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NATIONAL TB ELIMINATION PROGRAMME

INDIA TB REPORT 2024

NATIONAL TUBERCULOSIS ELIMINATION PROGRAMME
TB MUKT BHARAT
TB Harega Desh Jeetega

NATIONAL HEALTH MISSION
राष्ट्रीय स्वास्थ्य मिशन

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आज़ादी का अमृत महोत्सव

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स्वास्थ्य एवं परिवार कल्याण मंत्रालय
Government of India
Department of Health and Family Welfare
Ministry of Health and Family Welfare

Foreword for India TB Report, 2024

Our country takes immense pride in its commendable performance in curbing the scourge of Tuberculosis (TB). The WHO's Global TB Report 2023 acknowledges the tremendous progress made by India in improving case detection and reversing the impact of COVID-19 on the TB programme – our transformative efforts have led to a decline of 16% in TB incidence between 2015 and 2022, which is almost double the pace of decline observed globally. Significantly, our National TB Elimination Programme has registered 18% decline in mortality due to TB during the same time period.

In the past year, under India's successful G20 Presidency, we spotlighted Antimicrobial Resistance (AMR) in the G20 New Delhi Leaders' Declaration which articulated the myriad ways to tackle AMR effectively and its prioritization in national action plans. This has immense implications for TB, and we have ensured that global platforms like G20 are leveraged to further conversation on this important public health challenge. The WHO, too, commended India's efforts to establish innovative, multi-sector approaches to end TB and thus, inspiring other countries to do the same. India also became a signatory to the Gandhinagar Declaration – a joint declaration by the Health Ministers and WHO SEARO, signed at the G20 Ministerial meeting which aims to end TB in the South-East Asia Region by 2030.

Furthermore, our *Jan Bhagidari* or whole of society approach has ensured that people from all walks of life take ownership of TB elimination within their communities. This approach was evident in the massive success of the *Hamara Sankalp Viksit Bharat* campaign – through the campaign, over 3.9 crore people were screened for TB and 12 lakh people were referred to higher public health facilities. Our unique and first-of-its-kind community engagement and support programme, the *Pradhan Mantri TB-Mukt Bharat Abhiyaan* has garnered unprecedented attention to the disease – over 1.5 lakh individuals and organizations have come forward to support over 10 lakh TB patients.

And finally, we continue to deploy innovative solutions and invest in research and development to improve our TB management efforts. In a first, the Ministry has formulated research studies and implementation roadmaps for vaccinating adults with the BCG vaccine that can be the *suraksha kavach* for our local communities to ensure we scale up our TB prevention efforts through an easy and accessible manner.

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As we release the India TB Report 2024, I am filled with hope that our comprehensive approach is ensuring India leads the way towards TB elimination. I am certain that with our collective efforts, the country's *Jan Andolan* against TB will be successful very soon.

TB Harega, Desh Jeetega !

Dated 19th March, 2024

(Apurva Chandra)

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Foreword

Our National TB Elimination Programme has made great strides in the past few years. Through the annual India TB Report, we seek to document the efforts made by the programme and the various strategies we undertook the past year to provide quality services to every patient across the country.

Since the launch of the National Strategic Plan (NSP) 2017-25, transformative approaches have been followed to bring a paradigm shift in the way we prevent, detect and treat TB. Through the Ayushman Aarogya Mandirs, for instance, we have decentralized and taken TB care closer to citizen's doorstep. Through specialized trainings for our Community Health Officers and by leveraging campaigns such as the Hamara Sankalp Viksit Bharat campaign, we have managed to significantly improve case finding across the country. Alongside, door-to-door active case finding campaigns have resulted in 20.5 crore people being screened for TB and 35,438 patients being diagnosed and initiated on treatment.

Alongside, our efforts to engage the private health care sector are showing incredible results. Last year, the programme managed to notify over 8.4 lakh cases from the private sector – reflecting an exponential rise since 2017. Through the years, important policy adjustments and newer programmatic initiatives have improved the quality of care provided in the private sector. Patient Provider Support Agency (PPSA) program, have been introduced in over 200 districts across the country, taking forward the NSP's motto of 'going where the patient goes'.

Further, and very importantly, community engagement has been recognized as a cornerstone for the programme – as TB is both a medical and a social problem. Several initiatives have been taken in this regard – the TB Mukt Panchayat initiative, launched by the Honourable Prime Minister, Shri Narendra Modi on World TB Day 2023 exemplifies this social approach. In collaboration with the Ministry of Panchayati Raj, we aim to engage and enlist the support of over 2.5 lakh PRI members to create a community-led approach and Jan Andolan to end TB. The soul and future of India lies in its villages, and the route to a TB Mukt Bharat through its TB Mukt villages.

Our concerted efforts in creating a Jan Andolan to end TB by 2025 also came to a crescendo with the Pradhan Mantri TB Mukt Bharat Abhiyaan, escalating progress towards TB elimination. Since its launch in 2022 by the Honourable President of India, Smt. Droupadi Murmu, over ~1.5 lakh Ni-kshay Mitras have come forward to support over ~10 lakh people living with TB.

Finally, considering how critical proper nutrition is to counter a disease like TB, the government introduced a crucial social support scheme, Ni-kshay Poshan Yojana. Through NPY, each notified TB patient is entitled to Rs. 500 each month for the entire duration of treatment via Direct Benefit Transfer. Since the launch of the programme in April 2018, the NTEP has disbursed over Rs. 2781 crores to over 1 crore beneficiaries. Furthermore, the programme has successfully navigated numerous programmatic and logistical challenges to streamline processes, resulting in a halving of the time in which direct benefit transfers reach TB patients.

As we unveil the India TB Report 2024, I stand deeply optimistic and determined that our holistic strategy, wherein medical innovations along with greater community mobilization, nutritional support and R&D will facilitate the realization of our ambitious targets.

TB Harega, Desh Jeetaga!

(Ms. L. S. Changsan)

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आज़ादी का अमृत महोत्सव

Foreword

In the past year, the National TB Elimination Programme has continued to take proactive measures toward ending TB in India. Aligned with the detect-treat-prevent-build strategy for TB elimination, the NTEP has pioneered innovative and patient-centric solutions, along with creating a community-led approach to reach our ambitious goals.

In 2024, a key indicator – case notifications, reached a record number: over 25.5 lakh cases were reported, thereby closing the gap between the estimated and reported cases – this gap in numbers was more than 10 lakhs in 2015 and we have managed to close this gap to less than 3 lakhs by 2023. This has been a result of improved case detection by deploying various new programmatic interventions and conducive policy measures such as decentralization of TB care through Ayushman Aarogya Mandirs, engagement with the private health care sector and a significant upgradation of our diagnostics and screening measures.

The number of individuals identified as presumptive TB and tested increased by over 60 lakh – taking our presumptive TB examination rate to over 1710 per 1 lakh population – an increase of over 32% compared to the previous year. Alongside, we have been constantly upgrading our diagnostic capacity – since 2014, we've seen an exponential increase in the number of molecular diagnostic machines – from 119 in 2014 to over 6,496 machines in 2023.

The TB programme has also embedded technology in its strategy in a holistic manner. We are very proud of being one of the programs that tracks the entire cascade of care for each TB patient through life-cycle approach. Through Ni-kshay, the programme provides end-to-end information on each TB patient. Based on various monitoring parameters, Ni-kshay has supported attainment of various milestones in recording the patient lifecycle (e.g., Universal Drug Susceptibility offered is counted when a molecular resistance test for Rifampicin is added to a patient) and shows various reports to the program managers at TU, District, State and National level. Such a national data repository has also supported programme managers undertake advanced analytics and provides unlimited potential to generate insights into TB epidemiology and program functioning.

Lastly, another programmatic initiative that has proven critical in fostering a spirit of public health enterprise relates to sub-national certification of progress towards TB-free status. Encouraging elimination strategies at a sub-district level is an important way to help local communities move to zero deaths from TB in their own way, thus creating "islands of elimination". The aim is to help create TB-free Panchayats, blocks and districts which will ensure that entire states, eventually, become TB-free. When the community is galvanized and local leaders become agents of change, the Jan Andolan against TB is strengthened immensely.

Through a slew of such important measures, we are confident of ending TB in India.

'TB Harega Desh Jeetega'

Dated: 20-03-2024

K. K. Tripathy

Dr. Rajendra P. Joshi
Deputy Director General
Central TB Division

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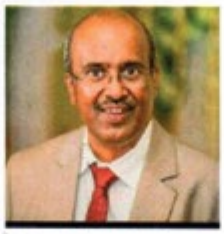

I am pleased to share the India TB Report 2024 which continues to build on the decades-long legacy of providing an annual bird's eye view of the TB landscape in India. I am even more pleased to note how we have managed, in a concerted whole-of-society manner, to curb the disease in the country.

Our efforts have resulted in reduction of TB incidence by 16% from 2015, which is double the pace at which global TB incidence is declining, and in the same period, mortality due to TB has decreased by 18%. These achievements have been a result of the novel and targeted interventions deployed in the last few years; across the detection and treatment cycle, the National TB Elimination Programme has introduced new tools, processes, and drug regimens with the sole objective of improving patient experience and convenience.

Such progress can be largely credited to the interventions we have spearheaded to create a Jan Andolan that facilitates community ownership of TB elimination. Through the *Pradhan Mantri TB-Mukt Bharat Abhiyaan,* over 1.5 lakh Ni-kshay Mitras have been transforming social attitudes towards TB patients, by providing them nutritional, diagnostic, and vocational support. To supplement that, through our TB champion/Vijaeta programme, over 85,384 TB survivors (including 34,650 females) were identified and sensitized about their potential role as advocates and community influencers to break stigma around the disease. TB champions are supporting efforts in not only raising awareness and connecting presumptive patients to care but are also providing personalised counselling support to patients and their families undergoing TB treatment. We have also strengthened TB Forums at the national, state and district levels. These forums – which are active in all states and UTs - provide an institutionalised space to create dialogue about TB and improve health services on the ground. Crucially, we ensured 11,373 forums held gram panchayat level forums last year – a major step toward generating greater awareness of TB at the grassroots.

These multisectoral efforts were further strengthened by the participation of more than 340 organizations that pledged their commitment to combatting TB through the Corporate TB Pledge (CTP). These organizations collectively focused on raising awareness, reducing vulnerability, providing social protection for TB-affected individuals, establishing TB-free workplaces, and utilizing Corporate Social Responsibility mandates to offer nutritional and social support for TB patients.

Furthermore, taking cognizance of the importance of prevention to achieve our elimination goals, more than 14 lakh household contacts of TB patients and PLHIV were initiated TPT in 2023. TB contact tracing among at-risk groups and giving TB Preventive Treatment (TPT) to those eligible are extremely important steps towards elimination, as studies have shown almost 60% reduction in the risk of developing TB disease after TPT, and this reduction can go up to 90% among People Living with HIV (PLHIV). In addition, the programme has also initiated a pilot study to estimate the impact of BCG vaccination for the adult population. These preventive measures are expected to significantly reduce disease burden protecting many vulnerable people

2023 was a year of massive progress for India's TB elimination programme and I am certain that our innovative and patient-centric approach that comprehensively looks after diagnosis, treatment and prevention has set us on the path to eliminate this ancient disease.

TB Harega, Desh Jeetega!

(Dr. Rajendra P Joshi)

ACRONYMS

AAAQ	Available, Accessible, Affordable and Quality
ABHA	Ayushman Bharat Health Account
AccEEND TB	Accelerated Efforts to END TB in India
ACNR	Annualized TB Case Notification Rate
ACSM	Advocacy, Communication and Social Mobilization
ACT	Amplifying Community Action
ADRs	Adverse Drug Reactions
AFMS	Armed Force Medical Services
AI	Artificial Intelligence
AIC	Air-borne Infection Control
AIIMS	All India Institute of Medical Sciences, New Delhi
ALLIES	Accountability Leadership by Local communities for Inclusive, Enabling Services
ANC	Antenatal Care
ANM	Auxiliary Nurse and Midwife
ART	Anti-Retroviral Therapy
ASHA	Accredited Social Health Activist
AYUSH	Ayurveda, Yoga, and Naturopathy, Unani, Siddha and Homoeopathy
BCG	Bacillus Calmette–Guérin
BDQ	Bedaquilin
BMHRC	Bhopal Memorial Hospital and Research Centre, Madhya Pradesh
BMI	Body Mass Index
BPHUs	Block Public Health Units
C&DST	Culture and Drug Susceptibility Testing
CAF	Community Accountability Framework
CAPFs	Central Armed Police Forces
CCBs	Critical Care Blocks
CDC	Centers for Disease Control and Prevention
CDHO	Chief District Health Officer
CDMO	Chief District Medical Officer
CETI	Collaborate to Eliminate Tuberculosis in India
CGA	Controller General of Accounts
CHO	Community Health Officer
CMC	Christian Medical College, Vellore
CME	Continuing Medical Education
CMSS	Central Medical Services Society
CoC	Continuum of TB Care
CoE	Centres of Excellence
CPHC	Comprehensive Primary Health Care
CPSE	Corporates, Public Sector Enterprise
CPSEs	Central Public Sector Enterprises
CSGs	Care and Support Groups
CSR	Corporate Social Responsibility
CTD	Central TB Division
CTP	Corporate TB Pledge

DBS	Domestic Budgetary Support
DBT	Direct Benefit Transfer
DDG-TB	Deputy Director General-TB
DDO	Drawing and Disbursing Office
DLIs	Disbursement-Linked Indicators
DM	Diabetes Mellitus
DoHFW	Department of Health and Family Welfare
DOTS	Directly Observed Therapy Short Course
DPE	Department of Public Enterprises
DR-TB	Drug-Resistant TB
DST	Drug Susceptibility Test
DS-TB	Drug-Sensitive TB, Drug-Susceptible TB
DT3C	Difficult-to-Treat TB Clinics
DTC	District TB Centre
DTO	District TB Officer
DTPB	Detect-Treat-Prevent-Build
EAC	Externally-Aided Component
EPTB	Extrapulmonary TB
EQA	External Quality Assessment
FDCs	Fixed-Dose Combinations
FL-LPA	First-line – Line Probe Assay
FMRs	Financial Management Reports
FQ	Fluoroquinolone
GC	General Component
GDF	Global Drug Facility
GFR	General Financial Rules
GHTM	Government Hospital of Thoracic Medicine, Tambaram
GMC	Government Medical College, Coimbatore
GoI	Government of India
GVS	Gurukrupa Vikas Sanstha
H&R	Isoniazid and Rifampicin
HHCs	Household Contacts
HHX-ray	Handheld X-Ray
HICC	Hospital Infection Control Committee
HIV	Human Immunodeficiency Virus
HLFPPT	Hindustan Latex Family Planning Promotion Trust
HMIS	Health Management Information System
HRGs	High-Risk Groups
HRH	Human Resources for Health
HS4TB	Health Systems for TB
HSCs	Health Sub-Centres
HWCs	Health and Wellness Centres
IAP	Indian Academy of Paediatricians
IBRD	International Bank for Reconstruction and Development (World Bank)
ICF	Intensified TB Case Finding
ICMR	Indian Council of Medical Research, New Delhi
ICT	Information and Communication Technology
IDDS	Infectious Diseases Detection and Surveillance
IEC	Information, Education and Communication
IFD	Integrated Finance Division
IGIMS	Indira Gandhi Institute of Medical Sciences, Patna
IHME	Institute for Health Metrics and Evaluation, USA
IITF	India International Trade Fair
ILM	Industry Led Monitoring
IOCL	Indian Oil Corporation Limited
IPC	Infection Prevention and Control
IPHLs	Integrated Public Health Laboratories
IPT	INH Preventive Therapy
IRL	Intermediate Reference Laboratory
IT	Information Technology
ITPO	India Trade Promotion Organisation
IVA	Independent Verification Agency
JALMA	Japanese Leprosy Mission for Asia
JEET 2.0	Joint Effort for Elimination of TB
JSI	John Snow Institute
KDs	Key Deliverables
KGMU	King George's Medical University, Lucknow, Uttar Pradesh
KPIs	Key Performance Indicators
LC	Liquid Culture
LGBTQIA++	Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual and Other Identities
LT	Laboratory Technician
LTBI	Latent Tuberculosis Infection
LZD	Linezolid
M&E	Monitoring and Evaluation
MDR/RR-TB	Multidrug-Resistant/Rifampicin-Resistant TB
MDR-TB	Multi-Drug Resistant TB
MJK	Maharashtra Jan Vikas Sansthaa
MO	Medical Officer
MoHFW	Ministry of Health and Family Welfare
MoPR	Ministry of Panchayati Raj
MO-TC	Medical Officer-TB Control
MoU	Memorandum of Understanding
MSH	Management Sciences for Health, India
MTB	Mycobacterium tuberculosis
NA	Not Available
NAAT	Nucleic Acid Amplification Tests
NABL	National Accreditation Board for Testing and Calibration Laboratories
NACP	National AIDS Control Programme
NATBPS	National TB Prevalence Survey
NCD	Non-Communicable Disease
NDCP	National Digital Communications Policy
NDR-TBCs	Nodal DR-TB Centres
NFHS	National Family Health Survey
NGOs	Non-governmental Organizations
NHM	National Health Mission
NIE	National Institute of Epidemiology, Chennai
NIRT	National Institute for Research in Tuberculosis, Chennai
NITRD	National Institute of Tuberculosis and Respiratory Disease, New Delhi
NJIL & OMD	National JALMA Institute for Leprosy and Other Mycobacterial Diseases, Agra
NODE-TB	Networks for Optimized Diagnostics to END TB

NPCC	National Programme Coordination Committee
NPY	Ni-Kshay Poshan Yojna
NRLs	National Reference Laboratories
NSP	National Strategic Plan
NTCP	National Tobacco Control Programme
NTEG	National Technical Expert Group
NTEP	National Tuberculosis Elimination Programme
NTF	National Task Force
NTI	National TB Institute, Bengaluru, Karnataka
NTSU	National Technical Support Unit
NTWG	National Technical Working Group
NVHCP	National Viral Hepatitis Control Programme
OBGY	Obstetrics and Gynaecology
OOP	Out-of-Pocket expenditure
OPD	Outpatient Department
PAO	Pay and Accounts Office
PART	Performance Analysis and Review Tool
pCoE-TB	Centres of Excellence for Paediatric TB
PDO	Project Development Objective
PDS	Public Distribution System
PFMS	Public Financial Management System
PfR	Programme focuses on four Result areas
PHCs	Primary Health Centres
PHFI	Public Health Foundation of India
PHI	Peripheral Health Institute
PIP	Programme Implementation Plan
PLHIV	People Living with Human Immunodeficiency Virus
PM-ABHIM	Pradhan Mantri Ayushman Bharat Health Infrastructure Mission
PMDT	Programmatic Management of Drug-Resistant TB
PMTBMBA	Pradhan Mantri TB Mukt Bharat Abhiyaan
PMTPT	Programmatic Management of TB Preventive Treatment
PPM	Public Private Mix
PPSA	Patient Provider Support Agency
PRCs	Population Research Centres
PRIs	Panchayati Raj Institutions
PSUs	Public Sector Undertakings
PT	Proficiency Testing
PTBER	Presumptive TB Examination Rate
PwTB	Person affected with TBI
RATIONS	Reducing Activation of Tuberculosis by Improvement of Nutritional Status
RBIPMT	Rajan Babu Institute of Pulmonary Medicine and Tuberculosis, New Delhi
RBSK	Rashtriya Bal Swasthya Karyakram
REACH	Resource Group for Education and Advocacy for Community Health
RKSK	Rashtriya Kishor Swasthya Karyakram
RMRC	Regional Medical Research Centre, Bhubaneswar
RNTCP	Revised National Tuberculosis Control Programme
RRR	Regional Review Roadshows
RR-TB	Rifampicin-Resistant TB
RS-TB	Rifampicin-Sensitive TB
SAFEVAC	Surveillance and Action for Events following vaccination
SAMS	Strategic Alliance Management Service
SDS	State Drug Store
SEARO	South-East Asian Regional Office
SH&WP	School Health and Wellness Programme
SHARE	Society for Health Allied Research and Education, India
SLI	Second-Line Injectable
SM&E	Supervision, Monitoring and Evaluation
SMC	Siddhartha Medical College, Vijayawada
SNMC	Dr. Sampurnanand Medical College, Jodhpur
SNRL	Supra National Reference Laboratories
SoE	Statement of Expenditure
SOGIESC	Sexual Orientation, Gender Identity, Gender Expression and Sex Characteristics
SOPs	Standard Operating Procedures
SOR	Schedule of Requirement
SRS	Sample Registration System
SSP	State Strategic Plans
STC	State TB Cell
STDC	State TB Training and Demonstration Centre
STF	State Task Force
STLS	Senior TB Laboratory Supervisor
STO	State Tuberculosis Officer
STS	Senior TB Treatment Supervisor
STSU	State Technical Support Units
TAT	Turnaround Time
TB HV	TB Health Visitor
TB	Tuberculosis
TBI	TB Infection
TDC	TB Diagnostic Centre
TIFA	Tuberculosis Implementation Framework Agreement
TNF	Tumour Necrosis Factor
TN-KET	Tamil Nadu Kasanoi Erappila Thittam
ToT	Training of Trainers
TPT	Tuberculosis Preventive Treatment
TSS	Treatment Supporters Honorarium
TSU	Technical Support Unit
UDST	Universal Drug Susceptibility Testing
ULB	Urban Local Bodies
UNDP	United Nations Development Programme
UN-HLM	United Nations High-Level Meeting
UN-SDGs	United Nations Sustainable Development Goals
USAID	The U.S. Agency for International Development
UT	Union Territory
UVGI	Ultraviolet Germicidal Irradiation
VBSY	Viksit Bharat Sankalp Yatra
WHO	World Health Organization
WHP	World Health Partners
WJCF	William J Clinton Foundation
XDR-TB	Extensively Drug-Resistant TB
ZTF	Zonal Task Force

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EXECUTIVE SUMMARY

Post-COVID-19 pandemic, the National Tuberculosis Elimination Programme (NTEP) of India embarked on a journey towards accelerating tuberculosis (TB) elimination, guided by the National Strategic Plan (NSP) 2017–25. In the year 2023, the NTEP achieved remarkable milestones and implemented innovative strategies aimed at ending TB by the target year 2025.

TB Disease Burden and Case Finding

The World Health Organization (WHO) released its Global TB Report in 2023. According to this report, where the estimates of the in-country model was accepted, the country seemed to have made tremendous progress in improving case detection and reversing the impact of COVID-19 on the programme. The treatment coverage had improved to 80% of the estimated TB cases, an increase of 19% over the previous year. India's efforts to ensure early detection and treatment initiation, along with a host of community engagement efforts has resulted in a decline of 16% in TB incidence (new cases emerging each year) and a 18% reduction in mortality due to TB, since 2015. The incidence rate in India had fallen from 237 per lakh population in 2015 to 199 per lakh population in 2022 and mortality rate had declined from 28 per lakh population in 2015 to 23 per lakh population in 2022.

The year 2023 witnessed a significant increase in TB case notifications achieving a case notification rate of approximately 179 cases per lakh population, thereby narrowing down the coverage to 0.2 million. This milestone was complemented by a surge in private TB case notifications, reflecting enhanced case-finding efforts. Moreover, the programme diagnosed 63,939 cases of multidrug-resistant TB (MDR-TB), highlighting the programme's commitment to addressing drug resistance.

TB Diagnostic Services

The NTEP continued its tradition of providing free-diagnostic services, conducting approximately 1.89 crore sputum smear tests and 68.3 lakh nucleic acid amplification tests (NAAT) in 2023. These efforts underscored the programme's commitment to expanding diagnostic access across all tiers of the healthcare system and leveraging advanced technologies for accurate and timely diagnosis.

India's efforts to ensure early detection and treatment initiation, along with a **host of community engagement efforts** has resulted in a **decline of 16% in TB incidence** (new cases emerging each year) and a **18% reduction in mortality due to TB, since 2015.**

Treatment Services

Adapting to evolving evidence, the NTEP introduced comprehensive care packages and decentralized services for TB patients, including those with DR-TB such as scale-up of shorter oral regimen. The programme also focused on reducing treatment delays and improving the quality of care provided to TB patients, with a particular emphasis on addressing comorbidities such as malnutrition, diabetes, human immunodeficiency virus (HIV), and substance abuse through differentiated care model and promotion of early diagnosis.

TB Prevention

Preventive measures remained a cornerstone of the NTEP's strategy, with a concerted effort to scale-up TB preventive treatment (TPT). Notable commitment from various states demonstrated a collective resolution to prevent the emergence of TB disease in vulnerable populations. This led to an overall increase to approximately 15 lakhs beneficiaries being provided with TPT including the shorter regimen.

TB Comorbidities and Special Situations

Recognizing the impact of comorbidities on TB outcomes, the NTEP implemented a range of initiatives to address underlying health issues such as malnutrition, diabetes, HIV and substance abuse. Collaborative efforts with other ministries and departments aimed at providing holistic support to TB patients and improving their treatment outcomes.

Supervision and Monitoring

To identify the technical and administrative challenges faced by the States/Union Territories (UTs) and provide necessary advocacy, various supervisory visits as part of strengthening private sector engagement, "Viksit Bharat Sankalp Yatra (VBSY)", laboratory strengthening activities were conducted across the country. Team provided extensive recommendations to the state officials for strengthening the TB response. Also, multiple reviews at National and State levels were conducted by the Government of India (GoI) both in-person and virtually establishing a daily monitoring system of key performance indicators from the highest level in GoI. Furthermore, the programme division is strengthening the Ni-kshay portal by incorporating advanced analytical tools to provide regular feedback to the States on important indicators, which will help them to take necessary steps and timely actions.

Patient Support Systems

Direct Benefit Transfer (DBT) under the Ni-kshay Poshan Yojana continued to provide financial support to TB patients, with approximately INR 2,781 crores disbursed to ~1 crore beneficiaries. New initiatives, including incentivizing treatment supporters and ASHA (Accredited Social Health Activist) workers, TB Vijeta's (TB champions) and Ni-kshay SAATHI (Family caregiver model) were aimed to further enhance patient support systems.

Partnerships for Private Sector Engagement

The NTEP expanded its partnerships with the private sector stakeholders, establishing technical support units and engaging interphase agencies to promote private sector engagement. A multisectoral approach was adopted to ensure meaningful engagement of key stakeholders, including government agencies, industries and non-governmental organizations (NGOs).

Pradhan Mantri TB Mukt Bharat Abhiyaan (PMTBMBA)

The launch of the Pradhan Mantri TB Mukt Bharat Abhiyaan in September 2022 marked a significant milestone in the community participation and ownership. The initiative garnered widespread support, with political leaders, government officials, and NGOs actively participating in awareness campaigns and events. More than 1.5 lakh Ni-kshay Mitras have come forward and committed to support persons affected with TB.

Direct Benefit Transfer (DBT) under the Ni-kshay Poshan Yojana continued to provide financial support to TB patients, with approximately **INR 2,781 crores disbursed to ~1 crore beneficiaries.**

Advocacy, Communication and Social Mobilization

Advocacy, communication, social mobilization and community engagement remained integral to the NTEP's efforts, reinforcing the programme's foundation and fostering community participation in TB elimination initiatives.

TB Research and Innovations

The NTEP continued to prioritize TB research and innovations, collaborating with national entities to scale-up adult BCG (Bacillus Calmette–Guérin) vaccination and leverage artificial intelligence (AI) for healthcare improvement. These efforts aimed to expedite the battle against TB and develop models of TB elimination across various geographies.

In conclusion, the NTEP's relentless efforts, guided by the NSP 2017–25, have propelled India's fight against TB, taking towards the goal of ending TB by 2025. Through innovative strategies, collaborative partnerships and a steadfast commitment to patient care, the programme has made significant strides in addressing the TB burden and improving treatment outcomes for millions of affected individuals.


National TB Elimination Program (NTEP)
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National TB Elimination Program (NTEP)
నిక్షయ పోషణ యోజన (NPY)
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INDIA'S **COMMITMENTS, TARGETS AND STRATEGIES** FOR ENDING TB

1

India, as a signatory of the United Nations Sustainable Development Goals (UN-SDGs), has committed to the achievement of the 'End TB' targets by 2025, five years ahead of the SDG timeline of 2030. The SDG target 3.3, which aims to "end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases by 2030", has the following indicators for TB:

1. An **80% reduction** in the **TB incidence rate** (new cases per lakh population) compared with levels in 2015
2. A **90% reduction** in the **TB mortality rate** compared with levels in 2015
3. **Zero TB-affected** households suffering from catastrophic expenses due to TB.

The commitment and the vision of the Government to "end TB by 2025", which was first articulated by the Hon'ble Prime Minister (PM), Shri Narendra Modi at the "End TB Summit" held in New Delhi in March 2018, was further reiterated during the "One World TB Summit" of 2023 which was held in Varanasi on World TB Day 2023. During the summit, the Hon'ble PM reiterated the commitments for a resolute and re-invigorated response against TB (Figure 1.1).

Figure 1.1: On "World TB Day 2023", the Hon'ble PM reiterated India's commitment to "End TB by 2025"

India is also a signatory to the Gandhinagar Declaration, the joint declaration by the Health Ministers and WHO South-East Asian Regional Office (SEARO), which was signed at the high-level ministerial meeting on "Sustain, Accelerate and Innovate to End TB" in the South-East Asia Region by 2030 in August 2023. The Declaration expressed confidence that the WHO–SEARO Region will be able to end TB by 2030 with unrelenting, concerted and synergistic actions in the right direction by all Member States with the support of partners, stakeholders and communities.

In line with the strong political commitment demonstrated by the GoI, the NTEP has been implementing the NSP for TB Elimination. The NSP 2017–25 envisages the most important

interventions and activities, which will have the maximum impact on the burden of TB in India, under four strategic pillars of "Detect-Treat-Prevent-Build" (DTPB).

India has made substantial progress in the implementation of the NSP leading to a narrowing in the gap between targets and achievements and also one of the first countries to have developed its mathematical model for burden estimation.[1] A 16% decline in estimated TB incidence has been observed from 2015 to 2022 higher than the global decline of 9%. Similarly, a 18% decrease in estimated TB mortality from 2015 to 2022 was noted.[2]

The NSP laid out a result framework with impact and outcome indicators and targets to monitor progress towards achieving TB elimination targets. Table 1.1 given below summarises the achievements of the programme in relation to the progress envisaged in the NSP.

Table 1.1: NSP indicators and progress

S. no.	Impact of indicators	Baseline 2015	Target 2023	Achievement 2023
1.	To reduce estimated TB incidence rate (per lakh population)	217 (112–355)	77 (49–185)	199
2.	To reduce estimated mortality due to TB (per lakh population)	32 (29–35)	6 (5–7)	23
3.	To ensure that no family should suffer from catastrophic cost due to TB	35%	0%	NA
Outcome indicators				
1.	Total TB patient notification (in millions)	1.74	2.7	2.55
2.	Total patient private providers notification (in millions)	0.19	1.5	0.84
3.	MDR/RR-TB patients notified	28,096	69,000	63,939
4.	Proportion of notified TB patients offered DST	25%	98%	58%
5.	Proportion of notified patients initiated on treatment	90%	95%	95%
6.	Treatment success rate among notified DS-TB	75%	92%	87%
7.	Treatment success rate among notified DR-TB	46%	73%	65%
8.	Proportion of identified targeted key affected population undergoing active case finding	0%	100%	NA
9.	Proportion of notified TB patients receiving financial support through DBT	0%	90%	70%
10.	Proportion of identified/eligible individuals for preventive therapy/LTBI-initiated on treatment	10%	90%	80%

[1] Sandip Mandal, Rao, Raghuram, and Joshi, Rajendra. Estimating the Burden of Tuberculosis in India: A Modelling Study. Indian J Community Med. 2023 May–Jun. 48(3):436–442 | DoI: 10.4103/ijcm.ijcm_160_23 | Epub 2023 Mar 24. PMID: 37469917; PMCID: PMC10353668.

