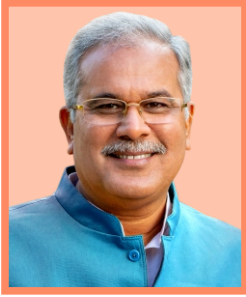
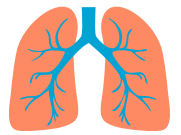


STATE STRATEGIC PLAN for
TUBERCULOSIS FREE
CHHATTISGARH
by 2023

REVISED NATIONAL TUBERCULOSIS CONTROL PROGRAMME: **2019-2023**



Department of HEALTH AND FAMILY WELFARE
Government of CHHATTISGARH



SHRI BUPESH BAGHEL
Chief Minister, Chhattisgarh

 **T.B. Harega**
Chhattisgarh Jitega

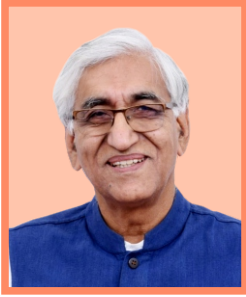
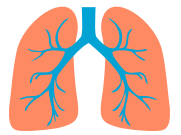
Tuberculosis is a major public health challenge affecting the poorest, most vulnerable and socially marginalized population for thousands of years. TB has highly devastating socio-economic consequences on individuals, families and community and it is severely threatening the collective progress of human beings. The United Nations Sustainable Development Goals (SDGs) include ending the TB epidemic by 2030. Government of India has formulated the National Strategic Plan to achieve this status by 2025. In Chhattisgarh, we took even more ambitious goal to achieve this target by 2023.

Earlier, in 1990, WHO had declared the disease as a global public health emergency. Chhattisgarh started implementing the Revised National Tuberculosis Control Program (RNTCP) in 2002 achieving complete population coverage by 2004. Since 2005, more than 4 lakh TB cases were initiated on treatment and of which nearly 90% were successfully treated.

TB free Chhattisgarh Mission will be integrated with the development plan of the state with major focus on improvement in socioeconomic conditions of the population, providing improved healthy housing conditions and assured quality health care. All stakeholders will be brought together for achieving the desired goal ahead of schedule.

This audacious goal is achievable through our commitment, determination and solidarity with the TB community. The Government of Chhattisgarh is strongly committed to accelerating its efforts to defeat TB. Together we can achieve a TB free world

(BUPESH BAGHEL)



SHRI T.S. SINGHDEO
Health Minister, Chhattisgarh

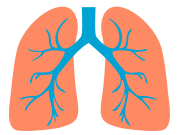
 **T.B. Harega**
Chhattisgarh Jitega

TB is a social disease with medical aspects which is closely associated with poverty and development. To achieve Sustainable Development Goals (SDGs) the world community has launched a dramatically accelerated fight against tuberculosis (TB) and for those most affected by it: the poorest, most vulnerable, socially marginalized population. Responding to poor man suffering, State of Chhattisgarh has formulated and started implementing a strategy 'TB Free Chhattisgarh' with highest political commitment.

State of Chhattisgarh has taken many steps towards TB Free Chhattisgarh. Through Mukhyamantri Kshay Poshan Yojana providing nutrition support to TB patients, we are the pioneer in introducing nutrition support for all TB patients across the state. Our attempt is quite successful in reducing high treatment costs by providing special Multi Drug Resistant (MDR) TB packages under Rashtriya Swasthya Bima Yojana (RSBY) and Mukhyamantri Swasthya Bima Yojana (MSBY).

The Strategy is the commitment of the state administration to achieve TB Free status by 2023. It is a 4-year strategy document and ambitiously aims to achieve a rapid decline in TB burden and catastrophic expenditure. I Wish and hope our strong commitment will make our state free from TB


(T.S. SINGHDEO)



NIHARIKA BARIK SINGH

(I.A.S.)

Secretary,
Department of Health & Family Welfare,
Chhattisgarh

 **T.B. Harega**
Chhattisgarh Jitega

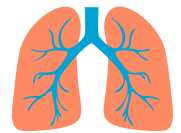
Among infectious diseases, TB remains to be the highest killer disease, it places its heaviest burden on the world's poorest and vulnerable, aggravating existing disparity. Responding to achieve Sustainable Development Goal of ending TB epidemic by 2030, Government of India has formulated National Strategic Plan for TB Elimination by 2025 with high-level commitment and financing. Chhattisgarh has gone one step further and set a 2023 target of making state free from Tuberculosis.

State of Chhattisgarh is committed towards TB elimination. Despite the highest efforts to find cases, TB notification rate is not increasing over the years and Treatment success rate is 89%. Our state initiatives like Mukhyamatry Kshay Poshan Yojana, Chemist Notification, Intersectoral Coordination for Active Case Finding for TB is considered as best practices.

TB Elimination in state is on par with strengthening the existing health system further. Health system will be geared to reduce major TB risk factors including Malnutrition, HIV, Diabetes, Chronic respiratory diseases, alcoholism and tobacco use. The strategy focusing on early diagnosing all cases of TB by setting a strong surveillance system and active case finding in high risk groups will help state in achieving TB free status in broader sense.

This strategy 'TB Free Chhattisgarh' provides vision of a Chhattisgarh State Free of Tuberculosis. Its ambition aims to reduce the TB burden in terms of incidence, prevalence, morbidity, mortality and build systems to strengthen the health service delivery to achieve TB Elimination.

(NIHARIKA BARIK SINGH)



Dr. PRIYANKA SHUKLA
(I.A.S.)
M.D., National Health Mission,
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 **T.B. Harega**
Chhattisgarh Jitega

Tuberculosis (TB) is one of the top 10 causes of death worldwide, over 95% of cases and deaths are in developing countries. TB is a public health issue of developing nation; it continues to be India's severest health crisis. GOI had planned and implementing audacious goal to end TB by 2025 i.e. five years ahead of the target fixed by UN. With an emphatically accelerated response to SDG and NSP, Government of Chhattisgarh has formulated "TB Free Chhattisgarh" strategy with highest administrative commitment.

The strategy focuses on early diagnosis and prompt treatment of TB so as to prevent further spread of the disease. It incorporates key elements of the programme such as universal drug susceptibility testing, systematic screening of contacts and high-risk groups, establishing collaborations with other cross cutting areas such as HIV, Diabetes, Malnutrition. Strategy ensures highest administrative commitment through State TB Elimination Board, State TB Elimination Task Force and District TB Elimination Task Force.

I am sure that with commitment of our entire team, this document will surely aid in ending the malady of TB in Chhattisgarh by providing direction to the programme and also unified and comprehensive strategy to end TB deaths, disease suffering of people of Chhattisgarh.

I express my gratitude to all the officials and subject experts who have contributed towards developing this documents.

(Dr. PRIYANKA SHUKLA)



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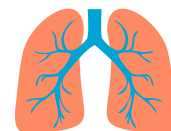
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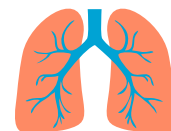
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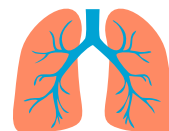




ABBREVIATIONS

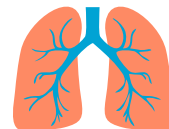
AIIMS	All India Institute of Medical Sciences
ANM	Auxiliary Nurse Midwifery
ART	Anti Retroviral Therapy
ASHA	Accredited Social Health Activist
AYUSH	Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy
BMI	Basal Metabolic Rate
CBNAAT	Cartridge Based Nucleic Acid Amplification Test
CDPO	Child Development Project Officer
CEA	Clinical Establishment Act
CEO	Chief Executive Officer
CGMSC	Chhattisgarh Medical Services Corporation
CGSACS	Chhattisgarh State AIDS Control Society
CHC	Community Health Centre
CME	Continuing Medical Education
CMHO	Chief Medical and Health Officer
CSEB	Chhattisgarh State Electricity Board
CSR	Cooperate Social Responsibility
DALY	Disability Adjusted Life Year
DBT	Direct Beneficiary Transfer
DMC	Designated Microscopic Centre
DOTS	Directly Observed Treatment Short course
DST	Drug Sensitivity Test
DTC	District TB Centre
EQA	External Quality Assurance
FDA	Food and Drug Administration
FDC	Fixed Dose Combination
GIS	Geographic Information System
Gol	Government of India
HIV	Human Immunodeficiency Virus
IAP	Indian Academy of Pediatrics
IAS	Indian Administrative Services
ICDS	Integrated Child Development Service
ICT	Information and Communication Technology
ICTC	Integrated Counseling and Testing Centre
IEC	Information Education and Communication
IGRA	Interferon Gamma Release Assay
IMA	Indian Medical Association
IPC	Indian Penal Court
IPT	Isoniazid Prevention Treatment
IRL	Intermediate Reference Laboratory
IVRS	Interactive Voice Response
LED FM	Light Emitting Diode Fluorescent Microscopes
LTBI	Latent Tuberculosis Infection
MD NHM	Mission Director, National Health Mission





MDR TB	Multi Drug Resistant Tuberculosis
MKPY	Mukhyamatry Kshay Poshan Yojana
MOHFW	Ministry of Health and Family Welfare
MSBY	Mukhyamantri Swasthya Bima Yojana
MTB	Mycobacterium Tuberculosis
NACO	National AIDS Control Organization
NCD	Non Communicable Disease
NGO	Non Government Organization
NMDC	National Mineral Development Co-operation
NSP	National Strategic Plan
NTCP	National Tobacco Control Programme
NTPC	National Thermal Power Co-operation
NUHM	National Urban Health Mission
OPD	Out Patient Department
PFMS	Public Finance Management System
PHC	Primary Health Centre
PMDT	Programmatic Management of Drug Resistant Tuberculosis
PMJDY	Pradhan Mantri Jan Dhan Yojana
PPM	Public Private Mix
PPSA	Public Private Support Agency
PSU	Public sector Undertaking
RHO	Rural Health Officer
Rif	Rifampicin
RNTCP	Revised National Tuberculosis Control Program
RR TB	Rifampicin Resistant Tuberculosis
RSBY	Rashtriya Swasthya Bima Yojana
SAIL	Steel Authority of India Limited
SDG	Sustainable Development Goal
SHG	Self Help Group
SHRC	State Health Resource Centre
SMS	Short Message Service
STDC	State Training and Demonstration Center
STLS	Senior Treatment Laboratory Supervisor
STS	Senior Treatment Supervisor
TB	Tuberculosis
TST	Tuberculin Skin Test
TU	Tuberculosis Unit
UN	United Nations
WCD	Woman and Child Development
WHO	World Health Organization
XDR	Extensively Drug Resistance
ZN	Ziehl Neelsen





ACKNOWLEDGMENT

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Mr Bhuvanesh Yadav, IAS, Special Secretary cum Commissioner Health has been very supportive and guided the team throughout the development of the document.

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A special note of thanks and gratitude for Dr. Priyanka Shukla, IAS, Joint Secretary cum Mission Director, National Health Mission, Chhattisgarh for her critical inputs and invaluable guidance which has immensely helped in refining this strategy document.

Dr Sarveshwar Narendra Bhure, IAS, District Collector Mungeli, Chhattisgarh during his tenure as MD NHM laid down the idea of developing a state specific strategic plan to eliminate TB. He was a constant source of guidance in designing this document.

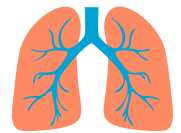
A special expression of appreciation for tireless effort of Dr Kshitij Khaparde, Medical Consultant, World Health Organization whose technical expertise has enabled the state in developing this strategy document to fight against TB. He along with his colleague Dr Nischith KR, Medical Consultant, World Health Organization were actively involved throughout the process of documentation and their contribution is highly appreciated.

Sincere thanks to Miss Ruqaiya Bano, Assistant Programme Officer, State TB Cell, Mr Alok Dubey, State PPM Coordinator, State TB Cell, Mr Durgesh Sahu, Data Entry Operator, State TB Cell and Mrs Akansha Rana, Microbiologist, IDSP for providing timely inputs which helped in successful completion of the document.

Special mention of Mr Urya Nag, State Programme Manager, National Health Mission for active contribution through his valuable suggestions which has helped in framing of the document.

I hope this strategic document will enable the state to achieve its vision of TB Free Chhattisgarh by the year 2023.

