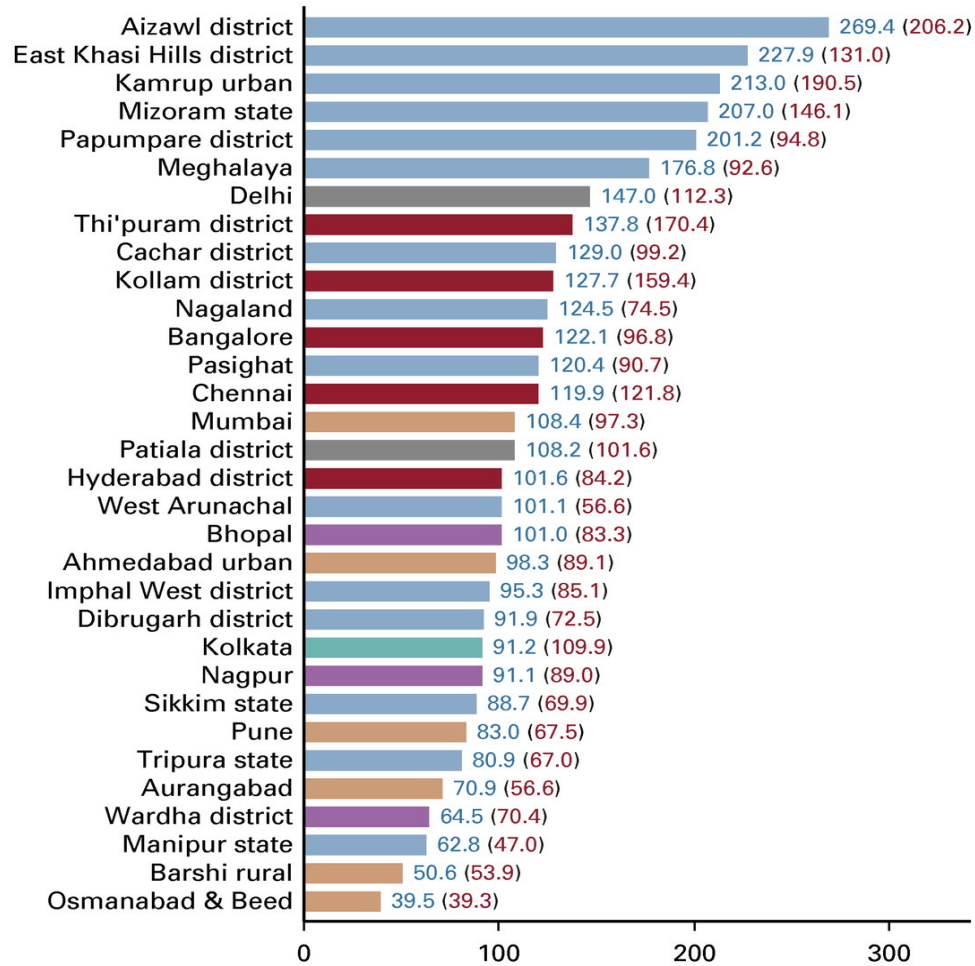
We dream of a cancer care delivery system that will ensure access to high-quality, patient-centered, evidence-based care, and that patients with cancer will have care teams supported by a system that enables them to provide compassionate and timely care.

This Meghalaya Mission Cancer Prevention and Early Detection will be implemented by State Cancer Society of Meghalaya in collaboration with National Health Mission, Meghalaya, World Economic Forum, Indian Institute and Public Health (IIPH) Gandhinagar, Gujarat and NEIGRIHMS. The Mission is the outcome of the thoughtful deliberations of our study committee, as well as the hard work of the team of the State Cancer Society, Meghalaya. If we can use this framework to successfully address the challenges to deliver high-quality oncology care, the same principles will be transferrable to other complex and chronic conditions that place continued demands on the health care system. This mission will chart a new course for the cancer control system that will ensure the decrease in cancer incidence over a period of time.

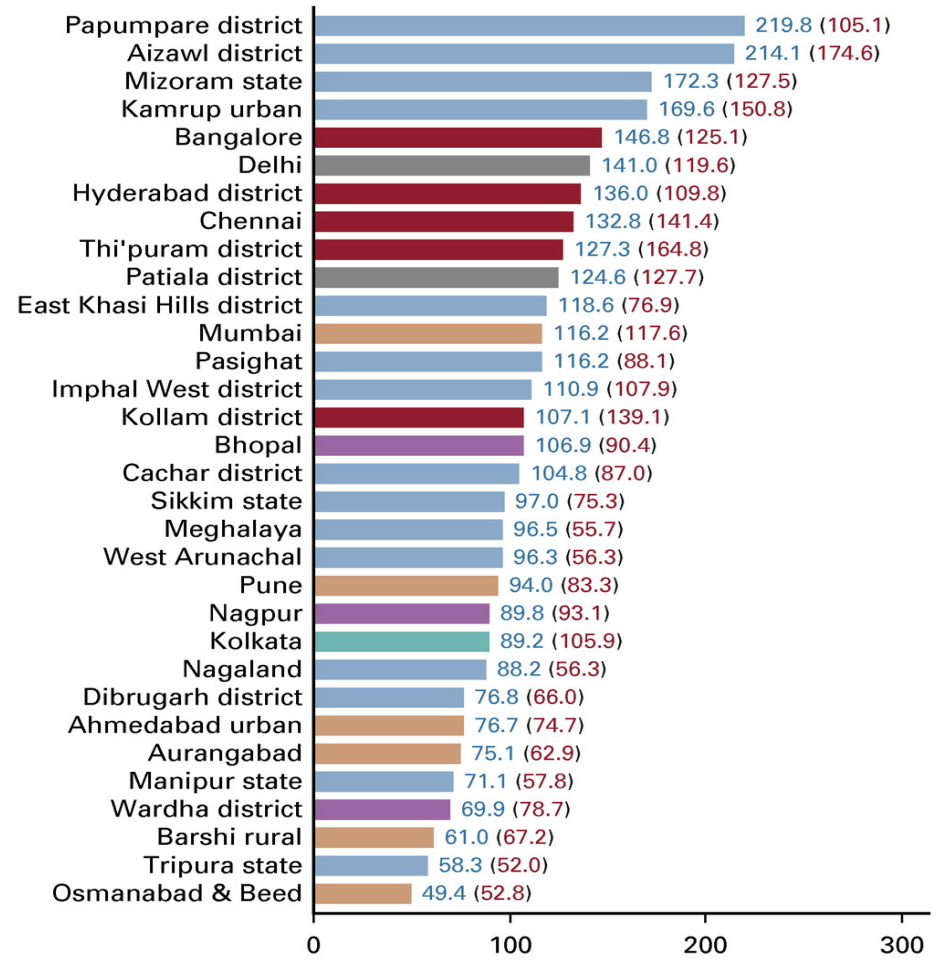
I convey my sincere and best wishes to all the convergence team who will play a vital role in achieving the common goal of the mission.

Sampath Kumar, IAS
Principal Secretary
Health & Family Welfare Department
Government of Meghalaya