[2] Global tuberculosis report 2023. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO.

The Way Forward

To maintain the momentum towards TB elimination, a raft of interventions is being deployed and in pipeline for the coming years, such as:

- Adult BCG vaccination study;
- Expansion and rapid scale-up of TPT, including the newer and shorter regimens;
- Scale-up of molecular diagnostic testing to all presumptive TB testing across the country with robust recording and reporting;
- Decentralizing TB service delivery to the level of "Ayushman Arogya Mandirs", and
- Strengthening community-based patient support systems through PMTBMBA.


CHAMPION

STRUCTURE OF THE **NATIONAL TUBERCULOSIS ELIMINATION PROGRAMME**

2

The NTEP is a centrally-sponsored programme being implemented under the aegis of the National Health Mission (NHM) with resource sharing between the State Governments and the Central Government.

A. National Level

At the national level, the NTEP is managed by the Central TB Division (CTD), the technical arm of the Ministry of Health and Family Welfare (MoHFW). The CTD and its establishment has been placed under the Department of Health and Family Welfare (DoHFW). The Additional Secretary and Mission Director, NHM is overall in-charge of the programme. The respective Joint Secretary from the administrative arm of the MoHFW takes care of the financial and administrative aspects of the programme. The Deputy Director General-TB (DDG-TB) as a head along with a team of officers in CTD, lead the implementation of the NTEP nationwide. The CTD is assisted by six national level institutes, namely the National Tuberculosis Institute (NTI), Bengaluru; the National Institute of Tuberculosis and Respiratory Disease (NITRD), New Delhi; the National Institute for Research in Tuberculosis (NIRT), Chennai; Regional Medical Research Centre (RMRC), Bhubaneswar; the National JALMA (Japanese Leprosy Mission for Asia) Institute for Leprosy and Other Mycobacterial Diseases (NJIL & OMD), Agra and the Bhopal Memorial Hospital and Research Centre (BMHRC), Bhopal. The CTD has assigned Additional DDG, Assistant DDG, Joint Directors and TB Specialists to manage the multiple thematic areas under the Programme Division (Figure 2.1).

Committees at the National Level

1. **National Technical Expert Group (NTEG) under NTEP:** It was reconstituted as a single group in the place of NTEG for diagnosis, treatment, LTBI and Paediatric TB, with Dr. Vishwa Mohan Katoch as Chair. The objective is to provide expert advice on the aforementioned thematic areas and offer regular updates to NTEP on diagnostic and treatment policies in-line with WHO guidelines and recommendations for TB including DR-TB in the public as well as private sectors.

2. **National Task Force (NTF) for Medical Colleges:** A NTF has been formed for the effective implementation of the NTEP in Medical Colleges. The DDG-TB is the Member Secretary of the NTF and the members are from CTD, each Zonal Task Force, the National Institutes and WHO. The main task of the NTF will be to provide leadership, advocacy, coordination, monitoring and policy development on issues related to the effective involvement of medical colleges in the NTEP.

3. **National TB Forum:** To execute the plan of meaningful involvement of the community and civil society "National TB Forum" has been constituted under the chairpersonship of the Secretary (Health), GoI for engagement of community and civil society for increasing participation of the community at large in TB elimination programme, to reach the unreached and to support TB patients in the course of their illness through a community-based response.

4. **National Technical Support Unit (NTSU):** To achieve the ambitious NSP targets (2017–25) and augment the efforts towards private sector engagement, CTD established the NTSU as an institutional framework under NTEP. The NTSU will aid the successful implementation of innovative interventions by supporting states PAN India through information technology (IT) system development, strategy development and implementation oversight, monitoring and evaluation (M&E), capacity building and technical assistance. The NTSU coordinates and monitors with the State Technical Support Units (STSU). In addition to this, CTD also has a Technical Support Unit (TSU) for Advocacy, Communication and Social Mobilization (ACSM) and Artificial Intelligence in place.

B. State Level

At the State level, State Health Secretary and MD-NHM are responsible for programme implementation in the State. The State TB Officer (STO) being the programme manager heads and oversees the planning, training, supervision and monitoring of the programme in their respective States/UTs in-line with the guidelines of the State Health Society and CTD. The STO, based at the State TB Cell (STC), coordinates with the CTD and the respective districts for the execution of their responsibilities towards the TB elimination in the respective geography.

Structures at the State Level

- The **STC** has been provided with contractual staff in addition to the general health system staff, to carry out its routine functions. It includes Medical Officer (MO) STC, Assistant Programme Officer, State HIV-TB Coordinator, State DR-TB Coordinator, State Public Private Mix (PPM) Coordinator, State ACSM Officer, Technical Officer for Procurement and Logistics, State Accountant and NI-KSHAY Operator.

- State TB Training and Demonstration Centre (STDC) supports the STC in most of the larger states. The STDC has three units: a training unit; a supervision and monitoring unit and an Intermediate Reference Laboratory (IRL). State Drug Store (SDS) has been established for the effective management of anti-TB drug logistics.
- At the State level, the STDC is supported by the State TB Forums for community engagement, State-level PMDT (programmatic management of DR-TB) Committee for implementation guidance and review of PMDT and State-level Technical Working Group for HIV-TB for smooth HIV-TB coordination. Nodal DR-TB centres are established for the PMDT with newer drugs and adverse drug reactions (ADR) as referral units.
- The STSUs have been established in the selected states to support the STC with the subject-matter expertise of an 11-member team. This team has programme management, M&E, capacity building, private sector, financial and procurement experts. The STSU team lead under the guidance of the STO supports the State in achieving the programmatic goals of the states, with a special focus towards private sector engagement, contract management through various strategy ideation, development and implementation, M&E, capacity building and technical assistance to the districts. All the STSUs are centrally monitored and provided handholding by the NTSU.

C. District Level

The district is the key level for the management of primary healthcare services. The Chief District Health Officer (CDHO)/Chief District Medical Officer (CDMO), or an equivalent functionary in the district, is responsible for all medical and public health activities, including TB control. The District TB Centre (DTC) is the nodal point for all TB control activities in the district. The District TB Officer (DTO) at the DTC has the overall responsibility of managing NTEP at the district level as per the programme guidelines and the guidance of the District Health Society. The DTO is assisted by contractual staff provided by NTEP which includes District Programme Coordinator, District PPM Coordinator, District DR-TB and HIV-TB Coordinator and District NI-KSHAY Operator.

D. Sub-District Level [TB Unit (TU) Level]

The TU is a programme management unit in NTEP at the sub-district level. The TU consists of a designated Medical Officer-TB Control (MO-TC) who delivers NTEP services in addition to other responsibilities. There are also two full-time NTEP contractual supervisory staff exclusively available for TB work – a Senior TB Treatment Supervisor (STS) and a Senior TB Laboratory Supervisor (STLS). The TU is generally aligned with the blocks in the district.

E. Peripheral Health Institute (PHI)

The PHI is the smallest functional unit under NTEP. A PHI is a health facility that is manned by a medical doctor. A PHI may be a public or private sector (including NGO-aided) dispensary, primary health centre, community health centre, referral or secondary care hospital and tertiary care centre (major hospitals, specialty clinics/hospitals and medical colleges). Some of the PHIs may serve as a TB Diagnostic Centre (TDC) which is the most peripheral laboratory within the NTEP structure. A PHI needs physical infrastructure, a binocular microscope and a trained laboratory technician (LT) to function as a TDC. A TB-health volunteer is assigned to PHIs as per the norms prescribed by the NTEP programme. Case finding, treatment initiation (both DS-TB and some instances of DR-TB) and further management take place at the PHI level.

F. Ayushman Arogya Mandirs

Under the Ayushman Bharat, Health Sub-Centres (HSCs) and Primary Health Centres (PHCs) have been transformed into Ayushman Arogya Mandirs [Health and Wellness Centres (HWCs)] for delivery of Comprehensive Primary Health Care (CPHC). The services provided at the HWCs include services for communicable diseases such as TB. For TB, HWCs serve as the first point of care for continuation of treatment, adherence support and ancillary drugs to support TB treatment.

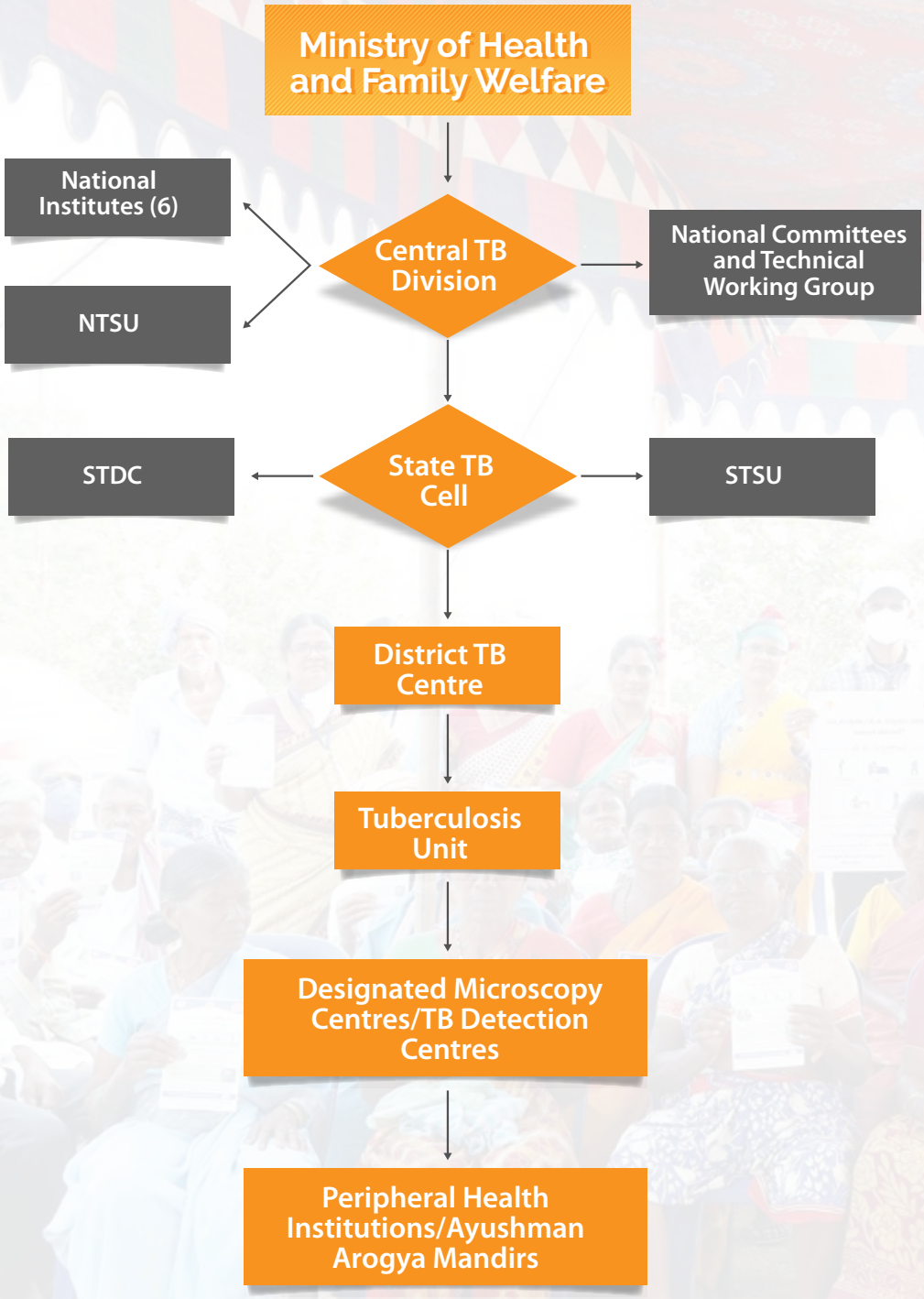


Figure 2.1: Organogram of NTEP

TB DISEASE BURDEN IN INDIA

3

On 22 September 2023, at the second UN-HLM meeting on the fight against TB, world leaders adopted a historic declaration with commitments to ambitious and comprehensive time-bound targets and actions. These targets and actions aimed at enhancing equitable access to TB services, protecting human rights, addressing TB determinants, reducing vulnerability, accelerating research and innovation and mobilizing sufficient resources to support these endeavours.

This was also reinforced during the 2023 World TB Day, by our Hon'ble PM with the release of various initiatives and the call for "Jan Bhagidari" approach to the citizens of the nation for ending TB.

India's Progress in SDG for TB

It would be appropriate to mention here that last year, in the Global TB Report 2022,[1] the WHO and the MoHFW, Government of India, had agreed to publish the data for India as "Interim" with an understanding that the WHO would work with the technical team of the ministry, to finalize the details later (Figure 3.1).

This year, the Global Tuberculosis Report 2023[2] has acknowledged and accepted the multiple evidences, generated and presented by the

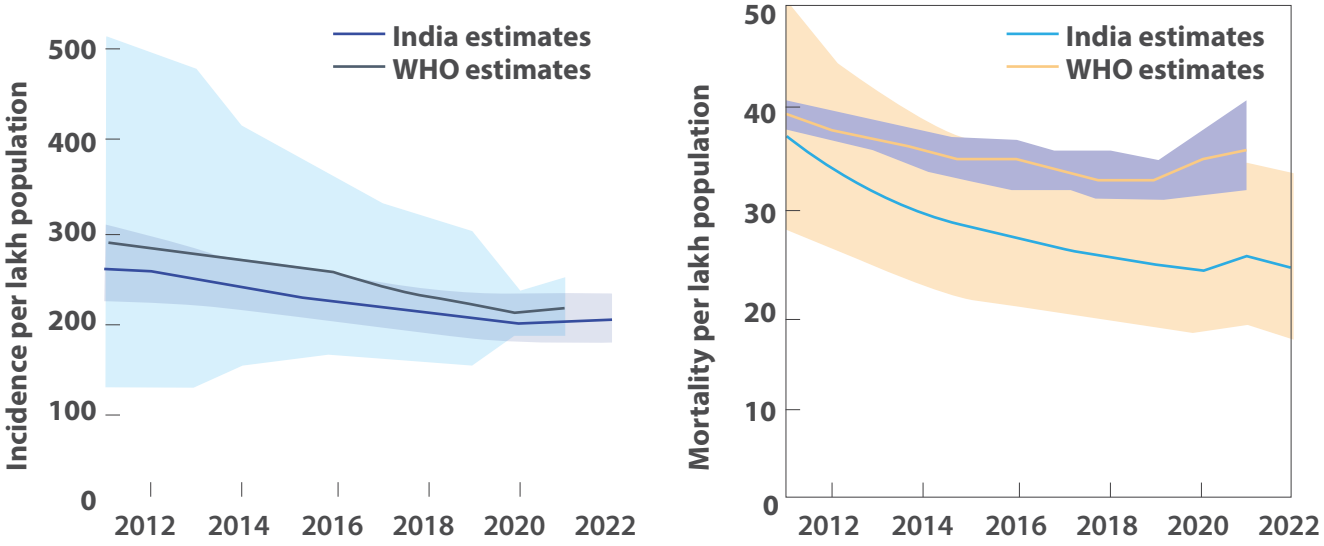


Figure 3.1: Comparison of estimates from Global Tuberculosis Report 2022 for India (interim) and the in-country model (India) – (2015–22)

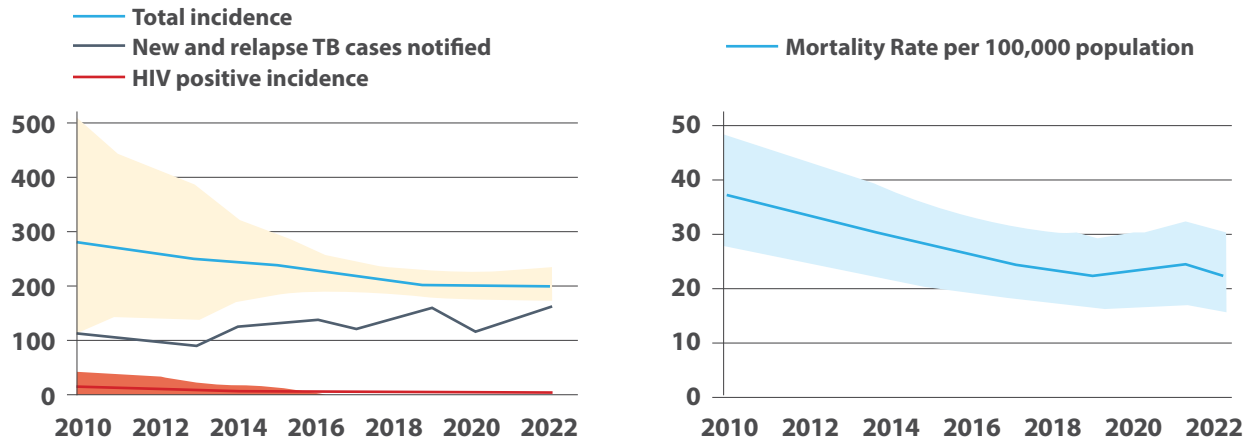
[1] Global tuberculosis report 2022. Geneva: World Health Organization; 2022. License: CC BY-NC-SA 3.0 IGO.

[2] Global tuberculosis report 2023. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO.

technical team of MoHFW, thereby resulting in downward revision of the burden estimates, especially TB-related mortality data. This incorporated the estimates developed as part of the in-country efforts to build a mathematical model[3] for TB burden estimation. The salient features of India are as follows:

- The estimates of the annual number of deaths caused by TB in India have been revised downwards, following the availability of new cause-of-death data from the country's sample registration system (SRS) for the period 2014–19. The updated estimates were extensively discussed with the MoHFW in India and also informed by communications with the Institute for Health Metrics and Evaluation (IHME), USA.
- The incidence for 2022 was 199 per lakh population, with 16% decline as compared to 2015 (237 per lakh population).
- The TB mortality was 23 per lakh population (Figure 3.2), with 18% decline as compared to 2015 (28 per lakh population).
- The resulting estimates of the number of deaths caused by TB between 2000 and 2019 are considerably lower than the "interim" estimates published in 2022.[4]
- Also, India had one of the best estimates (>80%) of treatment coverage among 30-high burden countries.
- Estimates of the percentage of the population facing catastrophic health expenditures were ≥15% of the population for India, showing an upward trend since 2000.

India had one of the best estimates **(>80%) of treatment coverage** among 30-high burden countries.



(A) Trend in TB incidence (per lakh) **(B) Trend in TB mortality (per lakh)**

Figure 3.2: Trend in (A) TB incidence and (B) TB mortality (per lakh population)

[3] Sandip Mandal, Rao, Raghuraman, and Joshi, Rajendra. Estimating the Burden of Tuberculosis in India: A Modelling Study. Indian J Community Med. 2023 May–Jun. 48(3):436–442 | DoI: 10.4103/ijcm.ijcm_160_23. | Epub 2023 Mar 24. PMID: 37469917; PMCID: PMC10353668.

[4] Global tuberculosis report 2022. Geneva: World Health organization; 2022. licence: cc bY-Nc-sa 3.0 iGo.

Estimating TB burden – in-country model

Estimating annual incidence and mortality rates of TB in a systematic way is essential for tracking the progress towards achieving the SDGs related to TB. Previously, the WHO relied on straightforward equilibrium models to estimate the TB burden in India, drawing data primarily from Gujarat, where the first state-level prevalence survey took place in 2011. However, a range of new evidence has emerged for the burden of TB at the country level, most importantly a recent national prevalence survey.[5] Interventions such as state- and district-level certification efforts, as well as new data for the volume of anti-TB drugs sold through the private sector, are also important sources of information that have significantly expanded the scope for both national and sub-national assessments of TB incidence and mortality.

Utilizing all the available data and with collaborative support from the WHO, India has developed a country-level dynamical mathematical model and projected incidence and mortality rate in 2022.[6] In 2023 this model was extensively reviewed by the WHO Global Task Force on impact of measurement, the primary body is responsible for reviewing updates on burden estimation. Based on these estimates, and further incorporating additional data for TB mortality, the WHO published an updated time series of TB incidence and mortality for the period 2010–19.[7,8]

The main data currently incorporated into the model are:

- National TB prevalence survey data (2020);
- National TB case notifications in 2011 and 2019;
- Pre-pandemic estimates of TB mortality, 2015 and 2019, the WHO (informed by the Sample Registration System, a source of vital registration data in India);
- Volumes of anti-TB drugs sold by the private healthcare sector from 2015 to 2019, to inform trends on the numbers of patients managed by the private sector;
- Estimates for the prevalence of TBI, drawn from a TBI survey that accompanied the recent prevalence survey from 2019 to 2021; and
- Community mobility reports from Google during the COVID-19 pandemic, to inform assumptions about periods during which TB transmission may have been reduced.

The model was calibrated in two stages, first for the pre-COVID years between 2011 and 2019 and then for the post-COVID years from 2020 onwards, to incorporate service disruptions during this period.

This year, the model has been further extended by incorporating the impact of TB preventive therapy (TPT) coverage among children (<5 years), adults and PLHIV. The coverage numbers and assumptions on the impact of TPT coverage are given in table 1.

[5] National TB Prevalence Survey India 2019-2021. https://tbcindia.mohfw.gov.in/2023/06/06/national-tb-prevalence-survey-in-india-2019-2021/ (accessed April 27, 2024).

[6] Mandal S, Rao R, Joshi R. Estimating the Burden of Tuberculosis in India: A Modelling Study. Indian Journal of Community Medicine 2023; 48: 436–42.

[7] World Health Organization. Global tuberculosis report 2023. 2023 https://iris.who.int/.

[8] Bastard M, Arinaminpathy N, Dodd PJ, Timimi H, Dean A, Floyd K. Methods used by WHO to estimate the global burden of TB disease. 2023.

Table 1: Data used for impact estimation of the TPT coverage

Indicators	Value	Comments and data source (assumptions)
TPT coverage in 2023	<5 year household contacts (HHCs) initiated TPT: 186,997 (60% eligible) ≥5 year HHCs initiated TPT: 840,474 (26% eligible) Other than HHCs (PLHIV) initiated TPT: 443,253	1. Among treatment initiation, 50% successfully completed the regimen. 2. Incidence cases among HHCs is 11.5 times higher than the general population (drawn from control arm in a recent study of HHCs in India[5]). 3. TB incidence among PLHIV is 20 times higher than the general population. 4. Effectiveness of TPT in reducing incidence is 60% for all age groups (consistent with trial findings for 6H and 3HP).

The results of values for TB incidence and mortality for the period between 2015 and 2023 are as follows in table 2 below.

Table 2: Estimates from the in-country model (India) – (2015–23)

		2015	2016	2017	2018	2019	2020	2021	2022	2023
Incidence (per lakh)	**Low**	182	193	194	187	182	172	176	174	168
	Middle	237	225	217	208	202	197	200	199	195
	High	302	265	244	234	229	226	233	237	233
Mortality (per lakh)	**Low**	21	20	19	18	17	17	18	17	16
	Middle	28	27	25	24	23	24	25	23	22
	High	36	34	33	31	30	31	33	31	30

		2015	2016	2017	2018	2019	2020	2021	2022	2023
Incidence (in million)	Low	2,412,330	2,586,191	2,627,359	2,559,142	2,516,182	2,404,510	2,477,614	2,468,204	2,396,601
	Middle	3,130,911	3,016,415	2,934,033	2,852,054	2,798,131	2,747,372	2,814,718	2,820,169	2,779,656
	High	3,994,897	3,553,752	3,301,186	3,206,778	3,166,860	3,162,235	3,281,255	3,353,302	3,325,596
Mortality (in million)	Low	277,802	267,727	257,297	246,421	235,129	241,916	253,321	240,221	230,128
	Middle	370,403	361,432	338,549	328,561	318,116	332,022	350,483	330,920	321,095
	High	476,232	455,136	446,885	424,391	414,934	435,011	459,748	442,998	433,835

The same model has further been customized for developing state/UT level estimates and shared with states and UTs.


acer

A TB DIAGNOSTIC SERVICES

4

Introduction

Quality-assured TB diagnostic services are offered free of cost to all the patients seeking care in the public health system as well as those referred from the private sector, through the network of laboratories under NTEP.

National Policy for Diagnosis

A. Drug-Sensitive TB (DS-TB)

- Offer of upfront NAAT for diagnosis of TB has been prioritized by the programme.
- Response to DS-TB treatment is monitored by using sputum smear microscopy.

B. Drug-Resistant TB (DR-TB)

- Microbiologically confirmed TB patients are offered NAAT for determining resistance to Rifampicin.
- First-line – line probe assay (FL-LPA) is offered to patients with Rifampicin-sensitive (RS) and Rifampicin-resistant TB (RR-TB).
- Second-line – LPA (SL-LPA) is offered to RR and isoniazid (H) resistant TB patients.
- Liquid Culture (LC) and DST are performed for determining resistance to additional drugs.
- LC is used for monitoring response to DR-TB treatment.

Implementation Arrangement

The tiered system of laboratory network includes Culture and Drug Susceptibility Testing (C&DST) laboratories, NAAT facilities and microscopy facilities at National, State, District, sub-district and peripheral levels (Figure 4.1).

National reference laboratories (NRLs), intermediate reference laboratories (IRLs) and C&DST laboratories are equipped to perform DST by various technologies such as LC and molecular tests such as LPA and NAAT.

- NRLs and IRLs conduct training, handholding and M&E for their respective States/district/block-level facilities/laboratories.
- Amongst 87 laboratories, which are equipped to support LC system, 68 are certified for FL-LC-DST and 60 are certified for SL-LCDST.
- Overall 88 laboratories are certified for FL-LPA and 78 laboratories are additionally certified for SL-LPA.
- 56 laboratories are certified for performing LC-DST to Linezolid and Pyrazinamide.
- NIRT, Chennai; NITRD, New Delhi; NTI, Bengaluru; Sir JJ Hospital and Grant Medical College, Mumbai; P.D. Hinduja Hospital, Mumbai and Christian Medical College (CMC), Vellore are certified for performing LC-DST to Bedaquiline and Delamanid.

List of certified laboratories is provided in Annexure.

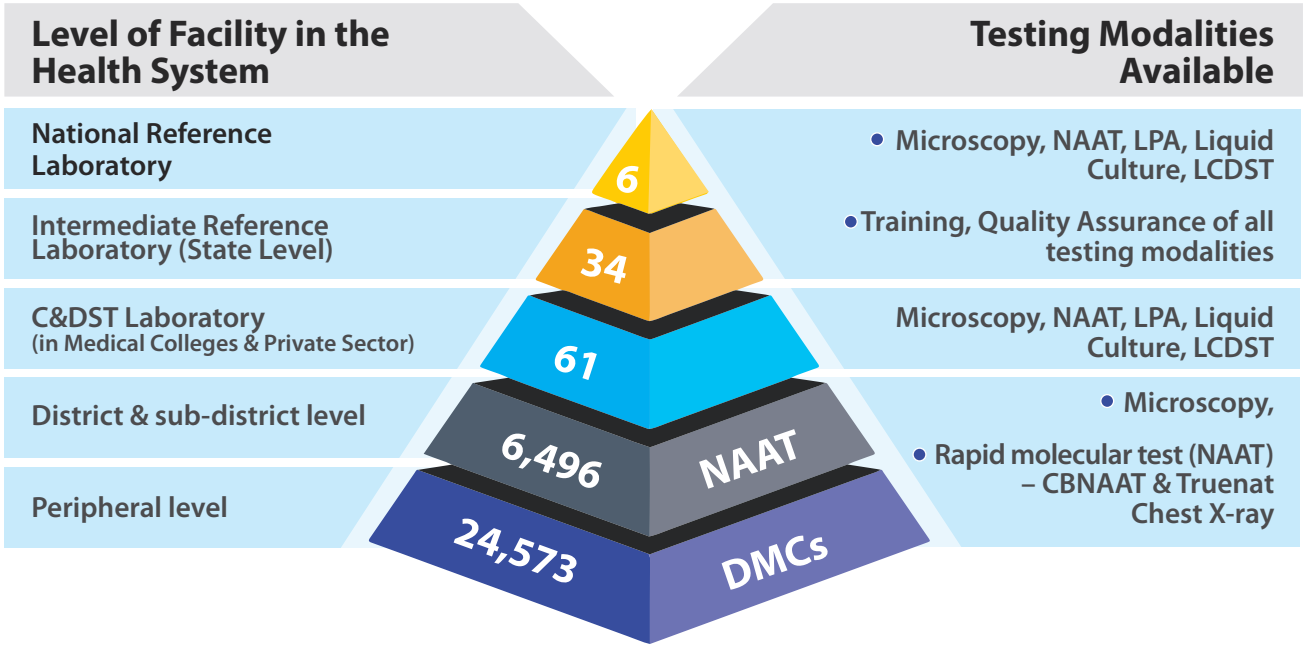


Figure 4.1: Tiered system of laboratory network and testing modalities available

Quality Assurance

The NTEP strives to ensure quality-assured diagnostics both in public and the private sectors. To achieve and sustain proficiency, an in-built routine system has been designed for conducting External Quality Assessment (EQA) including all elements of internal quality control, on-site evaluation and external quality control.

EQA is conducted by the NRL for sputum smear microscopy, NAAT, LPA and phenotypic DST (LC) through structured exercises. Proficiency Testing (PT) exercise is conducted annually for laboratories in all the technologies used for determination of drug resistance.

EQA for the NRLs is conducted through WHO Supra National Reference Laboratories (SNRL); NIRT, Chennai and the coordinating SNRL Antwerp, Belgium.

NABL (National Accreditation Board for Testing and Calibration Laboratories) Accreditation: 19 C&DST laboratories under NTEP had obtained NABL accreditation till 2022. Under Phase-1, four laboratories (IRL, Agra; IRL, Chandigarh; C&DST laboratories – Varanasi and Gwalior) out of 15 laboratories achieved NABL accreditation in 2023. In Phase-2, the following 15 laboratories have initiated activities towards the NABL accreditation:

- IRLs: Ranchi, Gangtok, Pune, Patna, Goa, Hyderabad, Raipur and Kolkata.
- C&DST laboratories:
  1. Government Hospital of Thoracic Medicine (GHTM), Tambaram;
  2. Indira Gandhi Institute of Medical Sciences (IGIMS), Patna;
  3. Rajan Babu Institute of Pulmonary Medicine and Tuberculosis (RBIPMT), New Delhi;
  4. Agartala Government Medical College (GMC), Agartala;
  5. Siddhartha Medical College (SMC), Vijayawada;
  6. Dr. Sampurnanand Medical College (SNMC), Jodhpur and
  7. Government Medical College (GMC), Coimbatore.

Human Resource Development

National-level training programmes for laboratory personnel are organized for:

- LPA, LC and DST, EQA for NAAT and Smear Microscopy and
- Ni-kshay hands-on training for NRL staff.

Performance by the Laboratory Network (2023)

In 2023, overall 19,300,332 patients were offered Smear Microscopy through 24,573 Microscopy centres and 583,742 (3%) patients were diagnosed as TB. NAAT facilities in the country were increased from 5,090 in 2022 to 6,496 in 2023. The details of the tests conducted in 2023 are given in Tables 4.1 to 4.4 below (Source: Monthly Lab Indicator).

Table 4.1: NAAT (2023)

NAAT	No. of tests conducted	MTB detected	Rifampicin-resistant
CBNAAT	37.19 lakhs	746,607 (20%)	52,727 (7%)
Truenat	31.13 lakhs	337,642 (11%)	13,125 (4%)

Abbreviation: MTB, Mycobacterium tuberculosis.