Dr. MADHAV DESHPANDE
State TB Officer, Chhattisgarh

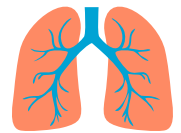


CHAPTER 1 - INTRODUCTION

BACKGROUND

In Chhattisgarh, the Revised National Tuberculosis Control Programme (RNTCP) was launched in 4 districts in 2002 which was then expanded phase wise to other districts thereby achieving state wide coverage in the year 2004. Currently all 27 districts have District TB Centers with 155 Tuberculosis Units (TU) and 778 Designated Microscopic Centers (DMC) which are providing free diagnostic and treatment services in the state. Since the year 2005, more than 4 lacs TB cases were initiated on treatment and of which nearly 90% were successfully treated. The programmatic management of drug resistant TB (PMDT) was launched in December 2011 in a phased manner and achieved state-wide coverage by the end of year 2013. Decentralized services are being provided for diagnosis and treatment of Drug Resistant TB cases whereby all the districts are having CBNAAT machines for diagnosis of drug resistant TB and to manage such cases, 21 Drug Resistant TB Centres are functional. State successfully implemented national framework for joint TB-HIV collaborative activities from the year 2012 onwards. Also there is active implementation of national framework for TB-Diabetes collaboration whereby districts are actively screening diabetic patients for symptoms of TB. Similar collaborations on bi-directional screening have been established with National Tobacco Control Programme. All the medical colleges including private medical colleges are actively involved in the programme and are part of task force review mechanism.





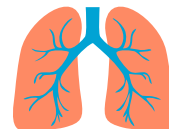
CHAPTER 2 - TB BURDEN IN CHHATTISGARH

DISABILITY ADJUSTED LIFE YEARS (DALY)

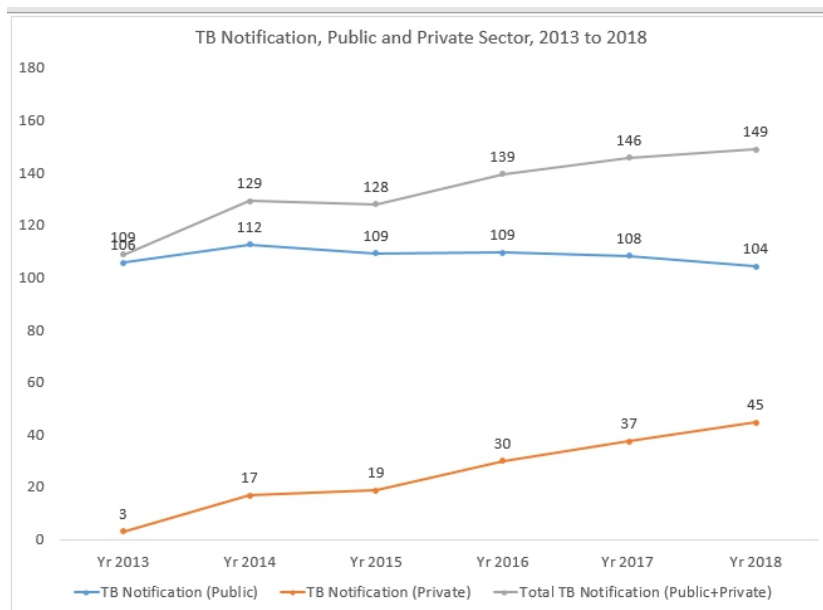
Chhattisgarh is the sixth state in the order of highest DALY rates for tuberculosis. The disease burden or DALY rate for tuberculosis for Chhattisgarh was 3.5 times higher than the average globally.

TB INCIDENCE (NEW CASES NOTIFIED PER YEAR)

The notification of TB (including private sector) for the year 2018 was 149 per lac population. The TB Notification from public sector is showing a declining trend in last 5 years. Private sector engagement was the key focus area of the state which has shown tremendous improvement in TB notification from 3/lac in the year 2013 to 45/lac in the year 2018 (Chart 1). This was achieved by reaching out and sensitizing the private practitioners at various forums such as Indian Medical Association (IMA), Indian Association of Pediatrician (IAP) etc. Also the state government has included mandatory TB notification in its Clinical Establishment Act (CEA) which is being stringently implemented. Another initiative towards strengthening TB notification was that the state government made it mandatory to the chemists and druggists to maintain sales register and to retain the physician's prescription copy as a proof of drug sales for tuberculosis. Chhattisgarh was the first state in the country to innovate such kind of model where the Food and Drug Administration (FDA) under the Department of Health and Family Welfare, issued directives to all the Chief Medical and Health Officers, Additional Drug Controllers, Drug Inspectors and Chemist Associations to gather information on a prescribed format about anti-TB drugs sold, name and address of the patient, name of the prescribing physician. A series of state and district level meetings of chemists and the health authorities were conducted for better partnership.

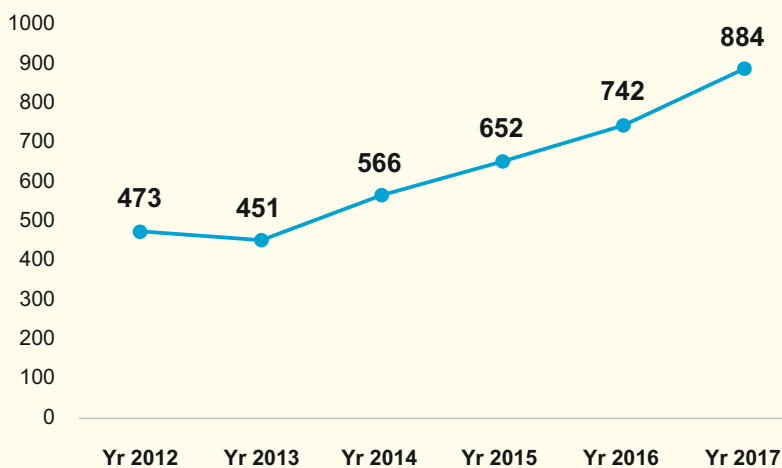


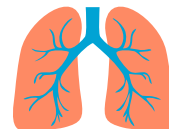
GRAPHS : TB NOTIFICATION RATE (PER LAC POPULATION) FOR PUBLIC AND PRIVATE SECTOR, 2013 TO 2018



Focusing on “reaching the unreached” the state planned and successfully implemented the policy of having DMCs across all the primary health centres (PHC) whereby the number of DMCs has increased from 293 in the year 2013 to 778 in the year 2018. This initiative has resulted in an increase in presumptive TB examination rate which rose from 473/lac in the year 2013 to 884 in the year 2017 (Chart 2).

GRAPHS : PRESUMPTIVE TB EXAMINATION RATE (PER LAC POPULATION), 2012 TO 2017





TB MORTALITY

The mortality rate of drug sensitive TB for patients registered in 2016 was 5% (2%-11%) whereas the mortality rate for drug resistant TB cases was reported as high as 22%.

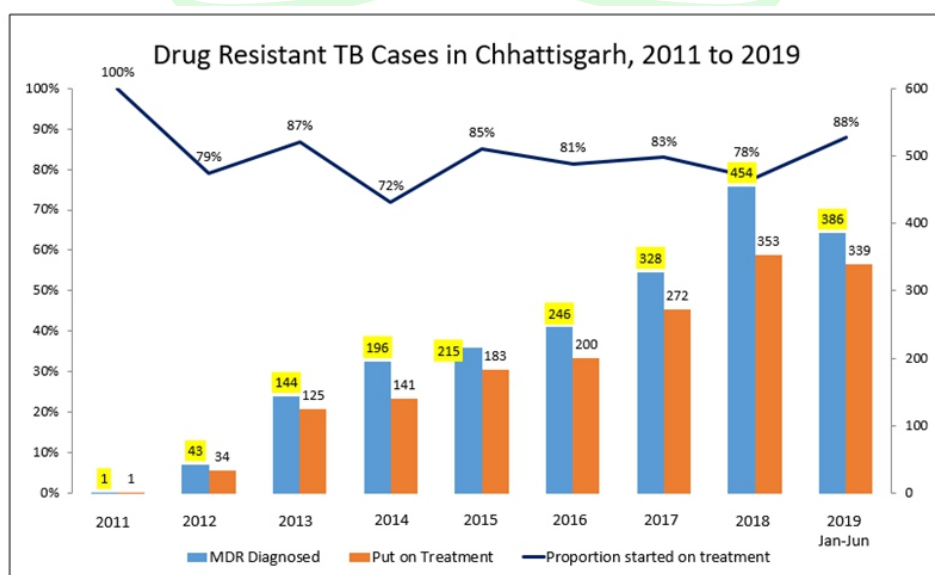
HIV TB CO-INFECTION

From the year 2012 onwards the state has started implementing National Framework for Joint TB HIV collaborative activities. In collaboration with CGSACS all the Integrated Counseling and Testing Centers (ICTC) are co-located with DMCs. As per the policy of testing all TB patients for HIV, 96% of TB patients are being tested for HIV. In the year 2019, 7 districts of the state are implementing policy of testing presumptive TB cases for HIV. All the five Anti-Retroviral Therapy (ART) centres in the state are actively screening HIV attendees for symptoms of TB based on 4 symptom complex. In the year 2019 more than 90% of HIV clients attending ART centres underwent 4S screening for TB of which 9% were having symptoms of TB; of those with symptoms 7% were diagnosed as TB and were put on treatment.

DRUG RESISTANT TB

The Programmatic Management of Drug Resistant TB (PMDT) services for diagnosis and management of Drug Resistant TB was launched in the state in December 2011. Since then 2013 Drug Resistant cases were diagnosed and 1648 cases were put on treatment (Chart 3).

GRAPHS : DRUG RESISTANT TB CASES IN CHHATTISGARH, 2011 TO 2019





CHAPTER 3 - MONITORING INDICATORS FOR TB FREE CHHATTISGARH

TB Free strategies adopted by the state for will be monitored based on the Result Framework presented below.

TABLE 1 : STATE LEVEL MONITORING INDICATORS

Indicators	2018	2020	2021	2022	2023
Total TB Patients Notified	43436	34749	30405	26062	21718
TB Patients Notified in Public Sector	31436	25149	22005	18862	15718
TB Patients Notified in Private Sector	12000	9600	8400	7200	6000
No. of Presumptive TB patients to be offered smear microscopy	280000	240000	220000	200000	180000
No. of Presumptive and Diagnosed TB patients to be offered Rapid Molecular Test	21718	24324	21284	18243	15203
Proportion of High Risk Population screened for TB	80%	100%	100%	100%	100%
No. of MDR/RR TB patients notified	400	600	600	450	275
No. of MDR/RR TB patients initiated on treatment	340	540	540	405	248
Treatment Success Rate of TB patients in Public Sector	90%	90%	90%	90%	90%
Treatment Success Rate of TB patients in Private Sector	25%	75%	90%	90%	90%
Treatment Success Rate of RR TB patients	63%	68%	70%	72%	74%
Proportion of Identified/Eligible individuals initiated on treatment of LTBI	25%	60%	80%	90%	90%
Proportion of Treatment Supporters paid incentives through DBT/PFMS	80%	100%	100%	100%	100%
Proportion of Private Providers paid incentives through DBT/PFMS	50%	90%	90%	90%	90%
Proportion of districts able to map TB patients through GIS based ICT tool	100%	100%	100%	100%	100%

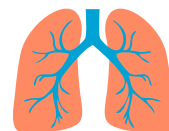


TABLE 2 : DISTRICT FRAMEWORK FOR TB NOTIFICATION

Districts	Total TB patients in 2018	Total TB patients in 2020	Total TB patients in 2021	Total TB patients in 2022	Total TB patients in 2023
Balarampur	944	755	661	566	472
Balod	1035	828	725	621	518
Baloda	1858	1486	1301	1115	929
Bastar	1311	1049	918	787	656
Bemetara	662	530	463	397	331
Bijapur-CG	435	348	305	261	218
Bilaspur	4378	3502	3065	2627	2189
Dhamtari	1330	1064	931	798	665
Durg	3608	2886	2526	2165	1804
Gariaband	832	666	582	499	416
Janjgir	2017	1614	1412	1210	1009
Jashpur	924	739	647	554	462
Kawardha	809	647	566	485	405
Kondagaon	737	590	516	442	369
Korba	1622	1298	1135	973	811
Koriya	752	602	526	451	376
Mahasamund	1561	1249	1093	937	781
Mungeli	821	657	575	493	411
Narayanpur	260	208	182	156	130
Raigarh	3235	2588	2265	1941	1618
Raipur	5174	4139	3622	3104	2587
Rajnandgaon	2408	1926	1686	1445	1204
Sarguja	1166	933	816	700	583
South Bastar Dantewada	698	558	489	419	349
Sukma	428	342	300	257	214
Surajpur	797	638	558	478	399
Uttar Bastar Kanker	915	732	641	549	458

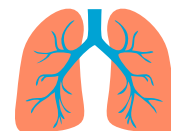
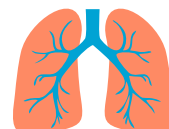
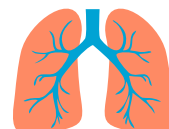