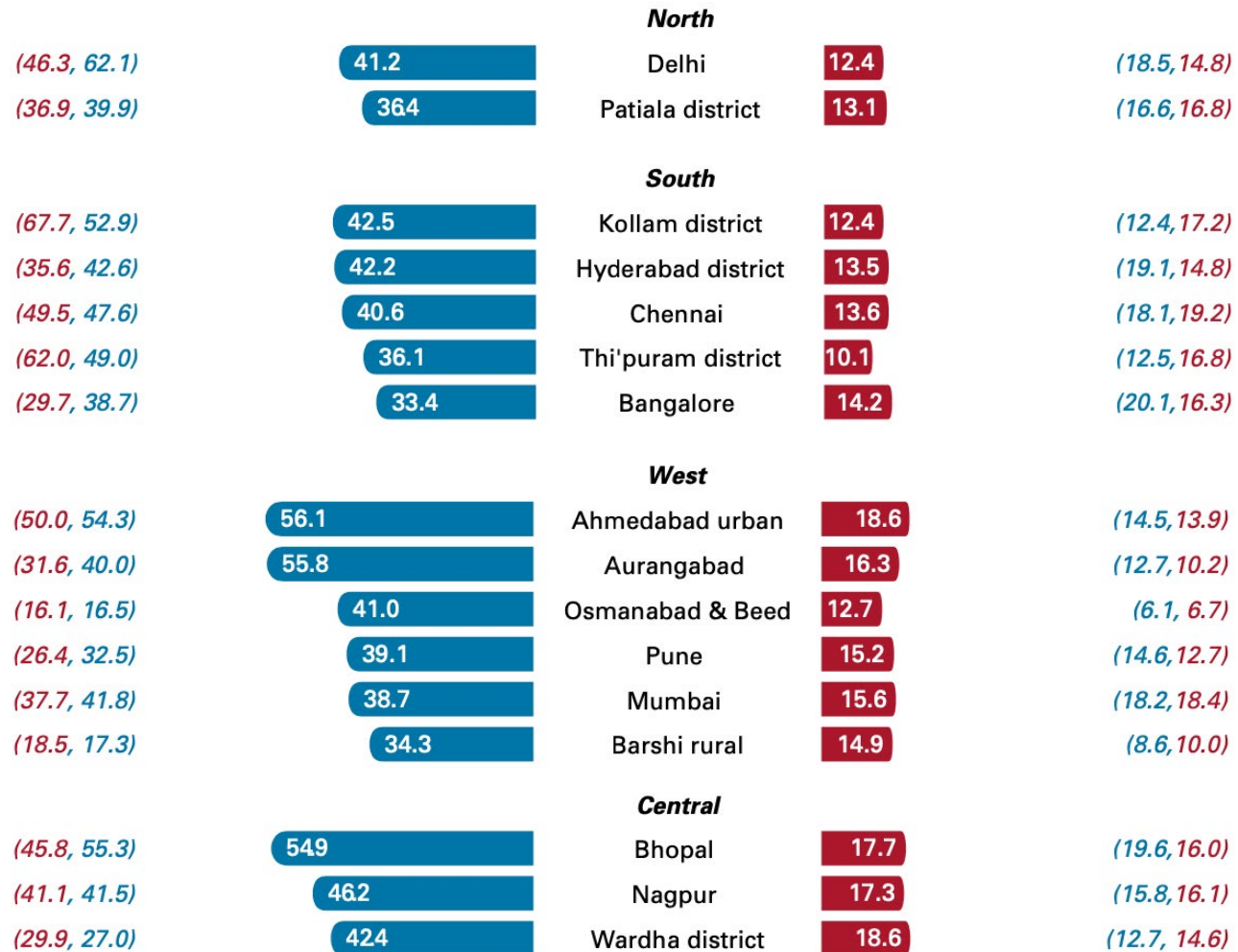
CANCER STATISTICS of Meghalaya

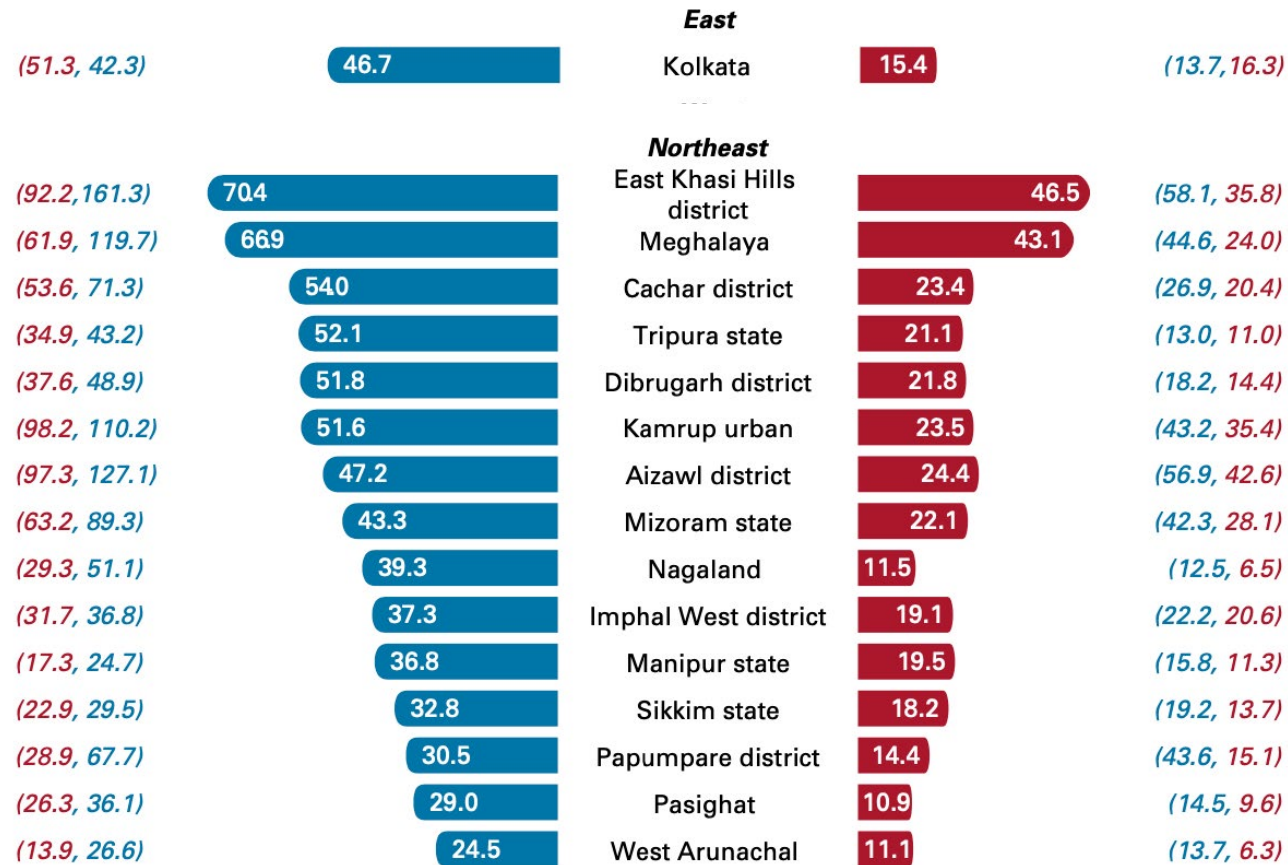


Males
Rates Per 1,00,000



Females
Rates Per 1,00,000





Sites of cancer associated with the use of tobacco (%), 2012-2016. Crude rate in red and age-adjusted rates in blue are given in parentheses. Sites of cancer associated with the use of tobacco, anatomic sites (International Statistical Classification of Diseases and Related Health Problems, 10th revision codes), lip (CO0); tongue (CO1-CO2); mouth (CO3-CO6); pharynx (C10 and C12-C14); esophagus (C15); larynx (C32); lung (C33-C34); urinary bladder (C67).³³ Thi'pura district, Thiruvananthapuram district.

Incidence of HPV related cancers registered in PBCRs under NCRP in 2012-2016

Name of the PBCR	Males				
	Number of HPV cancers	CR	AAR	Cumulative risk	Proportion to all sites of cancer (%)
Delhi	1,218	4.4	5.9	1 in 135	3.9
Patiala district	205	3.9	4.1	1 in 211	3.8
Hyderabad district	144	2.3	2.8	1 in 300	2.8
Kollam district	270	4.3	3.4	1 in 231	2.7
Thi'puram district	347	4.4	3.5	1 in 235	2.6
Bangalore	374	2.7	3.5	1 in 228	2.8
Chennai	537	4.5	4.4	1 in 199	3.7
Kolkata	231	2.4	2.0	1 in 415	2.3
Ahmedabad urban	456	2.8	3.1	1 in 267	3.1
Aurangabad	52	1.6	2.0	1 in 422	2.7
Osmanabad & Beed	162	1.7	1.8	1 in 482	4.5
Barshi rural	23	1.7	1.6	1 in 594	3.2
Mumbai	627	2.2	2.6	1 in 321	2.4
Pune	235	1.7	2.1	1 in 400	2.4
Wardha district	99	3.0	2.6	1 in 307	4.1
Bhopal	124	2.9	3.6	1 in 226	3.5
Nagpur	217	3.4	3.4	1 in 249	3.6
Manipur state	112	1.5	2.0	1 in 399	3.0
Imphal West district	37	2.7	3.1	1 in 251	3.3
Mizoram state	91	3.1	4.1	1 in 206	2.1
Aizawl district	52	4.9	6.1	1 in 138	2.4
Sikkim state	17	1.0	1.2	1 in 749	1.5
Tripura state	383	3.9	4.7	1 in 182	5.8
West Arunachal	30	1.4	2.6	1 in 377	2.5

Name of the PBCR	Males				
	Number of HPV cancers	CR	AAR	Cumulative risk	Proportion to all sites of cancer (%)
West Arunachal	30	1.4	2.6	1 in 377	2.5
Papumpare district	14	2.8	5.3	1 in 166	3.0
Meghalaya	250	5.0	9.1	1 in 92	5.3
East Khasi Hills district	166	7.5	12.4	1 in 69	5.8
Nagaland	76	4.0	7.1	1 in 110	5.4
Pasighat	7	1.9	2.6	1 in 320	2.2
Cachar district	208	4.4	5.9	1 in 142	4.5
Dibrugarh district	109	3.1	4.0	1 in 220	4.3
Kamrup urban	324	9.9	10.7	1 in 80	5.2

HPV, Human papillomavirus; CR, Crude incidence rate per 100,000; AAR, Age adjusted incidence rate per 100,000; NCRP, National Cancer Registry Programme; Thi' puram, Thiruvananthapuram; PBCR, Population Based Cancer Registry

Name of the PBCR	Females				
	Number of HPV cancers	CR	AAR	Cumulative risk	Proportion to all sites of cancer (%)
Delhi	3,329	13.7	16.1	1 in 54	11.5
Patiala district	732	15.4	15.0	1 in 60	12.0
Hyderabad district	672	11.4	14.2	1 in 58	10.4
Kollam district	673	9.6	7.1	1 in 119	6.9
Thi'puram district	914	10.5	7.8	1 in 108	6.4
Bangalore	2,122	16.8	19.8	1 in 44	13.4
Chennai	2,141	17.9	17.0	1 in 49	12.7
Kolkata	1,065	12.3	10.3	1 in 84	11.6
Ahmedabad urban	1,249	8.5	8.6	1 in 102	11.3
Aurangabad	413	13	15.7	1 in 54	20.6
Osmanabad & Beed	1,264	15	14.1	1 in 62	28.3
Barshi rural	227	18.7	16.9	1 in 51	27.9
Mumbai	2,350	10.1	9.9	1 in 87	8.6
Pune	1,273	9.8	11.1	1 in 78	11.8
Wardha district	325	10.3	8.9	1 in 102	12.8
Bhopal	471	11.9	14.2	1 in 58	13.1
Nagpur	839	12.9	12.5	1 in 71	13.9
Manipur state	494	6.3	7.8	1 in 109	11.0
Imphal West district	150	10.7	11.1	1 in 77	10.0
Mizoram state	603	20.6	24.3	1 in 41	16.1
Aizawl district	294	27.1	28.8	1 in 36	15.5
Sikkim state	134	8.9	11.4	1 in 76	11.8
Tripura state	921	9.7	10.9	1 in 82	18.7
West Arunachal	153	7.2	11.7	1 in 76	13.1
Papumpare district	81	16.1	34.5	1 in 23	15.3
Meghalaya	334	6.6	10.6	1 in 86	11.8
East Khasi Hills district	180	8	11.6	1 in 79	10.4

Name of the PBCR	Females				
	Number of HPV cancers	CR	AAR	Cumulative risk	Proportion to all sites of cancer (%)
Nagaland	175	10	14.7	1 in 64	17.6
Pasighat	60	17.5	22.1	1 in 45	19.8
Cachar district	696	15.3	17.9	1 in 53	17.7
Dibrugarh district	187	5.5	6.6	1 in 133	8.4
Kamrup urban	555	17.4	19.4	1 in 45	11.6

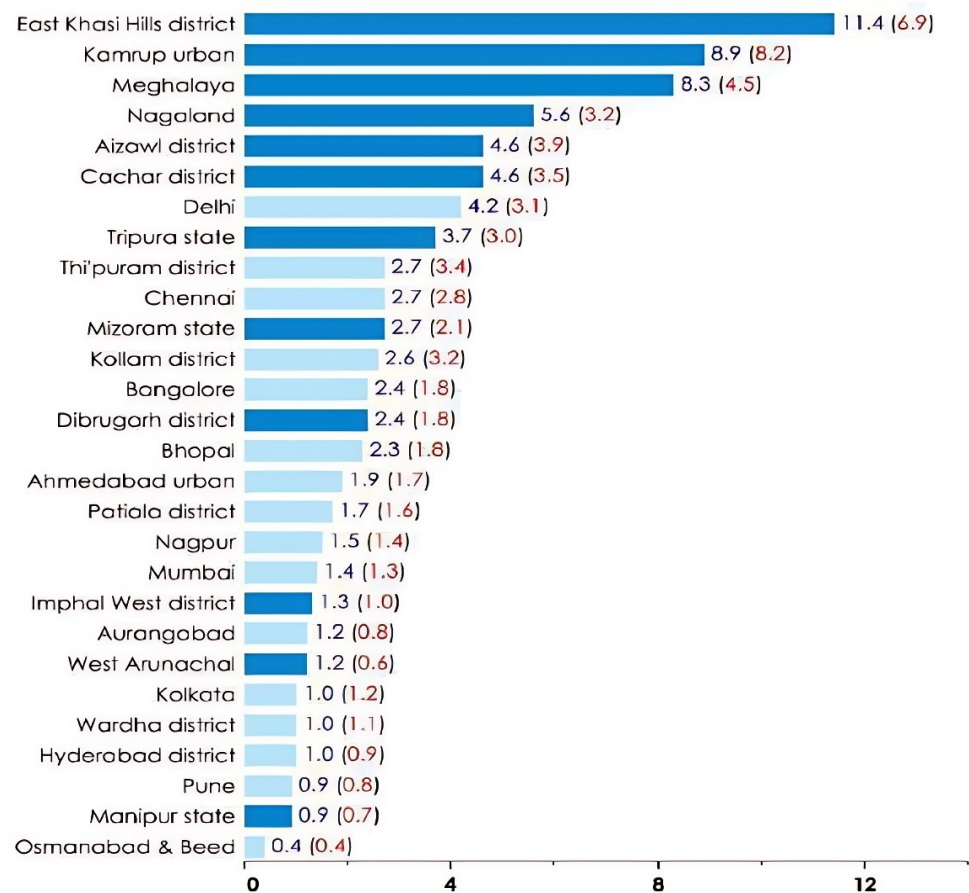
HPV, Human papillomavirus; CR, Crude incidence rate per 100,000; AAR, Age adjusted incidence rate per 100,000; NCRP, National Cancer Registry Programme; Thi' puram, Thiruvananthapuram; PBCR, Population Based Cancer Registry