Table 4.2: First-line LPA (2023)

No. of tests conducted	MTB detected	H&R sensitive	H-mono-resistant	R-mono-resistant	MDR-TB (H&R-resistant)
450,992	404,796 (93.1%)	357,189 (88.2%)	25,594 (6.3%)	7,332 (1.8%)	21,589 (5.3%)

Abbreviation: H&R, isoniazid and rifampicin; MDR-TB, multi-drug resistant TB.

Table 4.3: Second-line LPA (2023)

No. of tests conducted	MTB detected	FQ & SLI sensitive	FQ-resistant	No. of RR patients offered SL-LPA	No. of H mono/poly patients offered SL-LPA	SLI-resistant
68,046	58,272 (85.6%)	39,448 (67.7%)	12,781 (21.9%)	26,313	23,924	742 (1.3%)

Abbreviations: MTB, Mycobacterium tuberculosis; FQ, fluoroquinolone; SLI, second-line injectable.

Under LC, 345,497 culture tests were performed during the year 2023.

Table 4.4: Second-line LC-DST (2023)

SL-DST conducted	No. of FQ & SLI sensitive	No. of pre-XDR (MDR + FQ resistance detected)	No. of XDR-TB detected (RR/MDR + FQ + LZD/BDQ)
18,505	6,969	2,667	354

Abbreviations: XDR-TB, extensively drug-resistant TB; LZD/BDQ, linezolid/bedaquilin.

State-wise details of NAAT, LPA and LC-DST conducted in 2023 are provided in Annexure.

Newer Initiatives

- Third-party validation of automated reading and interpretation of LPA undertaken by Indian Council of Medical Research (ICMR), New Delhi.
- Integration of Truenat machine with Ni-kshay for direct data transfer piloted.
- Workshops conducted for improving quality of laboratory services and reducing turnaround time (TAT) for laboratory process.
- NTI, Bengaluru in collaboration with FIND India is supporting NTEP with EQA for NAAT.
  - Overall 1,287 CBNAAT machines (1,213 public sectors and 74 private sectors) across 1,147 sites participated in the EQA and 98% (1,259 machines) demonstrated satisfactory performance.
  - Almost 1,904 Truenat across 1,777 sites in 21 states participated in the EQA with 88% (1,672 machines) reporting satisfactory results.
- Three regional review meetings for the IRLs and TB C&DST laboratories linked with NRLs: Regional Medical Research Centre (RMRC), Bhubaneswar; NITRD, New Delhi and NTI, Bengaluru.
- Guidance documents/videos were developed and disseminated to strengthen the quality and efficiency of the TB/DR-TB diagnostic care cascade in collaboration with NRLs and USAID's (The U.S. Agency for International Development) Infectious Diseases Detection and Surveillance (IDDS) Project:
  - Biosafety Manual for TB Laboratories under NTEP;
  - Comprehensive Guidance for EQA of TB Laboratories under NTEP;
  - NTEP Guidance Document for NABL Accreditation Assessment of TB laboratories in Private Sector;
  - Pre-assessment tool to facilitate NTEP Certification of TB laboratory in Private Sector;
  - Truenat Videos – Good Laboratory Practices in Truenat MTB-RIF Testing (Do's and Don'ts).
- Quality system procedures and standard operating procedures (SOPs) for C&DST laboratories were developed in collaboration with NRLs and FIND India.
- Under CTD guidance, NIRT-Chennai in collaboration with IDDS Project conducted root-cause analysis of MTB invalid/Rifampicin indeterminate rates through on-site visits at 12 Truenat sites across 8 states to identify the reasons and possible solutions suggested.
- Initiated TB Wednesday (*Nidaan Samvaad*) – a series of regular, interactive online sessions on ECHO platform. The three sessions, conducted between May and August 2023, brought together over 1,598 participants. This inclusive group is comprised of DTOs, laboratory staff from National and State Reference Laboratories, personnel from TB C&DST sites as well as district-level health staff from various States across India.
- Networks for optimized diagnostics to END TB (NODE-TB) – Optimization and designing and implementing an efficient sample for referral mechanism within the diagnostic network were implemented in 52 districts across 10 States (Andhra Pradesh, Assam, Bihar, Chhattisgarh, Karnataka, Maharashtra, Madhya Pradesh, Odisha, Uttar Pradesh and Uttarakhand).

The Way Forward

- Increase the use of chest X-ray to improve efficiency of screening;
- Improve microbiological confirmation of TB;
- Scaling up NAAT to offer upfront rapid molecular diagnostic test to all presumptive TB patients;
- Increase universal drug susceptibility testing (UDST) coverage and
- Improve the completion of the diagnostic algorithm for all patients.

DDG-TB addressing the participants during the TB Wednesday – "Nidaan Samwaad" virtual session

B TB CASE FINDING

4

Case finding in TB consists of early identification of individuals with presumptive TB signs/symptoms at the first point of contact with the health system (be it public or private sectors) followed by prompt diagnosis by using high-sensitivity diagnostic tests. Broadly, case finding can be categorized into two groups:

1. **Passive case finding:** It refers to a person-initiated pathway to TB diagnosis. Intensified case finding is a component of passive case finding which involves systematic screening of all people seeking care in a health facility or a clinic for identification of people at risk for TB.
2. **Active case finding:** It refers to the systematic screening for active TB in at-risk populations, typically implemented outside the health facilities (community or congregate settings). Contact tracing is a component of active case finding.

Bending the epidemiological curve of TB to meet the "End TB" targets requires more than just screening people who are seeking care but involves being able to identify those with active TB in the community. This was reiterated by the findings of the recently concluded National TB Prevalence Survey (NATBPS) in India. In the NATBPS 2019–21, it was observed that up to 63% of those with presumptive TB symptoms or signs in the general population did not seek care. Also, among those who were diagnosed during the survey, more than 50% did not have typical signs or symptoms suggestive of TB but had an abnormality in the chest X-ray which led to their TB diagnosis.

Under NTEP, the following indicators help in monitoring case-finding efforts:

- **Presumptive TB examination rates (PTBER)** is defined as the number of presumptive TB tested per lakh population;
- **Proportion of presumptive TB offered molecular diagnostics upfront for diagnosis of TB:** Of the presumptive TB tested, the proportion that were offered a rapid molecular test for diagnosis of TB as the first test of diagnosis; and
- **Annualized TB case notification rate (ACNR)** is defined as the number of TB cases notified per lakh population on annualized basis.

In 2023, the PTBER of India increased to 1,710 per lakh population from 1,295 per lakh population in 2022. The number of rapid molecular diagnosis tests that were offered for presumptive TB testing was 358 per lakh population (Figure 4.2). The proportion of presumptive TB testing in which a rapid molecular diagnostic test is offered out of total presumptive TB testing was 21% in 2023.

The country continued the consistent trend of improvement in case finding in 2023, as demonstrated by the notification of 25.52 lakh TB cases and a total ACNR of 178.8 per lakh population which are the highest ever achieved by India (Figure 4.3).

Nearly half the States and UTs reported an increase in the number of notified TB in 2023 as compared to 2022 while the remaining States/UTs maintained the TB notification achievements year-on-year. In the private sector, the CNR achieved was 59.2 cases per lakh population, the highest ever achieved under the programme (Figure 4.4).

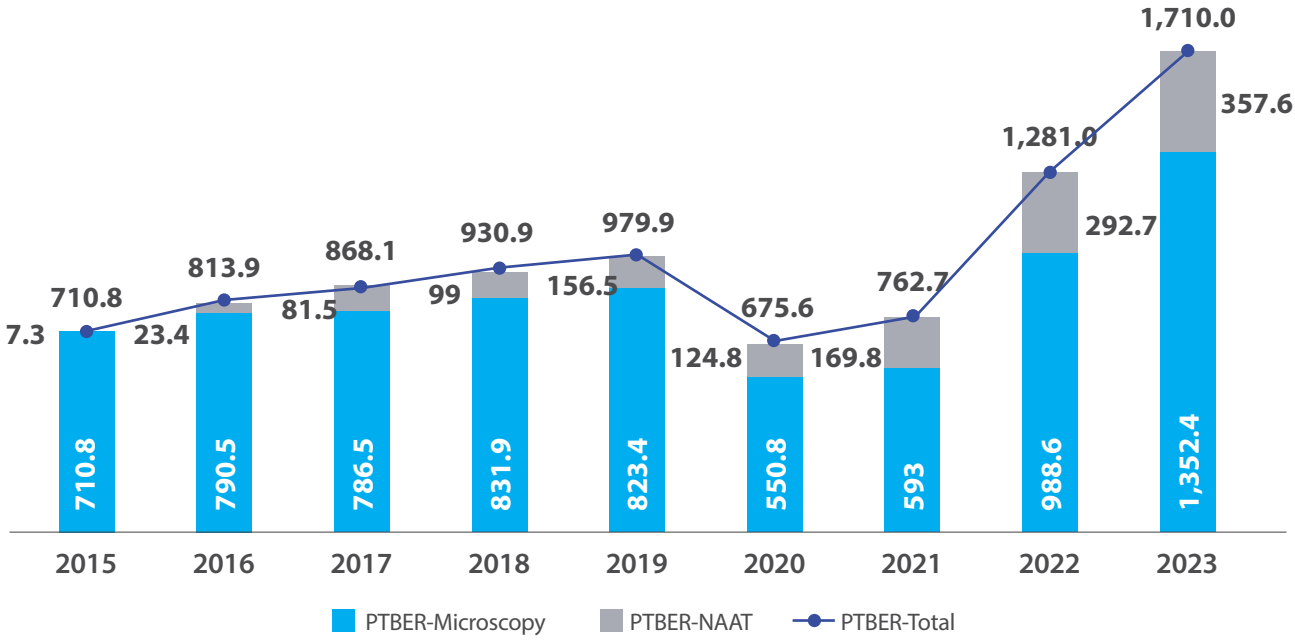


Figure 4.2: Trend in the PTBER of India (2015–23)

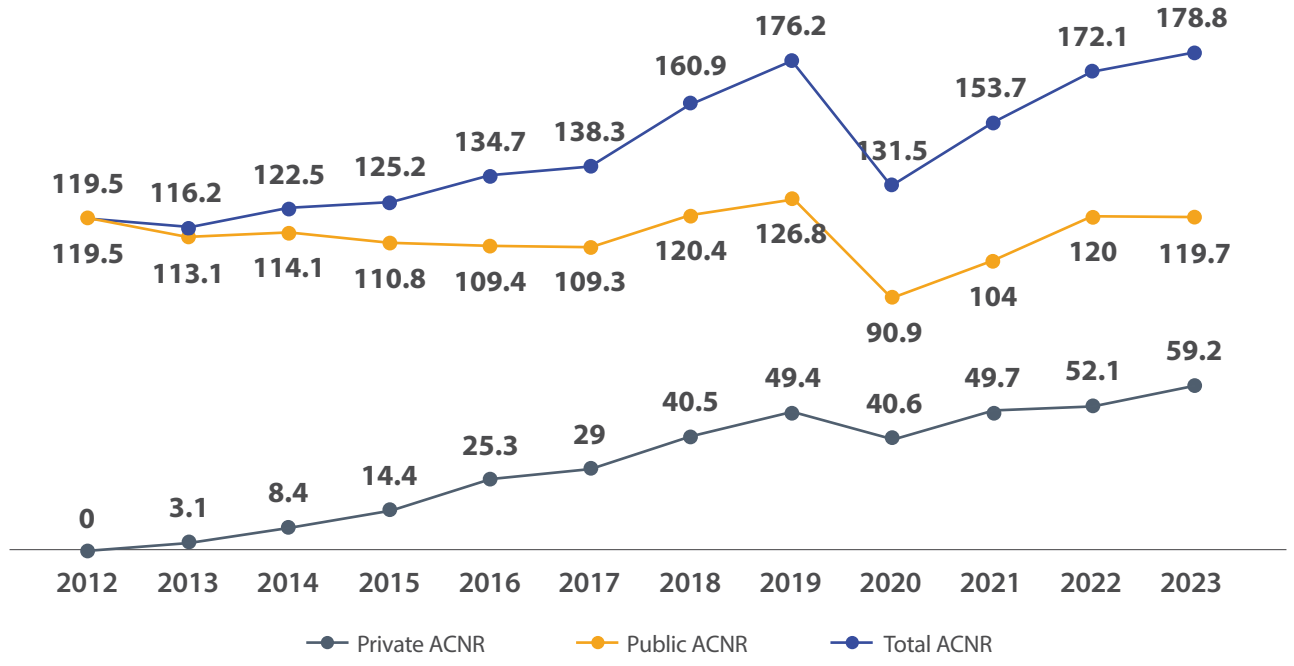


Figure 4.3: Trend in ACNR (private, public and total, 2012–23)

Active Case Finding

Active case finding through systematic screening of selected high-risk/vulnerable groups for TB is being implemented by all the States/UTs since 2017 as part of the implementation of the NSP 2017–25. Such vulnerable groups specifically need active attempts by the system to minimize avoidable delays in detection and prompt treatment initiation, since they are often at higher risk of exposure, health-seeking behaviour, comorbidities, accessibility to quality healthcare and more poor treatment outcomes from the disease.

In 2023, a total of more than 20.5 crore individuals were screened for signs/symptoms suggestive of TB as a part of active case finding efforts (Box 4.1). Of the screened, 1.1% (21.8 lakhs) were examined and tested for TB diagnosis and 35,438 TB cases (1.6% out of those tested) were diagnosed.

The Way Forward

- Scaling up of AI-enabled portable, handheld and mobile X-ray units for screening during active case finding.
- Systematic planning and implementation of active case finding campaigns among selected vulnerable groups and intensified case finding activities within health facilities.
- Further decentralization of rapid molecular diagnostics to saturate NAAT capacity and uninterrupted supply of consumables, thereby ensuring optimal utilization.

Box 4.1

Active case finding in Kashmir region of Himalayas

In the remote Gurez valley of Bandipora District, Kashmir, the NTEP Kashmir team, led by the State TB Officer Kashmir and supported by the State TB Cell, District TB Cell Baramulla, and NTEP Nodal Officer from Government Medical College, Baramulla conducted a comprehensive campaign to screen, test and raise awareness about TB. Situated in the high Himalayas at an altitude of approximately 2,400 metres and cut-off from the mainland district during the harsh winter months, the Gurez valley presented unique challenges. Utilizing a mobile CBNAAT (Cartridge-based Nucleic Acid Amplification Test) van equipped with additional microscopy and Truenat machines, as well as a HHX-ray machine, the team screened 1,250 individuals over 3 days. More than 250 presumptive TB cases were identified, referred and tested for microbiological confirmation of TB. Additionally, the team conducted awareness campaigns, sensitizing various stakeholders including Indian Army officials, local health teams, ASHAs, Panchayati Raj representatives and religious leaders. These efforts demonstrate the dedication of the Jammu and Kashmir, UT Administration and NTEP Kashmir towards achieving the goal of a "TB Free Kashmir" by 2025, contributing to the broader efforts to combat TB in the region.

TREATMENT SERVICES

5

The primary goals of TB treatment services are to:

- Swiftly render the patient non-infectious to curb transmission, reduce TB infection spread, and break the transmission chain,
- Lower fatality and morbidity by securing relapse-free cure,
- Minimize and prevent development of drug resistance.

Management of Drug-Susceptible TB

The NTEP administers a multi-drug regimen in fixed-dose combinations (FDCs) tailored to weight bands for TB patients. This is done under the direct supervision of a trained treatment supporter or utilizing digital adherence technologies.

Individuals diagnosed with TB receive various public health interventions, including:

i. Home visits based on patient convenience,
ii. Counseling for both patients and their families,
iii. Support for treatment adherence and follow-up to ensure completion,
iv. Contact tracing, symptom screening, evaluation, and offering chemo-prophylaxis to eligible contacts,
v. Providing HIV counseling and testing, DST, and
vi. Facilitating linkage with available social welfare and support schemes.

The TB patients are promptly initiated on appropriate treatment, within 3 days of diagnosis at the health facilities. Those residing outside the catchment area of a diagnostic facility receive 7-day transit dose upon treatment initiation before being transferred in Ni-kshay. NTEP ensures access to free and quality anti-TB drugs for all patients from both the public and private sectors.

Adverse events occurring during treatment should be promptly identified, reported to the program through Ni-kshay, and managed appropriately to ensure optimal quality of care for TB patients (Figure 5.1 and also refer to Box 5.1).

Performance during 2023

In 2023, a total of 24.7 lakhs patients were diagnosed as drug-susceptible TB (DS-TB) of whom, 23.6 lakhs (95%) patients were initiated on treatment. Among notified DS-TB cases, 61% were male, 39% were female and 141,098 (5.7%) were below 15 years of age. Among the TB patients notified in 2022, 87.6% had been successfully treated, while 3.6% died during the treatment, 2.1% were lost to follow-up,1.9% failed treatment (including regimen changed), 0.4% were not evaluated (including still on treatment). Treatment success rates of patients notified from public and private sectors were 86.9% and 89.5% respectively. The state-wise TB patients initiated on treatment and Treatment Success Rate of Public and Private sectors have been presented in Annexure.

Management of DR-TB

The management of DR-TB is complex and early identification of drug resistance is crucial to initiate a DR-TB patient on appropriate treatment. Hence, a huge network of rapid molecular test laboratories and culture DST laboratories has been established under the programme to offer UDST in all DS-TB cases (as described in Chapter 4A on "Diagnostic Services", Figure 5.2).

Performance in 2023

In 2023, a total 63,929 MDR/RR-TB, including 11,749 pre-XDR-TB (Fluoroquinolone-resistant), 114 XDR-TB (Fluoroquinolone with Linezolid and Bedaquiline-resistant) and 23,019 H-mono/poly DR-TB patients were diagnosed. Of these, 58,524 (92%) MDR/RR-TB including 10,311 (88%) pre-XDR-TB, 104 (91%) XDR-TB and 21,916 (95%) H-mono/poly DR-TB patients were initiated on the second-line treatment regimen respectively. A total of 20,566 (41%) patients were initiated on shorter MDR/RR-TB regimen and 29,988 (59%) on longer oral M/XDR-TB regimen.

From the 2022 cohort, out of 10,490 patients treated with H-mono/poly DR-TB regimen, a total of 9,095 (87%) were successfully treated, while 523 (5%) died during treatment, 536 (5%) were lost to follow-up, 198 (2%) failed treatment (including regimen changed), 138 (1%) were not evaluated (including patients still on treatment or outcome not reported). Out of 21,285 patients treated with a shorter MDR/RR-TB (oral + injectable) regimen, a total of 15,951 (75%) were successfully treated, 2,149 (10%) died during treatment, 2,036 (10%) were lost to follow-up, 486 (2%) were treatment failures including treatment regimen changed, 663 (3%) were not evaluated including patients still on treatment or outcome not reported.

From the 2021 cohort data, out of 33,555 MDR/RR-TB patients initiated on treatment, 24,793 (74%) patients were successfully treated, 4,086 (12%) died during treatment, 2,892 (9%) were lost to follow-up, 1,346 (4%) treatment failed (including treatment regimen changed), 438 (1%) were not evaluated (including those still on treatment and outcome not reported).

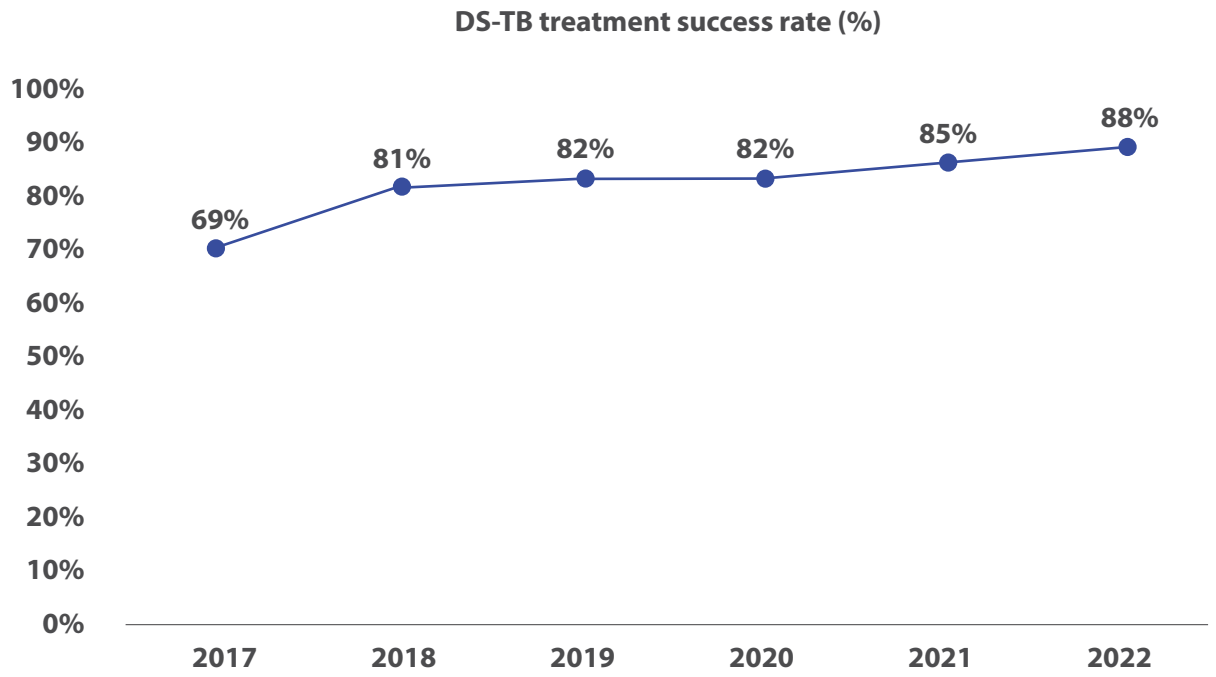


Figure 5.1: Trend of treatment outcome of DS-TB

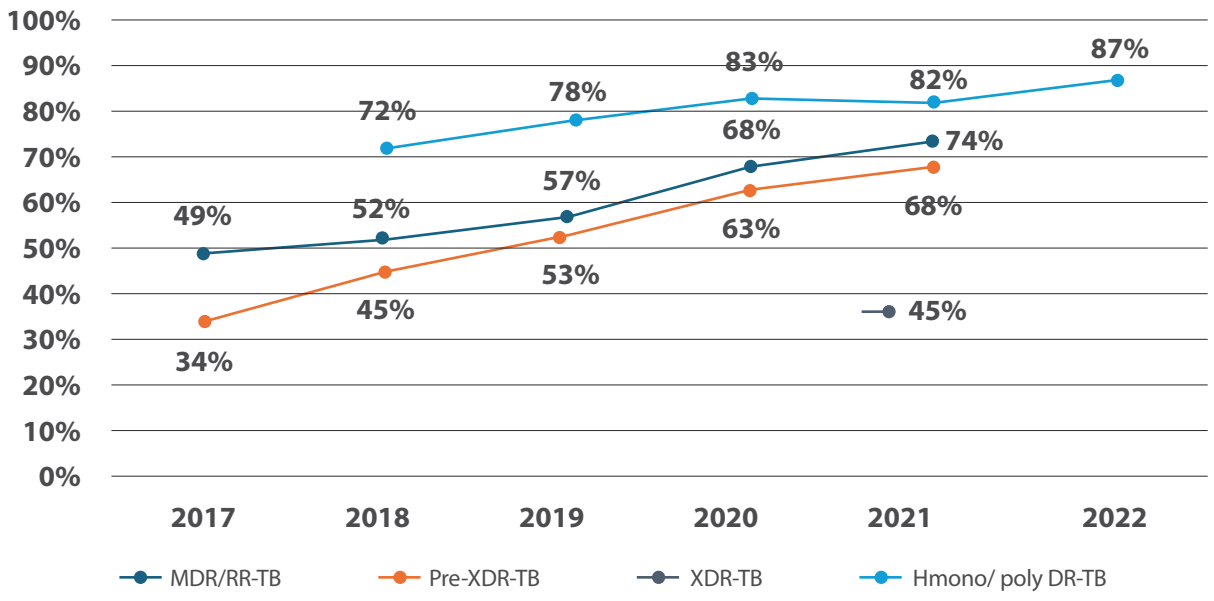


Figure 5.2: Trend of treatment success rate of M/XDR-TB patients

DR-TB data validation exercise

CTD initiated a validation exercise in the field to assess the reasons for data discrepancy. Multiple rounds of virtual meetings were conducted with the states and the validation exercise was conducted by the states with the support of WHO NTEP Consultants' Network. The findings emerging from this validation exercise were analyzed and discussed internally and are being utilized for further improvement in Ni-kshay and for the formulation of standard methodology for routine data validation. The need of training and re-training of the Ni-kshay users on data entry has also been identified.

Status of Differentiated TB Care

The NTEP has implemented a range of measures to address factors contributing to increased morbidity and mortality among individuals affected with TB. One notable initiative is the adoption of a differentiated TB care approach, which involves the provision of comprehensive evaluation and supportive treatment services at various healthcare levels (Figure 5.3).

Figure 5.3: "National Consultative Workshop on Implementing Differentiated TB Care in India" held in Chennai on 24–26 May 2023

Figure 5.4: National consultative workshop: A milestone in the implementation of the "Differentiated TB Care Model"

This holistic approach to clinical care for individuals with TB involves assessing patients for essential clinical parameters such as vital signs and overall health status, along with conducting basic investigations. The primary objective is to promptly identify patients with severe disease, co-morbid conditions, or those at risk of adverse effects.

By employing this risk stratification process, healthcare providers can tailor their approach to ensure appropriate care for individuals identified with specific risks. While some patients may require no referrals, others may benefit from outpatient department (OPD) based management, and a subset may necessitate in-patient or critical care.

A significant milestone in the implementation of the Differentiated TB Care model was the "National Consultative Workshop on Implementing Differentiated TB Care in India" held in Chennai from 24th to 26th May 2023. During this event, States were briefed on the model, and comprehensive state-specific implementation plans were developed. Presently, the model is being implemented in 17 State/UTs across the country.

In 2023, a baseline risk assessment was conducted for 159,907 out of 989,588 notified TB patients in the implementing State/UTs. This initiative reflects the commitment to proactively identify and address the unique needs of individuals affected with TB, contributing to more effective and personalized healthcare delivery.

The NTEP with the support of partners William J Clinton Foundation (WJCF), World Health Partners (WHP) and JHPIEGO under the Tuberculosis Implementation Framework Agreement (TIFA) mechanism of John Snow Institute (JSI), India funded by the USAID piloted this model with the objective of understanding the feasibility of implementation. The WJCF implemented this initiative in Muzaffarpur, Durg, Srinagar and Ahmedabad Municipal Corporation; WHP in two districts, each from Gujarat and Jharkhand, later expanded to additional states (Bihar, Uttar Pradesh, Himachal Pradesh, Sikkim and Punjab); JHPIEGO in Meghalaya, Madhya Pradesh and Odisha. These learning outcomes were shared in the national consultative workshop mentioned above (Figure 5.4).

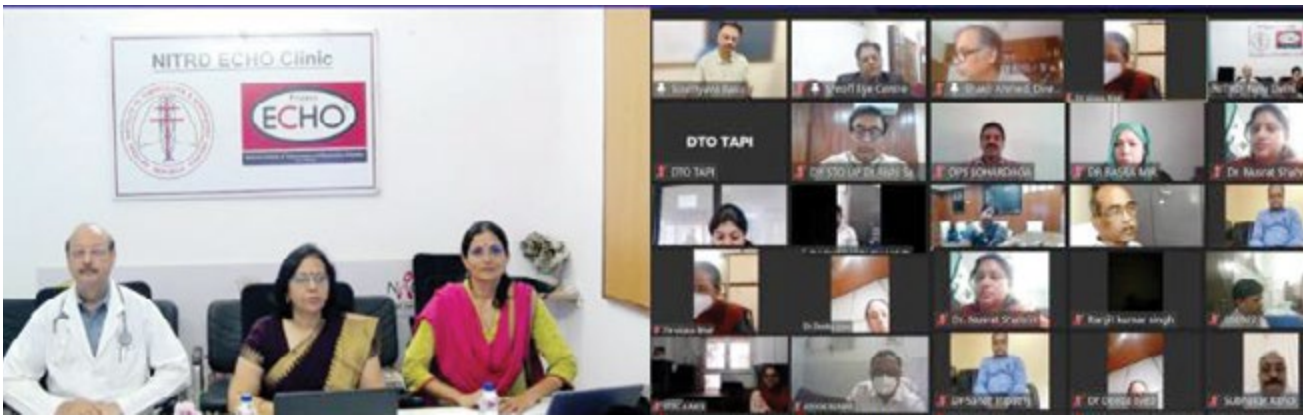


Figure 5.5: Virtual mentoring sessions with the identified spokes to improve in the quality of DR-TB service delivery

NITRD-CTD-NTF National Difficult-to-Treat TB Clinic

The NITRD, New Delhi in collaboration with the CTD and the National Task Force (NTF), has introduced Difficult-to-Treat TB Clinics (DT3C) nationwide since 2020.

The objective of the DT3C is to enhance the clinical expertise of peripheral physicians for managing TB and DR-TB. The case-based TB clinics have been conducted with involvement of expert clinicians to provide solutions to difficult cases and capacity building of peripheral doctors through "Hub-and-Spoke" model. These virtual monthly learning sessions are guided by technical experts, have benefited over 5,100 attendees between January and December 2023 (Figure 5.5). Support for these sessions is provided by ECHO India's digital infrastructure (iECHO).

In continuation of the national DT3C and based on the Guidelines for Programmatic Management of DR-TB (PMDT) in India 2021, a total of 32 States and UTs have organized around 320 sessions in 2023. This decentralized approach ensures the widespread sharing of knowledge and expertise in managing complex TB/DR-TB cases.

Centres of Excellence (CoE) for DR-TB Care

With an intention to improve the quality of DR-TB care, the NTEP has set up five CoEs at NITRD and RBIPMT in New Delhi; Sir J.J. Hospital in Mumbai, Maharashtra; GHTM in Tambaram, Chennai and King George's Medical University (KGMU) in Lucknow, Uttar Pradesh. These CoEs act as hubs of expertise and disseminate knowledge and skills for DR-TB management to other nodal and district DR-TB centres in a "Hub-and-Spoke" model.

All the five CoEs are providing clinical advice to the linked spokes for managing complicated DR-TB cases, by conducting capacity building sessions on different topics related to DR-TB and holding one-to-one virtual mentoring sessions (refer to Figure 5.5) with the identified spokes individually to improve the quality of DR-TB service delivery.

Coordination meetings were organized at Grant Government Medical College and Sir J.J. Group of Hospitals, Mumbai on 20th October 2023 and at KGMU Lucknow, Uttar Pradesh on 20th December 2023. Based on the respective expertise, these CoEs are involved in different activities.

In continuation of the national DT3C and based on the Guidelines for Programmatic Management of DR-TB (PMDT) in India 2021, a **total of 32 States and UTs have organized around 320 sessions** in 2023.

Residential Skill Training Course on TB Thoracic Surgery

TB thoracic surgery can improve outcomes and can be beneficial to people affected with DR-TB. However, people have limited access to quality thoracic surgical care, limited availability of trained surgeons. With an intention to build the capacity of surgeons across the country and improve the access to TB thoracic surgical procedures, NITRD, New Delhi in collaboration with CTD and iDEFEAT-TB Project has initiated a 3 months' residential skill training. The initiative has successfully completed four batches of training with eight surgeons.