TABLE 3 : BLOCK WISE FRAMEWORK FOR TB NOTIFICATION

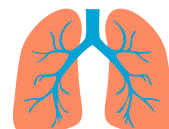
District	Tuberculosis Unit	Total TB patients in 2018	Total TB patients in 2020	Total TB patients in 2021	Total TB patients in 2022	Total TB patients in 2023
Balrampur	Rajpur	137	110	96	82	69
	Tu Balarampur	154	123	108	92	77
	Tu Kusmi	121	97	85	73	61
	Tu Ramanujganj	249	199	174	149	125
	Tu Shankargarh	136	109	95	82	68
	Tu Wadrafnagar	147	118	103	88	74
Balod	Balod	382	306	267	229	191
	Dondi	177	142	124	106	89
	Dondi Lohara	117	94	82	70	59
	Gunderdehi	252	202	176	151	126
	Gurur	107	86	75	64	54
Balodabazar	Balodabazar	518	414	363	311	259
	Bhatapara	431	345	302	259	216
	Bilaigarh	255	204	179	153	128
	Kasdol	318	254	223	191	159
	Palari	223	178	156	134	112
	Simga	113	90	79	68	57
Bastar	Badekilepal	18	14	13	11	9
	Bakawand	168	134	118	101	84
	Bastar	111	89	78	67	56
	Darbha	25	20	18	15	13
	DTC_Jagdapur	857	686	600	514	429
	Lohandiguda	77	62	54	46	39
	Tokapal	54	43	38	32	27
Bemetara	Bemetara	269	215	188	161	135
	Berla	56	45	39	34	28
	Nawagarh	103	82	72	62	52
	Saja	234	187	164	140	117
Bijapur	DTC_TU Bijapur	351	281	246	211	176
	TU Bhairamgarh	23	18	16	14	12
	TU Bhopalpatnam	41	33	29	25	21
	Tu Usoor	20	16	14	12	10



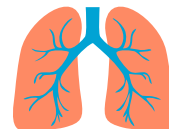
District	Tuberculosis Unit	Total TB patients in 2018	Total TB patients in 2020	Total TB patients in 2021	Total TB patients in 2022	Total TB patients in 2023
Bilaspur	Bilha	244	195	171	146	122
	DTC_Bilaspur	2112	1690	1478	1267	1056
	Gaurella	180	144	126	108	90
	Kota	245	196	172	147	123
	Marwahi	199	159	139	119	100
	Masturi	306	245	214	184	153
	Pendra	90	72	63	54	45
	Takhatpur	448	358	314	269	224
	Urban Bilaspur	505	404	354	303	253
Dhamtari	Dhamtari	970	776	679	582	485
	Kurud	130	104	91	78	65
	Magarlod	93	74	65	56	47
	Nagri	137	110	96	82	69
Durg	Dhamdha	189	151	132	113	95
	Durg -DTC	1461	1169	1023	877	731
	Patan	227	182	159	136	114
	Supela	1718	1374	1203	1031	859
Gariyaband	Chhura	123	98	86	74	62
	Deobhog	148	118	104	89	74
	Gariaband	191	153	134	115	96
	Mainpur	117	94	82	70	59
	Rajim	254	203	178	152	127
Janjgir	Akaltara TU	297	238	208	178	149
	Baloda	83	66	58	50	42
	Bamhndih	104	83	73	62	52
	Dabhara	110	88	77	66	55
	Jaijaipur	98	78	69	59	49
	Janjgir	709	567	496	425	355
	Malkharoda	66	53	46	40	33
	Nawagarh	47	38	33	28	24
	Pamgarh	128	102	90	77	64
	Sakti	375	300	263	225	188
Kanker	Antagarh	62	50	43	37	31
	Bhanupratappur	171	137	120	103	86
	Charama	79	63	55	47	40
	Durgukondal	88	70	62	53	44
	Kanker_DTC	259	207	181	155	130
	Narharpur	105	84	74	63	53
	Pakhanjore	151	121	106	91	76



District	Tuberculosis Unit	Total TB patients in 2018	Total TB patients in 2020	Total TB patients in 2021	Total TB patients in 2022	Total TB patients in 2023
Jashpur	Bagicha	113	90	79	68	57
	Duldula	16	13	11	10	8
	Farsabahar	83	66	58	50	42
	Jashpur_DTC	325	260	228	195	163
	Kansabel	56	45	39	34	28
	Kunkuri	73	58	51	44	37
	Manora	25	20	18	15	13
	Pathalgaon	233	186	163	140	117
Kawardha	Boldla	138	110	97	83	69
	Kawardha- DTC	379	303	265	227	190
	S. Lohara	117	94	82	70	59
	Pandariya	175	140	123	105	88
Kondagaon	DTC Kondagaon	480	384	336	288	240
	TU Baderajpur	60	48	42	36	30
	TU Keshkal	119	95	83	71	60
	TU Makdi	29	23	20	17	15
	TU Pharasgaon	50	40	35	30	25
Korba	Kartala TU	68	54	48	41	34
	Katghora TU	279	223	195	167	140
	Korba TU	930	744	651	558	465
	Pali TU	231	185	162	139	116
	PondiUproda TU	113	90	79	68	57
Koriya	Baikunthpur_DTC	267	214	187	160	134
	Chirmiri	110	88	77	66	55
	Janakpur	82	66	57	49	41
	Manendragarh	273	218	191	164	137
	Sonhat	20	16	14	12	10
Mahasamund	Bagbahra	240	192	168	144	120
	Basna	174	139	122	104	87
	Mahasamund	744	595	521	446	372
	Pithora	135	108	95	81	68
	Saraipali	268	214	188	161	134
Mungeli	Lormi	218	174	153	131	109
	Mungeli	472	378	330	283	236
	Pathariya	183	146	128	110	92
Narayanpur	Narayanpur	237	190	166	142	119
	Orchha	23	18	16	14	12
Dantewada	DTC-Dantewada	456	365	319	274	228
	Geedam	76	61	53	46	38
	Katekalyan	31	25	22	19	16
	Kuakonda	135	108	95	81	68
Sukma	Dornapal	86	69	60	52	43
	Sukma	341	273	239	205	171

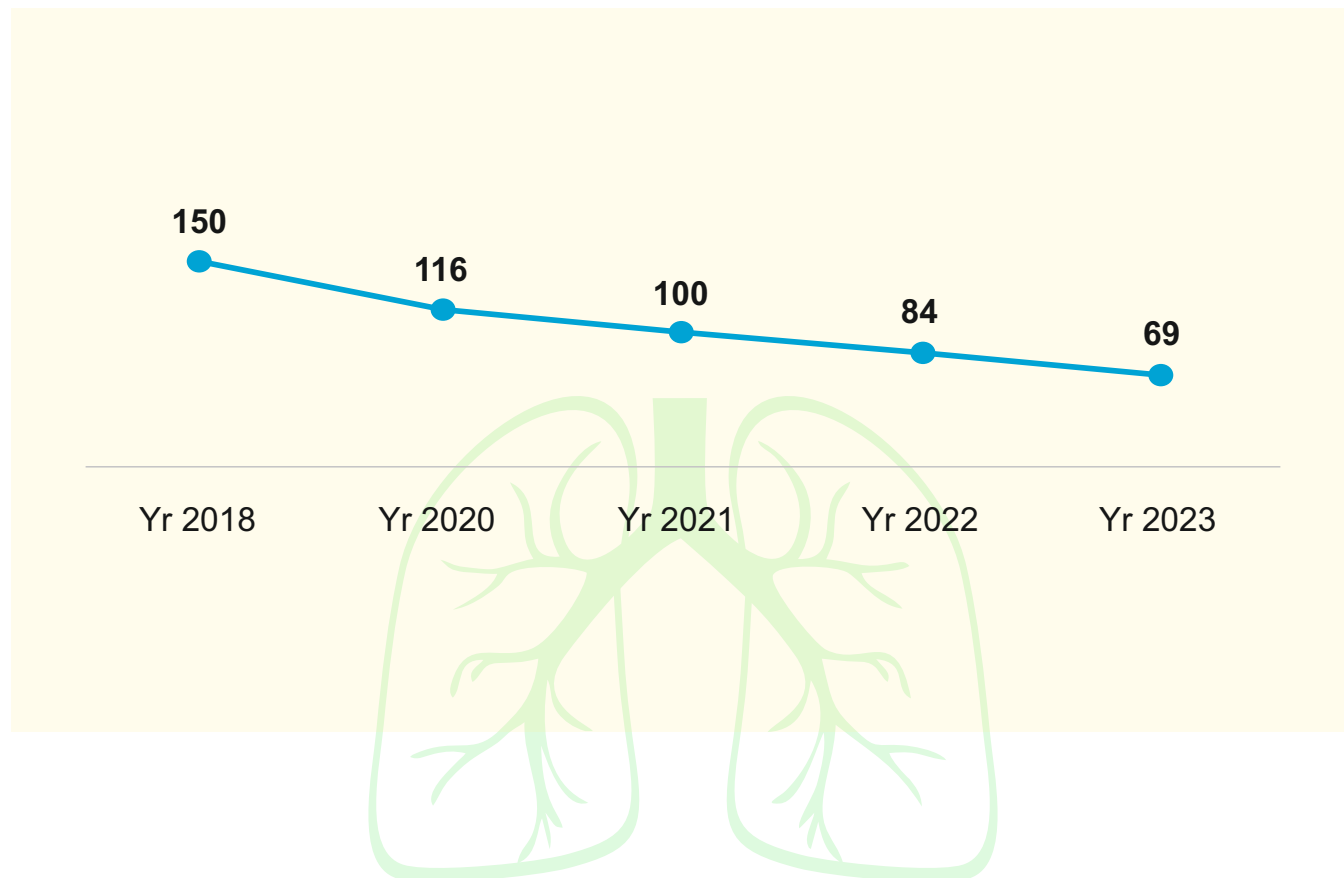


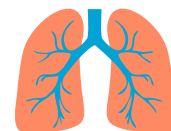
District	Tuberculosis Unit	Total TB patients in 2018	Total TB patients in 2020	Total TB patients in 2021	Total TB patients in 2022	Total TB patients in 2023
Raigarh	Baramkela	168	134	118	101	84
	Dharamjaygarh	240	192	168	144	120
	Gharghoda	84	67	59	50	42
	Kharsia	270	216	189	162	135
	Lailunga	158	126	111	95	79
	Pussore	163	130	114	98	82
	Raigarh	1554	1243	1088	932	777
	Sarangarh	451	361	316	271	226
	TAMNAR	147	118	103	88	74
Raipur	Aarang	270	216	189	162	135
	Abhanpur	272	218	190	163	136
	Aiims	509	407	356	305	255
	Dharsiwa	191	153	134	115	96
	MCHR	844	675	591	506	422
	Raipur DHR	515	412	361	309	258
	Raipur_DTC	2259	1807	1581	1355	1130
	Tilda	349	279	244	209	175
Rajnandgaon	Ambagarh Chowki	99	79	69	59	50
	Chhuikhadan	138	110	97	83	69
	Chhuriya	85	68	60	51	43
	Dongargaon	119	95	83	71	60
	Dongargarh	134	107	94	80	67
	Ghumka	78	62	55	47	39
	Khairagarh	158	126	111	95	79
	Manpur	149	119	104	89	75
	Mohla	80	64	56	48	40
	Rajnandgaon	1368	1094	958	821	684
Surguja	Ambikapur_DTC	721	577	505	433	361
	Batouli	36	29	25	22	18
	Dhourpur	35	28	25	21	18
	Lakhanpur	90	72	63	54	45
	Mainpath	90	72	63	54	45
	Sitapur	106	85	74	64	53
	Udaipur	83	66	58	50	42
Surajpur	Bhaiyathan	127	102	89	76	64
	Odagi	83	66	58	50	42
	pratappur	171	137	120	103	86
	Premnagar	71	57	50	43	36
	ramanujnagar	110	88	77	66	55
	surajpur	235	188	165	141	118



An aggressive strategy will be adopted and monitored to achieve TB elimination goals. The projected targets are shown below:

GRAPHS 4 : PROJECTED TARGETS FOR TB NOTIFICATION RATE (PER LAC POPULATION)





CHAPTER 4 - KEY STRATEGIES FOR “TB FREE” CHHATTISGARH

OBJECTIVES

1. To achieve TB Free status by the year 2023
2. To reduce TB deaths to 4/lacs by the year 2023
3. To achieve zero catastrophic expenditure due to TB by 2023
4. To improve nutrition status of TB patients

DEFINITION OF TB FREE CHHATTISGARH

The National Strategic Plan for Revised National Tuberculosis Control Programme in India has set its target to end TB by 2025. Chhattisgarh has set an ambitious plan to achieve 50% reduction of estimated TB incidence from 150/lac population in the year 2018 to 69/lac by the end of year 2023.