**CANCER
& RELATED
HEALTH
INDICATORS**

In the
North East Region of India

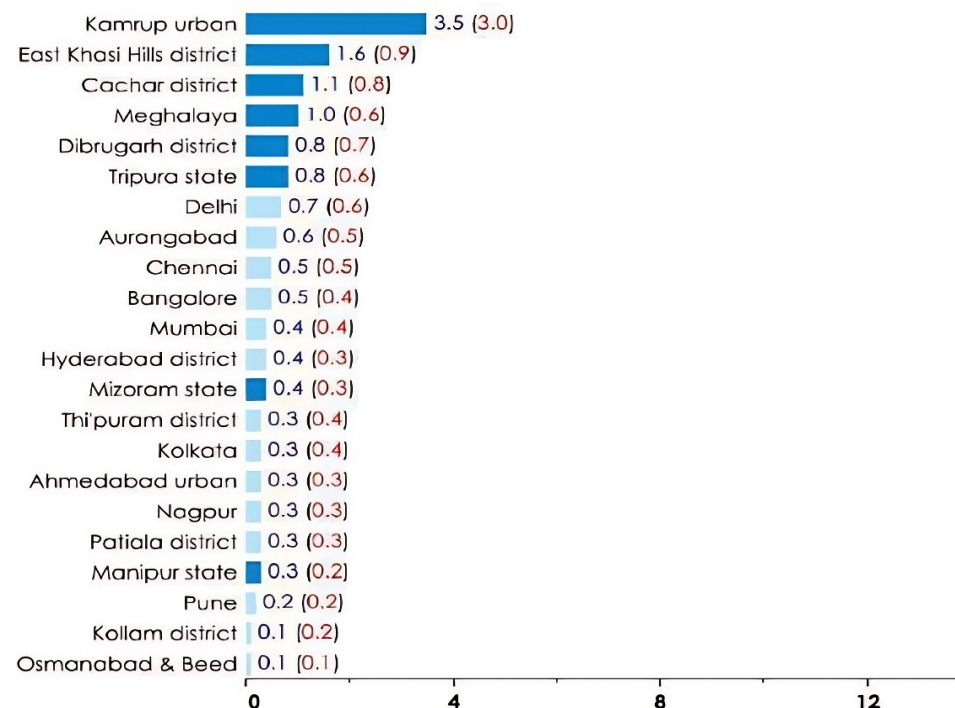
2021

Oropharynx - Males



Males
Rates Per 1,00,000

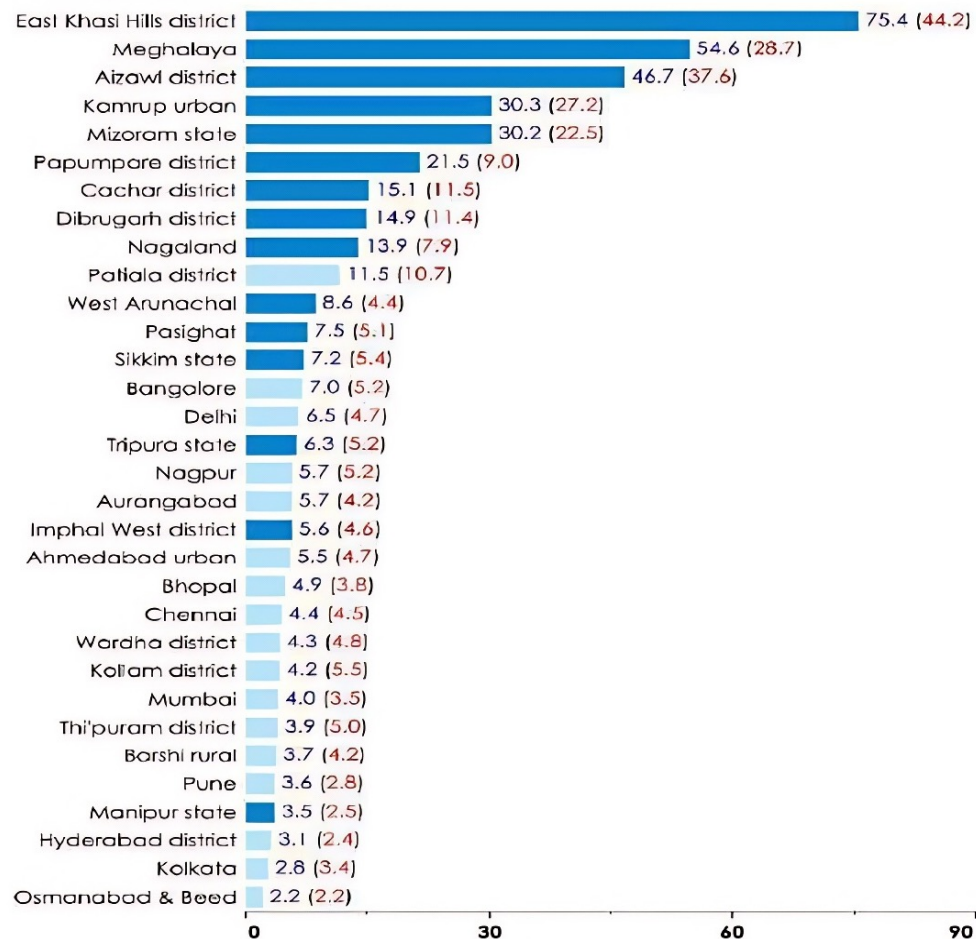
Oropharynx - Females



Females
Rates Per 1,00,000

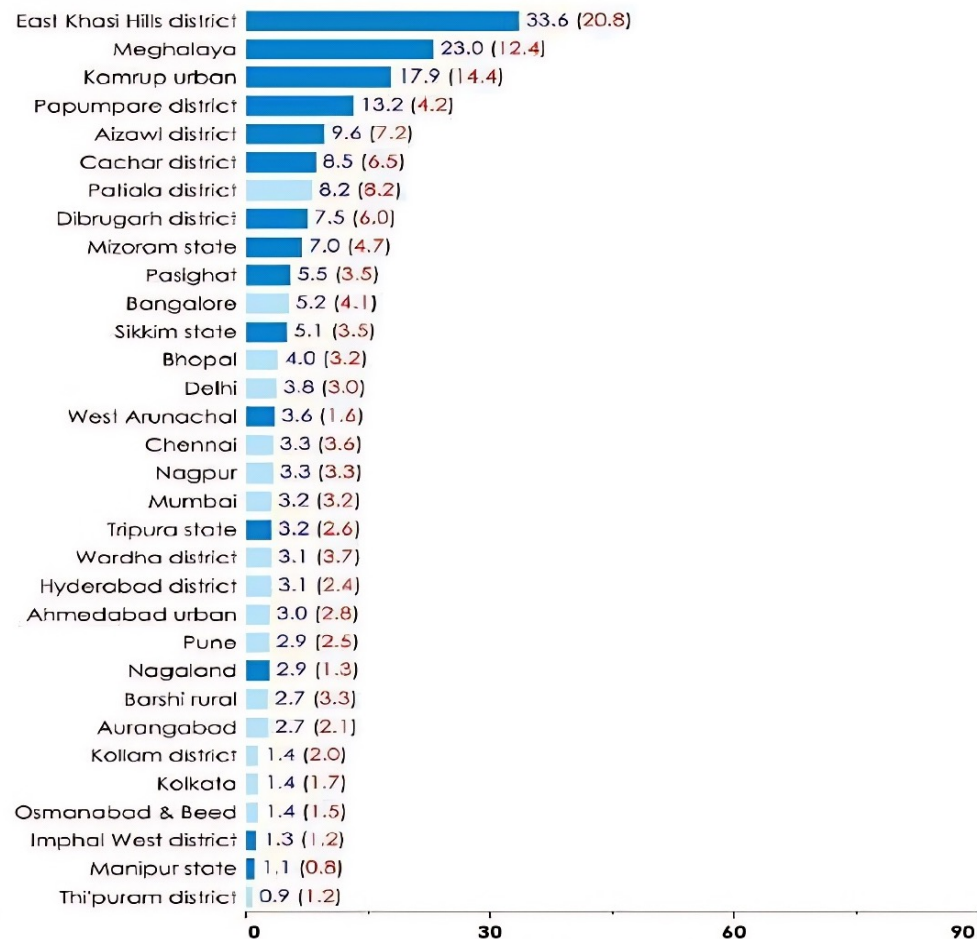
AAR (CR) ■ North East India ■ Rest of India

Oesophagus - Males



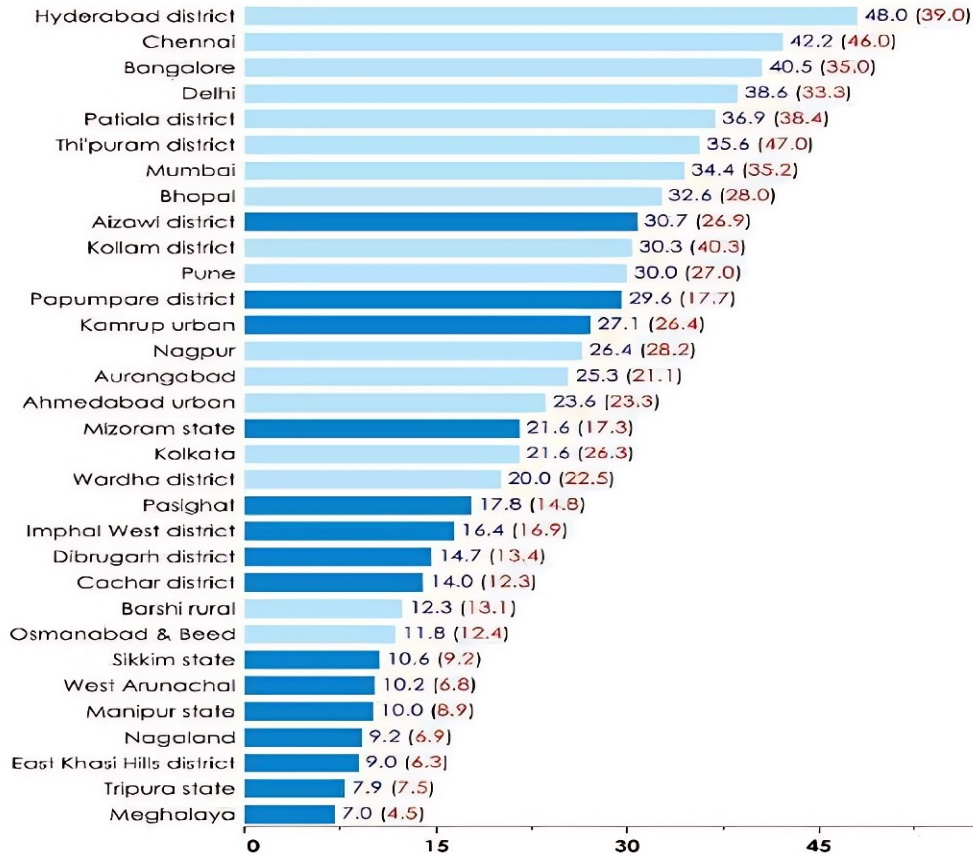
Males
Rates Per 1,00,000

Oesophagus - Females



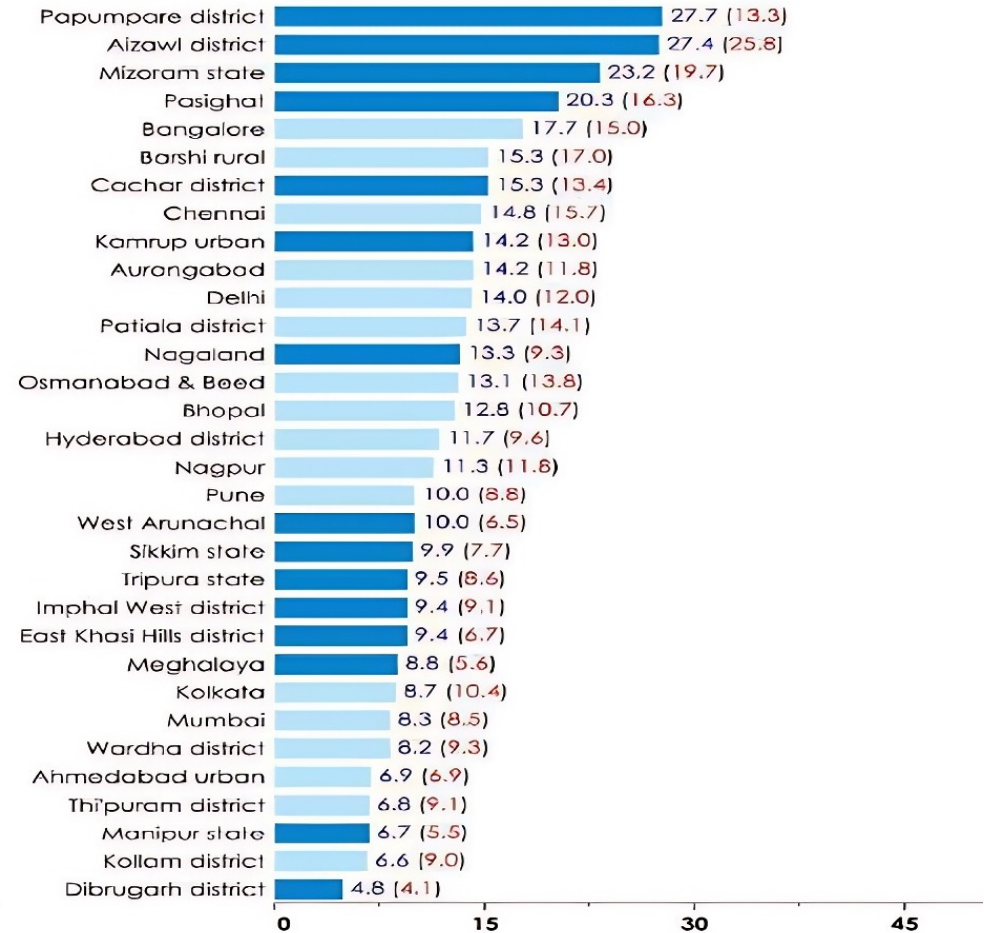
Females
Rates Per 1,00,000

Breast - Females



Breast Females
Rates Per 1,00,000

Cervix Uteri



Cervix Uteri
Rates Per 1,00,000

CANCER STATISTICS

Civil Hospital

**OPD Patients Attending, Civil Hospital Shillong
Year 2022-2023 (April 22 – March 23)**

Months	Total Onco Patients	Onco New Patients			New RT Patient's		
		Male	Female	Total	Male	Female	Total
April 2022	772	84	59	143	34	22	56
May 2022	744	64	39	103	31	20	51
June 2022	673	45	26	71	33	13	46
July 2022	701	80	40	120	29	20	49
Aug 2022	663	63	45	108	32	17	49
Sept 2022	797	64	41	105	24	22	46
Oct 2022	595	59	54	83	5	1	6
Total	4,945	459	274	733	188	115	303