Manage TB India Mobile Application

The NITRD, New Delhi with predominant technical inputs from a team of experts led by Dr. Rupak Singla, Consultant, Department of TB and Respiratory Diseases and also with the support of iDEFEAT-TB Project have developed 'Manage TB India' Application. The app enables decision-making in designing effective treatment regimen for DR-TB as per national guidelines based on the inputs on DST results, clinical and other laboratory parameters. The app has been successfully installed by more than 2,000 users across the country. The app is available on Google Play Store for Android smartphones.

Pulmonary Rehabilitation

The RBIPMT is working towards the establishment of a specialized Pulmonary Rehabilitation Unit. A consultation meeting was held from 31st May to 1st June 2023 to formulate a comprehensive guidance document to establish pulmonary rehabilitation unit specifically designed for DR-TB patient management. Pulmonary Rehabilitation Unit has been established at RBIPMT with the support of iDEFEAT-TB Project. Grant Government Medical College and Sir J.J. Group of Hospitals, Mumbai have also initiated pulmonary rehabilitation services to manage DR-TB sequelae (Figure 5.6).

Figure 5.6: A consultation meeting to formulate a comprehensive guidance document held from 31st May to 1st June 2023

Palliative Care for TB

A 5-day training was organized at the GHTM Tambaram, Chennai from 15th May to 19th May 2023 for staff of various CoEs (Figure 5.7).

Mini ECHO TB Hubs

To further strengthen the "Hub-and-Spoke model" approach, 19 mini ECHO TB hubs were established at the selected Nodal DR-TB Centres (NDR-TBCs) linked to five CoEs. The NDR-TBCs are providing clinical consultations on capacity-building and mentoring to their linked District DR-TB Centres (DDR-TBCs) through the mini ECHO TB hubs.

Providing Person-Centred Care and Support to People Affected with TB and DR-TB

The NTEP with the support of REACH (Resource Group for Education and Advocacy for Community Health) under ALLIES (Accountability Leadership by Local communities for Inclusive, Enabling Services) Project has been conducting the following activities in the following selected geographies:

- **Integrated TB-NCD (non-communicable disease) services in Chennai, Tamil Nadu:** Continue to provide holistic care through 40 nodal Nakshatra centres, screening for TB, diabetes and hypertension, supported by the Lilly Global Health Partnership.
- **Peer-led, personalized and person-centred support model for migrant persons affected with TB in Tamil Nadu:** Implemented under the Wave 9 grant of the "Stop TB Partnership", by providing customized services to migrant people with TB in four districts.
- **Reducing pre-treatment loss-to-follow-up among people affected with DR-TB in Bihar:** Implemented in eight districts of Bihar, focusing on reducing pre-treatment loss-to-follow-up and improving adherence among people affected with DR-TB.
- **Building a community care model for people affected with DR-TB:** Piloting a comprehensive community care model in Chennai, Tamil Nadu facilitating towards LPA testing, providing person-centred care and improving treatment outcomes for people affected with DR-TB.

Figure 5.7: A 5-day training on "Palliative Care for TB" organized at the GHTM in Tambaram, Chennai

Box 5.1

Culture-based treatment outcome of drug-sensitive pulmonary TB patients in Goa

In accordance with the Technical and Operational Guidelines (2016), the following definition has been adopted under the definition of treatment outcome **'CURED'**: "a microbiologically confirmed drug-susceptible TB (DS-TB) patient at the beginning of the treatment who is reported to be smear or culture negative at the end of complete treatment".

Goa has rolled-out the initiative of undertaking **'end of treatment culture'** for all pulmonary DS-TB cases since May 2023. The objective of this initiative resides in confirming bacteriological cure and detection of failure cases which would **otherwise have been missed** based on a negative end of treatment (Sputum Smear Report).

A guidance document was prepared for training of all the medical officers and the field staff subsequently. They were required to send additional sputum sample in falcon tubes for liquid culture at IRL, Goa for all pulmonary DS-TB patients at the time of completion of treatment for culture (Table 5.1).

Table 5.1: Results of end of treatment sputum culture of pulmonary DS-TB (May–Dec 2023)

DS-TB patients subjected for culture at end of treatment (A)	Out of (A), no. of patients whose culture results are available (B)	Out of (B), no. of TB patients whose culture was found		
		Positive (in %) (C)	Negative (in %)	to be contaminated
334	280*	7(2.5%)	270(96.4%)	3(1.1%)

**Note: Rest of the patient's culture results are awaited.*

By this initiative, seven DS-TB patients with end of Treatment found Culture Positive were declared as **'FAILURE'.** These would have otherwise been declared **'CURED'** based on microscopy results or **"TREATMENT COMPLETE"** if sputum testing does not get done.

All patients have been further subjected to FL-LPA and found to be sensitive to first-line drugs and restarted on treatment. These patients are also being offered therapeutic drug monitoring (TDM) with the intent to find **therapeutic drug levels and prevent the acquired drug resistance in future.**


National TB Elimination Program (NTEP)
నిక్షయ పోషణ యోజన (NPY)
ఏప్రిల్ 1, 2018 నుండి నోటిపై లయిన ప్రతి టీ.బి. రోగికి రూ.500/- పూర్తి చికిత్స కాలం పోషక ఆహారనిమిత్తం అందజేయడం జరుగుతుంది. ఈ మొత్తం నేరుగా లబ్ధిదారుల ఖాతాలకు పంపిణీ చేస్తారు.
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TB PREVENTION

6

Introduction

'Prevent' is one of the four pillars of NSP 2017–25 for ending TB in India by 2025, five years ahead of global target. The key strategies for TB prevention, as mentioned in NSP, are as follows:

- Nation-wide scale-up of TPT in contacts of TB patients and at-risk population,
- Air-borne infection control (AIC) in health facilities and
- Exploring the role of immunomodulations and vaccines for preventive therapeutics.

Programmatic Management of TB Preventive Treatment (PMTPT)

The year 2023 is considered as a major milestone for PMTPT in India. Hon'ble PM Shri Narendra Modi announced transition and roll-out of shorter TPT regimen pan-India on World TB Day held on 24 March 2023 (Figure 6.1). Acting on this clarion call, the MoHFW has completed the procurement of 50 lakh courses of shorter 3 months (12 once–weekly) doses of Isoniazid (H) and Rifapentine (P) – 3HP regimen for TPT. The supplies have been initiated in various tranches from first quarter of 2024 (1Q2024).

Figure 6.1: Launch of key TB initiatives and address by Hon'ble PM Shri Narendra Modi ji on the eve of World TB Day held on 24th March 2023

The progress and scale-up of TPT under NTEP is evidence-based. The NATPS (2019–21), India estimated a 31.3% crude prevalence of TB infection (TBI), which turns-out to nearly 28 lakh TB annually. To prevent TB, it is important to screen the persons at-risk for TBI, testing for TBI and/or initiate TPT after ruling out active TB. To reinforce the goal of "Ending TB by 2025" by accelerating preventive measures like TPT, the MoHFW has taken a policy decision by expanding the policy to offer TPT to a wider vulnerable group. These include all household contacts (HHCs) of index pulmonary TB patients irrespective of their age, and other risk groups including those on immunosuppressive therapy, having silicosis patients, those on anti-TNF (tumour necrosis factor) treatment, those on dialysis, and those preparing for organ or hematologic transplantation. Such vulnerable individuals should be tested and treated for TBI because of their increased risk for progression to active TB disease.

The National Task Force for Guideline Development, in collaboration with the National Technical Working Group (NTWG), spearheaded the development of PMTPT guidelines in India. The process involved a series of deliberations, evidence reviews, and consultations with experts and stakeholders from across the country. Global recommendations and in-country evidence were thoroughly reviewed to ensure alignment with the best practices and contextual relevance. The guidelines were released by Hon'ble Union Health Minister, Dr. Manshukh Laxmanbhai Mandaviya on August 2021 (refer to Figure 6.2).

Scale-up of TPT

The states have demonstrated sustained politico-administrative commitment and scaled up TPT in various districts. The State TPT Committee meeting being held under the Chairpersonship of Principal Secretary-Health/Mission Director-NHM, plays a pivotal role in monitoring and taking administrative decisions for TPT scale-up. A total of 18-states TPT committee meetings were held in 2023.

By the end of 2023, 774 (96%) and 681 (84%) districts have scaled up TPT in the contacts of TB patients seeking care in public and private sectors respectively; 376 districts have established testing for TBI. Shorter 3HP regimen was introduced in 285 (35%) districts and 3RH regimen was introduced in 194 (24%) districts. A total of 16 states have expanded and introduced TPT in contacts of DR-TB patients.

The monumental leap in TPT coverage achieved in 2022, was sustained in 2023. More than 15 lakh HHCs of TB patients and PLHIV were initiated on TPT in 2023 (Figure 6.3).

Figure 6.2: Guidelines released by Hon'ble Union Health Minister, Dr. Manshukh Laxmanbhai Mandaviya on August 2021

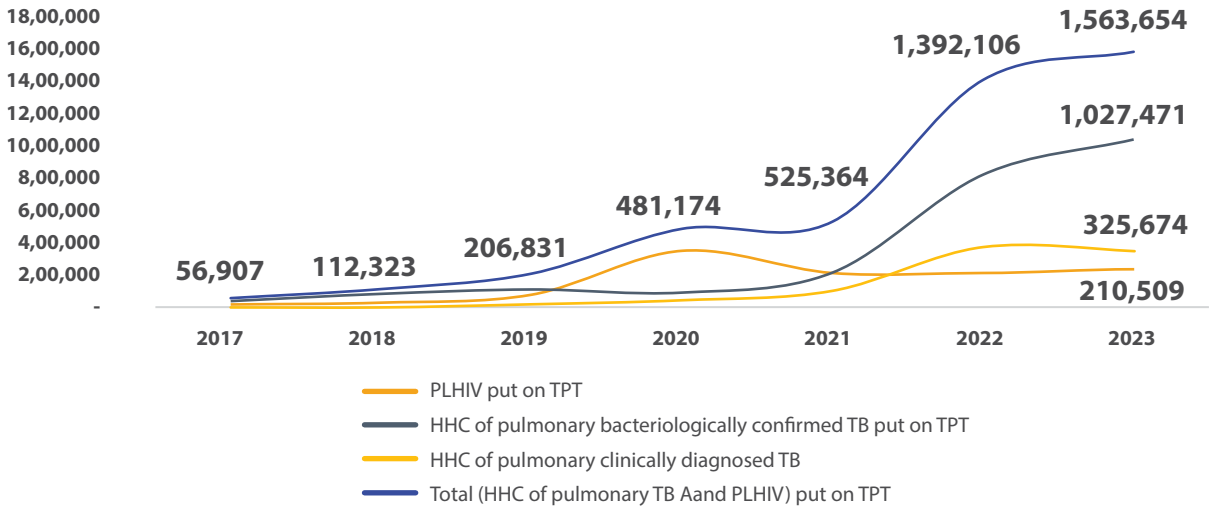


Figure 6.3: TPT coverage including HHCs of TB patients and PLHIV initiated

TPT Care Cascade

In 2023 against the eligible HHCs of pulmonary bacteriologically confirmed TB, 27% were initiated on TPT. Ruling out active TB before initiation of TPT is critically important; 91% HHCs were screened for TB. However, only 1% symptomatic HHCs were identified, 65% evaluated and 39% diagnosed with TB disease. The selective TB screening, evaluation and detection is indicated from the TPT care cascade in 2023. There is an opportunity of improvement in quality TB screening among HHCs.

Transition to Shorter TPT Regimen

The NTEP has introduced shorter 3 months of weekly 3HP-containing regimen in 2022 with 45,000 courses received from WHO-India and Global Fund project. Additional 80,000 courses of 3HP received with support of WHO-India and WJCF through Unitaid Project helped us to further scale-up and generate evidence.

The country has procured around 50 lakh courses of 3HP for estimated annual requirement to scale-up TPT in HHCs and other risk groups.

Introduction of 1HP-TPT Regimen in PLHIV

Technical Resource Group (Adult) for National AIDS Control Programme (NACP) met in February 2024 and recommended for introduction of shorter one-month of daily Isoniazid and Rifapentine (1HP) containing TPT regimen for PLHIV. The CTD has already reserved around 20,000 courses of 1HP for introduction and scale-up of 1HP in PLHIV under the national programme.

JEET 2.0 and Axshya-Plus

Under the Global Fund grant for 2021–24, the PMTPT projects – JEET 2.0 (Joint Effort for Elimination of TB) and Akshaya Plus – are being implemented by the non-government principal recipients (WJCF, FIND and The Union) and their sub-recipients in 194 districts in 22 states. These projects have created considerable impact in overall TPT coverage as well as given learning outcomes for improvement in the programme.

e-Sanjeevani Platform for TPT Initiation

JHPIEGO initiated a project in Manipur and Jharkhand for leveraging e-Sanjeevani platform for tele-consultation and ruling out active TB by Community Health Officers (CHOs) in HHCs of TB patients. The project is intended to model and assess feasibility of initiation of TPT in remote/tribal areas by CHOs who consult medical doctors through e-Sanjeevani platform for treatment initiation. 95% of eligible contacts have been successfully initiated on TPT regimen through tele-consultation. Moreover, JHPIEGO facilitated TBI

testing by tuberculin skin test and initiation of TPT in 85% of eligible contacts in Mizoram.

Monitoring through Ni-kshay TPT Dashboard

Contract tracing and TPT were recorded as aggregates. In January 2023, at the national review meeting held in New Delhi, Ni-kshay TPT dashboard was released. The Ni-kshay TPT dashboard allows the programme managers and staff to monitor TPT care cascade in more granular manner up to the level of HWCs and private health facilities registered in Ni-kshay. CTD has also organized capacity building on Ni-kshay TPT dashboard to sensitize the state and district teams.

Newer Skin Test for Detection of TBI

Cy-Tb is a novel skin test for detection of TBI. The administration of Cy-Tb follows Mantoux technique that has single cut-off – '5 mm' for reading. The regulatory approval is available for use of the test in ages more than or equal to 18 years. Although the ICMR has recommended the test for those aged 1–18 years, while recommendation from the regulatory authority for its use is under consideration. To achieve the ambitious target of scale-up of TPT in vulnerable population, CTD has initiated the process of procurement of 50 lakh tests as per estimated annual requirement.

Training and Capacity Building

Physical national training on PMTPT was conducted at National TB Institute (Bengaluru, Karnataka) for the state and district programme managers from nine states to ensure the sustainability and effectiveness of TB control efforts. The representatives who attended the training were from the following states: Chandigarh, Delhi, Karnataka, Kashmir, Maharashtra, Odisha, Nagaland, Kerala, and Punjab.

Capacity building sessions, both physical and virtual, has been conducted by the programme for a wider audience to enhance the reach of the programme. A 4-day orientation for medical officers from AYUSH (Ayurveda, Yoga, and Naturopathy, Unani, Siddha and Homoeopathy) was held at NITRD in New Delhi. With the objective of achieving an impact on burden of disease and enhancing collaboration, virtual training of Armed Force Medical Officer was also conducted (refer to Figure 6.4A and B).

A

B

Figure 6.4A and B: (A) A 4-day orientation programme for medical officer AYUSH held at NITRD in New Delhi and (B) Virtual training of Armed Force Medical Officer

Ultraportable Handheld X-ray (HHX-ray) Devices

X-ray imaging plays a crucial role in TB screening due to its effectiveness in identifying characteristic signs of the disease in the lungs. X-ray screening is critical for ruling out active TB before initiation of TPT. Although access to X-ray services at the secondary care level has significantly improved in recent years, mobilization of the population is a challenge. Ultraportable HHX-ray machine provides mobility, easy transportation and use at the point-of-care at the peripheral or camp level.

AIC in Health Facilities

Prioritizing AIC measures in the health facilities are critically important for prevention of cross infection among patient and health workers. High-risk centres such as DR-TB centres, ART (anti-retroviral therapy) centres, C&DST laboratories, TB microscopy centres, NAAT sites should be AIC compliant. CTD with the support of FIND and in collaboration with WHO-India, CDC (Centers for Disease Control and Prevention) and NITRD, New Delhi is implementing AIC risks assessments and interventions at selected 100 NDR-TBCs under the Global Fund (C19RM grant) project. The assessment of 100 DR-TBCs was completed. Structural modifications, installation of ultraviolet germicidal irradiation (UVGI) and training of Hospital Infection Control Committees (HICC) are the key recommendations.

TB Mukt Bharat Infection Prevention and Control (IPC) project is being implemented by CTD, U.S. CDC – India, and Society for Health Allied Research and Education India (SHARE India). The project conducted baseline assessment of 131 health facilities and trained 953 health staff on IPC.

The best practices (refer to Box 6.1) such as awareness generation, distribution of AIC kits among the patients, establishing cough corners and introduction of fast tracking in health facilities, and screening of patients admitted in indoor wards (Himachal Pradesh) are the state-led activities for containment and prevention of air-borne transmission of TB.

Adult BCG Vaccination

Introducing adult TB vaccine would help in decline in the incidence curve. After multiple discussions and scientific deliberations, the expert committee recommended the introduction of adult BCG vaccine for the vulnerable groups. The vaccine introduction among adults is in implementation research study mode to generate more evidence. Details are provided in the Chapter 13 on "Research and Innovation".

Box 6.1 Procurement of 3HP and implementation of shorter TPT state-wide (Tamil Nadu)

The TPT by using 3HP is an approved regimen and was launched by the Hon'ble Prime Minister on 24 March 2023 (Figure 6.5A and B). Tamil Nadu was the first state to procure this medicine locally to be provided to HHCs of index TB patients who are found to have TBI. This new regimen has 3-month duration (one dose per week for 12 weeks); this was started at Tiruvallur as a pilot project. TPT is now being extended to all districts of Tamil Nadu, under treat all policies adopted by the state in May 2023.

Figure 6.5A and B: Launch of 3HP regimen TPT in Tamil Nadu by the Hon'ble Health Minister

TB **COMORBIDITIES AND VULNERABLE** POPULATIONS

7

The prevalence of TB is substantially determined by factors influencing socio-economic development, as well as health-related risks. TB primarily impacts individuals with weakened immune systems, including young children and those living with HIV. It also affects people with specific conditions like malnutrition, diabetes mellitus (DM), silicosis and existing disabilities, as well as those who smoke or have substance-use disorders. Major health-related risk factors such as diabetes, HIV infection, alcohol-use disorders, tobacco smoking, and undernutrition are some of the most significant comorbidities and driving forces behind the global TB epidemic. The NATBPS in India 2019–21 indicated a higher incidence of TB among survey participants with a Body Mass Index (BMI) less than 18.5 kg/m^2, individuals with diabetes, those engaged in alcohol consumption and tobacco smokers.

Additionally, broader socio-economic determinants, including gendered vulnerabilities, access to healthcare, income inequality, discrimination, stigma, poverty and provisions of social protection or lack thereof, play a critical role in TB. The TB disproportionately affects individuals whose health is compromised by socio-economic factors such as poverty, inadequate housing, displacement, or imprisonment. Limited access to healthcare for these populations leads to ongoing TB transmission, as well as more poor outcomes and stigma, even among those seeking care.

"Key and vulnerable populations" are populations with heightened exposure to TB bacilli, constrained access to health services on account of socio-economic determinants of health, or an elevated risk of TB due to compromised immune function. Therefore, achieving targets to reduce the burden of TB necessitates progress in addressing both health-related risk factors and socio-economic determinants. Achieving equity, upholding human rights and reaching out to KVPs are essential elements in the TB response and crucial for countries to effectively bring an end to the TB epidemic. To address the health-related risk factors of TB, the NTEP partners with various national public health programmes to develop and execute strategies targeting significant comorbidities associated with TB. These strategies involve collaborative staff training, integrating diagnostic and treatment services, bidirectional screening efforts, referring presumptive and confirmed cases, and implementing TBI treatment and AIC measures at government health facilities.

The estimated number of TB cases attributable to these comorbidities is mentioned in the Table 7.1.

Table 7.1: Global and India estimates of TB cases attributable to selected comorbidities, 2022 (WHO Global TB Report, 2023)

Risk factors	No. of Cases (95% Confidence Interval) (in lakhs)	
	Global estimates	India estimates
Undernourishment	22.00 L (20.00–24.00)	7.44 L (6.30–8.61)
Alcohol use disorders	7.30 L (5.20–9.90)	2.48 L (0.87–4.92)
Smoking	7.05 L (5.00–9.50)	1.06 L (0.25–2.46)
Diabetes	3.70 L (2.70–4.80)	1.02 L (0.37–1.99)
HIV infection	8.94 L (7.33–11.00)	0.94 L (0.29–1.97)

7.1 TB-Nutrition

Background

TB and undernutrition form a mutually reinforcing cycle, significantly impacting India's disease burden. Undernutrition, a prominent risk factor, increases the likelihood of TBI (latent) progressing to active TB, while active TB exacerbates nutritional decline and heightens risks. Lower BMI correlates with increased TB risk, and socio-economic factors amplify the latent-to-active TB transition. Food insecurity among TB patient contacts further elevates risk. Additionally, inadequate nutrition during developmental stages and pregnancy increases TB susceptibility.

In-country evidence demonstrates that enhancing nutritional support to persons with TB improves treatment outcomes. Recent evidence also suggests that providing nutritional support to persons exposed to TBI in the households reduces their likelihood for progression to active TB disease. The CTD's TB Aarogya Sathi and Nutrition-TB App (N-TB app) provide tools for assessing nutritional status and guidance on nutrition for undernourished persons affected with TB. In addition, the POSHAN Abhiyaan has incorporated Community-Based Events with the aim of raising awareness, combating stigma and promoting TB prevention.

Progress

A. Ni-Kshay Poshan Yojna

The Government of India is dedicated to providing nutritional support to all TB patients throughout their treatments. The NPY employs DBT of INR 500 per month to beneficiaries, ensuring precise delivery of benefits directly to their bank accounts. This approach enhances efficiency, improves the effectiveness of treatment services, and ultimately contributes to better treatment outcomes in terms of reduced morbidity and mortality. As of December 2023, these incentives have been disbursed to ~1 crore beneficiaries, totalling more than INR 2,781 crores.

B. Pradhan Mantri TB Mukt Bharat Abhiyaan

The Government of India, through the PMTBMBA, aims to accelerate TB elimination by uniting community stakeholders, enhancing community involvement and leveraging Corporate Social Responsibility (CSR). This initiative supplements government's efforts by enlisting support from various entities, including cooperative societies, corporations, elected representatives, individuals, institutions, NGOs, political parties and partners. The collaboration seeks to provide additional patient support, improve treatment outcomes, increase awareness, reduce stigma, lower out-of-pocket expenses, and enhance nutrition for TB patients. Detailed information about this initiative can be found in Chapter 8 on "Patient Support Systems".

7.2 Childhood TB

Background

Children face a higher risk of acquiring and developing TB, leading to significant morbidity and mortality globally. In the Global TB Report 2023, in 2022, children aged 0–14 years constituted 12% of incident TB cases, with 16% of global TB deaths

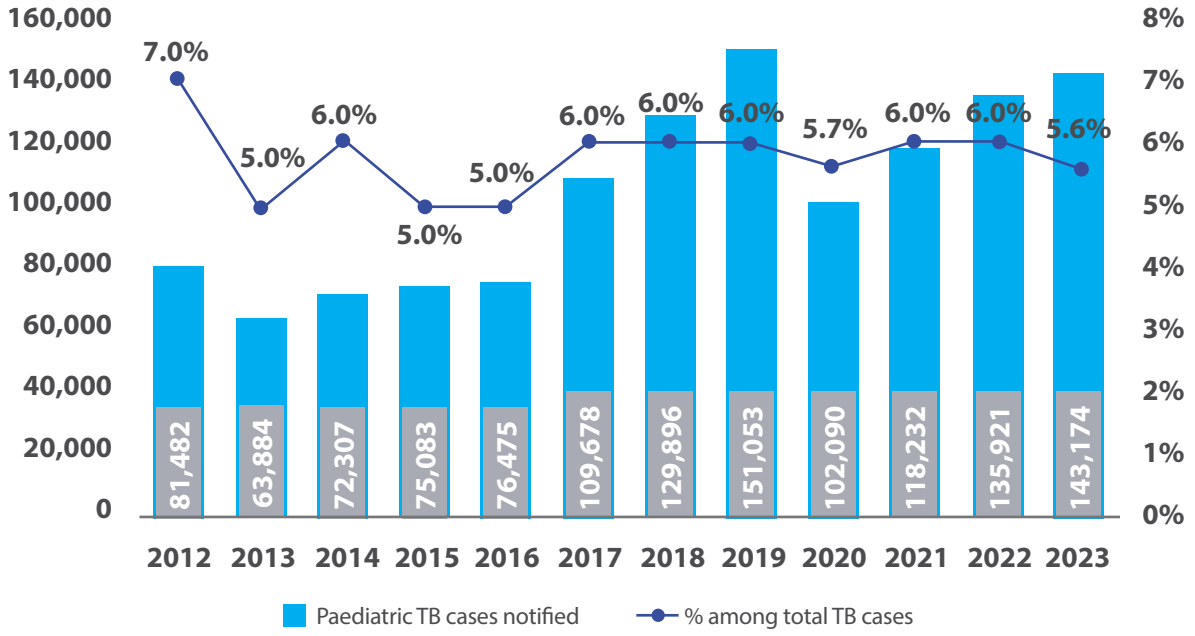


Figure 7.1: Proportion of paediatric TB notification (2012–23)

among HIV-negative individuals occurring in this age group. Infants and young children are more prone to life-threatening TB forms.

The non-specific symptoms and signs of TB in children, the paucibacillary nature of childhood TB, challenges in obtaining quality sputum samples—particularly in young children—and barriers to accessing health services collectively contribute to the substantial burden of childhood TB. Annually, 5–7% of all patients notified under NTEP are children, contrasting the expected 10–12% proportion of incidence of paediatric cases.

To enhance paediatric TB diagnosis, including DR-TB in young children, the NTEP now mandates upfront rapid molecular diagnostics nationwide. The programme has streamlined treatment with FDCs based on weight bands for DS-TB and DR-TB – shorter and longer regimens, minimizing the risk of drug-resistant strains. Additionally, to reduce MDR-TB mortality and ensure successful treatment, Delamanid for children of all ages weighing at least 10 kg has been approved.

Progress

A. Paediatric TB Notification

While the initial years (2019 and 2020) of the ongoing COVID-19 pandemic witnessed a significant decline in newly diagnosed TB cases due to widespread disruptions in diagnostic and treatment services, the year 2023 saw the notification of 143,174 paediatric TB patients in India (Figure 7.1), representing a slight increase from the 135,921 in 2022.

In terms of the site of active TB disease within the paediatric age groups (0–14 years), pulmonary TB is more prevalent than extrapulmonary TB (EPTB). According to Ni-kshay data, the total number and proportion of EPTB cases in the paediatric age group is 63,116 and 44% respectively.

Paediatric DR-TB Notification

In 2023, a total of 2,108 MDR/RR-TB, including 373 pre-XDR-TB (Fluoroquinolone resistant), 5 XDR-TB (Fluoroquinolone with Linezolid and/or Bedaquiline resistant) and 348 H-mono/poly paediatric DR-TB patients were diagnosed.

Of these, 1,576 (75%) MDR/RR-TB, including 318 (85%) pre-XDR TB, 4 (80%) XDR-TB and 237 (68%) H-mono/poly paediatric DR-TB patients were initiated on the appropriate treatment regimen, respectively. A total of 472 (30%) patients were initiated on the shorter MDR/RR-TB regimen and 1,104 (70%) on the longer oral M/XDR-TB regimen.

B. Private Sector Engagement

The MoU between NTEP and the Indian Academy of Paediatricians (IAP) aims to enhance capacity among paediatricians and NTEP Medical Officers in both public and private sectors for paediatric TB diagnosis, notification, treatment and public health actions. As per the MoU, the IAP is committed to

provide training to 18,000 paediatricians and 2,000 NTEP Medical Officers through 300 district-level Continuing Medical Education (CME).

C. Operationalization of Inter-Sectoral Coordination

To enhance community understanding of paediatric TB, encourage disease prevention and detect symptoms early in children, TB screening is actively conducted as part of the collaborative efforts between NTEP and Rashtriya Bal Swasthya Karyakram (RBSK) and Rashtriya Kishor Swasthya Karyakram (RKSK). In addition, detailed content for the training curriculum of peer educators to raise awareness on TB and to improve community awareness and knowledge about TB service delivery has been included in the RKSK Peer Educator Training Manual. Moreover, the following strategies to Strengthen Linkages with the School Health and Wellness Programme (SH&WP) were proposed in the Second National Workshop held in January 2023:

- For timely diagnosis of TB, include information on TB to generate awareness and inculcate TB preventive behaviour through information, education and communication (IEC);
- Engaging Primary School Students through Flip Book and Childhood TB Activity Book;
- Engaging Secondary and Higher Secondary School Students through NCERT School Curriculum and establishment of School Health Clubs;
- Engaging Students and Teachers to create awareness and reduce TB Stigma by identifying TB Champions at the school level.

D. Centre of Excellence for Paediatric TB

The Centres of Excellence for Paediatric TB (pCoE) are intended to:

1. serve as model centres for TB care, support and treatment;
2. increase capacity, knowledge, skills and abilities for paediatric TB prevention and management through communication, education and training activities targeting public and private sector paediatricians and providers of paediatric care in the operational states/regions;
3. improve sustainable evidence-based TB clinical practices and patient care networking and provision of expert medical consultation;
4. monitoring the clinical and programmatic outcomes of paediatric TB patients;
5. building capacity of the health system to carry out operational research in TB diagnosis, treatment and prevention aspects.

Streamlining and implementation of objectives for 2 national and 5 regional pCoE-TB to function as model centres for TB care, support and treatment are ongoing.

E. Contact Tracing and TPT

Contact tracing of active TB cases and vulnerable populations serves as a cornerstone activity for offering preventive therapy and minimizing the risk of TBI developing into active TB disease. Screening for TB is conducted on all household members, including children, who are in contact with a family member afflicted by active TB disease. Additional information on this can be found in the Chapter 6 on "TB Prevention".

7.3 TB and Gender

Background

TB affects people of all genders and ages. The Global TB report for 2023 indicates that in 2022, almost 55% of people who developed TB were men, and 33% women. Despite higher TB incidence in men, women and Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual and Other Identities (LGBTQIA++) individuals experience TB differently, facing discrimination and stigma in various aspects of life. These factors interact to determine TB exposure, risks, vulnerability and health-seeking behaviour. Gender roles and power differentials also impact access to opportunities and resources for all people, regardless of sexual orientation, gender identity, gender expression and sex characteristics (SOGIESC).

Gendered vulnerabilities significantly impact how cis women, LGBTQIA++ individuals, and cis men access healthcare in both the public and private sectors. Notably, evidence indicates that smoking, alcohol use and substance use contribute to TB among men. On the other hand, women face a higher burden of undernutrition, rendering them susceptible to TB, as highlighted in National Family

Health Survey 5 (NFHS-5). Women's vulnerabilities include hiding symptoms due to stigma, prioritizing household responsibilities, limited decision-making power, restricted mobility and autonomy over financial resources.

The National Framework for Gender-Responsive TB Care in India recognizes the influence of sex, gender identity and sexual orientation as social determinants for TB, impacting health-seeking behaviour and healthcare access. The framework takes into account the gender and sexuality-specific needs of all persons affected by TB at all levels to address discrimination and systemic stigma towards various gender and sexual identities.

Progress

In 2023, out of the total TB cases notified, 60.7% were men, 39.2% women, and 0.04% transgender (Figure 7.2).

While the National Framework for a Gender-Responsive Approach to TB made India one of the first countries to integrate gender into the TB response, the Framework needs to evolve by incorporating newer learning and evidence. In addition, to expand the scope of the Framework's inclusivity, input was sought from leading representatives across various sexualities and gender identities. Moreover, a sub-committee for "gender-responsive and queer-affirmative actions in TB" was constituted to ensure the Framework is comprehensive and inclusive of all genders and sexual identities. The revised Framework will aim to cater to the diverse needs of individuals across genders and sexual orientations and outline the provision of available, accessible, affordable, quality (AAAQ) care to all persons irrespective of their SOGIESC.