STRATEGY

With a vision to make a TB Free Chhattisgarh by the year 2023, a uniform strategy is planned to be adopted across all the districts. Ensuring political and administrative commitment will be key pillar to achieve the TB Free goal of the state.

Populations who are at high risk for TB have poor accessibility to health care services, and remain undiagnosed and continue to spread the disease in the community. Early identification and prompt treatment for TB will be the mainstay for achieving TB elimination. Population at higher risk for developing TB will be actively screened for the symptoms of TB and tested with high sensitive diagnostic tests.

Following are the key areas of intervention for achieving TB elimination in the state:

1. POLITICAL COMMITMENT

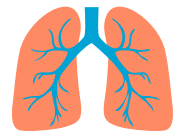
Political commitment will play an important role to give strength to the implementation of TB Free strategy in the state. The State Government is committed to make a TB Free Chhattisgarh by 2023, two years ahead of the vision of Government of India.

2. ADMINISTRATIVE COMMITMENT

The most important preparatory steps include formation of TB elimination boards at state and district level for policies and TB elimination task forces at state, district, TB Unit, and local self-government levels.

2.1. CONSTITUTION OF STATE TB ELIMINATION BOARD

The State TB Elimination Board will exhibit politico-administrative commitment of the state for elimination of TB. The board meets on a quarterly basis and takes policy decisions on strategies, devise implementation guidelines, mobilize resources, monitor implementation, guide districts, establish coordination with different ministries for TB elimination.



Following will be the constitution of the board:

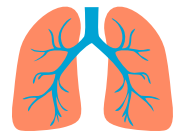
- Chief Patron – Hon'ble Chief Minister

- Patrons
 1. Hon'ble Minister for Health and Family Welfare
 2. Hon'ble Minister for Panchayat and Rural Development
 3. Hon'ble Minister for Social Welfare
 4. Hon'ble Minister for Urban Administration and Development
 5. Hon'ble Minister for Tribal Welfare
 6. Hon'ble Minister for Education
 7. Hon'ble Minister for Mining
 8. Chief Secretary, Government of Chhattisgarh

- Chairperson: Principal Secretary/Secretary, Health
- Member Secretary
 1. Director Health Services
 2. Mission Director, NHM
 3. Director Family Welfare

- Convener – State TB Officer
- Members –
 1. Director, Social Welfare Department
 2. Director, Urban Administration and Development
 3. Director, Panchayat and Rural Development
 4. Director, Mining
 5. Director, WCD
 6. Director, Tribal Welfare
 7. Director, School Education Department
 8. Director, Higher Education Department
 9. Director of Medical Education
 10. Director, AYUSH
 11. Regional Director, MOHFW, GoI
 12. Project Director, CGSACS
 13. Director, SHRC
 14. STDC Director
 15. WHO Consultant [TB]





2.2 CONSTITUTION OF STATE TB TASK FORCE

The State TB Elimination Task Force will be the technical committee which based on decisions of State TB elimination Board will execute desired activities planned for TB Elimination in the state. The task force will plan, supervise, monitor and support the districts in implementation of the TB elimination plan. The task force will meet on the quarterly basis and report to State TB Elimination Board. The following will be the constitution of State TB Elimination Task Force:

Chairperson: Director Health Services

Co-chairperson:

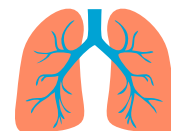
1. MD, NHM
2. Director Family Welfare

Member Secretary: State TB Officer

Members:

1. Chairman, State Task Force for Medical Colleges
2. IMA State Official
3. State Nodal Officer, Social Welfare Department
4. State Nodal Officer, Urban Administration and Development Department
5. State Nodal Officer, Panchayat and Rural Development Department
6. State Nodal Officer, Mineral Development Department
7. State Nodal Officer, WCD
8. State Nodal Officer, School Education Department
9. State Nodal Officer, Higher Education Department
10. State Nodal Officer, Tribal Welfare Department
11. Director, STDC
12. Assistant Project Director, CGSACS
13. State Program Officer (NCD)
14. State Programme Manager, NHM
15. State Programme Manager, NUHM
16. State Programme Officer, IEC Cell
17. Medical Officer State TB Cell
18. State Epidemiologist/APO
19. IRL Microbiologist
20. EQA Microbiologist
21. State PPM Coordinator
22. WHO Consultant (TB)
23. NGO's working in RNTCP
24. TB Champion/Survivor





2.3 CONSTITUTION OF DISTRICT TB ELIMINATION TASK FORCE

The District TB Elimination Task Force plans, executes, supervises, monitors, reviews activities at the district level and reports to State TB Elimination Task Force. This task force meets on a monthly basis and reviews the implementation of strategy of the block level. This is the apex body at the district level which will coordinate and integrate with other non-health departments of the district for active implementation of TB elimination strategy of the state. Following is the constitution of the task force:

Chairperson: District Collector

Vice Chairperson: CEO, Zila Panchayat

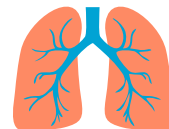
Member Secretary: Chief Medical and Health Officer

Convener: District TB Officer

Executive Members:

1. District Nodal Officer, Social Welfare Department
2. District Officer, Urban Administration and Development Department
3. District Officer, Panchayat and Rural Development Department
4. District Officer, Mineral Development Department
5. District Nodal Officer, WCD
6. District Nodal Officer, Tribal Welfare Department
7. District Education Officer
8. District Nodal Officer [NCD]
9. District Nodal Officer, CGSACS
10. District Nodal Officer, NTCP
11. District Programme Manager, NHM
12. District IEC Officer
13. President/Secretary, District IMA Branch
14. WHO Consultant, TB
15. Chairman, Medical College Core Committee
16. Medical Officer-TB Control of all TB Units
17. TB Champion/Survivor





2.4 CONSTITUTION OF BLOCK TB ELIMINATION TASK FORCE

The Block TB Elimination Task Force will be the key functional unit for TB elimination in the districts. This task force will execute the implementation strategy of the state and will supervise, monitor and review the planned activities. This task force reports to the District TB Elimination Task Force. Following is the constitution of Block TB Elimination Task Force:

Chairperson: Sub Divisional Officer (Revenue)

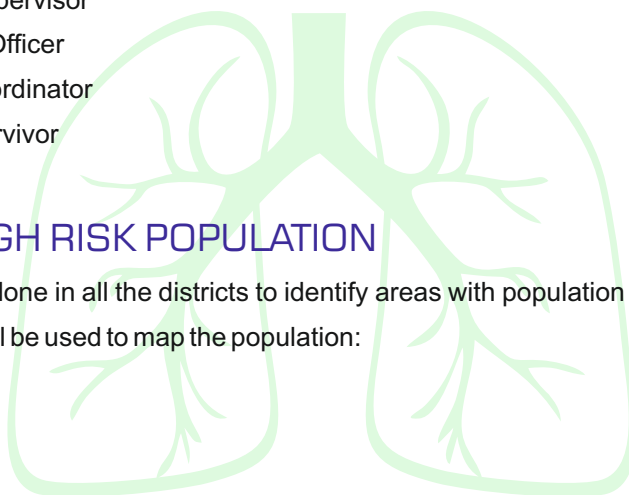
Convener: Block Medical Officer

Members:

1. All Medical Officers of the Block
2. CEO, Janpad Panchayat
3. Block Officer, WCD
4. Senior TB Treatment Supervisor
5. Senior TB Lab Supervisor
6. Block Education Officer
7. Block Mitranin Coordinator
8. TB Champion/Survivor

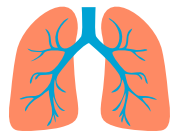
3. MAPPING OF HIGH RISK POPULATION

Vulnerability mapping will be done in all the districts to identify areas with population at higher risk of developing TB. Below are the criteria which will be used to map the population:



Urban Areas	Rural Areas	Tribal Areas
<ul style="list-style-type: none">• Slum dwellers• Prison inmates• Unorganized Labours• Refugee Camps• NACO/SACS identified high risk group for HIV• Homeless/Street children• Old age homes/Orphanages	<ul style="list-style-type: none">• Difficult to reach villages• Mines workers• Unorganized Labours• Populations groups with high malnutrition• NACO/SACS identified high risk group for HIV• Villages with known higher case load	<ul style="list-style-type: none">• Indigenous tribal population• Difficult to reach hamlets• Tribal school hostels





FORMAT FOR THE VULNERABILITY MAPPING

टी.बी. के चिन्हित उच्च जोखिम समूह हेतु प्रपत्र

प्रा.स्वा. केन्द्र..... विकासखंड..... जिला..... चिन्हित करने की तिथि.....

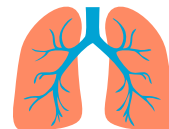
क्र.	उप स्वास्थ्य केन्द्र का नाम	ग्राम पंचायत का नाम	जनसंख्या	उच्च जोखिम समूह का प्रकार	उच्च जोखिम समूह का पता	उच्च जोखिम समूह का जनसंख्या

4. COMMUNITY ENGAGEMENT

Community engagement is defined as the process of working collaboratively with and through communities to address issues affecting their well-being, including influencing systems and serving as catalysts for changing policies, programs and practices, more patient sensitive.

Following are the scope of community engagement in TB:

- Awareness generation and stigma reduction
- Screening and Referral of TB suspects
- Treatment support services
- Social support services



Network of TB Survivors/TB Champions

A network of TB survivor's/TB champions will be established in all the districts. This is a group within the community who has witnessed personal, social and psychological affects due to TB. Hence these TB survivors will be engaged as follows:

- Act as advocates to generate awareness in the community,
- Aid in averting social stigma in the community
- Act as community facilitators for identification of TB suspects and refer them to appropriate health facility,
- Counselors for TB patients,
- Linking TB patients with social support schemes

5. INTENSIFIED CASE SEARCH

Intensified Case Search will be the key strategy in reaching the goal of TB Free state. The Intensified Case Search would be systematically done as per the strategy described below:

Objective:

- Early identification of presumptive TB cases.
- Early diagnosis of TB patients and initiating them on treatment.
- Early identification of TB infection and initiating them on preventive therapy.

Frequency:

- Mapped high risk population will be actively screened every 3 months.
- Door-to-Door screening of entire population will be done every 6 months.

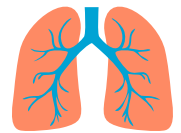
Team Composition:

- Campaign will be carried out by team comprising of ANM, Mitanin, RHO
- The team will be supervised by Health Supervisor

Mobile Outreach Services:

1. Mobile Medical Units will be utilized during the 7 days' active case finding campaign. These units will have multipurpose use i.e., for awareness generation, OPD services, sample transportation, supervision and monitoring etc.
2. Apart from using 4 TB Mobile Vans, the Mobile Vans under NUHM will also be used during the campaign.
3. Additional mobile units may be hired by the blocks/districts for which provision has been made in the budget.





6. RECORDING & REPORTING

- Structured formats will be used during the active case findings as per the attached Annex.
- After every campaign a summary report will be compiled at the block level and the report will be submitted to the Sub Divisional Officer, CMHO and the District Collector.

7. USE OF MOLECULAR TEST AND X-RAY FOR DIAGNOSIS OF TB

1. The presumptive TB cases identified during the campaign will be investigated for TB with X-ray of the appropriate site and CBNAAT test of the appropriate sample. Also the suspect will be subject to other relevant investigations as prescribed by the physician.
2. Both the investigations will be done free of cost for the patient.
3. The CBNAAT mobile van and Mobile X-ray van will also be strategically utilized in the identified blocks during the campaign.

8. TREATMENT AND SOCIAL SUPPORT SERVICES TO ALL TB PATIENTS

1. TB patients diagnosed during the intensified case search campaign will be immediately initiated on appropriate treatment free of cost.
2. These TB patients will be linked to already existing social support schemes of the state like Mukhyamantry Kshay Poshan Yojana, Tribal Welfare Schemes, Skill Development Skills etc.

9. TB TRACKING PROTOCOL

This initiative will be the key component for TB elimination with an intent to actively and continuously monitor identified presumptive TB cases, TB cases and contacts of TB cases.

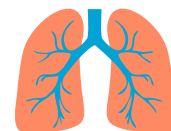
Tracking Presumptive TB cases

The presumptive TB cases identified during the active case finding campaign who are reported as NEGATIVE for TB will be line-listed and will be followed up again on priority bases in the next campaign.

Tracking contacts of TB cases :

- Household Contacts of the identified TB cases will all be actively screened for symptoms of TB and if found symptomatic will be investigated appropriately.
- All the household contacts will be tested for Latent TB Infection either by TST or by IGRA.
- Those household contact found to be infected with TB will be given preventive therapy of isoniazid 10mg/kg for 6 months.