**IPD Oncology Ward and Total Head Count at
Mid- Night Admitted in Civil Hospital Shillong
Year 2022-2023**

Months	Total New Patients in General Oncology Ward			Total Head Count at Midnight
	Male	Female	TOTAL	
April 2022	78	49	127	1,516
May 2022	77	52	129	1,766
June 2022	88	48	136	1,726
July 2022	91	71	162	1,936
Aug 2022	110	48	158	1,905
Sept 2022	97	60	157	2,111
Oct 2022	79	58	137	2,117
Total	620	386	1006	13,077

**Statistics for Day Care Patients for the
Year 2022-2023**

Months	Total No. of Patients		
	New Cases	Old Cases	TOTAL
April 2022	78	46	124
May 2022	126	58	184
June 2022	128	71	199
July 2022	87	48	135
Aug 2022	95	29	124
Sept 2022	104	112	216
Oct 2022	119	161	280
Total	737	525	1,262

**Following are the Total No. of Screening for Cancer for the
Year 2022 in Civil Hospital Shillong
(w.e.f 1st January – 31st August 2022)**

Month	Male	Female	Total
January 2022	5	0	5
February 2022	5	4	9
March 2022	1	4	5
April 2022	3	5	8
May 2022	3	3	6
June 2022	3	3	6
July 2022	1	0	1
Aug 2022	3	3	6
Sept 2022	1	0	1
Oct 2022	5	3	8
Total	30	25	55

No. of persons attending cancer screening at NCD Clinics (w. e. f 2017-2022): NPCDCS

Sl.No	District	Nos. of patients																	
		2017-18			2018-19			2019-20			2020-21			2021-22			2022-23 (Till September 2022)		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	East Khasi Hills	5650	7889	13539	5587	7429	13016	7830	12838	20668	8579	18317	26896	13886	24182	38068	13830	25706	39536
2	West Garo Hills	4807	5388	10195	5801	7261	13062	15709	23305	39014	5579	7277	12856	5644	5978	11622	4950	6045	10995
3	West Jaintia Hills	545	948	1493	585	1083	1668	1696	3664	5360	3168	7634	10802	3020	6570	9590	1950	5257	7207
4	West Khasi Hills	NA			NA			6074	11360	17434	1766	4307	6073	1364	4411	5775	1190	4175	5365
5	Ribhoi	NA			NA			5776	10824	16600	4172	6757	10929	2231	3550	5781	2815	5094	7909
6	South West Garo Hills	NA			NA			NA			80	102	182	2038	2283	4321	609	2275	2884
7	East Jaintia Hills	NA			NA			NA			NA			80	150	230	151	227	378
8	South West Khasi Hills	NA			NA			NA			NA			553	885	1438	592	1139	1731
9	East Garo Hills	NA			NA			NA			NA			339	440	779	6181	10944	17125
10	North Garo Hills	NA			NA			NA			NA			221	343	564	175	400	575
11	South Garo Hills	NA			NA			NA			NA			441	350	791	131	96	227
12	Total	11002	14225	25227	11973	15773	27746	37085	61991	99076	23344	44394	67738	29817	49142	78959	32574	61358	93932

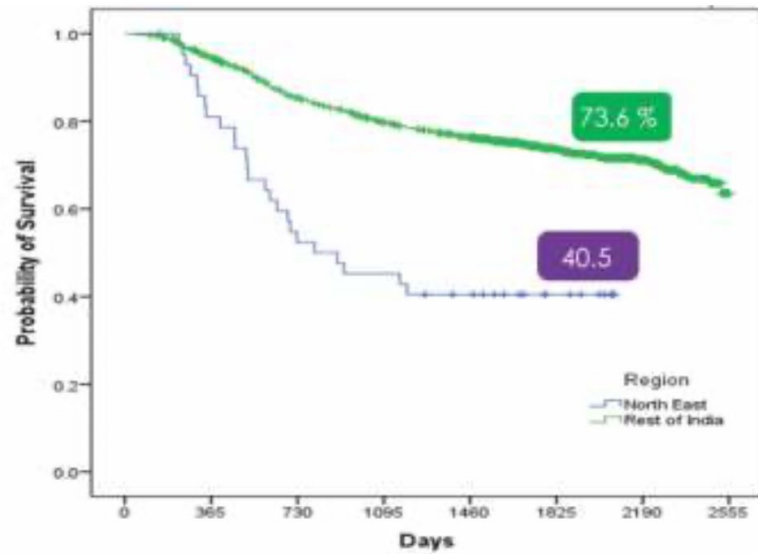
No's of Patients suspected with Cancer during screening and referred: District wise (w.e.f 2017-2022): NPCDCS

Sl.No	District	No's of suspected patients																	
		2017-18			2018-19			2019-20			2020-21			2021-22			2022-23 (Till September 2022)		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	East Khasi Hills	365	179	544	411	236	647	311	152	463	152	100	252	489	270	759	405	250	655
2	West Garo Hills	116	93	209	78	101	179	107	99	206	111	78	189	117	76	193	78	89	167
3	West Jaintia Hills	0	0	0	0	0	0	4	1	5	16	5	21	17	31	48	3	1	4
4	West Khasi Hills	NA			NA			0	0	0	0	2	2	1	0	1	0	0	0
5	Ribhoi	NA			NA			0	0	0	0	2	2	1	0	1	0	0	0
6	South West Garo Hills	NA			NA			NA			0	0	0	0	0	0	0	0	0
7	East Jaintia Hills	NA			NA			NA			NA			0	0	0	0	0	0
8	South West Khasi Hills	NA			NA			NA			NA			0	0	0	0	0	0
9	East Garo Hills	NA			NA			NA			NA			1	0	1	1	0	1
10	North Garo Hills	NA			NA			NA			NA			0	0	0	0	0	0
11	South Garo Hills	NA			NA			NA			NA			0	0	0	0	0	0
12	Total	481	272	753	489	337	826	422	252	674	279	187	466	626	377	1003	487	340	827

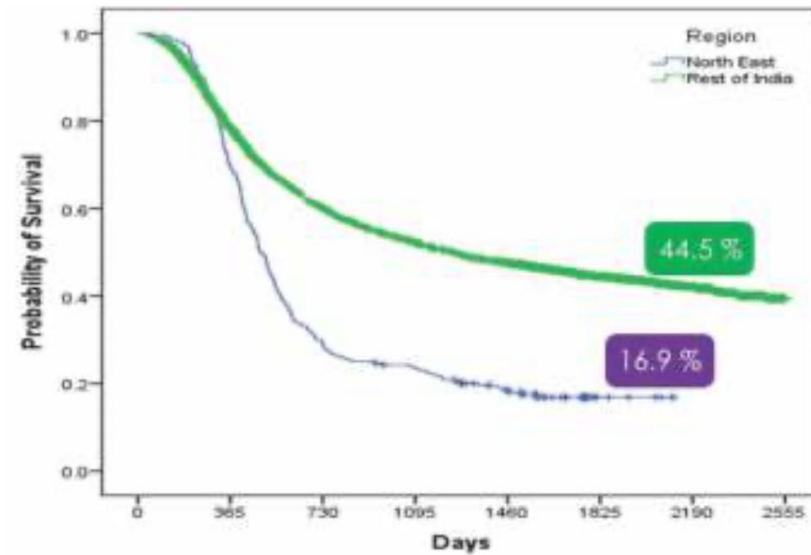
LOW SURVIVAL IN NORTH EAST

as per report on
Cancer Burden in North
Eastern States of India 2017

LOW SURVIVAL IN NORTH EAST
As per Report on Cancer Burden in North Eastern States of India 2017
Survival Analysis(Hospital Based Cancer Registry)

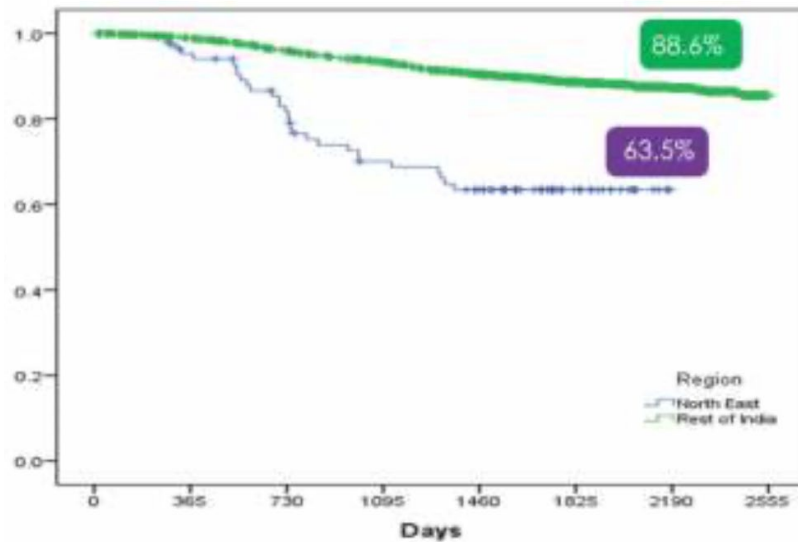


Five Year Cumulative Survival of Head and Neck Cancers(Early Stage) by Region

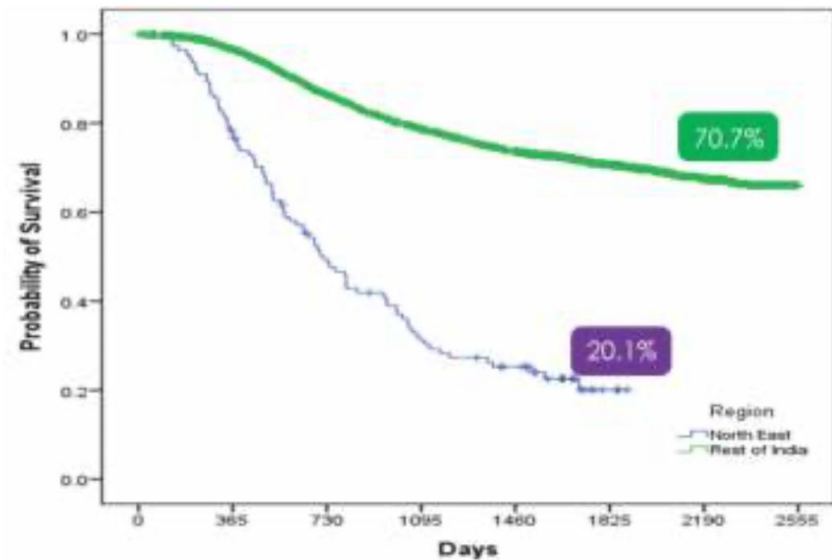


Five Year Cumulative Survival of Head and Neck Cancers(Locally Advanced Stage) by Region

Survival of Early Stage Head & Neck cancer is lower in North East compared to rest of India. The 5 - year survival is 40.5% in North East.