7.4 Extrapulmonary TB

For India to achieve "End TB targets by 2025", it is vital to address the causes of TB morbidity and mortality of all forms of TB, including EPTB. According to the Global TB Report 2020, EPTB constituted 16% of the 7.5 million reported TB cases globally. In India, EPTB accounts for 20–24% of all TB cases (all age groups) and is higher in immunocompromized people as compared to the general population.

Although significant advancements have been made in diagnosing pulmonary TB, EPTB diagnosis

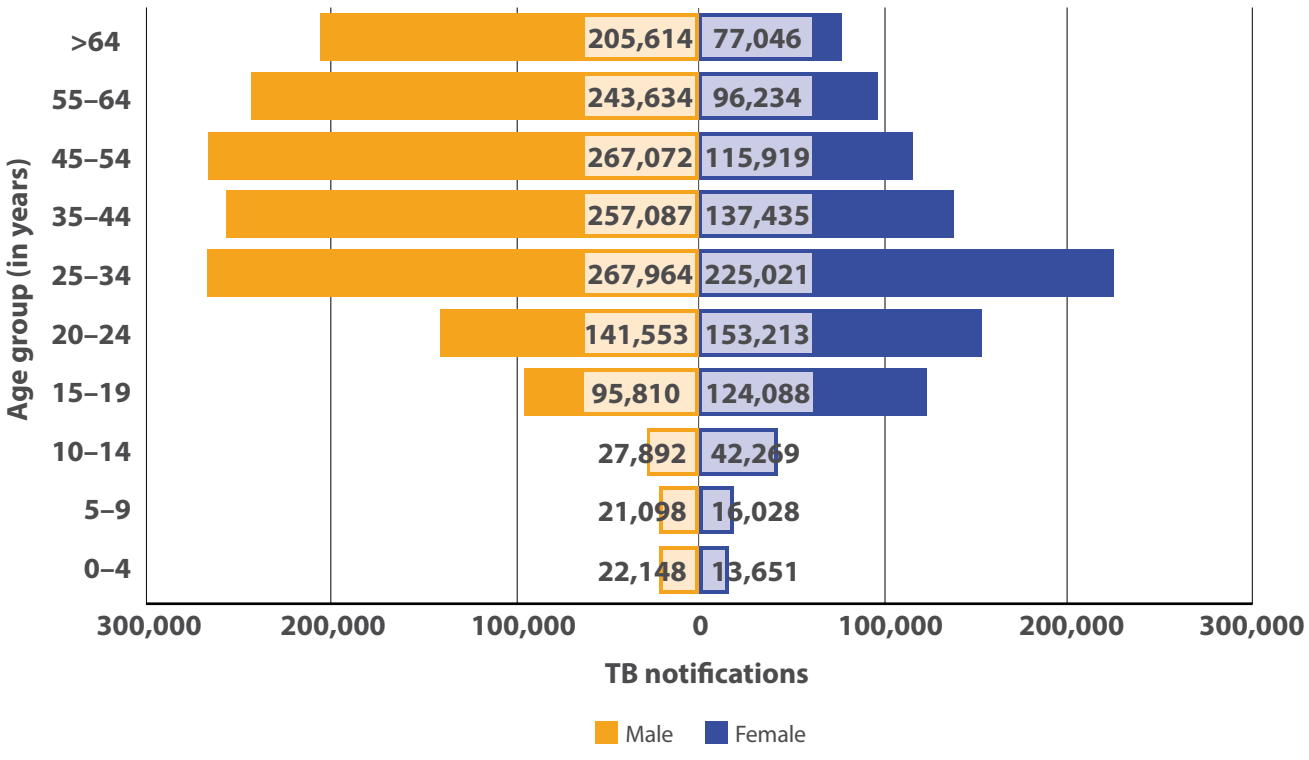


Figure 7.2: TB notifications: Age–sex distribution

and management remain a considerable challenge. Due to the paucibacillary nature of extrapulmonary specimens and sample collection often requiring invasive procedures, diagnosis of EPTB is often delayed. Further, the diagnosis and management of EPTB have been primarily available at tertiary care centres and medical colleges. Regardless of the public or private sector, many service providers involved in management of EPTB (whether general health practitioners or specialists) are not updated with the latest information on its management.

A. Launch of the Training Module on EPTB

The Training Module on EPTB was launched by the Hon'ble Prime Minister of India on World TB Day, 2023 during the One World TB Summit. The primary aim of this module is to strengthen the systematic management of EPTB for healthcare providers at the secondary and tertiary care levels, both in the public and private sectors and for TB Programme managers in India.

B. National Training of Master Trainers on Management of EPTB

The CTD, in collaboration with the Department of Medicine, AIIMS (All India Institute of Medical Sciences), New Delhi, and the WHO Country Office for India, organized two batches of 3-day National Training of Trainers for Management of EPTB under NTEP. The training was conducted at AIIMS, New Delhi, between 1–3 November 2023 and 6–8 November 2023; over 250 participants attended.

The primary aim of this training was to build capacity for creating an adequate pool of master trainers across the country from the public and private health sectors at the state level to deliver high-quality diagnostic and treatment services for the management of EPTB. To that end, state-level programme managers and various medical specialists from all states attended the training.

The participants included practising clinicians, specialists from medical colleges, NTEP programme managers and WHO consultants. The training involved over 50 resource faculties from AIIMS, NTEP–TEG, NITRD, RBIPMT, NRL and NTI Bengaluru, who shared their knowledge and experiences. Master trainers included STO(s), STDC Director(s), WHO NTEP consultants, Medical College Task Force, NTF Chair and Vice Chair, Zonal Chair and Vice Chair and STF Chair and Vice-Chairpersons (Figure 7.3A to D). The subject-matter experts from medical colleges across all the states included specialists from different departments.

C. Further Action Plan

To ensure the implementation of evidence-based clinical algorithms to provide timely diagnostic and treatment services, the states are undertaking:

- **Cascade training:** to cascade the learning of this training, sensitize and train service providers;
- **Identify and map:** health facilities by providing EPTB diagnostic and treatment services; and
- **Establish linkages:** with mapped facilities for service delivery.

Figure 7.3A to D: Pictures from the National Training of Master Trainers on Management of EPTB

7.5 TB and Pregnancy

Background

Despite higher prevalence of TB in men, women, especially those in the reproductive age groups (15–49 years), undergo unique challenges when dealing with the disease. This period is marked by significant physiological changes in a woman's body. Additionally, diagnosing TB in pregnant women poses difficulties due to the overlap of non-specific symptoms commonly found in both TB and pregnancy.

Active TB in pregnancy is associated with an increased risk of perinatal death, up to six times higher, along with a twofold higher likelihood of premature birth and low-birth weight. The implications of TB during pregnancy vary widely in the short and long term, contributing to a cascade of effects such as recurrent reproductive issues, compromised foetal health, preterm deliveries and TB transmission to newborns and infants. These complications, in turn, can lead to elevated levels of maternal and perinatal morbidity and mortality.

Progress

In line with the NSP (2017–25), pregnant women are identified as a high-risk group for TB morbidity. The Collaborative Framework for Managing TB in Pregnant Women, a joint initiative of NTEP and the Maternal Health Division, aims to reduce TB-related morbidity and mortality in pregnant women and newborns. The framework focuses on early diagnosis, treatment initiation, TB awareness and healthcare system strengthening through integrated screening during antenatal care (ANC) sessions. The bidirectional screening from both programmes enhances case finding among pregnant women, contributing to optimal maternal and perinatal outcomes. In addition, as part of the Collaborative Framework, the updated Health Management Information System (HMIS) portal of the MoHFW has incorporated the list of indicators recording screening of pregnant women for TB symptoms during ANC visits, OPD referrals, number of presumptive TB identified and sent for TB testing, and number of presumptive TB patients diagnosed with TB either by microscopy or by molecular tests (Figure 7.4).

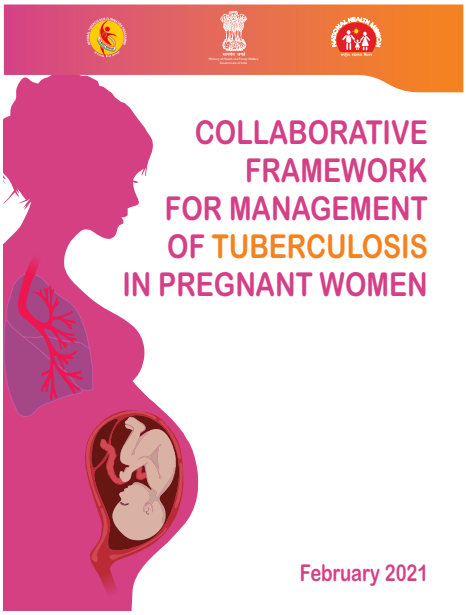


Figure 7.4: Collaborative framework for managing TB in pregnant women

7.6 TB and Alcohol-Use Disorder

Background

Alcohol consumption is a significant TB risk factor, as demonstrated by various studies. Daily intake exceeding 40 gm or 50 ml elevates the risk of TBI, latent TB conversion and TB recurrence. The prevalence of alcohol use in TB patients ranges from 20.3% to 31.5%, with studies attributing to the increased risk of the association between alcohol-use disorder and impaired immunity. Under the NTEP, Ni-kshay captures information on alcohol use by people affected with TB. Services such as counseling, linkages to de-addiction centres, and social support systems are essential to address this.

Progress

Under the NTEP, Ni-kshay captures information on alcohol use by TB patients. Data on alcohol use revealed that in 2023, about 18.8 lakh (74%) TB patients underwent alcohol use screening, out of whom 1.33 lakh (7.1%) TB patients were identified as alcohol users. Out of these, 44,574 (34%) TB patients were linked with de-addiction services.

7.7 TB and Tobacco

Tobacco use increases susceptibility to airborne diseases by impairing ciliary function, compromising macrophage response, and reducing CD4 (clusters of differentiation) count. Active smoking is linked to an elevated risk of TBI, progression from latent to active TB, recurrence and death. It also raises the risk for delayed culture conversion, cavitary disease, treatment response delays, and poor outcomes. Smoking cessation improves treatment success, drug resistance and mortality. The NTEP and National Tobacco Control Programme (NTCP) collaborate with a Joint Action Plan, initiating bidirectional screening. The NTCP implements TB tobacco cessation services nationwide, enhancing collaboration through regular reviews on TB Comorbidity Committee Meetings.

Progress

The NTEP records information on tobacco use and linkages to tobacco cessation centres by using Ni-kshay. In 2023, at the national level, 19.1 lakh (75%) TB patients were screened for tobacco usage, out of whom 2.13 lakh (11%) patients were identified as tobacco users; 67,304 (32%) patients were linked to tobacco cessation services.

7.8 TB and Diabetes

Diabetes escalates the likelihood of contracting TB disease by 2–3 times which is linked to an increased risk of MDR-TB. Individuals with both TB and diabetes face a higher probability of unfavourable TB treatment results, such as delayed microbiological conversion, death, and treatment failure, and have a fourfold risk of relapse after completing treatment. As per the Global TB Report 2023, in 2022, an estimated 0.37 million cases of TB were attributable to diabetes globally.

Progress

Since the introduction of the National Framework for Joint TB-Diabetes Collaborative Activities in 2017, efforts to address the combined challenges of TB and diabetes have been expanded. In 2023, overall 23.6 lakh (92%) TB patients, including those seeking care in the private sector, underwent DM screening. Of those screened, 1.8 lakh (7.7%) TB patients were diagnosed with DM. Out of the TB patients diagnosed with DM, 1.13 lakh (63%) commenced anti-diabetic treatment.

7.9 TB and HIV

TB and HIV are two major public health problems globally and particularly so in India. PLHIV have up to 20 times higher risk of developing active TB as compared to those without HIV infection. TB is the leading cause of death among PLHIV worldwide. These two diseases are among the leading causes of morbidity and mortality from infectious diseases (Table 7.2).

In 2022, India accounted for an estimated 48,000 (40,000–55,000) incident HIV-TB co-infected cases against the previous estimate of 54,000 (46,000–63,000) HIV-TB co-infected cases in 2021 (WHO Global TB report 2023).

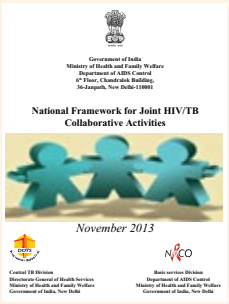
Table 7.2: Estimates of TB HIV burden in India (Global TB Report 2023)

Parameters	India	Global
HIV positive TB incidence	48,000 (40,000–55,000)	671,000 (600,000–746,000)
HIV positive TB mortality	11,000 (81,000–14,000)	167,000 (139,000–198,000)
TB patients with HIV positive	37,600	427,000
HIV-positive TB patients on ART	37,200 (99%)	365,000 (85%)

National Framework for Joint HIV/TB Collaborative Activities

A Joint effort in the form of HIV-TB Collaborative activity by the NACP and NTEP to address the dual burden of TB and HIV was initiated in 2001. The objectives of the collaboration were to have close coordination between NTEP and NACP at National, State and District levels and to decrease morbidity and mortality due to TB among persons living with HIV/AIDS (Figure 7.5). The framework adopted a four-pronged strategy:

- Preventive activities focusing on INH Preventive Therapy (IPT) and AIC measures;
- Early detection of TB/HIV with the use of molecular diagnostics (CBNAAT/Truenat);
- Prompt treatment of TB/HIV with FDCs, including test and treat policy for PLHIV for initiating ART and
- Management of TB/HIV cases in special situations.



- Establishment of coordination mechanisms
- Joint supervision, monitoring and review
- Joint training
- Standard recording and reporting

Three 'I' strategy to reduce the burden of TB in PLHIV and initiate early ART

a. Intensified case finding activities
b. Initiate TB Preventive Treatment
c. Ensure control of TB Infection in healthcare settings

Prevention
1. Isoniazid preventive treatment
2. Air-borne infection control
3. Awareness generation

Early detection of TB/HIV
1. 100% coverage of PITC in TB patients
2. PITC in presumptive TB cases
3. Rapid diagnostics for detection of TB and DR-TB in PLHIV
4. ICF activities at all HIV settings - ICTC, ART, LAC and TI settings

TB/HIV coordination to reduce mortality

Prompt treatment of TB/HIV
1. Early initiation of ART
2. Prompt initiation of TB treatment

Management of special TB/HIV cases
1. TB/HIV patients on PI-based ARV
2. TB/HIV in children
3. TB/HIV pregnant women
4. Drug-resistant TB/HIV

Figure 7.5: National framework for joint HIV/TB collaborative activities

Major policy decisions for strengthening the collaborative activity have been the expansion of TB diagnostics in HIV care settings, designating district TB officers as District AIDS Control Officers and including NACP state and district programme managers in joint reviews and supervisory visits. HIV-TB services are also provided as a referral service to the most HIV vulnerable populations. During the routine outreach services, the Peer Educator and other outreach team members screen High-Risk Groups (HRGs), bridge populations (Truckers and Migrants) and in prisons and other closed settings for TB symptoms and refer them to the nearest TB centre for early diagnosis and treatment.

Achievements

Key interventions being undertaken to strengthen HIV-TB collaborative activities (Figure 7.6):

I. Status of known HIV status among all notified TB cases

II. Intensified TB case finding (ICF)

a. ICF at ICTC: Under ICF, all ICTC clients are screened by ICTC counsellors for presence of TB symptoms at the time of pre- and post-test counseling. Clients who have symptoms of TB, irrespective of their HIV status, are referred to the nearest NTEP diagnostic facility. During 2023, overall 1,643,768 (7%) of general clients (except pregnant women) receiving pre-test counseling/information have been referred for TB testing from ICTC, and 53,050 (3%) were detected as TB cases, 50,764 (96%) have been put on treatment (Source: NACP).

b. ICF at ART centre: Under ICF activities at the ART centre, 97% PLHIV attending ART centre were screened for four TB symptoms at ART centres and subsequently 4% were identified as presumptive TB cases and (497,014) 4% presumptive TB cases were referred to NTEP for TB testing, among whom (438,078) 96% were tested for TB, among which 26,903 (6%) were diagnosed as TB patients and of this 14,430 (54%) were bacteriologically confirmed TB (Figure 7.7). The total number of TB-HIV co-infected cases for the year Jan–Dec 2023 are 34,476 and out of this 32,508 (94%) and 32,641 (95%) were started on ART and CPT respectively (Source: NACP).

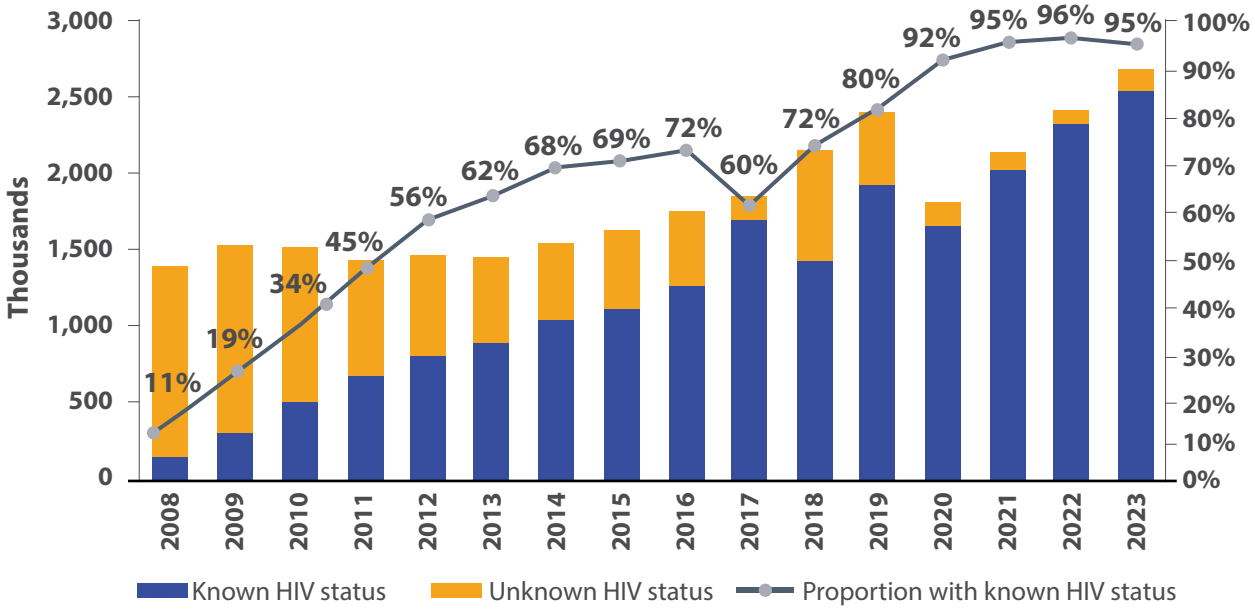


Figure 7.6: Trend of HIV screening among notified TB patients

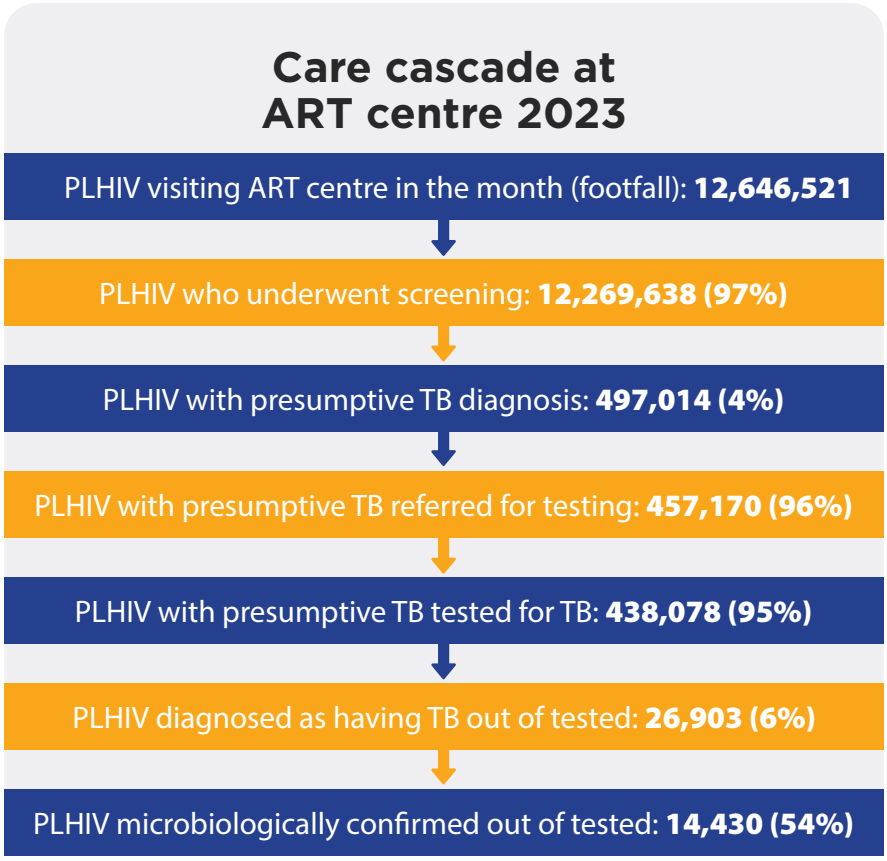


Figure 7.7: TB-HIV care cascade at ART centre (2023)

c. ICF at TI sites for core and bridge populations: NTEP and NACP have been focussing on the screening for TB for the core and the bridge populations. Under ICF activities at the TI sites for the Core and Bridge Populations, 93% and 81% were screened for TB and out of this 2% were diagnosed as TB and of which 93% and 92% were put on treatment, respectively (Source: NACP).

d. ICF for prison inmates and other closed settings: As an integral part of the TB-HIV collaborative activities, screening for TB has been undertaken as routine activity by NACP, wherein 1,128 (86%) prisons and 492 (63%) other closed settings are covered under the programme. During the routine TB case finding activity in the prisons and the closed settings, 79% and 73% of the beneficiaries have been screened for TB, of which those diagnosed as TB (1%), more than 97% have been put on treatment, respectively (Source: NACP).

III. TPT [isoniazid preventive therapy (IPT)]

Isoniazid (INH) is the most effective bactericidal drug. It protects against both progression of TBI to active disease (reactivation) as well as from reinfection when exposed to active TB cases (Table 7.3). IPT was initiated for 137,465 beneficiaries from Jan–Dec 2023. IPT is one of the 3-I strategies globally recommended for prevention of incident TB among HIV infected individuals (Source: NACP).

During 2023, overall 1,643,768 (7%) of general clients (except pregnant women) receiving pre-test counseling/information have been referred for TB testing from ICTC, and 53,050 (3%) were detected as TB cases, 50,764 (96%) have been put on treatment.

Table 7.3: TB care cascade at NACP 2023 (Jan–Dec 2023)

S. no.	Strategies	Indicators	No. of beneficiaries
I	**Clients attending ICTC centres**	ICTC attendees (exclusively pregnant women)	22,693,637
		Referred for TB testing	1,643,768
		Diagnosed with TB	53,050
		Put on treatment	50,764
II	**TB-HIV co-infected patients**	Enrolled in HIV/TB register	34,476
		Initiated on ART	32,508
		Initiated on CPT	32,641
III	**Co-infected attending ART centre**	PLHIV alive and on ART	1,663,612
		PLHIV attending ART centre (refer to the total no. of visit of PLHIV to the ART)	12,646,521
		PLHIV who underwent (4S) screening (refer to the total no. of screening of patients)	12,269,638
		PLHIV with presumptive TB	497,014
		PLHIV with presumptive TB referred for TB diagnosis test	457,170
		PLHIV with presumptive TB, tested for TB	438,078
		PLHIV diagnosed as having TB (Clinically + Microbiologically) total	26,903
		PLHIV diagnosed as having TB (Microbiologically confirmed)	14,430
		Cumulative number of PLHIV in active care (indicator 2.10)	1,669,491
		PLHIV newly initiated on IPT	1,374,465
		PLHIV completed IPT	203,258
IV	**Core population**	Target*	6,318,647
		HRG screened	5,905,681
		HRG referred for TB testing	195,499
		HRG tested for TB	86,282
		HRG diagnosed for TB	1,318
		HRG put on TB treatment	1,229
V	**Bridge population**	Target#	3,463,268
		HRG screened	2,816,044
		HRG referred for TB testing	47,818
		HRG tested for TB	15,649
		HRG diagnosed for TB	387
		HRG put on TB treatment	357

S. no.	Strategies	Indicators	No. of beneficiaries
VI	**Prison inmates**	Total number of prisons (Central and District)	1,319
		Total prisons covered under the programme	1,128
		Total number of prison inmates	1,731,664
		Total inmates screened for TB	1,371,291
		Total prison inmates who are presumptive TB	81,897
		Total prison inmates referred for TB testing	81,897
		Total prison inmates tested for TB	65,966
		Total prison inmates diagnosed as TB	919
		Total prison inmates put on TB treatment	892
VII	**Other closed settings**	Total number of closed settings including juvenile homes	78
		Total number covered under the programme	492
		Total number inmates in other dosed settings including juvenile homes	53,935
		Total number screened for TB	39,601
		Total number identified as presumptive TB	2,884
		Total number referred for TB testing	2,884
		Total number tested for TB	2,719
		Total number diagnosed as TB	34
		Total number put on TB treatment	34

Priorities for 2024

The focus of the TB-HIV collaborative activities for the year 2024 are cascade monitoring of the TB-HIV co-infected cases, TB screening among core and bridge populations and the inmates in prisons and other closed settings with the focus on improving treatment outcomes of the TB-HIV co-infected cases.

PATIENT SUPPORT SYSTEMS

8

Introduction

The NSP 2017–25 envisions a TB-free India with zero deaths, disease and poverty due to TB. There is a critical need for patient-centric service delivery approaches to address the social determinants like undernutrition, poverty and social stigma that allow TB to persist and thrive to achieve the goal of "TB Elimination by 2025". The NSP has articulated the need for Patient Support Systems to limit and eliminate out-of-pocket (OOP) expenditure during the treatment, support patient's nutritional needs through financial incentives and create linkages to other social welfare scheme programmes.

Key Components

The key components of patient support provided under the NTEP are:

- **DBT:** is a major initiative of Government of India whereby any government subsidy or benefit is transferred directly into the bank accounts of the beneficiary, while intermediary agencies or stakeholders only manage the process of payments.
- **National Call Centre (Ni-kshay Sampark):** Supports the patients through a dedicated call centre for addressing queries related to TB and providing tele-counseling on treatment.

DBT is the initiative of the Government of India, enabling targeted delivery of benefits to beneficiaries directly to their bank account(s), thus enhancing efficiency, effectiveness, transparency and accountability for each transaction.

Under the NTEP, the following DBT schemes are currently ongoing:

1. **NPY:** The Government of India launched the NPY scheme in April 2018, providing financial incentives via DBT to all notified TB patients to support their nutritional requirements for the duration of their treatment.
2. **Transport support for TB patients in notified tribal/hilly/difficult areas:** Under the scheme, a one-time financial incentive of INR 750 is provided to notified TB patients residing in tribal/hilly/difficult areas to access the health facilities.
3. **Treatment supporters honorarium (TSS):** Treatment supporters are provided with an honorarium for supporting notified TB patients and TPT patients who successfully complete their treatment.
4. **Notification and treatment outcome incentive for private sector providers including informants' incentive:** Private providers are also provided financial incentives for both notifying a TB patient as well as reporting the treatment outcome of a TB patient. In addition, the incentive to any person who referred a presumptive TB patient to a health facility in the public sector and a person diagnosed as a confirmed TB patient is eligible for an informant incentive.

Some details about these schemes are as explained in Table 8.1.

Table 8.1: DBT schemes, beneficiaries and benefit amount

DBT schemes	Beneficiaries	Benefit amount (in INR)
Ni-kshay Poshan Yojana	» Confirmed TB patients » DS-TB and DR-TB » Public + private sector patients	500 per month
Tribal/hilly/difficult area support scheme	Confirmed TB patients residing in tribal/ hilly/difficult blocks	750 (one time)
Treatment supporter honorarium	Treatment supporter	» 1,000 for DS-TB patients » 5,000 for DR-TB patients » 250 for TPT patients
Incentive for notification and outcomes	Private health facilities: » Practitioner/clinic, etc. (single) » Hospital/clinic/nursing home etc. (multi) » Laboratories chemists » Any person as informants	» 500 as informant or notification incentive » 500 for outcome declaration

Table 8.2: Status of DBT schemes (as per Ni-kshay)

S. No.	DBT schemes	No. of beneficiaries paid		Amount paid (in cores)	
		Apr 2018 to Dec 2023	Jan–Dec 2023	Apr 2018 to Dec 2023	Jan–Dec 2023
1.	Ni-kshay Poshan Yojana	1,00,37,873	18,75,510	2,781	440
2.	Tribal/hilly/difficult area support scheme	6,79,627	1,28,477	51	9.60
3.	Treatment supporter honorarium	3,11,579	56,291	159.4	12.4
4.	Incentives for private sector providers and informants	29,155	18,438	113.6	24.3

Key achievement under DBT payment under NTEP as under:

Under NPY from April 2018 to December 2023, **INR 2,781 crores** have been disbursed to **~1 crore beneficiaries.**

Under NPY since April 2018 **over ~1 crore beneficiaries bank/ post office account** were collected and seeded in Ni-kshay.

The programme has **digitized end-to-end products to all the DBT schemes** via Ni-kshay and Public Financial Management System (PFMS) interface.

The States of **Tamil Nadu** and **Maharashtra** have shifted from district level to State level DBT payment. It has **minimized the procedural delays in DBT payments.**

Implementation Arrangements

To enable direct transfer of DBT payments to the eligible beneficiaries, Ni-kshay has been integrated with PFMS. The DBT payments can be processed to the eligible beneficiaries via Ni-kshay (Table 8.2).

Novel Initiatives

I. Revision in NPY installment generation logics: Since 1st January 2024, the NTEP has revised the logic of generating financial incentives under NPY to increase the coverage and avoid the delays in processing multiple benefits to the beneficiaries. As per the revised logic of the benefit

generation process, the first benefit of INR 1,500 will be generated upon diagnosis of TB patients. Subsequently, second benefit of INR 1,500 will be generated at the end of 84 days from the date of treatment initiation. Any extension of treatment beyond the usual 168 days of treatment would create benefits at the rate of INR 500 per treatment month.

II. Extension of the TSS module for TPT beneficiaries: The TSS module was previously available only to the treatment supporter for TB patients in Ni-kshay. The Mission Steering Group of NHM in its 7th meeting has approved an additional incentive of INR 250 per TPT patient for the ASHA or community volunteers for facilitating TPT treatment completion. Since then, the TSS module has been further extended and is now available in Ni-kshay for beneficiaries as a treatment supporter for TPT patients.

III. Viksit Bharat Sankalp Yatra (VBSY):"Hamara Sankalp Viksit Bharat" is a nationwide campaign to raise awareness through outreach activities to achieve saturation of schemes of Government of India across the country covering all Gram Panchayat, Nagar Panchayat and Urban Local Bodies. To further substantiate the coverage of the NPY scheme's benefits to the beneficiaries, this campaign included activities of NTEP, in which collecting bank/post office accounts of beneficiaries under the NPY was included as one of the key activities to be conducted. Through this campaign, since 15 November 2023, overall 39,552 beneficiaries' bank accounts have been collected until 31st December 2023.