CHAPTER 5 - LABORATORY STRENGTHENING FOR DIAGNOSIS OF TB AND DRUG RESISTANT TB

INTRODUCTION

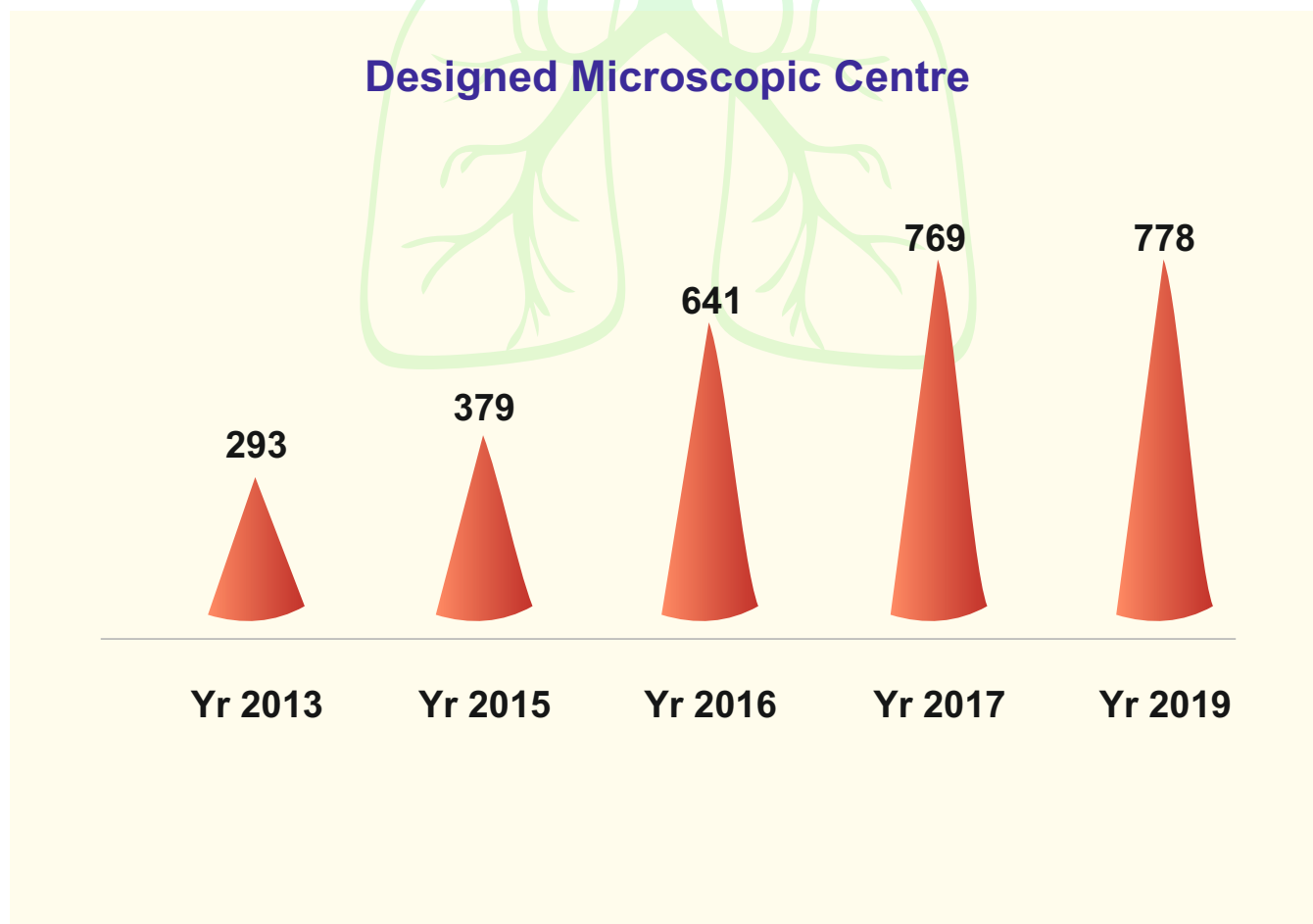
The state has established Designated Microscopy Centres for diagnosis of TB in PHCs, CHCs, District Hospitals, Medical Colleges, selected NGOs and also in some of the private health facilities. There is a well-established quality assurance mechanism; both external and internal quality assurance which is being supported by Intermediate Reference Laboratory (IRL).

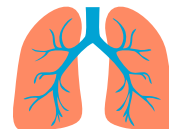
DESIGNATED MICROSCOPY CENTER (DMC)

CURRENT STATUS

The state has decentralized the diagnostic services in order to reach the difficult to reach population and hence the number of DMCs has increased from 293 in the year 2013 to 778 by the end of year 2018 as depicted in the figure below.

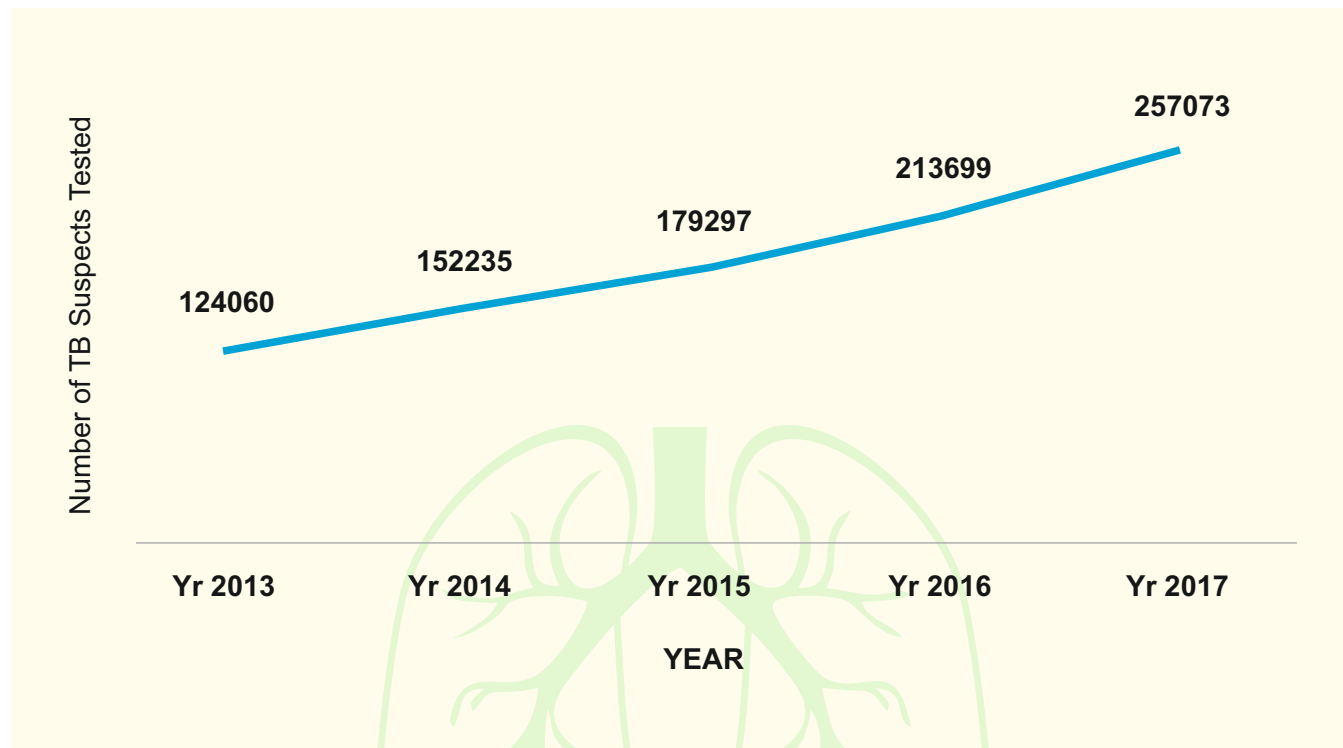
FIGURE 1 : INCREASE IN NUMBER OF DMC, 2013 TO 2019





This expansion of services has resulted in increase in number of TB suspects examined in the state as shown in the graph below:

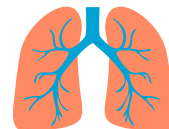
GRAPHS :TREND OF TB SUSPECTS TESTED WITH SMEAR MICROSCOPY



State has also upgraded DMCs with LED Fluorescent Microscopes where by 57 high burden DMCs of the state are provided with LED Fluorescent Microscopes.

EXPANSION PLAN

- 1. Operationalization of DMCs in all PHCs**
The state has planned to make functional all the PHCs as DMCs. Efforts are ongoing to assess the requirement of Microscopes and realign the position of Lab technicians so as to provide TB diagnostic services in all the PHCs.
- 2. LED FM in all the CHCs**
It is proposed to upgrade the CHCs by providing them with LED Fluorescent Microscopes. The demand for the same has been given to Central TB Division.
- 3. Decentralizing Molecular Diagnostic Tests**
The state envisions providing molecular diagnostic tests and efforts will be made to provide the necessary diagnostic technology to the block level.



SAMPLE COLLECTION AND TRANSPORTATION MECHANISM

In order to provide diagnostic services in all the PHCs and till the time all the PHCs are functional as DMCs the state has established sample collection and transportation mechanism to facilitate diagnosis for TB.

The state has developed a policy guideline for all the districts for sample transportation whereby a community volunteer is identified with a task to transport the collected samples from designated health facilities. The districts have prepared a definite route chart for the community volunteers who will transport the samples on fixed days to the nearby DMC or CBNAAT lab for diagnosis of TB or DR-TB. The figure below is an example of planning and implementation of sample collection and transportation mechanism in block of Korba district. Similar kind of planning is done in all the districts as per guidance from the state.

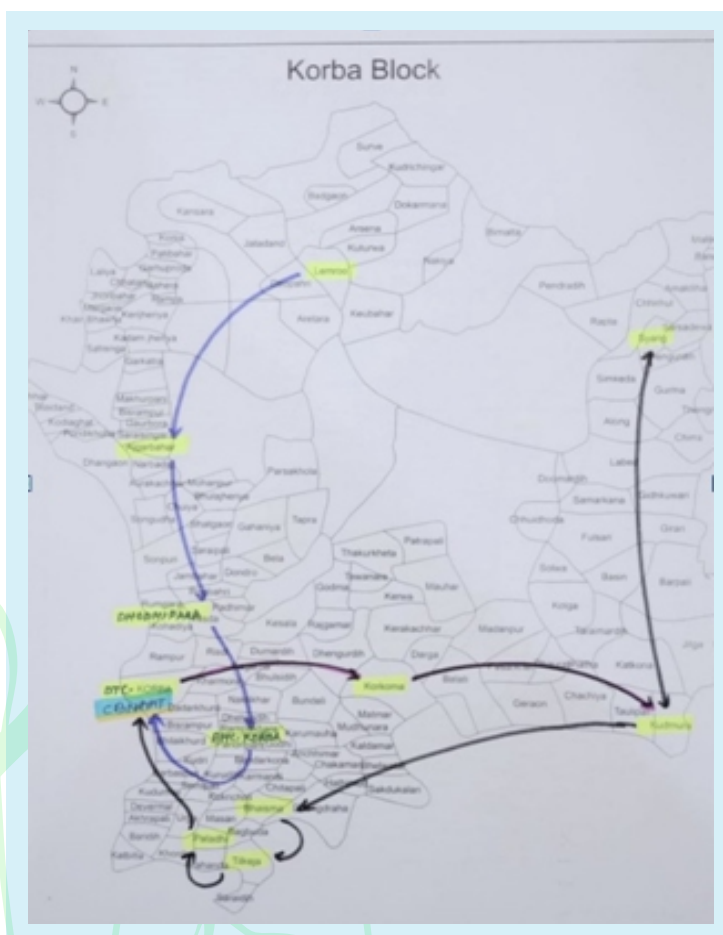
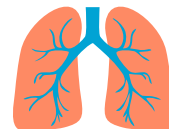