Five Year Cumulative Survival of Breast Cancer (Stage II) by Region

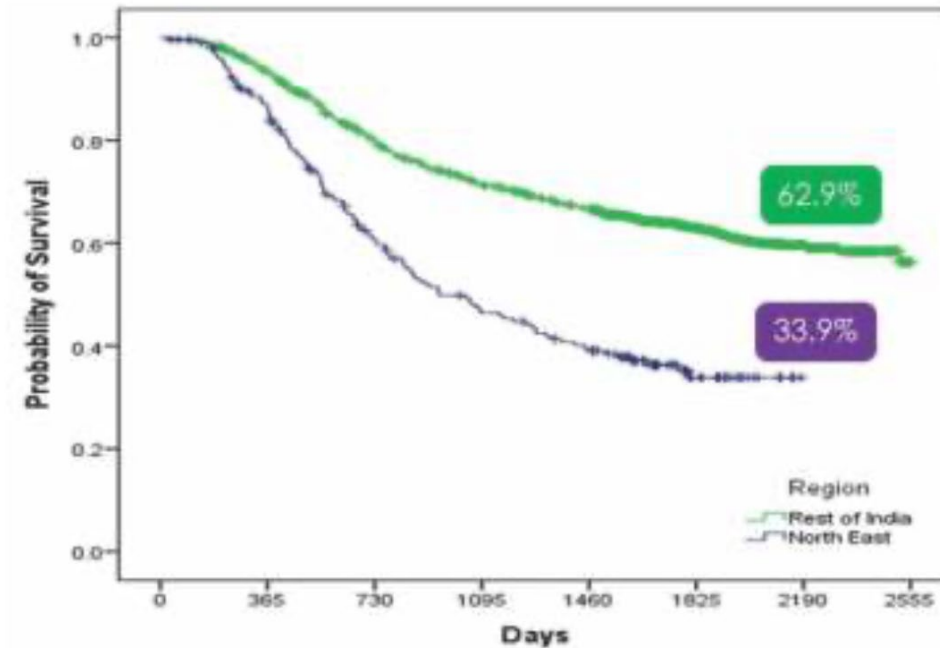


Five Year Cumulative Survival of Breast Cancer (Stage III) by Region

Survival of Stage II Breast Cancer is lower in North East compared to rest of India. The 5 - year survival is 63.5% in North East.

Survival of Stage III Breast Cancer is lower in North East compared to rest of India. The 5 - year survival is 20.1% in North East.

Five Year Cumulative Survival of Cervical Cancer with locally advanced stage (IIB-IVA) by Region



Survival of Locally Advance Stage IIB-IVA Cervical Cancer is lower in North East compared to rest of India.
The 5 - year survival is 33.9% in North East.

The main reason for low survival rate in the state is that most of the people reported at late stage of the disease when the success rate of treatment is indeed very poor.

Lack of infrastructure availability including diagnostic facility, treatment infrastructures, IPD, OPD services & medicine availability, lack of finances and logistic support are the causes that leads to low survival rate as most of the patients are unable to complete the treatment.

PROBLEM STATEMENTS

1. East Khasi hills district in Meghalaya reports the highest Age adjusted Incidence rates (AAR) for cancer of the tongue (males), mouth (females), oropharynx (males), hypopharynx (males), oesophagus (males and females) and larynx (males and females) - **As per Profile of Cancer and Related Health Indicators in the North East Region of India - ICMR 2021 report.**

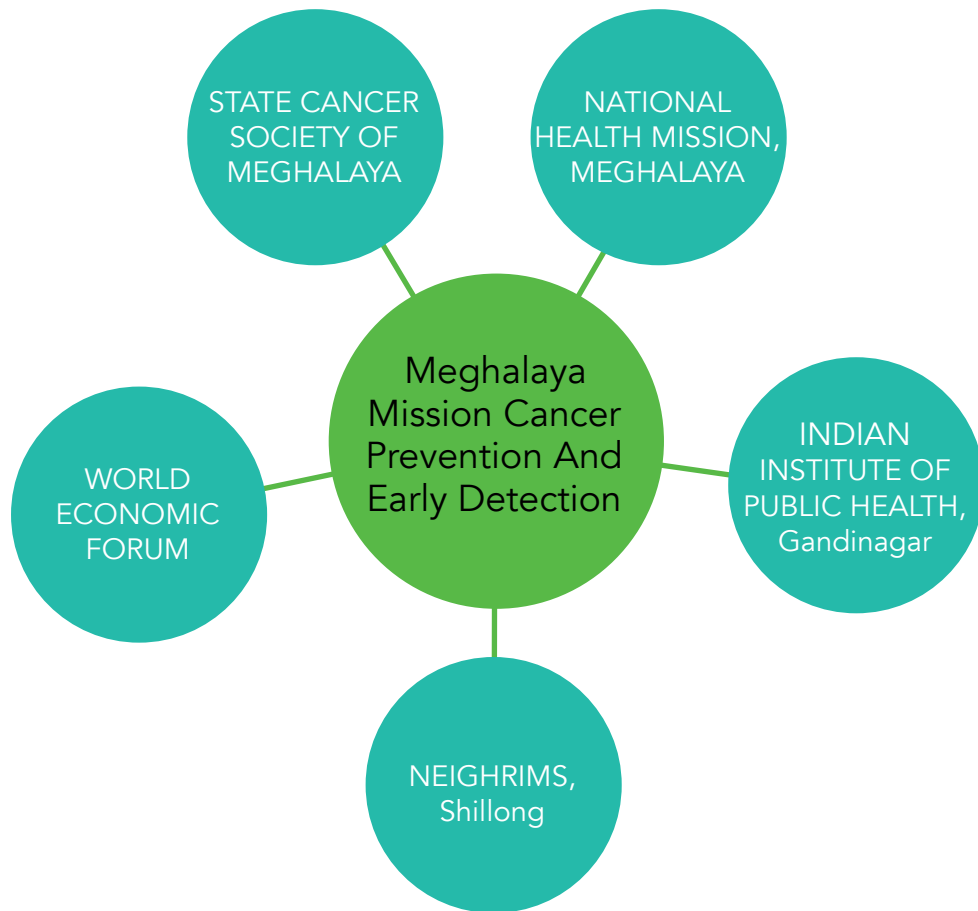
2. Incidence of HPV related cancers in India: East Khasi Hills district, Meghalaya reported the highest age adjusted incidence rate (AAR) among males (AAR: 12.4 per 100,000) of oropharyngeal cancers.

3. Tobacco related cancer in North Eastern Region - East Khasi Hills district of Meghalaya had the highest relative proportion of cancers associated with the use of tobacco, with 70.4% and 46.5% for males and females, respectively - **Report From National Cancer Registry Programme, India 2020**

Since **EAST KHASI HILLS DISTRICT** has the highest cancer incidence rate, a separate programme on FIRST CANCER CARE at East Khasi Hills District has been designed and under process for intervention in collaboration with World Economic Forum.

MEGHALAYA MISSION

Cancer Prevention & Early Detection



A JOURNEY TO DOWNSTAGE THE INCIDENCE OF CANCER IN THE STATE

The State of Meghalaya is on an active mode to reduce the incidence of cancer in the state. The Department of Health and Family Welfare is now embarking on the journey for screening and early detection of cancers for implementing the **“Meghalaya Mission Cancer Prevention”** and early detection in with State Cancer Society of Meghalaya as the implementing agency in collaboration with National Health Mission.

The programme envisages control of tobacco related cancers, HPV related cancers with special target for the commonest cancers in the state viz., Head & Neck cancers, Esophagus, Breast, cervical and other cancers.

THE STATE CANCER SOCIETY OF MEGHALAYA

VISION

Reducing the cancer mortality rate by focusing on individual behaviour, prevention and early detection.

- Making prevention knowledge and early detection services more accessible for people in the communities.
- Collaborating with stakeholders to maximize the effectiveness and reach of the prevention and early detection programs and messages.
- Human Resource Development and capacity building.
- Improving of diagnostic tools at all district hospitals.

MISSION

The mission of the programme is saving lives across all populations through cancer prevention and early detection.

Registered under the Meghalaya Societies Registration Act, 12 of 1983 on 13th January 2004 to strengthen the Cancer care services in the state, with support from the Department of Atomic Energy (DAE) and the Government of Meghalaya.

The DAE-Civil Hospital Cancer Wing was established at Civil Hospital Shillong. The IPD services (Total Bed strength is 65 beds), Day Care chemotherapy section (total beds -15 beds) and OPD services are functioning from the Cancer Wing of Civil Hospital Shillong.

Aims to address the various issues of cancer in the state right from prevention, screening, early detection, treatment and follow up of cancer patients. The Mission cancer Prevention and Early Detection will also formulate long term health policy to increase the awareness and reduce the risk factor exposure among the population.

OBJECTIVES OF MEGHALAYA MISSION CANCER PREVENTION AND EARLY DETECTION

1. Create Public awareness on cancer prevention to the whole state.
2. To increase early detection for oesophagus cancer, Head & Neck cancers, cervical cancer, breast cancer and other cancer through mass screening especially for high risk group.
3. Capacity building training for Health Care personnel.
4. Ensuring registration and health record for cancer care.
5. Mapping the state cancer policy.
6. Setting up of a Cancer Wing at Tura Civil Hospital in a span of 2-3 years.

STRATEGY FOR MEGHALAYA MISSION CANCER PREVENTION & EARLY DETECTION

MASS AWARENESS ON CANCER PREVENTION

Awareness will be conducted for high risk groups (tobacco users, betel nut users, alcoholics and sexually active population) initially and also the General population.

MONITORING & EVALUATION

Monitoring and evaluation will be conducted quarterly by the Project Management Unit of the programme.

MASS SCREENING FOR EARLY DETECTION

- Screening will be prioritized for high risk groups (tobacco users, betel users, alcoholics and sexually active population)
- Special focus on female health by implementing (Mother-daughter duo approach) including HPV vaccine sensitization
- General population

CAPACITY BUILDING

- Training on screening and early detection methods on cancer for health care personnel.
- Involvement of the grass root level community workers including traditional healers for sensitization.
- Training of Health care personnel for taking Biopsies from easily accessible sites.

IMPLEMENTATION COMMITTEE

Chairman:

- Additional Chief Secretary/Principal Secretary /Commissioner & Secretary / Secretary, Health & Family Welfare Department.

Member Secretary:

- Member Secretary, State Cancer Society Meghalaya.

Members:

- Mission Director ,National Health Mission
- Commissioner and Secretary, Finance Department, Government of Meghalaya, Shillong
- Director or Representatives North Eastern Indira Gandhi Regional Institute of Health And Medical Sciences (NEIGRIHMS), Mawdiang diang.
- Director of Health Services (MI), (MCH&FW), (Research), Dept. of Health & Family Welfare, Govt. of Meghalaya
- Joint Director of Health Services (S.S), Civil Hospital Shillong
- Nodal Officer NPCDCS
- State Epidemiologist , NPCDCS.
- Oncologist NEIGRIHMS/Woodland Hospital and Nazareth Hospital.

MEGHALAYA PROFILE

The total population of Meghalaya as per 2011 census is 29,66,889 lakhs.

- **Male:** 14,91,832
- **Female :** 14,75,057

TARGET POPULATION FOR AWARENESS

- High risk groups (Tobacco users, betelnut users ,alcoholics, sexually active population).
- General population

TARGET POPULATION FOR SCREENING

- High risk groups (Tobacco users, alcoholics, sexual active population, HPV infected group)
- General population (Tobacco users, betel users, alcoholics, sexually active population.)
- Women Health Care :
 1. Cervix Health - women ages 21 to 60 years for married women, non pregnant women and sexually active person
 2. Breast Health- women between ages 25-60yrs and above.

FOOD HABITS OF OUR STATE

The following are the food habits of the people of the state that is associated with an increased incidence of cancer:

- Consumption of tobacco (smoke & smokeless)
- Consumption of Betel nut (Kwai)
- Consumption of Alcohol
- Consumption of fermented, smoked and preserved food items.

LIST OF STEPS PROPOSED IN GETTING THE EXPECTED OUTCOME

- » **Mapping of Health Care facilities**
- » **Recruitment for Additional Manpower**
- » **Setting up of nodes for screening , biopsies and radiological investigation at District Hospitals**
- » **Capacity Building for screening and early detection for Health Personnel.**
 1. Specialist on cancer care as trainers
 2. Medical & Health Officers for screening, doing biopsy from suspected lesions and providing optimal cancer treatment.
 3. SNs(Staff Nurse)/ MLHPs(Mid-Level Health Provider)/ CHOs(Community Health Officer) for case.
 4. Identification, follow up, treatment and continuum of care including Palliative care
 5. ANMs for case identification by using (CAUTION)
 - C:** Change in bowel or bladder habits,
 - A:** A sore that does not heal,
 - U:** Unusual bleeding or discharge,
 - T:** Thickening or lump in the breast or elsewhere,
 - I:** Indigestion or difficulty in swallowing,
 - O:** Obvious change in a wart or mole,
 - N:** Nagging cough or hoarseness
- » **Involvement of the grass root level community workers for sensitization and awareness.**
 1. Involvement of Village Health Council (VHC),Traditional Healers, Churches, Local NGO's, etc for community mobilization on cancer awareness and education.