IV. ICMR-NIE study on DBT: The ICMR-National Institute of Epidemiology (NIE) in Chennai, India has conducted a retrospective cohort study on DBT for nutritional support (Figure 8.1). This study was conducted with programmatic data on patients who were notified with TB in nine randomly selected States from 2018 to 2022. It was concluded in the study that the coverage of NPY among patients with TB had increased and the time to receipt of benefit had halved in the past 5 years. Three-fourths of the patients received at least one NPY installment, more than half of whom had to wait over 3 months to receive the first installment (Figures 8.2 to 8.3).

The detailed findings of the study may be read in the link mentioned below: https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-024-17777-7.

Monitoring and Process Streamline

The NTEP has continued the monitoring and supervisory visits to the 15 State/UTs with the support of partner organizations (i.e., WHO, the Union, NTSU and STSU). The objective of the visits is to develop capacity, provide support and address DBT field queries (Figures 8.4 to 8.7).

Figure 8.1: ICMR-NIE DBT study dissemination workshop

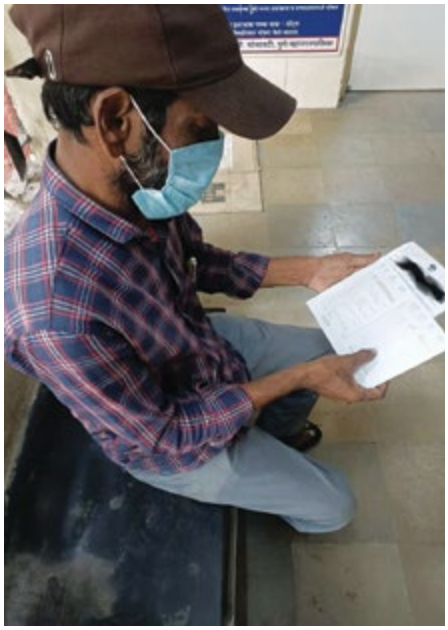


Figure 8.2: Passbook showing credit of NPY amount paid

Figure 8.3: ICMR-NIE DBT study dissemination workshop

Figure 8.4: NTEP staff capacity building during visit

Figure 8.5: Sensitization Meeting with all the districts NTEP Staff of South 24 Pargana on DBT Ni-kshay and PFMS

Figure 8.6: State visits

Figure 8.7: Person affected with TBI (PwTB)

National TB Call Centre – Ni-kshay SAMPARK

The National TB Call Centre – Ni-kshay SAMPARK (1800-11-6666) is managed by CTD and is operational all 7 days in a week, from 7 am to 11 pm (Figure 8.8). The operation of Ni-kshay SAMPARK commenced in May 2018 and is currently operating from two sites of Noida and Pune. It provides inbound and outbound call services in 14 languages for all States and UTs (Table 8.3 and Figure 8.9).

Role of the Ni-kshay SAMPARK

Following are the roles performed by Ni-kshay SAMPARK:

- Resolving queries related to TB for citizens, TB patients, public health providers and private health provide INR;
- Resolving queries of citizens/patients related to Hepatitis under National Viral Hepatitis Control Programme (NVHCP);
- Tele-counseling to persons affected with TB on treatment support provided under the programme (refer to Box 8.1);
- Redressal of TB grievances received at Ni-kshay SAMPARK;
- Conduct satisfaction Survey of persons affected with TB on NTEP services.

The National TB Call Centre is consistent in its efforts to reach every TB patient and his/her family and support NTEP in achieving the goal to ending TB.

Table 8.3: National TB call centre performance (Jan–Dec 2023)

Calls attended	Total calls (in lakhs)
Inbound calls (TB)	05.49
Outbound calls (TB)	29.55
Total calls (TB)	35.04

Figure 8.8: National TB Call Centre

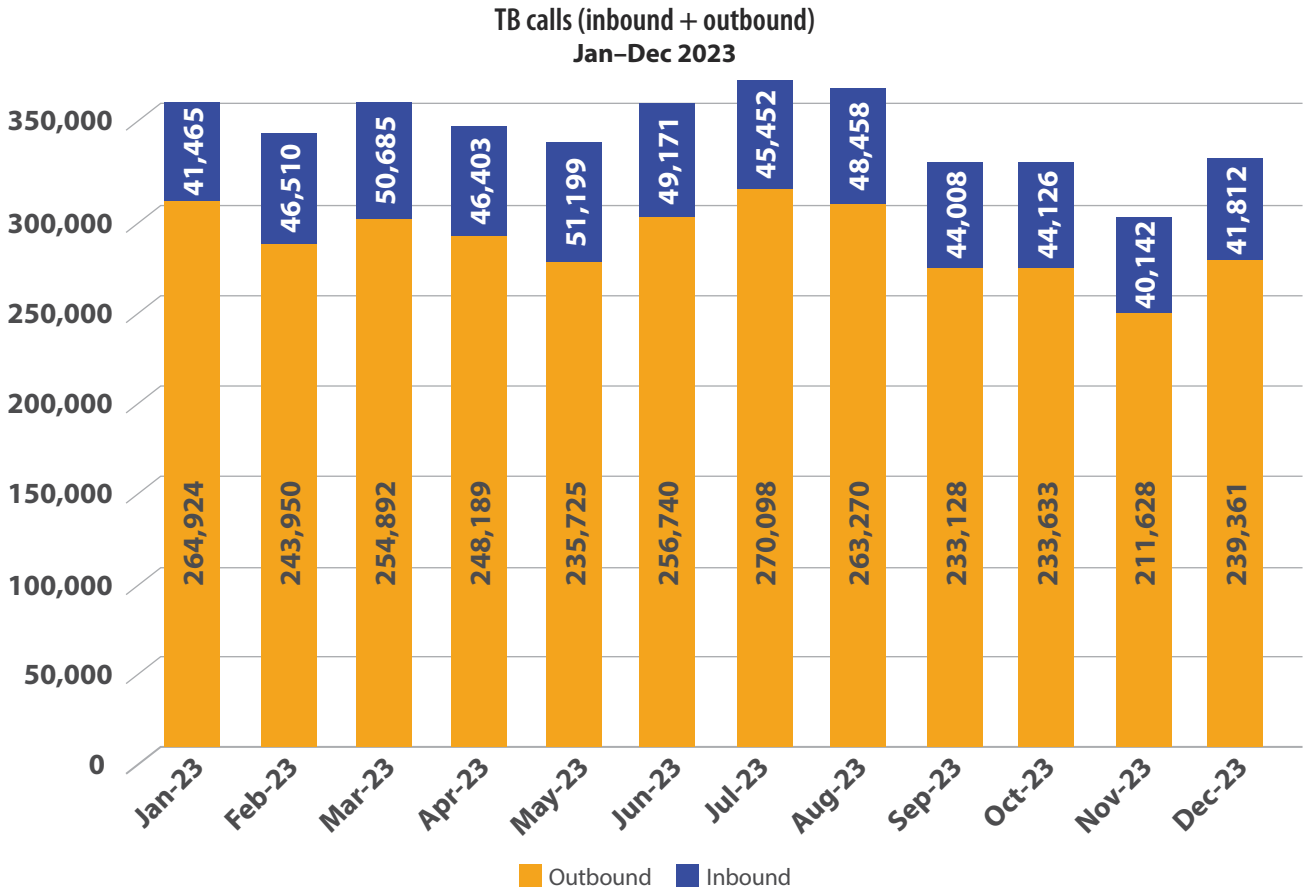


Figure 8.9: Count of TB calls (outbound and inbound) managed by the National TB Call Centre

Engaging Families for Supporting PwTB in India (Family Care Model)

While the Government of India ensures free diagnostics as well as management of TB across the country through the NTEP, the focus on providing care still rests with the health system. While retaining healthcare responsibilities by the system is important, the role of family members in caring for a TB patient is immense.

Family members spend the maximum amount of time with the patient and are universally acknowledged as the ideal caregivers and support to the patients. However, family members are often untapped when it comes to effectively involving them in caregiving, prevention and recovery at all levels of healthcare. With very limited information or training, families are often ill-equipped to provide support during the recovery process; sometimes resulting in higher rates of relapse and complications.

Considering the importance of engaging families in the care of TB patients, preventing complications, identifying early signs of complications, timely referrals, support in recovery, providing proper nutrition, following standard practices and overall improving health outcomes of all types of TB patients, the NTEP has launched an innovative intervention of engaging a responsible caregiver, named as Ni-kshay Saathi, for person affected with TB (PwTB). This intervention was launched by Hon'ble Prime Minister of India, Shri Narendra Modi on World TB Day 2023 at Varanasi. The salient features of this intervention are as under:

1. Empowering family members as the primary caregiver of PwTB to provide holistic and comprehensive care throughout the course of treatment for ensuring successful treatment outcomes and preventing the spread of TB in the community;
2. One responsible caregiver for every confirmed PwTB will be identified and enrolled in Ni-kshay by health staff;
3. Caregiver will accompany the PwTB in every visit to the health facility and during each visit, the identified caregiver will be trained by health staff (CHOs/Medical Officer (MO)/ Auxiliary Nurse and Midwife (ANM)/ASHA/ TB Health Visitor (TB HV)/Senior Treatment Supervisor (STS)) on different aspects of caregiving using interactive tools designed for caregiver (Figure 8.10);
4. Health staff of current treatment facility need to ensure that every person with TB and their family caregivers are followed-up on monthly basis for adherence monitoring and training of caregivers (Figure 8.11);

5. Guidelines have been developed along with a set of interactive counseling tools, training materials and job-aids and shared with all State/UTs under this initiative.

Following the launch of the intervention, the NTEP has conducted cascade training sessions for National, State and field staff at the district and sub-district levels. Additionally, they have provided accessible and informative materials such as videos, animation tools, and information brochures through various IT and mobile telephony platforms. These resources serve as ready reckoners and reference points, aiding in the seamless implementation of the National Guidelines on Engagement of Ni-kshay Saathi for supporting PwTB. A total of ~2.3 lakh Ni-kshay Saathis were identified and enrolled on Ni-Kshay and ~2 lakh beneficiaries have been linked to the Ni-kshay Saathis (as on 8th March 2024).

Figure 8.10: CHO at Ayushman Arogya Mandir, Chippon, Madhya Pradesh guides a PwTB and his Ni-Kshay Saathi on TB treatment regimen

Figure 8.11: Accessible TB services making every family's life easier and happier!

Box 8.1 Specialized Tele-TB consultation through Swasthya Ingit initiative for TB and presumptive TB patients in West Bengal – An innovative intervention

Background of Tele-TB Initiative

Tuberculosis is an airborne infectious disease, caused by the *M. tuberculosis* that primarily affects the lungs [pulmonary TB (PTB)], but can also affect other parts of the body (EPTB). As a part of its programme of 'Elimination of TB by 2025' and achieve "TB Mukto Bangla", Tele-medicine Services have been launched throughout the State on 3 October 2023 with an aim to reach the unreached and provide consultation by a Specialist to TB patients in the remotest areas of the State ranging from the Himalayas in the north to the riverine blocks of the Bay of Bengal in the south.

Process of Tele-TB Consultation

One panel of Pulmonologists and the medical officer (MO) who are experienced in TB treatment was formed. Virtual sensitization was done for all the DTOs and the specialists' doctors of the panel. For each district, sub-district level NTEP and frontline HCWs and CHOs were sensitized by concerned DTOs. At present 6,680 HWCs [Su-Swasthya Kendras (SSKs)], 780 PHCs and 456 UPHCs

are functioning as Spokes and 29 Specialist/Experienced MOs from across the State provide consultation from Hub-TB. A duly filled-up "Patient information" sheet for TB Tele-medicine consultation in Swasthya Ingit was uploaded, will have all details about TB patients/presumptive TB cases which were reviewed by the Doctors at Tele-TB Hub and then spoke to the patient through Video Conferencing facilitated by the CHO of HWCs and provided e-prescription (Figure 8.12), a print-out of which along with medicines were given to the patient.

Frequency of Tele-TB Consultation

At present, Tele-TB consultation in West Bengal is done every Tuesday and Thursday through Swasthya Ingit Portal from 1.00 pm to 3.00 pm. Since its launch, specialist consultation and advice were provided to 3,069 patients till 31 January 2024 through Swasthya Ingit platform.

Uniqueness of Tele-TB Consultation: Two-Tier Consultations

Level 1: Tele-TB consultation

- CHOs or staff nurses at all Telemedicine-enabled SSKs can connect for consultation during OPD hours with MOs at Primary Tier health facilities.

Level 2: Tele-TB consultation

- All CHOs and staff nurses of Telemedicine-enabled SSK's or health facilities can consult Specialists/Sr. MO/Experienced MO at Hub-TB.
- MOs at primary tier Level – 1 Hub can consult through Staff Nurse's Log-in ID using Audio-Video conference or Instant Chat mode (Table 8.4).

Table 8.4: Month-wise performance of Tele-TB consultation through Swasthya Ingit portal

S. No.	Month, year	Total no. of consultations
1.	October, 2023	509
2.	November, 2023	684
3.	December, 2023	836
4.	January, 2024	1,040
Total consultation in 4 months was 3,069		

Figure 8.12: Glimpses of Tele-TB consultations by CHOs and treatment through e-prescription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PROCUREMENT AND SUPPLY CHAIN MANAGEMENT

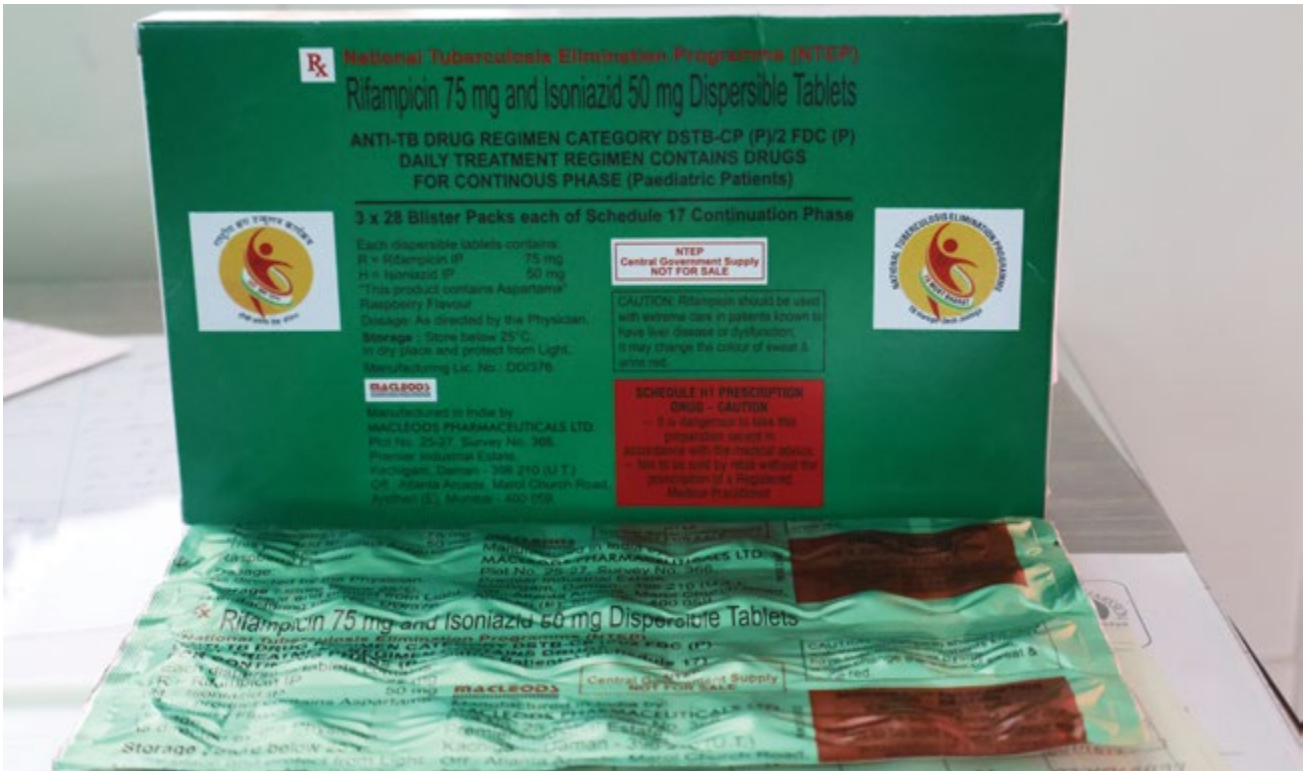
9

Uninterrupted supply of good quality assured anti-TB drugs, diagnostics and related commodities is one of the prime objectives and an essential component of DOTS (Directly Observed Therapy Short Course) strategy under NTEP.

Procurement of anti-TB drugs and diagnostics for national level is being done centrally through a well-defined and transparent procurement mechanism by using domestic funding and the Global Fund grant. The procurement of anti-TB drugs and diagnostics through domestic funding is done by the Central Procurement agency of MoHFW, viz., Central Medical Services Society (CMSS). The procurement through Global Fund grant is done by the Global Drug Facility (GDF) by their authorized procurement agent, i.e., Stitching IPLUS Solutions (i+ solutions).

The procurement and supply chain management unit at CTD functions under the supervision of an Additional DDG-TB and is supported by a team of consultants from the Government of India and WHO.

Many initiatives were taken during the year with respect to procurement and supply chain management.



Salient Activities

Procurement of TPT drugs	Procurement of Cy-TB skin test for the detection of latent TB	Procurement of Anti-TB drugs	Procurement of NAAT consumables	Updation of SOPs	Hiring of call centre agency for National TB Call Centre

1. **Procurement of TPT drugs:** Prevention of TB by TPT is an important component of India's NSP (2017–25) for ending TB by 2025. Accordingly, procurement of 3-month regimen of weekly Isoniazid and Rifapentine (3HP) along with loose drugs Rifapentine (150 mg) and Isoniazid (100 mg and 300 mg) for TPT have been completed through CMSS. Supplies have been started and are being issued to the respective states.
2. **Procurement of Cy-TB skin test for the detection of latent TB:** Cy-TB is a third-generation skin-based test for the detection of latent TB. Cy-TB addresses the problem of false positives in BCG-vaccinated patients when Tuberculin Skin Test is used in them. As per recommendation of NTEG for TPT, procurement of about 52.17 lakh doses of Cy-TB skin test has been completed through CMSS and supply is expected from second quarter of 2024 (2Q-2024) onwards.
3. **Procurement of Anti-TB drugs:** Procurement of anti-TB drugs (DS-TB and DR-TB) for the year 2024–25 is being done through CMSS and GDF. The Programme Division is also ensuring that supply orders of anti-TB drugs are being delivered as per schedule of requirement (SOR) to the consignees.
4. **Procurement of NAAT consumables:** In order to ensure adequate quantity of NAAT

consumables, about 70 lakhs of NAAT consumables (Truenat MTB Chips/CBNAAT Cartridges) have been procured by the programme in the year 2023–24.

5. **Updation of SOPs:** The SOPs for Supply Chain Management of health products and diagnostics under NTEP has been updated in accordance with the latest practices of Supply Chain Management. Based on the newly developed SOPs, Training of Trainers (ToT) for all the states has been completed. The aim of TOTs was to enhance the capacity of the participants who will further support to execute and cascade the training at the district and sub-levels.

6. **Call centre agency for National TB Call Centre:** Hiring of an agency for continuation of National TB Call Centre, an information and communication technology (ICT) enabled comprehensive surveillance system for TB patients under NTEP, has successfully been completed for the next 3 years.


टी.बी. मुक्त मध्यप्रदेश
गोपाल पर चर्चा"
जि. - मन्दसौर (म.प्र.)

10

ACSM AND **COMMUNITY** ENGAGEMENT

"The success with which India's fight against TB is progressing is also the result of public participation. Yes, I would also like to make a request to you. There is often a lack of awareness in TB patients, and they attempt to hide this disease due to an old thinking which is prevalent in society. Therefore, we have to pay equal attention to making these patients more aware."

Hon'ble PM, Narendra Modi,
at the One World TB Summit, 2023

On the momentous occasion of India hosting the One World TB Summit 2023 at Varanasi, Prime Minister Narendra Modi, crucially highlighted the need to encourage health-seeking behaviour across the Continuum of TB Care (CoC) in order to meet our collective vision of a TB-free India. This commitment is evidenced by the CTD's formalization of the Advocacy, Communications and Social Mobilization (ACSM) technical unit in 2021 that aims at building awareness about TB addressing the misconceptions and raising demand for TB services through enhanced decibel levels on TB. Through consistent and vigorous ACSM interventions, this year saw the proliferation and impact of a heightened *Jan Andolan* against TB.

As ACSM became a key contour for achieving programmatic impact under the NTEP, the buy-in from stakeholders across the NTEP network was evidenced by the increased politico-administrative commitment at different levels, intense multi-sectoral cooperation as well as the mobilization of communities. Aimed towards sustainable and scalable behaviour change that tackles the sociological component of TB, the ACSM interventions strove to supplement the NTEP via demand generation for TB services, particularly through spreading awareness of symptoms, promoting early testing and uptake of TB treatment and available government schemes. Appreciation of the importance of ACSM towards ending TB is indicated by the overwhelming participation and contribution in all the ACSM related exercises, be it engagement with #TBTuesdays sessions that witness an average of 850 participants, review and capacity building workshops that see a representation from almost all the States and uptake of strategic ACSM plans and participation across all levels (STOs, DTOs, PPM Coordinators, IEC Officers, partners, consultants, etc.).

At the CTD level, the ACSM component of the NTEP is an intrinsic part of all interventions while

an impact multiplier effect is constantly underway by strengthening the institutional systems for ACSM (capacity building platforms, National and Regional Workshops, planning and implementing templates, monitoring indicators), which are being adopted and replicated across other functions of the NTEP.

There were three broad areas which formed the contours of the continuous, high quality ACSM interventions infused into the programme, over 2023.

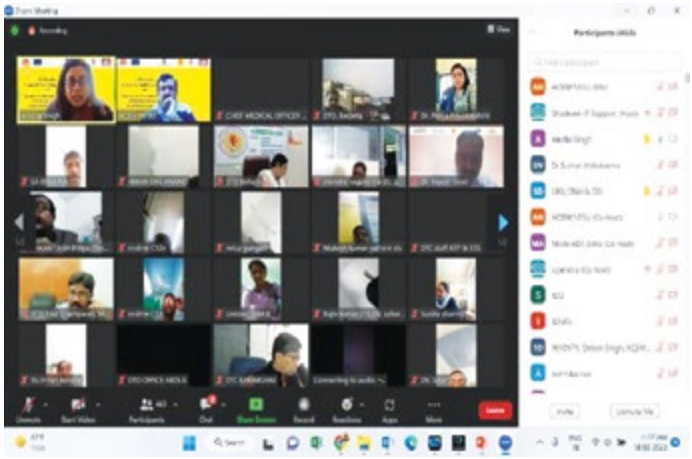
1. Capacity building

ACSM capacity building for NTEP officials took place across every level of governance. Virtual capacity building sessions were held that enabled officials to execute meaningful interventions to spread awareness about TB and the facilities of the TB care cascade in an engaging, approachable manner, comprehensible to every rung of Indian society. However, any capacity building exercise is incomplete if it does not incorporate thorough M&E processes to enable strategic planning and resource allocation through budgets. Thus, the second vital aspect of ACSM capacity building took the form of regional review roadshows – workshops to assess aforementioned progress and address the need gaps of existing strategies and budget utilization.

a) TB Tuesdays: Capacity Building on ACSM

TB Tuesday sessions continue to be very popular capacity building sessions. These virtual capacity-building sessions called "TB Tuesday" (held on 4th Tuesday of every month) build the capacity of the state and district teams, in a sustained manner, on a range of subjects related to ACSM. Under the series, every month a new theme was shortlisted and sessions were conducted by ACSM team members as well as external experts on various ACSM topics. #TBTuesdays are a platform to leverage the expertise of CTD directors who are active participants and leaders in these sessions, as well as draw on the versatile strengths of various development partners, including the WHO consultant network. This platform provided an opportunity for cross-learning as the states/districts were also invited to share their interventions. Nine sessions under TB Tuesday series were conducted during this past year – spanning topics covering models of community engagement, engagement with Panchayati Raj Institution (PRI), effective storytelling, media and social media engagement, editorial media engagement, toolkit for engaging elected leaders, importance of Ni-kshay Diwas, amplifying important events such as World TB Day, etc. These sessions were widely popular and receive huge participation each time, with an average of 850 participants (STOs, DTOs, IEC officers, PPMs, WHO consultants) per session.

The CTD receives continuous request for customized sessions for specific states. ***This platform has now begun to be used by the programme officers for capacity building on many non-ACSM interventions as well, that need to reach the states and districts – family care model, PRI engagement. Inspired by this TB Wednesday has been initiated by CTD to reach out to the laboratory and diagnostic teams.***



b) Regional Review Roadshows: Capacity Building through Strategic Planning, Reporting and Review of ACSM Targets

In December 2022, the first-ever unique National Workshop on ACSM was organized for the NTEP teams, in collaboration with the CTD. Over 100 participants from across India, and nearly 30 external speakers participated in this learning exercise that drew on social behaviour change communication insights, and adapted it to the context of TB-related ACSM interventions. Taking this exercise further, the focus this year was to help states and districts develop the strategic muscle for planning, budgeting, executing and ACSM interventions which are mapped to programmatic indicators, as that was observed as a need gap.

A strategic planning template was developed through in-person Regional Review Roadshows (RRR), in-depth engagement with the State and district teams was done to arrive at the ACSM plans for 2023–24. The workshops also aimed at helping states also arrive at PIP budgets based on these plans. These three "Advocacy, Communications, and Social Mobilization – Regional Review Roadshows (ACSM-RRR)" were organized in Jaipur, New Delhi and Kolkata for all five regions of India by early August 2023. These workshops received an enthusiastic response from all stakeholders and attended by NTEP officials, across central, state and district-level programmes, development partners and public health experts. Over a period of 3 months, these road reviews witnessed participation from 31 States and UTs, 12 STOs, 19 ACSM/IEC officers, 17 resource persons and 10 partner organizations. Each state team was assigned resource persons from the NTEP partner network like GHS, KHPT, REACH and Piramal Swasthya – and WHO, to help the states in reviewing their progress, identifying the gap areas, setting and utilizing budgets, and streamlining the areas of strength.

The state teams along with the facilitators planned the ACSM interventions till March 2024. The states further shared these plans with their respective districts and helped them prepare their district plans accordingly. The following PIP process witnessed a reflection of this planning in the form of budget planning basis robust ACSM plans. A follow-up intervention was designed with the express purpose of visiting the commitments made during RRR, assess gaps, identify solutions to address these gaps and discuss the proposed periodic review process.

Addressed by Key Dignitaries – DDG TB, WHO NPO, Jt Director Public Health (CTD)

2. Advocacy at the highest levels

India's hosting of the One World TB Summit in Varanasi, TB as an agenda point during the G20 Summit as well top leadership engagements with heads of countries demonstrated the strength of India's "Jan Andolan" against TB at significant national and international platforms. Interventions underscoring the importance of defeating TB through active citizenship and participatory action highlighted the significance of advocating for global co-operation on fighting TB, while demonstrating India's leadership from the front in making it a people's movement.

a) One World TB Summit

On 24 March 2023, One World TB Summit was organized at Varanasi in Uttar Pradesh by the CTD. It was addressed by the Hon'ble Prime Minister, in the presence of Hon'ble HFM, Governor of Uttar Pradesh, CM Uttar Pradesh, Deputy CM Uttar Pradesh, ED - STOP TB Partnership. The One World TB Summit was organized to observe World TB Day at Varanasi not just showcased India's groundbreaking and innovative efforts to combat TB to the world, it galvanized efforts, collaborations and innovations across all stakeholders in the TB space at every domestic level in India. This increased momentum was clearly reflected in the ACSM activities and interventions staged and supported on this momentous occasion.

The ACSM branding of this event as One World TB Summit focused on the 'India for the World' narrative. Five key TB initiatives - Annual TB Report – 2023, Training module for EPTB, Family-centric care Module, TB Mukt Panchayat initiative, Pan-India rollout of Shorter TPT was also launched by the Hon'ble Prime Minister. Progress film documenting the success of the TB Programme over the last 9 years was showcased. This was an international Summit with ministerial representation and high-level delegation from across the globe. The Summit saw participation from close to 1,200 delegates across STCs, CHOs, TB Champions, Partner Organizations, etc. The Summit was followed by field visits by the international delegation to the HWCs. The visit was aimed at developing cross-learnings, understanding the new initiatives by the Government of India like TB free Panchayat, Active Case Findings, Specimen transport system, interact with TB affected families and how does community tackle stigma, understand the implementation of PMTBMBA and Ni-kshay as real-time portal for monitoring.

The event became the marquee event which helped in gaining the Prime Minister's confidence in the programme and he continues to remain the chief advocate – as is demonstrated in his inclusion of TB in his international visits as well as his other national addresses. TB and the efforts being made in India were also covered in his monthly "Mann Ki Baat" series.

b) G20 Summit

The 18th G20 Summit was successfully conducted at Bharat Mandapam in New Delhi during 9–10 September 2023. It was a culmination of all the G20 processes and meetings held throughout the year among ministers, senior officials and civil societies. The G20 Leaders' Declaration was adopted at the G20 New Delhi Summit, stating their commitment towards the priorities discussed and agreed upon, during the respective ministerial and working group meetings.

With the summit's focus on digital health, India's advancements in TB surveillance and notifications through the Ni-kshay portal were generated with much interest. The ACSM-NTSU developed communication assets to be profiled during the G20 meetings. Progress films, progress brochures, Ni-kshay portal film that was launched at the G20 Health Working group meeting in Goa, testimonials

for the Ni-kshay Mitra Programme are a part of the basket of assets created for the national and international audience at G20 and for use by high-level delegations attending international events.

c) India International Trade Fair (IITF) 2023

The 42nd edition of IITF, an annual magnum opus of India Trade Promotion Organisation (ITPO) was held from 14 to 27 November 2023 at Pragati Maidan, New Delhi. The trade fair showcases much diversity in its exhibits – and engages people on multiple levels – business, social, cultural and educational. This wide spectrum, thus attracts a heavy footfall from the general public, with the government using this platform to spread awareness about its various public welfare programmes and policies. This opportunity for mass dissemination was optimized by the NTEP as well – with a CTD anchored stall that used a plethora of cultural activities to engage the passing public.

While information pamphlets and brochures prepared for various ACSM activities were prominently displayed at the stall, daily performances by a theatre group performing a CTD approved script emphasizing the importance and ease of treating TB was a notable crowd puller. In addition to busting myths about TB, the play also sought to challenge emotive barriers that deter health seeking behaviour – apathy, fatalism, fear, etc.

Furthermore, TB Champions were there to engage with the passers-by and talk about their lived experience of TB. The stall was visited both by the DDG-CTD as well as Dr. Mansukh Mandaviya, Union Minister for Health and Family Welfare on different occasions, lending gravitas and value to the TB outreach and messaging.