FIGURE : ROUTE CHART FOR SAMPLE TRANSPORTATION, KORBA



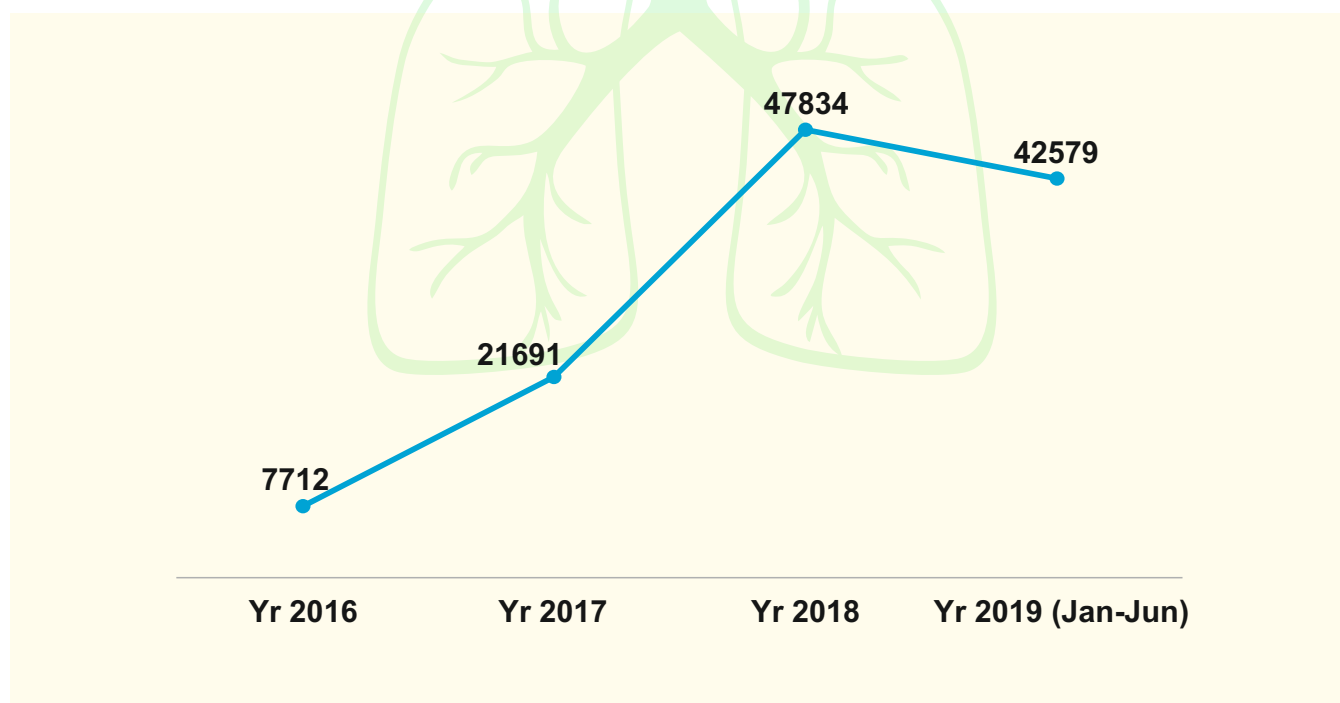
CARTRIDGE BASED NUCLEIC ACID AMPLIFICATION TEST (CBNAAT)

CURRENT STATUS

The state in coordination with the Central TB Division has made functional 28 CBNAAT sites, a rapid molecular diagnostic tool for early diagnosis of TB and Drug Resistant TB. CBNAAT were introduced in Chhattisgarh in the year 2015 by having 2 CBNAAT followed by 9 CBNAAT in 2016 and 30 CBNAAT in 2019 respectively. These CBNAAT machines are strategically placed so that now all the districts have at least one CBNAAT machine. Districts Sukma and Narayanpur are linked with their neighboring districts for CBNAAT services. Districts like Bilaspur, Raipur and Durg has been provided with an additional CBNAAT machine to enhance the utilization. The state is providing CBNAAT services free of cost even to the patients seeking care in private sector.

Alongwith the facility of CBNAAT at district level, a CBNAAT mobile van has also been provided for the betterment and easy access for the diagnosis of tuberculosis.

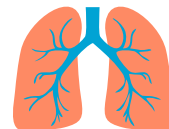
GRAPHS 6 : YEAR WISE TREND OF NUMBER OF TESTS PERFORMED IN CBNAAT



EXPANSION PLAN

With a view to further decentralize and upgrade the technology for diagnosis of TB and Drug Resistant TB, the state in coordination with Central TB Division is planning to deploy Trunat machines at all the CHCs which will help in early diagnosis of TB and drug resistant TB.





INTERMEDIATE REFERENCE LABORATORY

CURRENT STATUS

The state has one intermediate reference laboratory (IRL) located at Raipur and has been upgraded with latest technology for assisting the districts in diagnosis and follow-up of drug resistant TB. Following are the technology available at IRL:

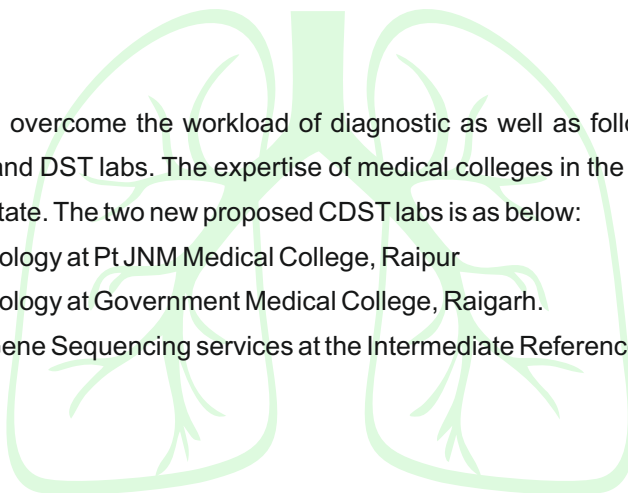
1. For Isolation of Bacteria and Drug Susceptibility Testing
 - a. Solid Culture
 - b. Liquid Culture
2. Molecular Tests
 - a. Line Probe Assay
 - b. CBNAAT

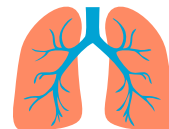
EXPANSION PLAN

In order to support the IRL to overcome the workload of diagnostic as well as follow-up samples it is planned to establish 2 additional culture and DST labs. The expertise of medical colleges in the state is proposed to strengthen the diagnostic services in the state. The two new proposed CDST labs is as below:

1. Department of Microbiology at Pt JNM Medical College, Raipur
2. Department of Microbiology at Government Medical College, Raigarh.

It is also planned to establish Gene Sequencing services at the Intermediate Reference Laboratory.





CHAPTER 6 - TB PREVENTION

BACKGROUND

Individuals with a latent infection are at risk of developing active tuberculosis at any time in the future. The risk is greatest during the first 2 years after being infected, during which time about 5 percent of infected persons develop active tuberculosis. Another 5 percent of infected persons will develop active tuberculosis at a later time in their lives. It is generally thought that approximately 90 percent of individuals with latent infection will never develop tuberculosis. Latent infection causes no symptoms and can be diagnosed only by a positive tuberculin skin test together with an evaluation that does not indicate the presence of active tuberculosis. Since prevalence of TB infection is very high in India, the tuberculin skin test is a recommended tool to identify latent TB infection. Tuberculin skin testing should be targeted to a population who are at higher risk for developing TB infection. Treatment of persons with latent tuberculosis infection can greatly reduce the incidence of tuberculosis.

DIAGNOSIS AND TREATMENT OF LATENT TB INFECTION (LTBI)

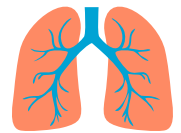
Community based screening for diagnosis and treating LTBI will be the most challenging and resource intensive cumbersome task. Supplemental it raises the issues of people approval, civic rights, adherence and methodology.

DIAGNOSIS OF LTBI: TESTING FOR LATENT TB INFECTION

Tuberculin Skin Test (TST) or Interferon Gamma Release Assay (IGRA) will be used for diagnosis of LTBI as per the recommendations of the national programme. TST is economical, but less accurate. IGRA is very costly, though accurate. The screening of high-risk populations for latent tuberculosis infection and provision of treatment of latent infection as described below will be one of the key strategy to achieve the goal of tuberculosis free Chhattisgarh.

Screening of High Risk Population for Latent TB Infection

- a. **HIV affected adults and adolescents and children aged \geq 12 months** with unknown or positive tuberculin skin test (TST) and are unlikely to have active TB disease will receive TB preventive therapy as a part of comprehensive HIV care.
- b. **HIV affected infants aged $<$ 12 months** who are in contact with a case of TB and are investigated for TB should receive 6 months of isoniazid preventive treatment (IPT) if the investigation shows no TB disease.
- c. **HIV-negative children aged $<$ 5 years** who are household contacts of people with bacteriologically confirmed pulmonary TB and are found not to have active TB will be given TB preventive treatment.



- d. **Children aged ≥ 5 years, adolescents and adults** who are household contacts of people with bacteriologically confirmed pulmonary TB who are found not to have active TB will be considered for TB preventive treatment upon recommendation by the national programme.
- e. **Screening of general population** may be considered after the recommendation of Central TB division.

TREATMENT OF LTBI:

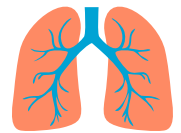
All individuals with LTBI may not be evolved to active TB. The risk to develop active disease among HIV positive individuals is around 60-80%. It justifies treatment of LTBI among them, this evidence has been incorporated and implemented in RNTCP, as a prophylactic therapy isoniazid is recommended to all HIV positive individuals irrespective of LTBI test positivity, so LTBI testing is not recommended for HIV positives by programme. The risk of progressing to disease is not accurately measured among the infected who have malnourished, diabetes, renal disease, etc. Since the main objective is to break the ongoing transmission, treating LTBI may be considered among these high risk populations. Patient centric counselling and treatment will be 'offered' to these individuals they will be encouraged to opt for treatment and monitored for adherence and treatment completion. However, people who do not opt for treatment may be closely followed up for symptoms of active tuberculosis, at the onset of which a CBNAAT must be done on the appropriate sample and if found positive, or clinically diagnosed having active TB, must be treated with full course of anti TB treatment.

Treatment options recommended by WHO for LTBI include:

1. 6-month isoniazid or
2. 9-month isoniazid, or
3. 3-month regimen of weekly rifapentine plus isoniazid
4. 3–4 months' isoniazid plus rifampicin
5. 3–4 months' rifampicin alone

Among these options, presently 6-month isoniazid regimen is implemented. A 3-month regimen of weekly rifapentine plus isoniazid is operationally feasible in view of ease of administration, and monitoring for adherence, this regimen will be explored for implementation based on the program recommendations.





STATE OPERATIONAL POLICY OF CONTACT INVESTIGATION

OBJECTIVE:

To undertake contact investigation through home visits of all the household contacts of microbiologically confirmed TB cases.

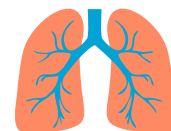
PROCESSES:

- STS will share the list of bacteriologically confirmed TB cases to the concerned Male MPW.
- Male MPW will be responsible for conducting house visit to do the symptomatic screening among all the households.
- The details of all the households will be recorded in Contact Investigation Register.
- Symptomatic households will be referred to nearest Health Facility using Contact Investigation Referral Slip
- Male MPW will be responsible to follow-up with these households so as to ensure they are tested for TB.
- The Male MPW will also be responsible to complete the NIKSHAY entry under this activity.
- This activity will be monitored by Health Supervisor at the block level. STS/STLS will support the MPW Male in successful completion of this activity.

MONITORING

- The contact investigation activity will be actively monitored on a monthly basis by the MOTC and the STS for its completeness in the records which are being maintained by the male health worker.
- The DTO and the district team will also monitor this activity during their field visits.
- The DTO and the STO will also monitor this activity through NIKSHAY





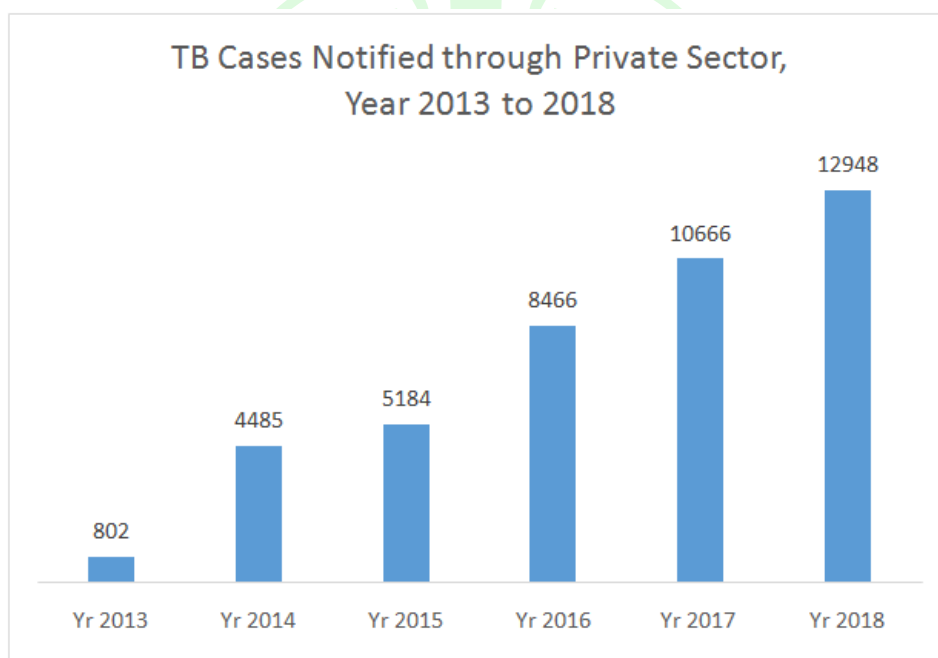
CHAPTER 7 - PRIVATE SECTOR ENGAGEMENT

STRATEGY SO FAR

1. IMPLEMENTATION OF GAZETTE OF INDIA TB NOTIFICATION ORDER

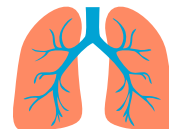
Chhattisgarh started implementing the Gazette of India TB notification order as soon as it was released in the year 2012. The Chief Medical and Health Officer of the districts were designated as the nodal person for reporting the TB notification in a district. The TB notification information from private sector is digitally recorded in NIKSHAY a web based case based notification portal. Till date 1693 private health facilities are registered in NIKSHAY of which 58% have notified at least a case of TB. TB notification from private sector has drastically improved which is depicted in the graph below:

GRAPHS 7 : TB NOTIFICATION FROM PRIVATE SECTOR, 2013 TO 2018



2. INCLUSION OF MANDATORY TB NOTIFICATION IN CLINICAL ESTABLISHMENT ACT

Chhattisgarh has well established clinical establishment act which is strictly being implemented across the districts. All the private health facilities are registered and abide the rules and regulations laid down under this act. Taking the advantage of already established well functional act, the TB being a notifiable disease has been included into the guidelines of this act, which has given the district authority to take appropriate actions against those not notifying TB cases to the government.