ACTIVITIES AND OUTCOME INDICATORS AS PER THE OBJECTIVES

OBJECTIVES	ACTIVITIES TO BE CONDUCTED	PROCESS INDICATORS	OUTCOME INDICATORS
<p>Create and increase Public awareness on cancer prevention</p>	<ul style="list-style-type: none"> • To complete within 1 year by making VHC activated for cancer awareness activities. • VHC will collaborate with gatekeepers (traditional healers, religious leaders, the Dorbar Shnong etc.) for organizing activities. • VHC along with gatekeepers and community health workers (ASHA, ANM, AWW, CHO etc.) will prepare line listing of eligible population in the village for all cancer awareness and screening. • The same team will plan a quarterly calendar for activities to be conducted for increasing awareness. 	<p>Village level process indicator.</p> <ul style="list-style-type: none"> • No. of VHC activated for cancer awareness activities. • No. of VHC completed Line listing of eligible population. • No. of VHC completed designing quarterly calendar for activities • No. of activities or sessions conducted quarterly. 	<ul style="list-style-type: none"> • No. of people covered by the awareness activities or sessions. • No. of eligible people undergoing screening

Total number of Village Health Council in the state of Meghalaya

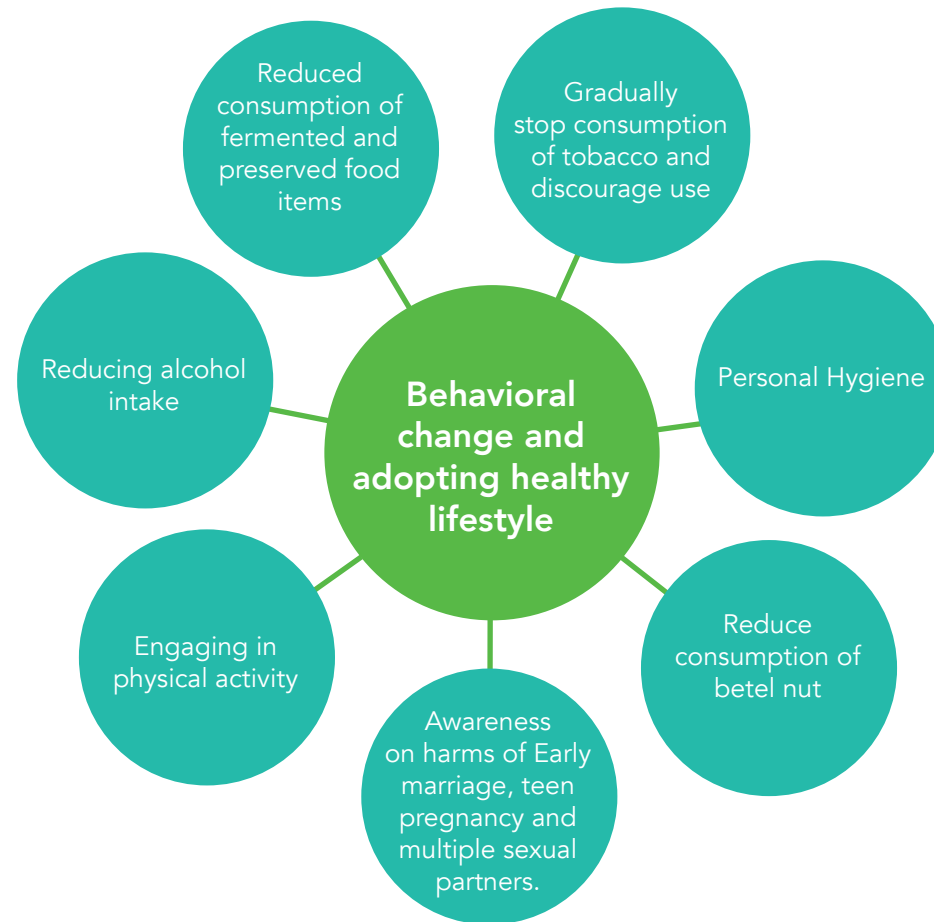
District	No.of Villages Identified	Community Training Planned	Community Training Conducted	Training conducted out of the total villages	VHC Formed (Number of Villages that have had elections and signed the agreement)	Percentage of VHC formed out of total villages	VHC activated (Meetings/Activities initiated)	Percentage of VHC activated out of total villages
EGH	522	240	239	46%	235	45%	165	32%
EJH	172	149	148	86%	91	53%	43	25%
EKH	1103	619	619	56%	277	25%	68	6%
EWKH	283	283	277	98%	210	74%	13	5%
NGH	588	169	169	29%	99	17%	61	10%
RBD	621	290	280	45%	140	23%	36	6%
SGH	677	320	320	47%	266	39%	78	12%
SWGK	462	160	160	35%	158	34%	142	31%
SWKH	322	160	151	47%	254	79%	75	23%
WGH	1254	481	461	37%	354	28%	150	12%
WJH	242	242	233	96%	144	60%	144	60%
WKH	582	582	414	71%	260	45%	100	17%
Grand Total	6828	3695	3471	51%	2488	36%	1075	16%

The Total Number of VHC activated (updated as on 25.10.2022) 1075

The Total Number of VHC formed

(Villages done with election and signed the agreement): 2488

AWARENESS STRATEGY



KEY STAKEHOLDERS FOR IMPLEMENTATION

VILLAGE HEALTH COUNCIL (VHC)	TRADITIONAL HEALERS IN THE COMMUNITY	HEALTH AND WELLNESS CENTRE	DISTRICT HOSPITALS
<ul style="list-style-type: none"> VHC play a role in enrolling the participant in the project. Liason the community and state health systems Assist in follow up of patients. 	<ul style="list-style-type: none"> Traditional Healers will encourage patients with signs and symptoms to report at any NCD clinic and HWCs for screening. They will mobilize and enroll patients in preventive strategies. Encourage patients for treatment. 	<ul style="list-style-type: none"> HWCs for conducting population based cancer screening In HWCs they will implement the Mothers-Daughter Duo for Women Health Care by involving daughters for awareness of HPV and acceptance of the HPV vaccination and for breast cancer screening to start practicing Breast Self-Examination and visit Breast Clinic for CBE in case they detect any lump. 	<ul style="list-style-type: none"> District Hospital to conduct screening and testing for diagnosis Suspicious cancer case are referred to Tertiary cancer center (Civil Hospital Shillong/NEIGHRIMS) Trained doctors in District Hospitals will provide supportive care and simple chemotherapy regimen to reduce the travel burden on patients and increase the treatment compliance.

List of Traditional Healers available in the State of Meghalaya as per the Report on the Project "Support to Traditional Healers for Strengthening and Capacity Building" - 2017

1. The widespread beliefs and trust in traditional healers by the community in Meghalaya for cancer diagnosis and treatment often leads to delay, interrupted diagnosis and treatment resulting in late presentation of the diseases that leads to low survival rate.
2. The Mission Cancer prevention and early detection aims to involve the traditional healers in the programme and educate them about signs and symptoms of cancer and screening of cancers.
3. Traditional healers in our communities are consulted by a range of people, imparting them with the basic knowledge of cancer is important as they will educate their patients on cancer and involved them to participate in cancer preventive strategies.

Sl. No.	Name of the District	Total no of Healers
1.	East Khasi Hills	141
2.	West Khasi Hills	54
3.	South West Khasi Hills	27
4.	Northern West Khasi Hills	28
5.	Ri Bhoi	65
6.	West Jaintia Hills	52
7.	East Jaintia Hills	29
8.	North Garo Hills	17
9.	East Garo Hills	40
10.	West Garo Hills	49
11.	South West Garo Hills	42
12.	South Garo Hills	41
Total		585

Electronic & Print Media	<ul style="list-style-type: none"> • Radio, Local News Channels, news papers, speaker announcements, mobile media. • Print: Banner, IEC materials, posters, Flyers and inter personal communication
Community mobilization through the VHC	<ul style="list-style-type: none"> • VHC will act as the influencers to advocate and mobilize public for participating in awareness regarding cancer • Before 2 weeks of awareness VHC will distribute posters, door -to -door flyers and displaying of banners in the target area. • Fixing convenient date, time and venue with the HWC for the awareness and make Public announcement for the awareness to be held.
Convergence of HWC and VHC	<ul style="list-style-type: none"> • Monthly meeting between the HWC and VHC for planning and organising the awareness programme at the target village. • HWC should involved all the members of VHC (to ensure success implementations of the programme) • Instructing and imparting their active role in spreading the awareness through print media
Workshop	<ul style="list-style-type: none"> • Workshop will be organize by State Health Expert, State Cancer Society of Meghalaya and NHM. • Workshop will be conducted at District Hospital yearly and at PHC/CHC quarterly. • Targeted group for the workshop will include health workers of PHC/CHC, sub centers and all the members of VHC who are the field workers.
Rallies	<ul style="list-style-type: none"> • Rallies will be conducted in coordination with the District Administration and other stakeholders.
Campaign	<ul style="list-style-type: none"> • Anti-Tobacco campaign will be undertaken in line with the existing state programme. • Cancer awareness week campaigns will be observed in each and every health facility with a focus on the causes of cancers.

ACTIVITIES AND OUTCOME INDICATORS AS PER THE OBJECTIVES

Objectives	To increase early detection for oesophagus cancer, Head & Neck cancers, cervical cancer, breast cancer and other cancer through mass screening especially for high risk group.
Activities to be conducted	<ul style="list-style-type: none"> • Activities to be Conducted • Complete Mapping of Health Care facilities in one year • Complete assessment on the availability of health facilities for cancer detection and management in 2 years. • Recruitment for Additional Manpower as required. • Proportion of facilities ready with cancer screening-equipments, infrastructure, utilities (water, electricity and internet). • No. of nodes set up for screening, biopsies and radiological investigation at District Hospitals • No. of facilities having efficient referral system upward and backwards connecting it to registration and health record system.
Process Indicators	<p>At the village level same activities as awareness will be conducted for ensuring participation</p> <p>At the Health facility level Mapping of Health Care facilities.</p> <ul style="list-style-type: none"> • Recruitment for Additional Manpower • .Ensuring all the facilities are equipped with basic cancer screening-equipment, infrastructure, utilities (water, electricity and internet) . • Setting up of nodes for screening, biopsies and radiological investigation at District Hospitals • Setting up an efficient referral system : upward and backwards connecting it to registration and health record system.
Outcome Indicators	<ul style="list-style-type: none"> • No. of people undergoing screening at the facility level at each facility. • No. of people diagnosed with cancer or premalignant lesion at each facility. • No. of people diagnosed with cancer initiating treatment at each facility. • No. of people diagnosed with cancer completing treatment at each facility.

SCREENING STRATEGY

The Target population for screening over 5 years will be 30% of district population for an impact:

- Focus on high risk group & general population.
- Repeated screening after 1-5 years for high risk cases detected in 1st round.
- Utilization of Technology-led screening for target population.
- Screening camps will be held at regular intervals in each PHC /CHC premises.
- Screening would also be organized at fixed locations (public and private health facilities, Govt. Offices, colleges etc.)
- Screened positive cases will be followed up from diagnosis to treatment to support through PMJAY/Insurance, till the patient gets cured or reaches the stage of palliative care and rehabilitation.

Electronic & Print Media	Community mobilization through the VHC	Convergence of HWC and VHC
<p>Radio, Local News Channels, news papers, speaker announcements, mobile media for general announcement about the cancer screening to be held at the target area.</p> <p>Print: Banner, posters and inter personal communication to spread the information about the cancer screening date, time and venue</p>	<ul style="list-style-type: none"> • VHC will act as the influencers to mobilize and enroll the public for participating in cancer screening. • Before 2 weeks of cancer screening VHC will display posters and banners in the target area for ensuring maximum coverage of population for the screening. • Fixing convenient date, time and venue with the HWC for the cancer screening and make Public announcement for the screening to be held. 	<ul style="list-style-type: none"> • Monthly meeting between the HWC and VHC for planning and organizing cancer screening at the target village. • HWC should involved all the members of VHC (to ensure success implementations of the programme).