Celebrity Engagement

The NTEP stall was also graced with the presence of Dr. Deepa Malik, who visited the Ayushman Bhav Health Pavilion on 22 November 2023. A Padma Shri, Khel Ratna Arjuna Awardee, India's First Woman Paralympic Medalist and President of the Paralympic Committee of India, Dr. (H.C.) Deepa Malik is also the national ambassador of the TB Mukt Bharat campaign and a Ni-kshay Mitra herself. She further exhorted the crowd to join the TB Jan Andolan by providing nutritional support to TB patients through the Ni-kshay Mitra initiative. Having sponsored 10 TB patients into their recovery journey of becoming TB survivors, she encouraged others to follow her act of solidarity: **"Every citizen should pledge to become Ni-kshay Mitra to at least one TB patient to accelerate our journey in becoming a TB free nation".**

d) Corporates, Public Sector Enterprise (CPSE) Roundtable and Exhibition, New Delhi

A Roundtable and Exhibition was organized by the Department of Public Enterprise to bring together CPSE and different Ministries to explore synergy for collaboration attracting CSR funds for the betterment of people availing government services. More than 70 Corporates and Public Sector Enterprises participated in the 2-day CPSE Roundtable and Exhibition. Such collaborations and inter-ministerial engagement form the bedrock of the participatory people's movement against TB, whereby the stakeholders are limited to affected patients or government health services alone. The inaugural address was given by Hon'ble Minister of State for Finance, Dr. Bhagwat Kishanrao Karad. Hon'ble Minister shared the narrative of good public health and laid stress on malnutrition and other health areas where the CPSE's can complement the Public Health Programme and thereby help build a healthier country. This emphasis on malnutrition was particularly relevant in the context of TB, as it is one of the leading factors that cause infection to progress to disease (Box 10.1).

ACSM support was needed to showcase the NTEP's display: "India's Achievements in the Fight Against Tuberculosis". Furthermore, a team comprising of TB Survivors/Champions and CTD officials presented various components and shared IEC materials on PMTBMBA, Private Sector Participation, Laboratory Infrastructure expansion, Using Digital Platforms like Ni-kshay, Decentralization of TB services, localizing the SDG, building TB-Free Gram Panchayat.

3. Strategic support through communication campaigns

Reinforcing the increased importance of ACSM interventions, TB communications were released on radio and television. The 30 day media campaign plan for Television and Radio for 6 states was released this year, with the launch commencing from 27 December 2023. Celebrities taking the TB pledge, creative videos to invite people to become Ni-kshay Mitras were recurrent focus areas of the TV and radio spots. This campaign

also touched upon and sought to transcend the behaviour change barriers that prevent health-seeking behaviour, such as hopelessness and fatalism; instead it emphasized the treatability of the disease and accessibility to healthcare services for TB patients and TB vulnerable communities. The plan was shared with State/district teams and relevant development partners for dissemination to comprehensively support TB eradication efforts in India at every level.

Adult BCG vaccine

Modelling studies undertaken by the NTEP along with WHO have shown that a drastic and steep decline in the incidence curve, can be achieved by two specific interventions, i.e., introducing and scaling up preventive services for TB: (i) TPT and (ii) Effective TB vaccine.

The safety profile of BCG is well established and recent evidence and experience from the countries following a revaccination policy has demonstrated the effectiveness of BCG vaccination for individuals of higher age groups. Sixteen countries recommend multiple BCG vaccinations in older children and adolescents. The vaccine was, and continues to be, promoted through a range of awareness raising IEC materials.

Community Engagement

Background

Under the NSP (2017–25), a community-led response for TB has been incorporated as one of the key strategies to reach the unreached and to support TB patients through their treatment and recovery phase. Community engagement is 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.

The NTEP is envisaging to engage community through the following strategies:

1. Establishing platforms for the community to regularly interact with policymakers and programme managers and share their concerns, feedback and inputs for the programme;
2. Promoting community participation in decision-making processes, planning and implementation of programme activities, service delivery and M&E;
3. Empowering TB survivors and affected populations to act as change agents and leaders of community movement against TB;
4. Partnering with community level organizations and leverage existing community platforms for enhancing the reach and effectiveness of TB services.

Various activities in line with these strategies have been conducted at national level as well as in State/UTs during 2023.

TB Forums – Institutional Platforms for Community Engagement

TB Forums at National, State and District levels provide an institutional platform to include community as an important stakeholder under the programme to improve the quality of TB services and making the services patient-centric. They have representation of people affected by TB, elected representatives, policymakers, CSOs/NGOs, and programme managers. Creation of community-led TB forums of people affected by TB at the sub-district and village levels, is also being facilitated.

TB Forums have the mandate to:

- advice on ensuring patient-centric delivery of services and making the programme more responsive to the needs of people, especially of TB affected communities;
- advice on formulation of policies and strategies for engaging communities and increasing community participation in NTEP and provide feedback on their implementation;
- discuss community's feedback on critical gaps in service delivery and propose solutions to strengthen the programme;
- discuss concerns of TB affected communities, including that on TB related stigma and discrimination and of patient support requirements, and advocate their solutions;
- identify and recognize: (1) best practices across India on community engagement and (2) the contribution made by community members, survivor networks and CSOs to the fight against TB.

The National TB Forum is being reconstituted after every 2 years with a civil society representative and ICMR representative as co-chairs. Along with TB affected community members, representation was ensured from line ministries such as the Ministry of Rural Development, Ministry of Panchayati Raj, Ministry of Social Justice and Empowerment, CSOs, academia, media, subject-matter experts, etc. The National TB Forum meeting was held on 5 December 2023 under the chairpersonship of Secretary (H). Key issues being faced by the communities were highlighted and all stakeholders agreed to contribute to achieve a TB Mukt Bharat by 2025.

State and district-level TB Forums are operational in all State/UTs. Besides, TB forums were formed at block and Gram Panchayat levels also. In 2023, 29 State TB forum meetings and 642 District TB forum meetings were held across the States witnessing a participation of more than 2,300 TB-affected community representatives. Out of 881 block-level TB forums established, 667 met in 2023, and out of 12,772 Gram Panchayat level TB forums and 11,373 forums held meetings in 2023 (Details in Annexure). States like Himachal Pradesh ensured representation and participation of community and other relevant stakeholders in the TB Forum meetings. Challenges in accessing care, patient requirements were raised and new initiatives like TB Mukt Gram Panchayat initiative were discussed with the community during these meetings.

The CTD carried out a review of the TB forum functioning through a rapid assessment of meetings held in 2023, and a qualitative assessment carried out by REACH. Need for strengthening the TB forum functioning in terms of participation of key stakeholders and setting meeting agenda on community-driven aspects were observed. Accordingly, with support from USAID and REACH, CTD prepared a Tool Kit on TB Forum for reference of TB Forum members and NTEP officials. The Tool Kit includes:

- Facilitators' Manual on TB Forum,
- Infographic note on the role of stakeholders,
- A companion film in which an idea TB forum meeting is demonstrated and
- Workbook on TB Forum for TB Forum members.

Engaging with TB Affected Communities

TB patients undergo not only clinical manifestations but also because of society's prejudice, and even self-discrimination. While there are existing strategies under NTEP such as workplace policies, support for transportation of patient/sample, involving private sector in service delivery, and advocacy and communication to increase awareness and mitigate stigma, it is very well established that affected communities could play a vital role in enhancing effectiveness of these strategies and bridge in gaps. Communities, especially those who had gone through the experience of fighting TB, have the unique advantage of being close to their peers, understanding the issues and field reality as well the ability to communicate and articulate their needs. Thus, community engagement as a strategy is critical for the country's aim of "Ending TB by 2025". The programme promotes community-based interventions for awareness creation and stigma reduction, screening and referral, treatment adherence support as a strategy.

Thus, understanding the essence of involving the affected communities, NTEP has developed a standardized training curriculum for empowering a TB survivor as TB Champion to serve as a bridge between the community and the programme.

NTEP also has developed a Self-Learning Course for TB Champions for self-motivated TB Survivors who would like to volunteer as TB Champions. Till 2023, more than 30,000 TB Champions were trained through these training mechanisms.

Key Community Engagement Activities in 2023 at National Level

- The National Workshop on Strengthening Community Action for a TB Mukt Bharat was held on 23–24 February 2023 in New Delhi. It was attended by more than 120 participants including State representatives, WHO consultants, partners, community representatives and other development partners. The objectives of the Workshop were:
  - To provide updated guidance for meaningful community engagement in decision-making, and identifying ways that communities can contribute to the TB response in-line with the TB Mukt Bharat movement;
  - To strengthen mechanisms and provide guidance for impactful engagement of different stakeholders for community engagement (e.g., community structures, TB forums and others);
  - To update the NTEP about the ground-level challenges and interventions undertaken by community members to support people with and affected by TB.

As a result of collective discussions, brainstorming and feedback, the workshop brought forth several recommendations to improve the involvement of communities in TB elimination. The importance of partner involvement was also highlighted.

- The National Consultation on Identification, Capacity Building and Engagement of TB Champions (Identify, Empower and Engage to Eliminate TB) was held on 22–23 August 2023 in New Delhi. The objective of the National Consultation on Identification, Capacity Building, and Engagement of TB Champions under NTEP was to take technical inputs from the states, take learnings from the vast implementation experiences of the participants, and to make these documents user-friendly and realistic.

The Consultation concluded with the view that the involvement of the TB-affected community is much needed in TB response and the developed materials are crucial to be disseminated effectively among NTEP officials/staff and other stakeholders.

- A National Campaign to onboard Jan Arogya Samitis of then Ayushman Bharat HWCs for TB response at community level was held from 24th March to 13th April 2023, as part of the annual 21 days campaign initiative. A total of 89,973 AB-HWCs across 33 States reported on the campaign that a total of 58,986 orientation sessions on TB were conducted for Jan Arogya Samitis with participation from 4.37 lakh JAS members. Also, 81,424 special Gram Sabhas on TB were held involving 5.91 lakh participants; 91,689 VHSNC meetings on TB were also held during the campaign with a participation of 4.68 lakh VHSNC members. In addition, 85,384 TB survivors (34,650 females and 47,597 males) were identified and sensitized by the AB-HWCs on their potential role as TB Champions during the campaign.

Partner-supported projects and interventions

- **Unite to ACT (Amplifying Community Action)** project (2021–24) – a Global Fund supported project on engagement of TB affected communities in the TB response is being implemented by REACH from 2021. The project supports State/UTs in capacity building and engagement of TB survivors as TB champions and piloted community led TB Support Hubs at block level, Rapid Response Teams to address challenges of TB and COVID-19, development of communication resources by community and also supports TB survivor-led networks. In 2023, the project was instrumental in:
  - Establishing TB Support Hubs in 400 TBUs, providing person-centred care to over 307,446 people.
  - Forming Rapid Response Teams in 78 districts to address TB and COVID-19 challenges.
  - Training 880 TB Champions in communications skills, leading to the development and use of 19,222 products on TB.

- Conducting a Pan-India Stigma Assessment Survey, shedding light on various forms of stigma.
- Training for 44 TB survivors self-identifying as trans-men or trans-women as TB Champions in 6 states.

- **ALLIES (Accountability Leadership by Local communities for Inclusive, Enabling Services)** (2020–24) – a USAID supported project implemented by REACH is piloting a community-led TB response in 4 States namely, Chhattisgarh, Jharkhand, Odisha and Tamil Nadu. Under the project, Community Accountability Framework (CAF) for addressing community concerns at ground level, Achieving Excellence in TB care – a quality improvement initiative with community, etc., are being implemented. During 2023, the project supported the programme through:
  - TB Champions reaching out to over 13,214 people through the CAF, fostering a culture of accountability;
  - Piloting CAF variations, addressing vulnerabilities, Quality of Life, and extending coverage to non-ALLIES areas and private sectors;
  - Introducing a differentiated care model in Odisha and Tamil Nadu through TB champions to identify and address clinical and social vulnerabilities;
  - Engaging 573 elected representatives and sensitizing 30 industries under the employer-led model;
  - Hosted the TB Champion Conclave, releasing the Varanasi Statement for community mobilization.
- **Breaking the Barriers (2020–24):** a USAID-supported project implemented by Karnataka Health Promotion Trust is demonstrating behaviour change interventions among vulnerable populations in 4 States namely, Assam, Bihar, Karnataka and Telangana. Engaging with over 5,500 community structures and 1,173 key leaders, the initiative facilitated over 80 million verbal screenings, diagnosed 5,631 TB cases, and initiated treatment for 5,605 individuals so far.
- **NISHTHA:** a USAID-supported project implemented by Jhpiego supports community engagement at grassroots level through Ayushman Arogya Mandirs. It also supports "TB Champion Vani", an IVRS platform for supporting self-learning of TB survivors as TB champions in 7 languages.
- Other interventions by partner organizations:
  - REACH organized the first-ever Youth Conclave on TB, engaging 130 youth leaders, TB Champions and experts.
  - REACH also implemented projects with support obtained from different partners for building community-led interventions on TB and NCD services through 40 Nakshatra Centres in Chennai, TB care for Migrants, reducing pre-treatment loss to follow-up among persons with DRTB, etc.
  - KHPT supported NTEP in demonstrating Care and Support Groups (CSGs) wherein 347 CSGs provided a safe space for PwTB and caregivers to share experiences. These groups, involving 20,750 individuals, also identified, and trained 252 TB Champions and 297 Ni-Kshay Mitras, supporting 1,900 PwTB.

Box 10.1 Awareness campaign during Khelo India Winter Games 2024 in Ladakh

The STC Ladakh, under the guidance from Director, Health Services and with support from UT Administration, organized awareness and IEC campaign at "Khelo India Winter Games 2024" held in Leh, Ladakh from 2nd to 6th February 2024. The STC Team led by Dr. Motup Dorje, Mission Director, NHM Ladakh, stationed a mobile medical van at the venue of the Games. The van was decorated with posters with information on symptoms of TB, free-diagnostics services, NPY, and PMTBMBA, along with distribution of pamphlets with detailed information on the same. The campaign also offered sputum sample collection for testing from nearest TB Diagnostic Centre (TDC) in Leh. The NTEP Team interacted with participants from across the country, officials from Government of India and Indian Olympic Association and local people who gathered in huge numbers to support the Khelo India event. UT-NTEP team also showcased the efforts made by the UT administration towards achieving TB-Free Ladakh by 2025, as envisioned by Hon'ble Prime Minister of India.

SURVEILLANCE, SUPERVISION, MONITORING AND EVALUATION

11

Supervision is a systematic process for increasing efficiency of the health personnel by enhancing their knowledge and skills, including soft skills for efficiently managing their tasks. It is carried out in direct contact with the health personnel. It is a two-way communication between supervisors and those being supervised. The NTEP emphasizes its roles of supportive supervision and effective monitoring and evaluation of activities as learning exercise.

Monitoring is a continuous process of collecting and analysing information to compare on how well a project or a programme is performing against an expected result. Monitoring is a daily follow-up of activities to identify deviations and provide solutions/actions to bring back to correct course.

Progress in 2023

In 2023, India's NTEP witnessed significant advancements in supervision, monitoring and evaluation, reflecting the country's commitment to combating TB and achieving elimination targets. This chapter explores key developments and strategies implemented in 2023 to bolster these essential components and drive progress towards TB elimination in India.

Supervision remained a cornerstone of India's NTEP in 2023, with efforts focused on enhancing the quality and effectiveness of supervisory practices across all levels of the healthcare system. The year 2023 saw the implementation of structured supervision frameworks, with a particular emphasis on strengthening supervisory skills and fostering a culture of accountability among healthcare workers.

Innovative approaches such as tele-supervision-gained traction, leveraging technology to conduct remote supervision and provide timely guidance and support to frontline healthcare providers. This approach not only facilitated regular monitoring of TB services but also helped overcome logistical challenges and improve access to supervision in remote and underserved areas.

Furthermore, capacity building initiatives were intensified, with targeted training programmes aimed at equipping supervisors with the necessary tools and knowledge to conduct comprehensive assessments and address emerging challenges effectively. Continuous feedback mechanisms were established to promote learning and quality improvement, driving overall performance enhancement within the NTEP.

The year 2023 also witnessed significant strides in strengthening monitoring systems within India's NTEP, with a focus on enhancing data quality, timeliness and completeness. Collaborative efforts were made to refine data collection processes and streamline reporting mechanisms, ensuring the accurate capture and analysis of critical TB indicators. Moreover, efforts were made to strengthen surveillance systems for DR-TB, with the expansion of molecular diagnostics and the integration of surveillance data into "Ni-kshay" (in new features section in this chapter).

Rigorous evaluation studies were conducted to evaluate the performance of various strategies, including case detection and treatment initiatives, infection control measures and community engagement programmes (included in the Chapter 13 on "Research and Innovation"). Implementation

research gained prominence, with a particular focus on identifying innovative approaches to address persistent challenges such as diagnostic delays, treatment adherence and stigma associated with TB. These studies provided valuable insights into the contextual factors influencing TB control efforts in India, informing the development of evidence-based interventions tailored to local settings (as explained in Chapter 13 on "Research and Innovation").

As part of **Supervision, Monitoring and Evaluation,** the following activities were conducted by the programme:

1. **Daily monitoring of Key Performance** Indicators (KPIs) of the programme at the highest level from Government of India.

2. **Review of States/UTs by Government of India:** 1 in-person and 6 virtual reviews with all the States and UTs were conducted.

3. **Review of private sector engagement at national level:** A national review of private sector performance and STSUs was conducted in April 2023 in Kolkata, which concluded with regained momentum towards TB elimination goal of India.

4. **Review of ACSM and community engagement:** Three Regional Review Roadshows for ACSM were conducted at Jaipur (North zone), New Delhi (Central and West zones) and Kolkata (East and South zones) covering 31 States/UTs in June, July and August of 2023 respectively.

5. **Reviews of NRLs and IRLs as part of laboratory strengthening:** A national NRL coordination meeting was conducted in April 2023 followed by a National review of NRLs in October 2023. Regional-level NRL reviews were conducted at NTI Bengaluru, NITRD New Delhi and RMRC Bhubaneswar. The IRL reviews were conducted at IRL NDTBC, IRL Chennai, IRL Puducherry, IRL Cuttack, IRL Pune, and CDST laboratory, and JJ Hospital, Mumbai.

6. **Visits for fostering and boosting private sector performance:** Teams were formed at CTD and supportive supervisory visits to 16 states were completed in the third and fourth quarter of 2023 for strengthening the private sector engagement efforts and improving the case-finding. A total of 66 districts were covered during these visits.

7. **Field visits and reviews for PMTBMBA:** Four regional PMTBMBA review meetings for 4 different zones of India covering a total of 26 States/UTs were completed in Nov–Dec 2023. A national review of PMTBMBA performance for 2023 was conducted in February 2024. In addition, field visits to Madhya Pradesh and Tamil Nadu were done.

8. **Visits for VBSY:** Visits to monitor implementation of VBSY in the States of Odisha and Madhya Pradesh were done in Nov–Dec 2023 and 15 districts were visited.

9. **Miscellaneous trainings, reviews and visits for supportive supervision, health system strengthening and integration:**

   i. Capacity building of all STDCs in "Programmatic monitoring" at NTI, Bengaluru and NITRD, New Delhi;

   ii. Visit to aspirational blocks Zirniya in Madhya Pradesh and Hailakandi in Assam;

   iii. Visit for follow-up of JSSM to Mizoram;

   iv. Supervisory visit for the "One-Stop TB/DR-TB Diagnostic Solution" implementation model in Hisar, Haryana.

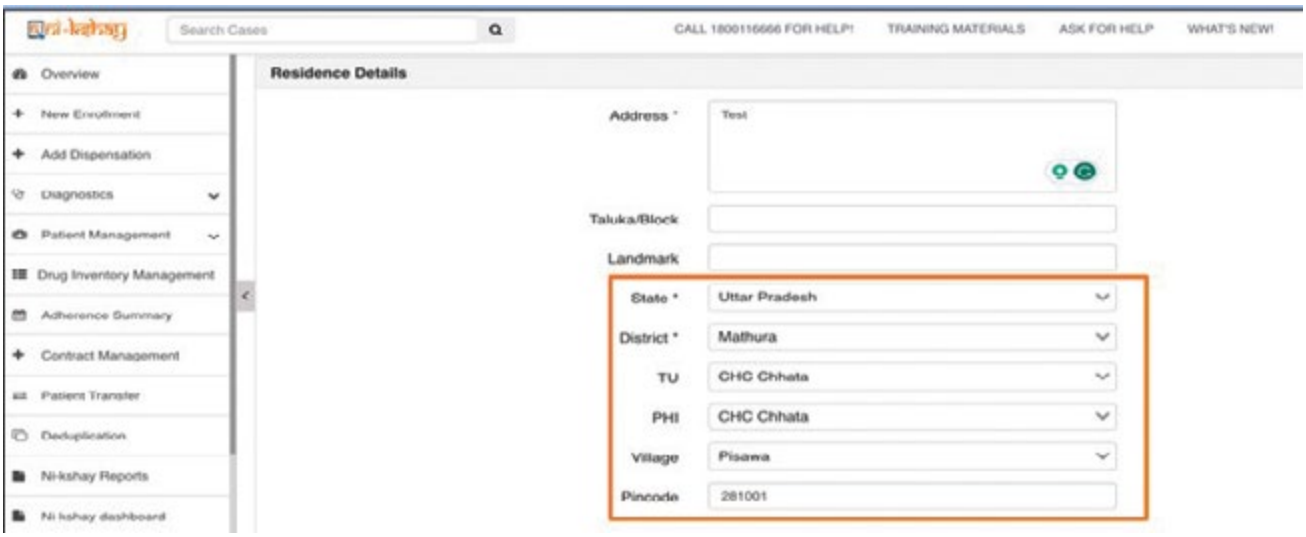
10. **Internal evaluation visits by States/UTs:** As part of internal evaluation at State level, 18 States/UTs conducted internal evaluation for around 56 districts in the year.

Ni-kshay: The most important part in the monitoring of the health services delivery is the collection and collation of patient-wise data, which under NTEP is done through "Ni-kshay". It is a **case-based web-based real-time patient management system** which offers the programme managers the ability to monitor patient's real-time through reports, registers and dashboards. It captures all the components of service delivery from curative to preventive services.

New features of Ni-kshay in 2023

1. In 2023, the Ni-kshay platform introduced several significant features to enhance its functionality. The diagnostics module was expanded to include new test types for TB disease as well as TBI.
2. Treatment-supporter DBT scheme for TPT beneficiaries, enabling the tagging of treatment supporters in the patient management module and the manual generation of benefits for validated treatment supporters upon successful TPT treatment completion.
3. To aid in monitoring, PMTBMBA – Consented Patients Dashboard and TPT Dashboard were released.
4. Ni-kshay integrated with the Ayushman Bharat Digital Mission, allowing the creation of Ayushman Bharat Health Account (ABHA) IDs using demographic details without requiring OTP authentication.
5. Family Caregiver workflows were released to facilitate the enrolment of family caregivers and the linking of patients to them, enhancing the system's ability to manage patient care comprehensively.
6. A pilot study across 10 sites was conducted to test the feasibility of integration of Ni-kshay directly with Truenat machines. The pilot study was successful opening up the scope of scaling up the integration for Truenat machines across the country.
7. To align TB patient classification in-line with WHO guidelines by allowing capture of types of cases and treatment for each patient by enhancing the treatment section of the patient management page.
8. The team has successfully completed the mapping of the NTEP hierarchy with the LGD mapping up to the Village level. This mapping will serve to improve the TB surveillance as well as utilized for the TB Mukt Panchayat Initiative.
9. Contract Management tool and dashboard – A new module has been added to map the various private sector contracts. The key components of the module include add contracts, task lists for NGOs to upload supporting evidence against achieved KPIs, field verification task list for district logins, invoice generation and supporting reports and dashboards for monitoring and effective implementation of the various contracts.

Village Mapping



Treatment-supported DBT Scheme for TPT Beneficiaries

The DBT Scheme for the treatment supporters of TPT beneficiaries was introduced in July 2023. Under this scheme, staff are provided with the option to tag a Treatment Supporter for TPT beneficiaries in the Staff/Treatment Supporter module of the Patient management page and manually generate benefits of INR 250 for validated treatment supporters tagged to beneficiaries who have successfully completed TPT. This scheme is available for all beneficiaries enrolled on or after 1 October 2022.

Family Caregiver Module

Recognizing the critical role of family caregivers in TB care, the Family Caregiver Module was made available in Ni-kshay in March 2023. This feature enables health staff to enrol a family caregiver (Ni-kshay SAATHI) and tag linked patients to them.

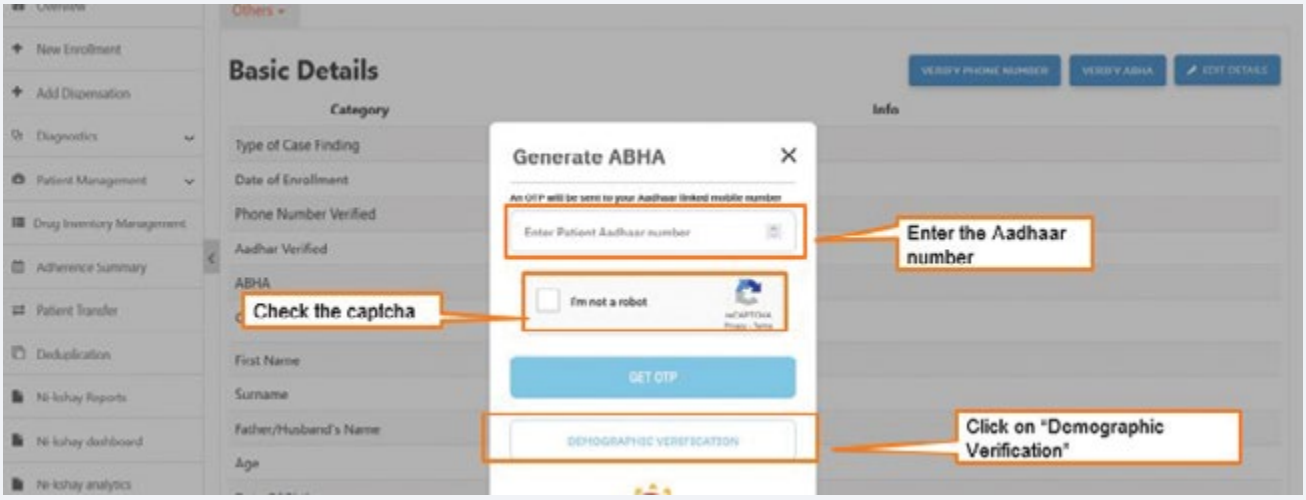
A few statistics of the module are as follows:

1. A total of **230,352 family caregivers** (Ni-kshay SAATHI) have been enrolled on Ni-kshay;
2. A total of **202,305 beneficiaries** are currently on treatment and are linked to Family Caregivers (Ni-kshay SAATHI). [Data as on 8 March 2024]

ABHA creating using Demographic Authentication Feature

The Demographic Authentication feature in Ni-kshay allows staff members to create an ABHA ID for patients using their Aadhaar card details, including Name, Date of Birth and Gender. This feature will complement the existing OTP verification method for generating ABHA IDs.

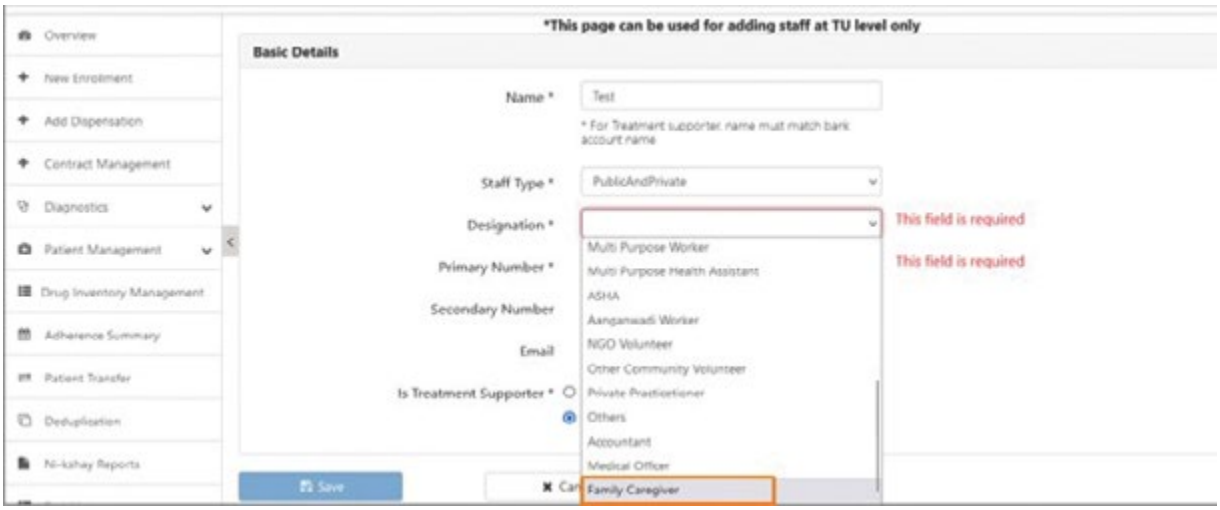
Both new and existing patients can utilize the Demographic Authentication feature to generate their ABHA IDs. A total of 548,684 ABHA IDs have been tagged to beneficiaries in Ni-kshay out of which 236,914 have been generated through Ni-kshay and the remaining 312,046 ABHA IDs that had been previously generated have been seeded to the Ni-kshay records; 317,095 ABHA IDs have been seeded/generated through the Demographic Authentication feature [Data as on 8 March 2024].

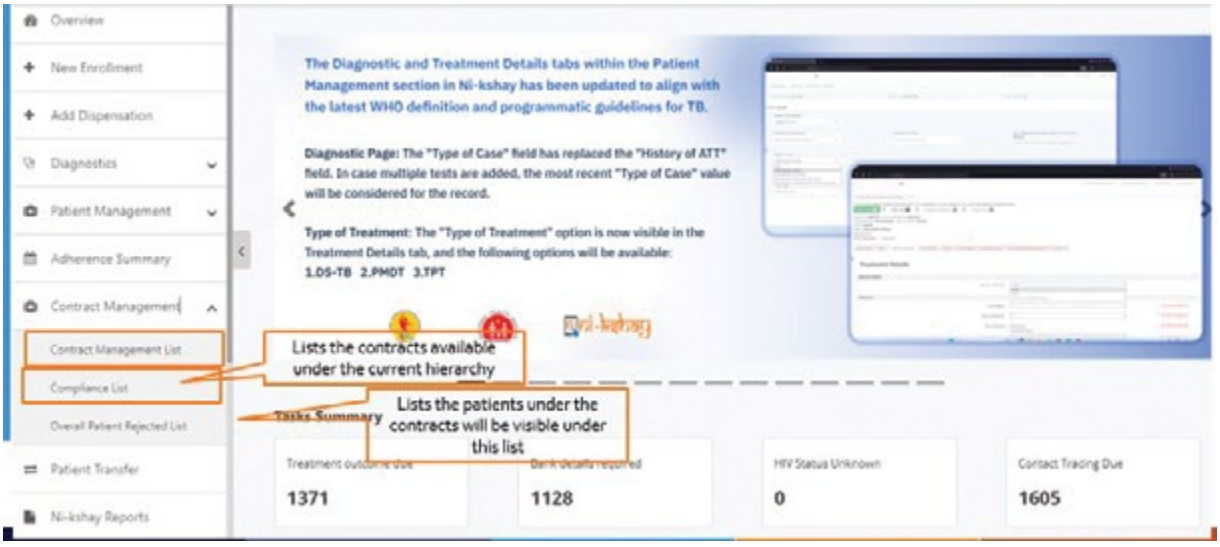


Contract Management Tool and Dashboard

The Contract Management module aims to alleviate NTEP and contracted agencies from the burdensome tasks of invoice generation, payment calculation and record validation performed by NTEP teams. Here's a breakdown of how each component of the module works:

1. **Add Contracts – Contract Profile:** This component captures all relevant details and contractual norms of the partnership agreements. For example, KPIs, rule engines, invoicing frequency, vendor details, payment clauses, etc. This information serves as the basis for payment pre-conditions.
2. **Electronic Documentation:** Once the profile is created, NGOs are linked to that contract and can submit required documents electronically, which can be easily verified and processed. NGO staff can use the mobile app to upload documentary evidence against patient records. This digitizes the submission process and ensures that the documentary evidence is easily accessible and securely stored in the cloud.
3. **Verification:** This is enabled through 3-step Process:
   - Step I: Internal Validation of services delivered in Ni-kshay.
   - Step II: Verification of submitted proof in context of contract conditions by NGO supervisor.
   - Step III: Verification of randomly selected patients for DTO level verification using task list.
4. **Entitlement/Invoice Generation:** When KPIs are achieved, the system initiates entitlement generation/Performa of invoices with detailed calculations and patient lists for further payment processing. This ensures that partners can be paid promptly upon meeting their performance goals. In addition to these core components, the Module also offers KPI tracking utilising task lists and reports.
5. **Data Analytics:** This feature provides administrators with visibility into the system's performance and user engagement. It can help in monitoring the effectiveness of partnerships and identifying areas for improvement.