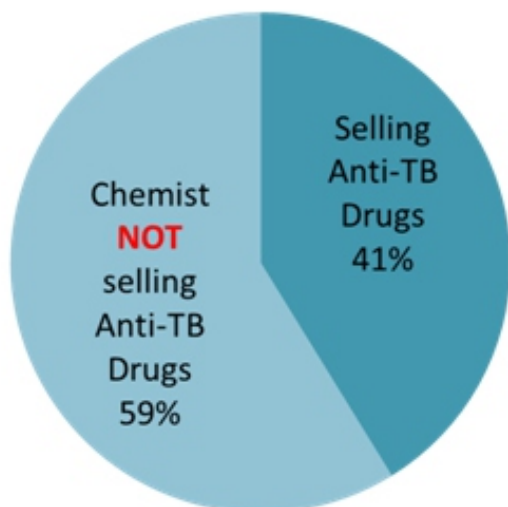
3. STATE AND DISTRICT LEVEL CONTINUED MEDICAL EDUCATION (CME) WITH PROFESSIONAL ORGANIZATIONS

Partnering with professional organizations like Indian Medical Association (IMA), Indian Academy of Pediatricians (IAP) etc. is the one of the key factor which has led to increase in TB notification from private sector. The CME's are being conducted or supported at state or the district level with emphasis on updating the knowledge of the practitioners on recent advances in TB elimination.

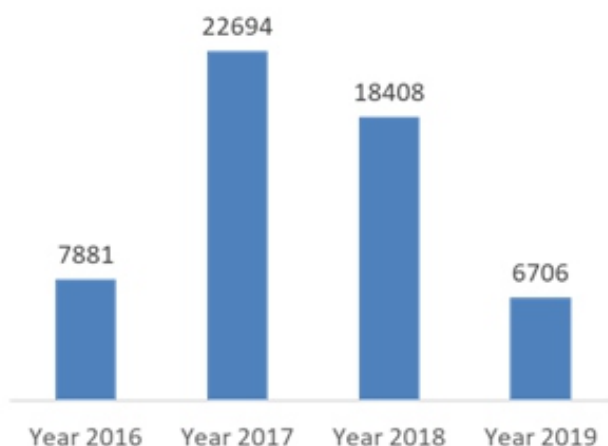
4. STATE INITIATIVE OF TB NOTIFICATION FROM CHEMISTS

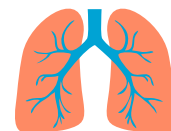
Chhattisgarh is the first state in the country to innovate a model where the Food and Drug Administration (FDA) under the Department of Health and Family Welfare, issued directives to all the Chief Medical and Health Officers, Additional Drug Controllers, Drug Inspectors and Chemist Associations to gather information on a prescribed format about anti-TB drugs sold, name and address of the patient, name of the prescribing physician. A series of state and district level meetings of chemists and the health authorities were conducted for better partnership. This has resulted in reaching out to the patients being managed in private sector and also has helped in strengthening TB notification information. The chart below depicts the output of TB notification from chemists.

Chemists - Sales of Anti-TB Drugs



TB patients notified from Chemists





STRATEGY AHEAD

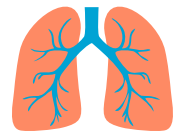
Engaging private sector will be the priority in order to eliminate TB from the state by the end of the year 2025. Seven districts in the state have more than 25% (range 25% to 57%) of total TB patients being managed in private sector. The strategy for the state will not just limit to notification but will be extended to following up of these patients by the health staff in order to ensure adherence and treatment completion. Following are the strategies which are proposed for engagement with private sector:

1. ENHANCING PRIVATE SECTOR ENGAGEMENT

- a) Strict implementation of TB notification from private health care provider and chemists remains the mainstay to further strengthen TB notification.
- b) Once a year state level workshop with private practitioners through professional organizations along with district level CME's
- c) Once a year State level workshop involving chemist association, wholesalers, department of food and drug administration.
- d) Implementation of policy of providing INR 1000 as an incentive to private practitioners for TB notification and reporting treatment outcome.
- e) Engaging AYUSH health care providers which will contribute in early symptom identification and referral for diagnosis of TB. They will also play a key role in counseling of TB patients on treatment and will be part of treatment support system.

2. OFFERING FREE DIAGNOSTIC AND TREATMENT SERVICES FOR TB PATIENTS IN PRIVATE SECTOR

- a) Providing free of cost rapid molecular diagnostic services to the patients seeking care in private sector.
- b) Ensuring availability of anti-TB drug stocks in identified private practitioners so that free treatment services are provided to such patients seeking care from private sector.
- c) Mass communication and dissemination of information among the general public on private health facilities offering free diagnosis and treatment services for TB.
- d) Offering free of cost diagnostic and treatment services for management of drug resistant TB.



3. IMPLEMENTATION OF REGULATORY APPROACHES TO STRENGTHEN TB NOTIFICATION

- a) State will continue to strictly implement the policy of mandatory TB notification from private health care providers. Those not notifying TB cases will be liable to punishments laid down under IPC 269 and IPC 270.
- b) With collaboration with Department of Food and Drug Administration the state will continue to seek TB notification under the schedule H1 drug policy act.

4. PUBLIC HEALTH ACTION TOWARDS TB PATIENTS IN PRIVATE SECTOR

- c) TB patients notified through private practitioners or through chemist will be home visited by the government health staff for counseling on treatment adherence, follow-up of treatment, contact screening and linking them with the social welfare schemes.
- d) Private sector managing TB patients also have the responsibility under public health action to notify TB cases and to report TB treatment outcome. State will ensure that all the private practitioners report the treatment outcome of all TB cases notified by them.

5. INVOLVEMENT OF HOSPITALS OF PUBLIC SECTOR UNDERTAKING (PSU)

- e) The state has many hospitals who are not part of department of health and family welfare and are part of other government ministries such as Coal India, SAIL, NTPC, CSEB, NMDC etc.
- f) State will ensure uninterrupted supply of lab consumables and anti-TB drugs to their health facilities so that free of cost diagnostic and treatment services can be provided. These facilities will also be supported for management of drug resistant TB cases.
- g) In cases where anti-TB medicines are prescribed from private market then such cases will have to be notified to the public health officials.





CHHATTISGARH PUBLIC PRIVATE ENGAGEMENT MODEL

A structured plan has been prepared for engaging private sector which will be implemented by engaging interface agency. The details of the plan are as below:

1. MAPPING OF HEALTH FACILITIES

The agency along with the district team will conduct a planning meeting whereby all the health facilities both public and private will be mapped. This mapping will be crucial for decision making on mode of engagement with the health facility. Mapping will be done based on the following criteria:

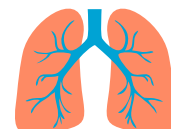
- a) Type of Health Facility – Public or Private
- b) Type of Medical Practice – Allopathic, AYUSH or Unqualified/Traditional Healers
- c) Type of Facilities – OPD/Clinic or Indoor/Hospital or Both
- d) Type of Services – Clinical, Pathology, Radiology, Mixed
- e) Mapping of Chemists

2. HUMAN RESOURCE SUPPORT

a. **Establishment of State Programme Management Unit (SPMU)**

A state level SPMU will have to be established which would oversee all project activities across the state. SPMU will be headed by the State PPM lead who will be responsible for strengthening PPM activities through PPSAs and sensitization / support to RNTCP PPM staff. SPMU will sensitize RTNCP state and district staff on PPM strategies, activities proposed under NSP and will support capacity building of the RNTCP PPM staff by conducting trainings / workshops at district and state level. SPMU will further support RNTCP PPM staff on creating PPM plans for their respective districts under the guidance of State TB Officer. Human resource structure of SPMU is as below:

Position	Number
Project Director	01
State PPM Lead	01
Data Manager	01
Accounts Officer	01



B. Hiring of City Coordinators/TB Mitra

The agency has to hire city coordinators who will be designated as “TB Mitra” with prime responsibility to liaison with patients, practitioners and RNTCP staff. They will assist the districts in ensuring public health action activities and coordinate for strengthening TB notification services.

City	Number Required
Raipur	10
Bilaspur	8
Durg	6
Korba	3
Raigarh	3
Dhamtari	3

3. TRAINING AND CONTINUED MEDICAL EDUCATION (CME)

The agency has to conduct Training/CMEs for all the health care providers (public and private) in batches. The CMEs will be planned with coordination with the district/state administration. The following order should be preferred for planning Training/CMEs:

- Induction Training/CME for the key partnering private practitioners
- CME for other private practitioners in batches

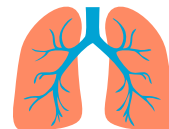
Batch Size for the CME should not be more than 40 participants

Such CME's will be repeated on a biannual basis to update the practitioners on the newer guidelines of the programme.

4. LINKAGES FOR DIAGNOSTIC SERVICES

The aim of the project is to provide access to free diagnostic services even for the patients seeking care in private sector. The agency has to establish linkages with the private health care providers in setting up a mechanism to minimize the out-of-pocket expenditure of the patients of private sector for diagnosis of TB or Drug Resistant TB. Following diagnostic services will be provided free of cost to the patients through developing linkages with the public health facilities:

- Smear Microscopy by ZN/FM staining
- Molecular Tests – Xpert MTB/Rif or Truenat
- Line Probe Assay
- Liquid Culture & DST
- Routine Blood Investigations if necessary



5. LINKAGES FOR TREATMENT SERVICES

To coordinate with district and state authorities in establishing liaison with public and private sector for drugs supply and logistics management to ensure smooth implementation of treatment services to the patients seeking care in private sector.

a. **Prescription based on non-RNTCP anti-TB medicines**

In condition where private practitioner prescribes non-RNTCP anti-TB medicines, the TB Mitra will have to perform public health actions.

b. **Prescription of RNTCP FDC**

After notifying the patient, the private provider will issue Free Drug Voucher to the patient. The patient will then produce the voucher to the chemist who is authorized to stock RNTCP FDC. On receipt of voucher the chemist will initiate the TB Treatment Card and attach the voucher with treatment card and issue one-month supply of RNTCP FDC to the patient.

6. PUBLIC HEALTH ACTIONS

The agency has to ensure all public health actions are being carried out for the patients notified from private sector. In coordination and guidance with the district they need to ensure the following:

- a. Counseling of TB patients
- b. Home visits for family counseling, contact investigation and adherence support
- c. Ensure that TB patients are tested for Drug Resistance, HIV and Diabetes
- d. Follow-up services

7. INFORMATION TECHNOLOGY SUPPORT

- a. Necessary logistics for setting up of SPMU
- b. Mobile Tablets with internet services for all the TB Mitra

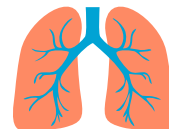
8. DEVELOPMENT OF IEC MATERIALS

In coordination with State and the District the agency will design, print and disseminate IEC materials for various stakeholders.