INDIVIDUAL SCREENING

Breast Cancer	<p>Clinical Breast Examination for women between ages 25-60yrs CBE recommended for women with the following signs and symptoms</p> <ul style="list-style-type: none"> • Swollen lymph nodes under the arm or around the collarbone. • Swelling of all or part of the breast • Skin irritation or dimpling. • Breast or nipple pain. • Nipple retraction. • Redness or thickening of the nipple or breast skin. • Bloody nipple discharge. • <p>Screening at field: Clinical examination.</p> <p>Diagnosis at District Hospital: Mammogram, Breast ultrasound, Biopsy, MRI, CT Scan, PET Scan.</p>
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Head And Neck Cancer	<p>Clinical examination for patients with the following symptoms</p> <ul style="list-style-type: none"> • Swelling or a sore that does not heal; this is the most common symptom • Red or white patch in the mouth • Lump, bump, or mass in the head or neck area, with or without pain • Persistent sore throat • Foul mouth odour not explained by hygiene • Hoarseness or change in voice • Nasal obstruction or persistent nasal congestion • Frequent nose bleeds and/or unusual nasal discharge • Difficulty breathing, double vision • Numbness or weakness of a body part in the head and neck region • Pain or difficulty chewing, swallowing, or moving the jaw or tongue and Jaw pain • Blood in the saliva or phlegm, which is mucus discharged into the mouth from respiratory passages, Loosening of teeth, dentures that no longer fit. • Unexplained weight loss, Fatigue and ear pain or infection. <p>Screening at Field: Physical and clinical examination.</p> <p>Diagnosis at District Hospital: Endoscopy, Biopsy, Computed Tomography (CT)scan, Magnetic Resonance Imaging (MRI), PET scan.</p>
Esophagus Cancer	<p>Clinical examination for patients with the following symptoms:</p> <ul style="list-style-type: none"> • Difficulty swallowing (dysphagia) • Weight loss without trying. • Chest pain, pressure or burning. • Worsening indigestion or heartburn. • Coughing or hoarseness. <p>Screening at field: Physical and clinical examination.</p> <p>Diagnosis at District Hospital: Endoscopy, Biopsy, Barium swallow X-ray, Computed Tomography (CT) scan, Magnetic Resonance Imaging (MRI), PET scan.</p>
Cervical Cancer	<ul style="list-style-type: none"> • Cervical Screening would be for married, non-pregnant women, sexually active women between 18 to 60 years of age. • Women with symptoms of Vaginal bleeding (either after intercourse, between periods or post-menopause), abnormal vaginal discharge (heavy or with a foul odour), pain during intercourse, Pelvic pain, Lower back pain, pain and swelling in legs, unexplained weight loss, decreased appetite. <p>Screening at field: Clinical examination, DNA based HPV test and Pap smear Test. Visual inspection of the cervix with acetic acid (VIA) is an effective, inexpensive screening test that can be combined with simple treatment procedures for early cervical lesions.</p> <p>Diagnosis at District Hospital: Biopsy, MRI.</p>

DIAGNOSTIC EQUIPMENT FOR THE STATE

Existing Diagnostic tools available at District Hospitals	Community mobilization through the VHC	Strengthening of Health Care Delivery System in the state
<p>X-Ray Machine Trunat RTPCR Machine Pap Smear Facility</p>	<ul style="list-style-type: none"> • Flexible portable video laryngoscope - bronchoscope machine for diagnosing Head & Neck cancers, Esophagus cancer , required at all District Hospital • Mammography required at Civil Hospital Shillong (from NPCDCS programme) • CINLuma device for treatment of HPV positive cases. 	<ul style="list-style-type: none"> • Ensuring the availability of the following basic Diagnostic Equipment at all District Hospitals, CHC and PHC. Initially diagnostic equipment will be provided for all the District Hospital and gradually upscale to CHC and PHC. <ol style="list-style-type: none"> 1. Portable X – Ray Unit 2. Mobile Video laryngoscopy -bronchoscopy Unit

NB:

- Portable X-Ray Unit is already being provided through the DHS (MI).
- Mobile Video laryngoscopy Unit will be from the Mission Fund.

Available Diagnostic Equipment in District Hospital, CHC and PHC of Meghalaya

Sl. No	Districts	District Hospital				Community Health Centre (CHC)				Primary Health Centre (PHC)			
		CT Scan	X-Ray		Endoscopy	CT Scan	X-Ray		Endoscopy	CT Scan	X-Ray		Endoscopy
			FILM RADIO GRAPHIC SYSTEM	MOBILE RADIO GRAPHIC UNIT			FILM RADIO GRAPHIC SYSTEM	MOBILE RADIO GRAPHIC UNIT			FILM RADIO GRAPHIC SYSTEM	MOBILE RADIO GRAPHIC UNIT	
1	EJH	-	-	-	-	-	KHLIEHRIAT	SUTNGA	-	-	-	-	-
2	WJH	-	-	CH JOWAI	-	-	-	NONGTALANG	-	-	-	-	-
3	RI BHOI	-	CH NONGPOH	-	-	-	BHOIRYMBONG	-	-	-	-	-	-
4	EKH	CHS SHG	CHS SHG, RP CHEST HOSP.	GANESH DAS, CHS SHG	GANESH DAS CHS SHG	-	PYNURSLA	MAWSYNRAM, PYNURSLA, ISHMATI	-	-	POMLUM	-	-
5	WKH	-	-	CH NONGSTOIN	-	-	-	-	-	-	-	-	-
6	EWKH	-	CH MAIRANG	CH MAIRANG	-	-	-	NONGKHLAW	-	-	-	-	-
7	SWKH	-	-	-	-	-	-	-	-	-	-	-	-
8	NGH	-	-	-	-	-	-	RUSUBELPARA	-	-	-	-	-
9	EGH	-	CH WILL-AMNAGAR	CH WILLIAM -NAGAR	-	-	-	RONGJENG	-	-	-	-	-
10	WGH	-	-	CH TURA, DMCH TURA	CH TURA	-	-	DADENGRRE, PHULBARI	-	-	-	-	-
11	SGH	-	CH BAGHMARA	CH BAGHMARA	-	-	-	-	-	-	-	-	-
12	SWGK	-	-	CH AMPATI	-	-	-	MAHENDRAGANJ	-	-	-	-	-
	State Total	1	6	10	3	NIL	3	11	NIL	NIL	1	NIL	NIL

Available and required Diagnostic Equipment in District Hospital

Sl.No	Districts	Hospitals	District Hospital				
			X-Ray			Endoscopy	
			FILM RADIO GRAPHIC SYSTEM	MOBILE RADIO GRAPHIC UNIT			
			Available Equipment	Available Equipment	Required Equipment	Available Equipment	Required Equipment
1	EJH	0		-	1	-	0
2	WJH	1		CH JOWAI	0	-	1
3	RI BHOI	1	CH NONGPOH	-	0	-	1
4	EKH	4	CHS SHG, RP CHEST HOSP.	GANESH DAS, CHS SHG	0	GANESH DAS CHS SHG	1 CHS
5	WKH	1		CH NONGSTOIN	0	-	1
6	EWKH	1	CH MAIRANG	CH MAIRANG	0	-	1
7	SWKH	0		-	0	-	0
8	NGH	0		-	0	-	0
9	EGH	1	CH WILLIAMNAGAR	CH WILLIAMNAGAR	0	-	1
10	WGH	2		CH TURA DMCH TURA	0	CH TURA	1
11	SGH	1	CH BAGHMARA	CH BAGHMARA	0	-	1
12	SWGK	1		CH AMPATI	0	-	1
	State Total	13	6	10	1	3	9

Available and required Diagnostic Equipment in District Hospital

Sl.No	Districts	No. of CHC	Community Health Centre				
			X-Ray			Endoscopy	
			FILM RADIO GRAPHIC SYSTEM	MOBILE RADIO GRAPHIC UNIT			
			Available Equipment	Available Equipment	Required Equipment	Available Equipment	Required Equipment
1	EJH	2	KHLIEHRIAT	SUTNGA	0	-	2
2	WJH	4	-	NONGTALANG	3	-	4
3	RI BHOI	3	BHOIRYM-BONG	-	2	-	3
4	EKH	7	PYNURSLA	MAWSYNRAM, PYNURSLA ISHMATI	4	-	7
5	WKH	1	-	-	1	-	1
6	EWKH	1	-	NONGKHLAW	-	-	1
7	SWKH	2	-	-	2	-	2
8	NGH	1	-	RUSUBELPARA	-	-	1
9	EGH	1	-	RONGJENG	-	-	1
10	WGH	5	-	DADENGRRE, PHULBARI	3	-	5
11	SGH	1	-	-	1	-	1
12	SWGK	1	-	MAHENDRAGANJ	-	-	1
	State Total	29	3	11	16	-	29

At the initial stage Diagnostic Equipment will be provided only at District Hospital which will later be expanded to CHC and PHC

Activities/Output And Outcome Indicators As Per The Objectives

Objectives	Capacity building training for Health Care personnel
Activities To Be Conducted	<ul style="list-style-type: none"> • Completion of mapping of healthcare personnel involve in cancer prevention and early detection in one year. • Completion of Assessment of knowledge understanding of healthcare personnel involve in cancer prevention and early detection and identification of gaps in one year. • Designing of training materials in six months for healthcare provider or personnel as per level of health facilities • Planning and conducting training activities every six months
Process Indicators	<ul style="list-style-type: none"> • Mapping of healthcare personnel involve in cancer prevention and early detection • Assessment of knowledge understanding of healthcare personnel involve in cancer prevention and early detection and identification of gaps. • Planning and designing of training activities for healthcare provider or personnel as per level of health facilities e.g:Skilled Based Training of Specialist on cancer care as trainers, Medical &Health Officers for screening, doing biopsy from suspected lesions and providing optimal cancer treatment. SN's (Staff Nurse) /MLHP's (Mid-Level Health Provider) /CHO's (Community Health Officer) for case identification, follow up, treatment and continuum of care including Palliative care ANMs for case identification by using (CAUTION)¹ • Conduct training and refresher training every year • Post training assessment • Appropriate posting of trained personnel
Output Indicators	<ul style="list-style-type: none"> • No. of Health personnel trained. • No. of Refreshers training conducted every six months • No. of Health personnel posted in cancer screening ready facilities

Objectives	
Ensuring registration and Health record for cancer care	<ul style="list-style-type: none"> • To setup and install an ONCOLOGY DATA MODEL for the whole state for maintenance of data of all Cancer patients right from Identification stage until the entire treatment process is completed upto Palliation and Rehabilitation (will be done through the WEF project).
Mapping the state cancer policy	<ul style="list-style-type: none"> • To develop a uniform system for cancer screening, Treatment, follow up, palliative care and rehabilitation for the whole state.

SETTING UP OF CANCER WING AT TURA CIVIL HOSPITAL

COMPONENTS OF THE TURA CIVIL HOSPITAL CANCER WING

Sl. No	COMPONENTS
1.	<p>Infrastructure (Construction of Cancer Wing building)</p> <ul style="list-style-type: none"> Basement (Radiotherapy services) Ground floor (Reception area, OPD services, Palliative Services , Day Care Ward and Cancer Registry) 1st Floor (Female Oncology Ward) 2nd Floor (Male Oncology Ward) <p>The total bed strength proposed is 90 beds.</p> <ul style="list-style-type: none"> Additional requirements :fire safety , water connection, transformer, generator, LANS connection, Lift services, centralized oxygen supply, facility for disability.
2.	<p>Radiotherapy Equipment</p> <ul style="list-style-type: none"> Computed Tomography (CT) Simulator – 1 No Cobalt-60 Brachytherapy Unit– 1 No Dual Energy Linear Accelerator – 1 No Physics Dosimetry QA and Mould Room Accessories.
3.	<p>Manpower</p> <ul style="list-style-type: none"> Medical Physicist cum Radiation Safety Officer (RSO)– 1 no Medical Physicist – 2 no. Radiotherapy Technicians- 10 nos. Nurses – 50 nos. Hospital attendant – 30 nos. Sweeper- 20 nos. DEO cum receptionist – 6 nos.
4	Hospital furnishing and Hospital equipment

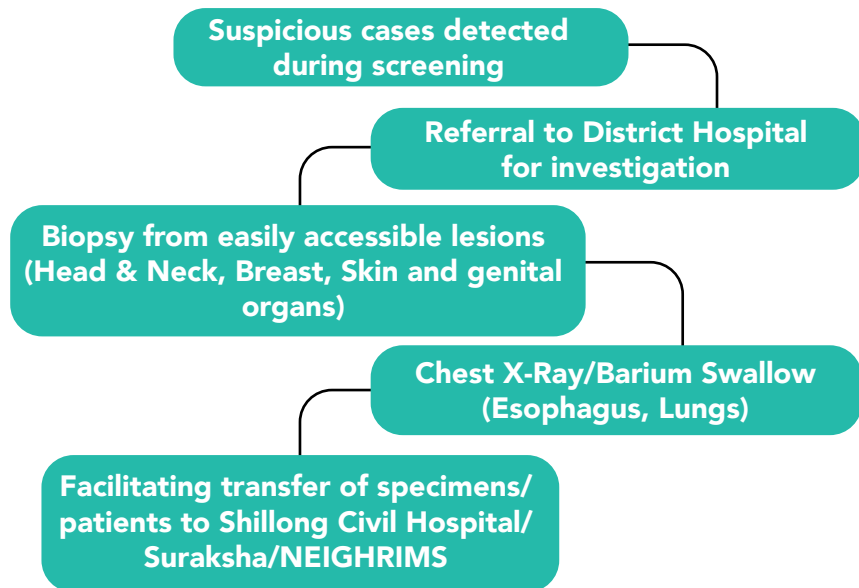
The Government of Meghalaya, Department of Health & Family Welfare will simultaneously set up a Cancer Wing at Tura Civil Hospital to cater to the cancer patients of Garo Hills.