9. DATA MANAGEMENT

- Collect, compile and manage data related to TB patients' demographic details, diagnostic tests and treatment details using NIKSHAY
- Conduct data quality checks, data audits
- Submit reports and participate in district/state level reviews periodically
- Maintain patient and project data confidentiality





CHAPTER 8 - PATIENT SUPPORT SYSTEMS

RSBY MDR TB PACKAGE

A step towards universal health coverage, the RNTCP in the state took an innovative step by integrating with Rashtriya Swasthya Bima Yojana (RSBY) and designed special multi drug resistant TB (MDR-TB) package to be included in RSBY health insurance cover. This MDR-TB package covers the cost of pre-treatment evaluations both in public and private sector for patients suffering from MDR TB.

This package will be revised further to cover costs on out-patient basis so as to ensure free of cost diagnostic and treatment services for management of drug resistant TB.

MUKHYAMANTRI KSHAY POSHAN YOJANA

Committed towards social health protection the Government of Chhattisgarh has decided to provide nutritional supplementation to all the tuberculosis patients including drug-resistant cases throughout the course of their treatment. This policy is nations first of its kind which no other state is implementing in a state-wide scale to provide supplementary nutrition to all TB patients.

The aim of designing the ration is to have calorie dense with high protein content, locally acceptable and palatable ration, easy to use, ration having long shelf life and easy to transport and store.

The decision on commodities to be provided to the beneficiaries was taken by the State Technical Committee for Nutrition based on pilot study in 2 districts of the state. The committee decided to provide the supplementary nutrition in the form of monthly food basket as depicted in the table below.

TABLE 4 : CONTENTS OF MONTHLY FOOD BASKET

Commodity	Quantity/month
Soya bean Oil	1 L
Groundnut	1.5 Kg
Milk Powder	1 Kg

मुख्यमंत्री क्षय पोषण योजना

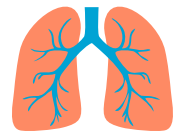
क्षय रोगियों के पौष्टिक आहार हेतु
छत्तीसगढ़ शासन की अभिनव योजना
मार्गदर्शिका

प्रतिमाह पंजीकृत सभी क्षय रोगियों को नि:शुल्क पौष्टिक आहार

सोयाबीन तेल -1 लीटर

मूंगफली-1.5 कि.ग्रा.

दूध पावडर
1 कि.ग्रा.



Procurement of the commodities is being done by Chhattisgarh Medical Services Corporation (CGMSC) as per the annual quantity provided by the Department of Health and Family Welfare. The order for the same is placed and is expected to be delivered by June 2017 for its state-wide implementation.

EXPECTED OUTCOME:

- Food security of TB patients
- Zero catastrophic expenditure
- Improve treatment adherence
- Improved BMI (indirect)
- Better treatment outcome
- Increase in Case Detection (indirect)

DIRECT CASH BENEFITS TO PATIENTS

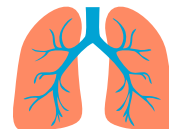
The programme is adopting a DBT mechanism for transfer of monetary support and incentives to patients. This will ensure the funds reach rightful recipients in a timely manner.

The cornerstones of the DBT mechanism will be:

- RNTCP – In addition to providing funds for DBT, programme will also identify and review incentives and treatment supports to be provided to the patients
- PMJDY – Pradhan Mantri Jan Dhan Yojana has introduced banking facilities even to the poorest and geographically remote persons in India. PMJDY accounts will allow for quick establishment of DBT linkages for patients irrespective of their economic strata or geographic location.
- NIKSHAY – As a case based patient identification system, NIKSHAY will allow for a real time tracking of patient eligibility for DBT and ensure quick activation of DBT linkages to patient accounts
- AADHAR – AADHAR will act as the unique identifier for patients seeking treatment support via DBT mechanism.

BETTER TREATMENT SUPPORT SYSTEMS

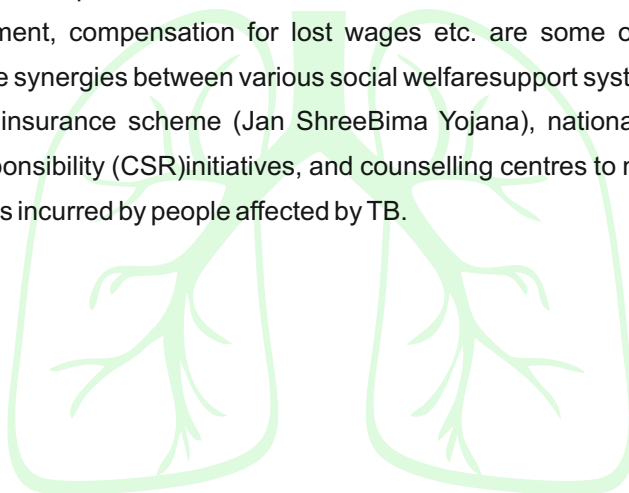
To assess and foster adherence, a patient-centred approach to administration of drug treatment, based on the patient's needs and mutual respect between the patient and the provider, will be developed for all patients. A good treatment support plan will be developed at the time of initiation of treatment. This plan will include initial and frequent follow-up counselling of the patient and family members, supervision of treatment by a trained treatment supporter, locally managed additional nutritional support, retrieval of treatment interrupters, screening for adverse reactions,

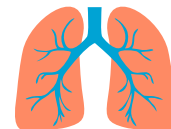


psycho-social support, co-morbidity management, follow up laboratory investigations, and management of post treatment sequelae.

Mitanin (ASHA) will be the treatment supporter as she is acceptable, accessible to the patient and accountable to the health system. Each patient and his/her treatment supporter will be supervised by a health worker. It may be a peripheral health worker in the public health system. If the patient is initiated on treatment by a private health care provider, public health system may offer this supportive role when requested.

While observing treatment is one of the best modalities of promoting treatment, other modalities also may be deployed to further enhance adherence to treatment. Intelligent deployment of information communication technologies (ICT) is an example of such modalities. A patient who is unable to undergo supervised treatment will not be denied treatment. Frequent on-job travellers, truck drivers, sailors etc may require identification of a proper treatment supporter. To promote treatment adherence among these patients, ICT modalities like frequent calls, SMS reminders, IVRS etc. may be deployed. Counselling may be required to tackle substance abuse. Nutritional assessment and support, ancillary drugs, co-morbidity management, compensation for lost wages etc. are some other strategies. To avail these, healthcare providers will derive synergies between various social welfare support systems like RSBY, National Family Benefit Scheme, Group Life insurance scheme (Jan Shree Bima Yojana), national rural employment guarantee scheme, corporate social responsibility (CSR) initiatives, and counselling centres to mitigate out of pocket expenses such as transport and wage loss incurred by people affected by TB.





CHAPTER 9 - MULTI-SECTORAL COORDINATION

INTRODUCTION

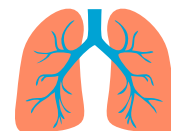
Strategies to end TB will have to address social and economic determinants which are risk factors for developing TB. Risk factors such as lack of awareness, poverty, malnutrition, urbanization, indoor air pollution, overcrowding, etc. require inter-departmental/ ministerial coordinated activities and the program will proactively facilitate this coordination to end TB. Inter-sectoral coordination will play a pivotal role in addressing social and economic determinants for TB. Role of different ministries for TB elimination has been described below:

5.1 ROLE OF MINISTRY OF PANCHAYAT AND RURAL DEVELOPMENT

1. Convergence and partnerships with Chhattisgarh State Rural Livelihood Mission (Bihaan) to link eligible TB household woman to self-help group (SHG) for vulnerability reduction, livelihoods enhancement, and employment and enterprises.
2. Involvement of SHG for active TB care and control activities, thereby providing informer, DOTS provider incentives to eligible beneficiaries.
3. Sensitization and orientation of PRI members on TB control activities.
4. Involvement of key stakeholders in the respective TB Elimination Task Forces
5. PRI members with other stakeholders involved in the planning of activities, awareness generation, mapping, surveys, active case findings, treatment support group activities, interventions for special groups, supervisory visits, linking TB patients with other social welfare schemes.
6. Facilitate the opening of a bank account of TB patients for Nikshay Poshana Yojana under Pradhan Mantri Jan-Dhan Yojana (PMJDY) and ensuring the benefits of Pradhan Mantri Suraksha Bima Yojana and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY).
7. Under Pradhan Mantri Awas Yojana- Gramin (PMAY-G) providing incentives to pucca house, with basic amenities, to all eligible TB patients who are houseless householder and those households living in kutcha and the dilapidated house is expected to reduce overcrowding in these high-risk group. The program will proactively facilitate this linkage of eligible TB patient to Yojana.
8. To facilitate the linkage of eligible TB patients who are farmers to Pradhan Mantri Fasal Bima Yojana (PMFBY) and Pradhan Mantri Kisan Samman Nidhi Yojana

5.2 ROLE OF DEPARTMENT OF TRIBAL WELFARE

1. TB screening among Tribal Residential School inmates by Medical Officers and Paramedical Staff.
2. Linkage of TB patients of Abujh Marias, Baigas, Bharias, Hill Korwas, Kamars, Saharias, Birhor tribes to a scheme of development of particularly vulnerable tribal groups (pvtgs) for socio-economic development in a comprehensive manner.



3. Linkage of TB patients to Article 275(1) grants development activity and State Scheduled Tribes Finance and Development Corporations (STFDCs) and special central assistance grants for Human resource and socio-economic development and enhanced quality of life.

5.3 ROLE OF DEPARTMENT OF URBAN ADMINISTRATION AND DEVELOPMENT

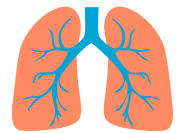
1. A ward/division level task force also can be formed under the leadership of the ward member/ division councillor.
2. Involvement of key stakeholders in Ward TB Elimination Task Force.
3. Urban local body members with other stakeholders involved in the planning of activities, Awareness generation, mapping, surveys, active case findings, treatment support group activities, interventions for special groups, supervisory visits, Linking TB patients with other social welfare schemes.
4. Facilitate the opening of a bank account of TB patients for Nikshay Poshana Yojana and ensuring the benefits of Pradhan Mantri Suraksha Bima Yojana and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY).
5. Convergence and partnerships with Chhattisgarh State Urban Livelihood Mission to link eligible TB household to uplift the urban poor folks by enhancing sustainable livelihood opportunities through skill development.

5.4 ROLE OF DEPARTMENT OF SCHOOL EDUCATION

1. Facilitating the linkage of eligible TB patients to scholarships scheme like Dr. Ambedkar pre-matric and post-matric scholarship for denotified, nomadic and semi-nomadic tribes (DNTS), Begum Hazrat mahal national scholarship, Pragati scholarship for girls, UDAAN, pre, and post-matric scholarship, etc.
2. Teachers and students of Secondary Schools to be trained and sensitized on various aspects of TB Control Programme by District TB officials for awareness generation and community mobilization.
3. Conducting regular awareness generation activities among students and teachers through Essay, Debate, Song, Slogan and Drawing Competitions on various National days.
4. Expansion of Right to Education for the affected and infected MDR/XDR TB children.
5. Platforms like Parent Teachers Association should be utilized for awareness generation on TB.

5.5 ROLE OF THE DEPARTMENT OF SOCIAL WELFARE

1. Linking the TB patients who have suffered disability due to TB treatment (MRD, XDR) to the existing social welfare schemes of the department.
2. Strengthening the rehabilitation of TB survivors who have suffered disability due to TB treatment



5.6 ROLE OF DEPARTMENT OF MINING

1. Engaging the mining corporation through Employer Led Model (ELM) to achieve TB Free mines
2. Strengthen the existing health mechanism under the department for better service delivery related to TB
 - a. Orienting the mining hospital to 100% notification of TB patients
 - b. Establishment of DMC for TB screening and treatment in mines hospital
 - c. Quarterly active case finding for TB in mining areas
3. Additional Nutritional Support for TB patients and affected families through CSR initiatives

5.7 ROLE OF MINISTRY OF PETROLEUM AND NATURAL GAS

1. Under Pradhan Mantri, Ujjwala Yojana subsidized LPG gas connections to BPL households and TB affected community is expected to reduce indoor air pollution in these high-risk group.
2. The program will make pro-active efforts to establish linkage with LPG connection distributors, LPG field officials and dedicated oil marketing's company(OMCs).
3. Involvement of LPG field officials dedicated OMCs in TB elimination task force.

5.8 ROLE OF DEPARTMENT OF WOMAN AND CHILD DEVELOPMENT

1. Ensuring the linkage of Woman TB patients who are victims of physical, sexual, emotional, psychological and economic abuse to One Stop Centres (OSCs).
2. Sensitization of CDPO, ICDS Supervisors, Anganwadi workers to incorporate TB care and prevention in general and respiratory hygiene in Anganwadi Centers.
3. Referral of TB suspects and malnourished children for TB Ongoing screening in DMCs and CBNAAT facilities.





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