This project will be taken up in a phase wise manner along with the proposed Medical College Project.

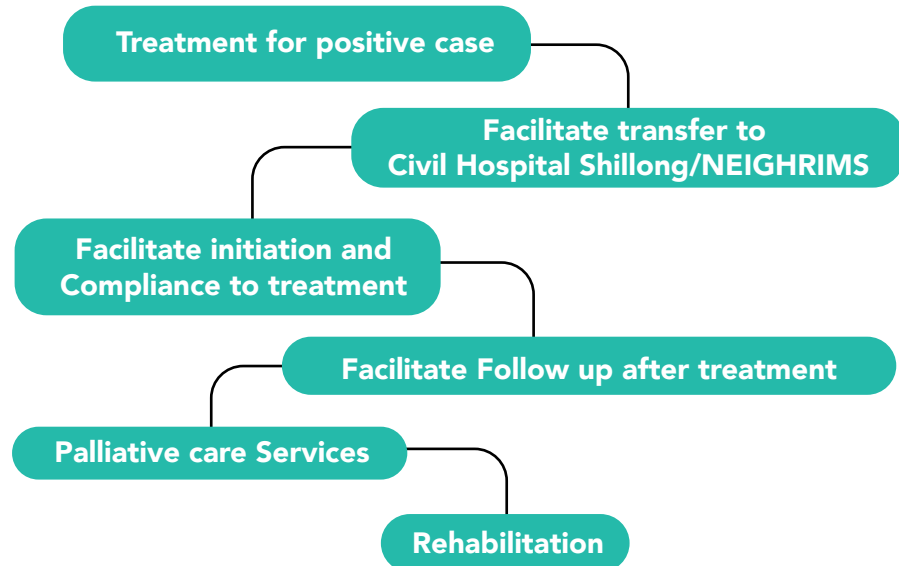
Aims & Objectives:

- To provide easily accessible cancer treatment to the people of Garo Hills.
- To generate professionally trained personnel including para-medical staffs in oncology and palliative care
- To establish and include Garo Hills in PBCR (Population Based Cancer Registry) for obtaining the accurate cancer data of the state.
- To establish a unit for research and screening.

DIAGNOSTIC ALGORITHM



TREATMENT



TARGET INTERVENTION

(proposed intervention over a period of 5 years with indicative target)

PARTICULARS	DETAILS		
	MALE	FEMALE	TOTAL
Population of Meghalaya as per 2011 census	1,491,832	1,475,057	2,966,889
Age Adjusted incidence rate of cancer per lakh population	176.8	96.5	-
Screening target for 5yrs @ 59.29% of Total Population (59.29% of total population in 20 years and above age group)	8,97,125	8,61,945	17,59,070
Screening target for 2 years	3,58,850	3,44,778	7,03,628
Screening target for year 1 @ 40% of 2 year target	1,43,540	1,37,912	2,81,452
Screening to be done by MLHP/ANM/CHO positioned at the HWC (in year 1)@ 20% of year 1 target	28,708	27,583	74,803
Number of PHCs	114		
Number of sub-centres	452		

PARTICULARS	DETAILS		
	MALE	FEMALE	TOTAL
Number of Functional HWC (PHC/UPHC & SC) as on 9.11.2022	482 (114 PHCs, 19 UPHCs and 349 SCs)		
Average screening target per PHC annually (From 2 nd year onwards- 10% increase over the previous target)	1260	1210	2470
Average screening target per PHC per month	106	100	206
Total Estimation of Population of Meghalaya for the year 2022	1,896,482	1,875,621	3,772,103
Age Adjusted incidence rate of cancer per lakh population	176.8	96.5	-
Screening target for 5 yrs @ 59.29% of Total Population (59.29% of total population in 20 years and above age group)	1,124,425	1,112,056	2,236,481
Screening target for 2 years	4,49,770	4,44,823	8,94,593
Screening target for year 1 @ 40% of 2 year target	1,79,908	1,77,930	3,57,838
Screening to be done by MLHP/ANM/CHO positioned at the HWC (in year 1)@ 20% of year 1 target	44,977	44,483	89,460
Number of PHCs	114		
Number of sub-centres	452		
Number of Functional HWC (PHC/UPHC & SC) as on 9.11.2022	482 (114 PHCs, 19 UPHCs and 349 SCs)		
Average screening target per PHC annually (From 2 nd year onwards- 10% increase over the previous target)	1260	1210	2470
Average screening target per PHC per month	106	100	206

Health Care Facilities In Meghalaya								
Sl No	District	Hospitals	Dispensaries	CHC	PHC	SC	HWCs	VHC
1	East Jaintia Hills	0	0	2	6	36	20	43
2	West Jaintia Hills	1	1	4	11	46	40	144
3	Ri Bhoi	1	2	3	8	34	30	36
4	East Khasi Hills	4	5	7	26	72	67	68
5	West Khasi Hills	1	0	1	5	28	21	100
6	Eastern West Khasi Hills	1	-	1	11	19	13	13
7	South West Khasi Hills	0	0	2	4	21	13	75
8	North Garo Hills	0	0	1	11	51	37	61
9	East Garo Hills	1	1	1	8	31	27	165
10	West Garo Hills	2	3	5	9	66	60	150
11	South Garo Hills	1	1	1	6	21	0	78
12	South West Garo Hills	1	0	1	9	27	26	142
	State Total	13	13	29	114	452	354	1,075
Source : From National Health Mission Data								

MEGHALAYA MISSION CANCER PREVENTION AND EARLY DETECTION FLOWCHART OF ACTIVITIES

Sl. No	STRATEGIES	ACTIVITY	PHASE - II (6 mnths-2.5 yrs) Population(2011 census)			
			Ri-Bhoi		West Khasi Hills	
			M	F	M	F
1	Awareness @ 50% of the Population	Awareness campaign for cancer of esophagus, Head & Neck, Breast, Cervix and other cancer(20-59 yrs).	28,200	26,796	37,629	37,341
2	Screening and Detection @ 50% of the Population	Screening for Esophagus Cancer (30-59 yrs).	16,767	15,422	21,880	21,297
		Screening for Head & Neck Cancer (30-59 yrs).	16,767	15,422	21,880	21,297
		Screening for Breast Cancer (25-59 yrs).	-	20,645	-	28,525
		Screening for Cervix Cancer (20-59 yrs) for married Women, Non Pregnant Women and Sexually active Person.	-	26,796	-	37,341
		Screening for other type of Cancer (20-59 yrs).	28,200	26,796	37,629	37,341

Sl. No	STRATEGIES	ACTIVITY	PHASE - II (6 mnths-2.5 yrs) Population(2011 census)			
			Jaintia Hills		East Khasi Hills	
			M	F	M	F
1	Awareness @ 50% of the Population	Awareness campaign for cancer of esophagus, Head & Neck, Breast, Cervix and other cancer (20-59 yrs)	38,993	26,792	99,055	1,00,452
2	Screening and Detection @ 50% of the Population	Screening for Esophagus Cancer (30-59 yrs)	22,131	22,079	58,887	59,575
		Screening for Head & Neck Cancer (30-59 yrs)	22,131	22,079	58,887	59,575
		Screening for Breast Cancer (25-59 yrs)	-	29,878	-	78,731
		Screening for Cervix Cancer (20-59 yrs) for married Women, Non Pregnant Women and Sexually active Person	-	39,455	-	1,00,452
		Screening for other type of Cancer (20-59 yrs)	38,993	26,792	99,055	1,00,452

MEGHALAYA MISSION CANCER PREVENTION AND EARLY DETECTION FLOWCHART OF ACTIVITIES

Sl. No	STRATEGIES	ACTIVITY	PHASE - II (6 mnths-2.5 yrs) Population(2011 census)					
			East Garo Hills		West Garo Hills		South Garo Hills	
			M	F	M	F	M	F
1	Awareness @ 50% of the Population	Awareness campaign for cancer of esophagus, Head & Neck, Breast, Cervix and other cancer (20-59 yrs)	36,293	35,900	73,684	74,027	16,119	15,094
2	Screening and Detection @ 50% of the Population	Screening for Esophagus Cancer (30-59 yrs)	22,454	20,858	45,927	44,664	10,019	8,843
		Screening for Head & Neck Cancer (30-59 yrs)	22,454	20,858	45,927	44,664	10,019	8,843
		Screening for Breast Cancer (25-59 yrs)	-	27,976	-	58,534	-	11,841
		Screening for Cervix Cancer (20-59 yrs) for married Women, Non Pregnant Women and Sexually active Person	-	35,900	-	74,027	-	15,094
		Screening for other type of Cancer (20-59 yrs)	36,293	35,900	73,684	74,027	16,119	15,094

SL.NO	STRATEGIES	ACTIVITY	Ongoing activity which will continue .
3	Treatment	Treatment at Tertiary Cancer Centre	
4	Capacity Building for Awareness	Educating the MLHP ,ANM, VHC and traditional healers for signs, symptoms ,risk factor and prevention on Esophagus, Head & Neck cancer, Breast ,Cervical cancer and other type of cancer.	
5	Capacity Building for screening methods	1. Training for Medical and Health officer for the screening, doing biopsy from suspected lesions . 2. Training of Staff nurse /MLHP/ ANM/CHO for case identification	

TIMELINE OF THE MISSION CANCER PREVENTION AND EARLY DETECTION

No	Activities	PHASE 1 (1-6 month)	PHASE 2 (6month- 2.5yrs)	PHASE 3 (2yrs-3yrs)
1	Recruitment of Human Resource			
2	Orientation for all stakeholders			
3	Training for Health Personnel			
4	Training for community mobilizer			
5	Mass awareness			
6	Mass Screening camps			
7	Monitoring & Evaluation			
8	Data Analysis and Report Writing			

CONCLUSION

The State Cancer Society of Meghalaya has completed the mission to establish the State of the Art Cancer Centre “The DAE-Civil Hospital Cancer Wing”.

The next mission for the society is to reduce the incidence of cancer in our state by targeting on the risk factors cum early detection and set up a Cancer Wing at Tura Civil Hospital.

Our vision is to reduce the incidence of cancer in our state and have a healthy and cancer free Meghalaya in the next 10-15 years.

CANCER CARE

COMPREHENSIVE

PREVENTION

1. Education & Awareness Generation
2. Promotion of Healthy Lifestyle

SCREENING & EARLY DETECTION

1. Mass Screening
2. Mapping of Health Care facilities
3. Availability of Screening & Detection Equipment
4. Setting up of nodes for screening, biopsies and radiological investigation at District Hospitals
5. Capacity Building for screening and early detection for Health Personnel.

CANCER TREATMENT

1. Availability of medical devices, instruments and equipments.
2. Availability of trained manpower
3. Setting up of Cancer Wing at Tura Civil Hospital.

PALLIATIVE CARE & SURVIVORSHIP

1. Uniform Policy on Palliative Care
2. Focus on Health & Well being along with cancer treatment
3. Survivorship Care

DAE-CIVIL HOSPITAL CANCER WING