Ni-kshay Reports

In the year 2023, we released reports, registers and data entry modules within the Ni-kshay ecosystem about various thematic areas such as Contacts and High-Risk Groups, PMTBMBA, Statement of Expenditure, Contract management tool and dashboard, Case Finding and Post-Treatment Follow Up. We could also accomplish multiple integrations of our reporting system with external government agencies like PRAYAS, NPHO, DBT Bharat, etc.

Enhancements relating to PMTBMBA

- Inclusion of TB patients actually supported at HWC/Home in the PMTBMBA Monitoring report.
- Feature to capture patient-wise HWC/Home-based service delivery under PMTBMBA has been made available in Ni-kshay Mitra Follow-up Confirmation form and on the PHI level logins.
- The Ni-kshay Mitra Support Follow-up Confirmation report has been enhanced wherein the details of monthly reporting of the patient-supported and HWC/Home-based service delivery (Poshan Kits distribution) is made available.
- New columns were added for 'TB patients provided support (Yes/No)' and the Ni-kshay Mitra ID (who have provided the support) in the TB Notification Register in Ni-kshay.

Statement of Expenditure (SoE) Form

In order to monitor the expenditure of funds, SoE forms are made available at the State level, CTD-3, India-all, Regional WHO Consultants, STDC, RTPMU, CTO, WHO Consultant, MD-NHM, PS-Health, and District level logins. These forms can be submitted by the users for each quarter and capture major KPIs such as Receipts, SPIP Approvals (as per RoP) and Expenditure. Reports for the SoE data submitted have also been made available under Ni-kshay reports.

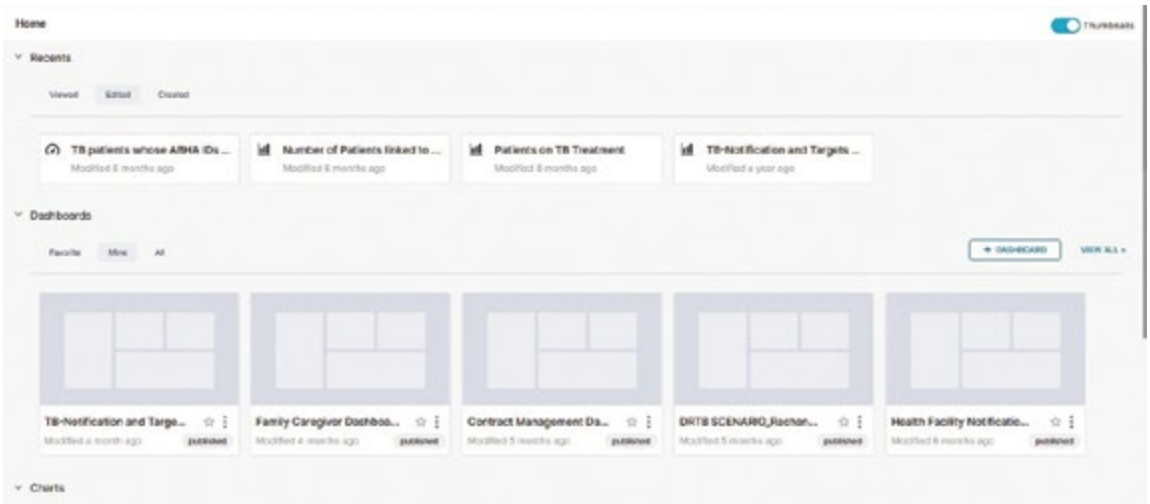
Ni-kshay Dashboards

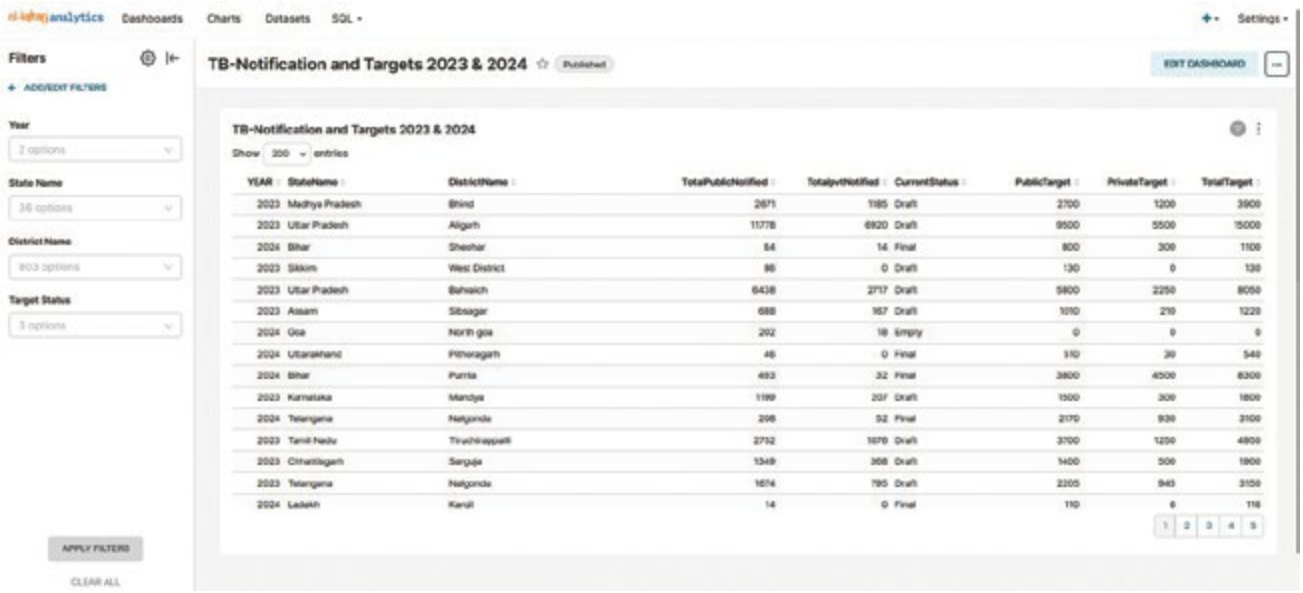
The Ni-kshay Dashboards have been conceptualized, designed and developed by the CTD as a tool to enable NTEP Programme Administrators at the Central, State, and District levels, as well as programme staff, to review and monitor various aspects of programme performance within their respective geographies. These dashboards simplify information and data by using interactive, easy-to-consume visualizations. They are now also being developed as guided narratives to prompt users to ask the right questions.

Ni-kshay Analytics

In 2023, Ni-kshay Analytics saw a significant push for wider adoption among M&E users, featuring numerous hands-on training sessions available both in-person and online. This effort led to a remarkable increase in user engagement, with the platform welcoming over 900 users by the end of the year—a substantial leap from the approximately 30 users registered in December 2022. During this period, we observed around 300 active users each week, contributing to the creation of a diverse range of dashboards. These dashboards covered various topics, including the Family Caregiver Model, Diagnostics and PMTBMBA, showcasing the dynamic use and versatility of the platform.

To enhance the user experience and expand the platform's capabilities, we implemented significant upgrades. These improvements included the introduction of new features such as cross filters and a more intuitive user interface (UX), aimed at facilitating a more efficient and user-friendly environment for our growing community.





Summary of the achievements and progress with respect to KPIs (Table 11.1): The country has notified **25.52 lakh TB patients** in 2023, which is 92.4% of the targeted 27.62 lakhs. This consists of **17.08 lakh TB notified by the public sector** (target achievement of 93.5%) and **8.44 lakh TB notified by the private sector** (target achievement of 90.1%).

Table 11.1: Summary of the achievements and progress with respect to KPIs

S. no.	Indicators	Annual target (Jan–Dec)	National achievement, n (%)
1	Achievement in TB case notification against target (Total)	2,761,682	2,552,257 (92.4%)
2	Achievement in TB case notification against target (Public)	1,827,755	1,707,878 (93.4%)
3	Achievement in TB case notification against target (Private)	933,927	844,379 (90.4%)
4	Proportion of notified TB patients offered Rifampicin sensitivity testing (%)	70% of total notification	58%
5	% of eligible beneficiaries paid all benefits under NPY	100%	45%

TB Index (National and State-wise) for Jan–Dec 2023: For continuous monitoring of the programmatic performance at all levels, a composite score is calculated from a selected list of KPIs from various thematic areas under NTEP. Appropriate weightage has been given to each of these indicators and individual States/UTs are scored for performance against every indicator. The individual indicators sum up to a total of 100. The TB index helps in objectively measuring the performance of the state and identifying gaps/ challenges for resolution that are necessary for promoting a healthy competition towards ending TB (Table 11.2 and Box 11.1).

Table 11.2: TB score of States/UTs

States/UTs	TB score
Andaman and Nicobar Islands	89.73
Andhra Pradesh	86.71
Arunachal Pradesh	76.81
Assam	81.82
Bihar	73.40
Chandigarh	83.08
Chhattisgarh	78.13
Dadra and Nagar Haveli and Daman and Diu	98.04
Delhi	82.00
Goa	81.38
Gujarat	91.91
Haryana	86.14
Himachal Pradesh	94.66
Jammu & Kashmir	87.82
Jharkhand	81.05
Karnataka	76.25
Kerala	86.95
Ladakh	94.82
Lakshadweep	81.50
Madhya Pradesh	83.19
Maharashtra	85.35
Manipur	71.61
Meghalaya	84.55
Mizoram	81.45
Nagaland	81.31
Odisha	93.45
Puducherry	91.56
Punjab	72.02
Rajasthan	84.35
Sikkim	92.02
Tamil Nadu	85.78
Telangana	83.75
Tripura	91.42
Uttar Pradesh	87.40
Uttarakhand	83.25
West Bengal	83.29

Box 11.1

Experience and implementation of the TB death surveillance and response system in Gujarat

The goal of reducing mortality due to TB requires concentrated efforts to ensure care and support to each PwTB. As part of the state-specific strategy and innovation, Gujarat introduced and implemented "TB Death Surveillance and Response System (TB-DSR)", thereby paving way for people-centric care and addressing the barriers from the system as well as community side.

Steps of implementation followed in Gujarat

1 Gujarat had already initiated the reporting of the TB deaths since a decade and its monitoring through the district and state review platforms.

2 The proposed plan was formulated in 2021 by conducting an operational research to understand the factors attributing to the TB deaths among PwTB as well as system capacity to manage.

3 Gujarat implemented the surveillance and response system after generating the evidence through TB death audit, establishing the flow of the reporting, and documenting the system and demand-side delays to build structure for the surveillance and response system. The following activities were employed in the State:

- **Initial Research on TB Death Audit:** The state, in collaboration with the Indian Institute of Public Health, Gandhinagar, Gujarat undertook an extensive study in districts with high mortality rates. The primary objectives included conducting verbal autopsies for TB-related deaths, deciphering the contributing factors influencing individuals with TB leading to fatalities, and establishing the reporting flow and structure at the block (TU) and district levels. The study also aimed at defining the formats to be adopted for state-wide implementation of the same.

Research Findings: The study assessed 74 TB deaths from the Ahmedabad [Amdavad Municipal Corporation (AMC)], Amreli, Anand, Bhavnagar, Dahod, Gandhinagar and Surat. A mixed-method cross-sectional study was conducted by acquiring information pertaining to TB death based on verbal autopsy and a detailed interview with family members on certain system-related factors.

Results: Overall 80% of deaths took place in 24 weeks after the onset of symptoms; 70% (48) deaths reported during the intensive phase of the anti-TB treatment for new and retreatment type of TB case. It was documented that 52 (68%) TB patients died at home. As per ICD-10, approximately 48 (64%) of patients had TB being the underlying cause of death.

- **Consultative approach to structure the TB-DSR:**
  - ✓ After gathering the research findings, a deliberate and consultative methodology was employed to delve into the responses from different districts. The objective was to comprehensively assess the capacity of the health system to develop and kick-start the TB-DSR initiative.
  - ✓ This consultative approach involved engaging with key stakeholders, analysing the nuances of district-level responses, and tailoring the TB-DSR strategy to align with the unique characteristics and requirements of each region within the State.
  - ✓ This process also aimed to identify and address the specific customizations required to ensure the effective and seamless implementation of TB-DSR (recording and reporting including the capacity building).

- **Implementation of TB-DSR System:** The state has developed electronic Death Audit Form (Google Form). Medical Officer-PHI was given the responsibility to fill the form and responses were being monitored by STDC team for feedback and analysis. Hierarchy of monitoring and feedback was established and the same gets reported on a periodic basis (Figure 11.1A and B).

Figure 11.1A and B: Monitoring and feedback (Medical Officer-PHI)

MULTISECTORAL ENGAGEMENT FOR ANNUAL TB REPORT 2024

12

Tuberculosis remains a significant global health challenge, affecting millions of lives every year. In response to this ongoing crisis, the NTEP has embraced a multisectoral engagement approach to address TB comprehensively. This strategy emphasizes collaboration across various sectors, including government ministries, corporations, public sector undertakings (PSUs) and CSOs. The Annual TB Report for 2024 showcases the progress, achievements and concerted efforts in the pursuit of a TB-free India by 2025.

Multisectoral Collaboration and Inter-Ministerial Response

The NTEP recognizes the importance of multisectoral collaboration in its fight against TB. This approach involves fostering partnerships and meaningful engagements with various entities such as government departments, autonomous bodies, institutions, corporations, PSUs and CSOs. The collaborative efforts aim to create an integrated response to achieve the national targets of ending TB by 2025.

The positive impact of these collaborative efforts is evident in the overwhelming responses from ministries and entities. The partnerships have created a conducive environment for convergent field actions, including awareness campaigns, integration of TB-related services and effective referral systems. The engagement with new ministries emphasizes the need for a unified approach to address TB, focusing on convergence, integration, capacity building and collective field actions.

Figure 12.1: Launch of key initiatives to eliminate TB in India

TB Mukt Panchayat Initiative: Empowering Communities for TB Elimination

The TB Mukt Panchayat Initiative, inaugurated by the Hon'ble PM in Varanasi on World TB Day, represents a collaborative venture with the Ministry of Panchayati Raj (MoPR). This joint effort signifies a unified and integrated response aimed at ensuring the attainment of TB-free status for every small geographical unit, specifically Panchayat (Figure 12.1). The concept of TB Mukt Panchayat has been promoted as a pivotal strategy to escalate initiatives toward the elimination of TB.

Objectives

- **Empowerment of PRIs:** The initiative seeks to empower PRIs to comprehend the extent and magnitude of problems associated with TB. It encourages them to take necessary actions to solve these issues, fostering healthy competition among Panchayats and appreciating their contributions.
- **Recognition and Appreciation:** Certificates for "TB Mukt Panchayat" will be issued annually with a one-year validity by the District Magistrate/District Collector/Deputy Commissioner on World TB Day (24 March). Additionally, a bronze statue of Mahatma Gandhi will be awarded to TB Mukt Gram Panchayats. The statue's colour signifies the duration of TB Mukt status: bronze for the first year, silver for two consecutive years and gold for three consecutive years.
- **Scientific Processes:** A systematic process, including key indicators, has been developed to attain the status of TB Mukt Panchayat, ensuring a structured and measurable approach towards achieving a TB-free environment.

Orientation and Training

- **Virtual Orientation Sessions:** Conducted in April 2023, these sessions engaged officials from State Panchayat Raj and Tuberculosis Departments, including officers and staff. The objective was to familiarize them with the TB Mukt Panchayat initiative, roles of Gram Pradhans, certification processes and overall strategies for accelerating TB response at the grassroots level.
- **Capacity Building:** Training modules and handbooks focusing on TB were developed to enhance the capacity of Gram Panchayat Members, ensuring effective implementation and understanding of the initiative.
- **Regional Workshops:** In September and October 2023, regional workshops were organized across five zones in the country, covering States and UTs. These workshops facilitated collaborative efforts to formulate State Action Plans, ensuring a uniform and coordinated approach towards TB Mukt Panchayat.

Regional Workshops Conducted

- **South Zone (1st and 2nd Sept., 2023):** Bengaluru (States: Karnataka, Andhra Pradesh, Telangana, Kerala, Tamil Nadu, Puducherry, Andaman and Nicobar Islands).
- **West Zone (14th and 15th Sept., 2023):** Pune (States: Maharashtra, Gujarat, Rajasthan, Goa and Dadra and Nagar Haveli).
- **North Zone (19th and 20th Sept., 2023):** Lucknow (States: Jammu and Kashmir, Himachal Pradesh, Punjab, Chandigarh, Haryana, Uttar Pradesh, Uttarakhand, Delhi, Ladakh).
- **North-East Zone (5th and 6th Oct., 2023):** Kolkata (States: West Bengal, Assam, Meghalaya, Mizoram, Manipur, Nagaland, Arunachal Pradesh, Sikkim and Tripura).
- **Central Zone (12th and 13th Oct., 2023):** Bhubaneswar (States: Madhya Pradesh, Odisha, Chhattisgarh, Jharkhand and Bihar).

Collaborations with other Ministries and Corporates

The NTEP has actively sought collaborations with various ministries and corporates to ensure an integrated response to TB. An MoU signed with the Ministry of Coal and CTD aims to engage Coal PSUs for collaborative action in addressing TB among coal mining workers (Figure 12.2). Similar collaborations with the Ministry of Ports Shipping and Waterways and the National Highways Authority of India focus on engaging major ports, PSUs and regional offices for TB awareness, prevention and control activities.

The engagements extend to the Ministry of Labour and Employment, where efforts are made to include TB-related services in existing health infrastructure. Meetings with the Ministry of AYUSH highlight the importance of collaborative actions, including the revival of TWGs and initiatives such as video modules on yoga for TB patients.

The Ministry of Housing and Urban Bodies has been approached for collective actions towards TB Mukt Palika [urban local bodies (ULBs)]. The objective of 'TB Mukt Palika' is to empower the ward councillors, ward members of Municipal Corporation/Municipality and representatives of other related ULBs to realize the extent and magnitude of the problems associated with TB, take necessary actions towards solving them and create healthy competition among ULBs to appreciate their contribution.

The ULBs are small local bodies that administer or govern a city or a town of a specified population. There are several types of ULBs such as Municipal Corporation/Municipality, Notified Area Committee, Town Area Committee, Special Purpose Agency, Township, Port Trust, Cantonment Board, etc.

Each ULB is divided into territorial constituencies, which are known as 'Wards'. Health is one of the

Figure 12.2: The MoU signed between Ministry of Coal and CTD

priority areas of ULBs. Keeping these in view, discussions are in progress to engage Ward Councillors, Ward Members and Mayors, etc., under the proposed intervention 'Wards' TB Free.

Indian Oil Corporation Limited (IOCL) has played a pivotal role in supporting the NTEP by generously providing 251 Truenat machines for conducting rapid molecular tests in critical states such as Uttar Pradesh, Chhattisgarh, Maharashtra and Uttarakhand, with a specific focus on aspirational and tribal districts. Between April and December 2023, the deployment of these machines facilitated a remarkable accomplishment, with a total of 54,067 tests conducted. This effort proved instrumental in identifying and diagnosing 9,001 TB cases, contributing significantly to the programme's mission of early detection and comprehensive management of TB in these regions.

Capacity Building Initiatives

Capacity building plays a crucial role in strengthening the national response against TB. The NTEP has conducted various training programmes to enhance the understanding of key stakeholders.

- **Training of Central Armed Police Forces (CAPFs), Department of Internal Security:** Conducted in February 2023, this programme aimed to orient and sensitize medical officers on various technical aspects of NTEP. The focus areas included TB diagnosis, programmatic management of DS-TB and DR-TB, TPT and notification procedures.
- **Training of Armed Force Medical Services (AFMS), Ministry of Defence:** Held in October 2023, this programme involved more than 100 Medical Officers from 71 Military Hospitals. The training covered technical aspects of NTEP, ensuring that medical professionals in the Armed Forces are well-equipped to contribute to national efforts in eliminating TB.
- **Training of Medical Officers AYUSH, Ministry of AYUSH:** Held from 18th to 21st December 2023, this orientation programme engaged more than 180 attendees, including AYUSH Medical Officers, Research Officers, Research Scholars and officials from institutions under the Ministry of AYUSH. The training aimed to enhance collaboration and cooperation in achieving the targets of End TB by 2025 (Figure 12.3).

Figure 12.3: Training of Medical Officer, Ministry of AYUSH

Reflections from States

The success of multisectoral engagements is reflected in the initiatives undertaken by states like Himachal Pradesh and Telangana.

- **Multisectoral Engagements in Himachal Pradesh:** The STC collaborates with key departments, engaging institutions and organizations for a collective and integrated response against TB. Initiatives such as wall paintings, engagement with Chemist Associations and involvement of the Central University showcase the diversity of efforts aimed at TB awareness, prevention and control (Figure 12.4).
- **Multistakeholder Engagement in Telangana:** Telangana has implemented various activities to engage key stakeholders, including industries in Sangareddy. Initiatives such as "Out Gate TB Sessions", "Lunch Break Sessions" and "Industry Led Monitoring (ILM)" are contributing to TB awareness and prevention in the region (Figure 12.5).

Figure 12.4: Multisectoral engagements in Himachal Pradesh

Figure 12.5: Multi-stakeholder engagement in Telangana

Corporate TB Pledge

The Corporate TB Pledge (CTP) provides the private sector with an opportunity to join the fight against TB (Figure 12.6). Over 400 organizations have been reached out to, with more than 340 signing the CTP. The initiative focuses on awareness generation, vulnerability reduction, integration of TB-related services, linkage of TB patients to NTEP, social protection for those affected by TB, TB Mukt Panchayat, TB-free workplaces, leveraging support through CSR and additional nutritional support for TB patients.

The CTP Secretariat has actively supported and improved capacities in seven focused states. The World TB Day Campaign, involving over 175 corporates, showcased the collective effort of 75 Corporates@75 Cities. The TB Free Workplace Initiative, launched in Jharkhand, encourages corporations to implement TB Free Workplace interventions. A major event held as part of the campaign was one by Apollo Tyres which witnessed the presence of Hon'ble Union Minister for Health and Family Welfare, Dr. Mansukh Mandaviya (Figure 12.7).

Figure 12.6: Corporate TB Summit organized in Telangana

Figure 12.7: Hon'ble Minister of Health at Event in March 2023

PSU Engagement and DR-TB Consortium

The CTP Secretariat focuses on engaging PSUs to support aspiration districts. Collaborations with CPSUs in Haryana, initiatives by Central Coal Fields Limited, Bharat Cooking Coal Limited and others highlight the active involvement of PSUs in the mission to eliminate TB.

The DR-TB Consortium, comprising over 15 commitments from corporates, plays a vital role in mainstreaming DR-TB activities in all corporate-supported projects. The consortium's efforts have identified 72 people with DR-TB through corporate-supported projects.

In conclusion, the Annual TB Report for 2024 demonstrates the success of multisectoral engagement in the fight against TB. Collaborative efforts, partnerships and initiatives at the national, state and corporate levels contribute to a comprehensive approach, bringing India closer to achieving the targets of End TB by 2025. The reflections from states and the commitment of various stakeholders underscore the collective determination to make India TB-free (Refer to Box 12.1 to 12.3).

Partnership and private sector engagement

Partnerships stand as the cornerstone in the collective effort towards TB elimination, playing a pivotal role in the annual accomplishments outlined in our report. Collaborative initiatives with CTD have been instrumental in identifying and fostering new relationships through comprehensive needs assessments. These partnerships have not only expanded the geographical reach of NTEP services but have also significantly enhanced NTEP's institutional capacity to engage with the TB care providers in the private sector. The concept of partnerships to strengthen engagement with private TB care providers for universal of quality-assured TB care is achieved through a contract management framework. This has yielded remarkable achievements, including streamlined processes and reduced turnaround times. The impact of these collaborations with partners extends beyond immediate project activities, as evidenced by the development of knowledge management products such as SOPs and reports, poised for dissemination and utilization by the NTEP. As we navigate the complex landscape of TB elimination, these partnerships stand as beacons of collective strength, facilitating focused action and contributing significantly to the progress outlined in this year's Annual Report.

The partners collaborating with the NTEP at the national level is listed in Table 12.1. There are many more partners who are working at the state and district level. The specific sections of this report cover the diverse thematic areas supported by these partners.

Private sector engagement

India has shown considerable progress in terms of providing standards of TB care in the last few years. Over the past few years, the NTEP has seen a significant increase in notification from the private sector. The NTEP achieved the highest ever number of TB notifications from the private sector (8.4 lakh) in 2023.

Table 12.1: Partners collaborating with the NTEP

S. no.	Name of the partners
1	Management Sciences for Health
2	REACH (Resource Group for Education and Advocacy for Community Health)
3	PATH
4	Global Health Strategies
5	William J Clinton Foundation
6	KHPT
7	Piramal Swasthya
8	World Health Partners
9	Jhpiego
10	TIFA (Tuberculosis Implementation Framework Agreement)
11	IQVIA
12	PHFI (Public Health Foundation of India)
13	SAMS (Strategic Alliance Management Service)
14	SAATHI
15	Wadhwani AI
16	IIPH Gandhinagar
17	FIND India
18	CETI (Collaborate to Eliminate Tuberculosis in India)
19	HLFFPT
20	SPYM
21	IPE Global
22	Doctors for You

National Technical Support Unit for Private Sector Engagement

The CTD has contracted the services of IQVIA to establish the NTSU, aimed at fortifying private sector involvement. The NTSU assumes the role of mentoring nine STUs across nine states in India. It provides strategic leadership, capacity building and oversight to these STUs.

In 2023, NTSU's pivotal activities encompassed boosting private sector engagement and addressing notification gaps. The following highlights the key endeavours undertaken by NTSU during this period:

- **Data-driven strategy for strengthening private provider engagement:** NTSU employs robust data analysis, utilizing the Health Facility Tracker, to monitor private healthcare facilities and TB notifications, thus enhancing private sector engagement and the quality of care.
- **National campaign for enhancing private sector engagement:** NTSU, under CTD's guidance, conducted over 100 district field missions across 13 states to stimulate private sector engagement and achieve the targeted notifications for 2023.
- **Addressing notification gaps and improving quality of care:** NTSU conducted a comprehensive analysis of country-level data, identifying and prioritizing 50 high-priority districts facing the highest private sector notification shortfall in August 2023. Insights were shared with states to guide efforts in improving notifications.
- **Enhancing interface agency performance:** Through Patient Provider Support Agency (PPSA) wise analysis, NTSU assessed their performance, offering insights on metrics like notifications, active providers and coverage of public health actions.

- **Creating knowledge products and technical guidelines:** NTSU supported the development of the "Operational Manual for Partnerships under NTEP", based on NTEP partnership guidance document.
- **Implementation of SOP for seamless treatment services:** NTSU supported CTD to identify challenges faced by TB patients in private sector during inter-state transfers from Uttar Pradesh to Chhatarpur in Madhya Pradesh. Despite the development and sharing of a SOP, challenges persisted, necessitating ongoing efforts to address treatment delays and DBT issues.

The HS4TB Project – Management Sciences for Health, India (MSH India)

The CTD partnered with MSH for implementing "The Health Systems for TB (HS4TB)" project. This has been instrumental in bolstering the TB elimination efforts across five states in India, namely Andhra Pradesh, Delhi, Gujarat, Odisha and Telangana. Particularly focused on enhancing private sector engagement in Contract Management, the project has made notable strides in optimizing procurement and contracting processes aligned with the NTEP needs.

In the realm of achievements in contracting processes, the HS4TB project has successfully identified new partnerships through meticulous need-assessments. Moreover, capacity-building initiatives have led to a significant reduction in TAT, ensuring more efficient contracting procedures. The development of knowledge management products, including SOPs and reports, has further enriched the NTEP's resources for seamless dissemination and utilization.

The year 2023 marked key accomplishments for HS4TB project, with a comprehensive competency assessment being conducted. A tailored training curriculum was developed, and in-person training sessions on contract management were successfully delivered to 200 participants. Needs assessment resulted in the inclusion of 200+ partnership options in the Program Implementation Plan (PIP) for 2024–26, proposing INR 101 crores for 2024–25.

The HS4TB's impact extends to the development of crucial tools in collaboration with STCs. Tools such as the Verification and Validation Tool for PPSA invoices, SOP for PPSA staff capacity building and the Performance Analysis and Review Tool (PART) have emerged as invaluable assets for focused action in disease management.

The tangible effects of HS4TB project on contracting in the states are evident in the improved contracting performance observed. Overall, the achievements of the HS4TB project underscore its commitment to fostering excellence in TB elimination strategies and strengthening the health systems across the targeted states in India.

Patient Provider Support Agency (PPSA)

A PPSA acts as an interface between NTEP and private healthcare system to provide end-to-end TB services to the patients, including mapping and landscaping of private providers, notification, linkage with free diagnostics and treatment services, counseling and adherence, comorbidity screening, UDST, follow-up, contact investigation, long-term follow-up). As per the RoP 2022–24, the PPSAs have been approved in 438 districts, out of which they are functional in 235 districts. The state-wise distribution of PPSA is as follows in Table 12.2 below.

Table 12.2: State-wise distribution of PPSA

States	PPSA approved	PPSA functional	Name of PPSA
Uttar Pradesh	36	36	M/S Hindustan Latex Family Planning Promotion Trust (HLFPPT), Doctors For You
Assam	24	24	Doctors For You
Andhra Pradesh	26	26	Bavya Health Services Pvt. LTD
Telangana	10	10	Bavya Health Services Pvt. LTD
Odisha	7	7	» HLFPPT: Khordha, Bhubaneswar MC, Cuttack, Ganjam » IMTS: Mayurbhanj, Sundargarh » WHP: Sambalpur
Chhattisgarh	6	6	HLFPPT
Goa	2	2	DISHA Foundation (PPSA has discontinued services from July 2023)
Meghalaya	2	2	Dong Valley Consultants
Mizoram	1	1	Youth for action
Jharkhand	24	17	TRY
Madhya Pradesh	52	29	Deepak Foundation and Divya Jyoti Development Society
Bihar	38	19	Doctors For You (11 districts), WHPs (8 districts)
Maharashtra	80	35	DISHA Foundation, HLFPPT, Alert India, Doctors for you, MJK (Maharashtra Jan Vikas Sansthaa), Gurukrupa Vikas Sanstha (GVS)
Gujarat	39	17	HLFPPT
Punjab	5	2	WHPs
Delhi	25	0	–
Tamil Nadu	23	0	–
West Bengal	23	0	Nil
Haryana	6	0	Under process
Uttarakhand	4	0	NA
Jammu and Kashmir	2	0	NA
Manipur	2	2	Eehul Foundation, Imphal
Puducherry (UT)	0	0	NA
India	438	235	–

Box 12.1

"TB-Free Sweet Shops", workplace campaign from Thane MC, Maharashtra

During the bustling Diwali festival of 2023, sweet shops in Thane, Maharashtra were swarming with customers, prompting the Thane Municipal Corporation to launch the "TB-Free Sweet Shop Mission" to safeguard consumer health. With customers unaware of the health status of shop employees, the Health Department took action, screened all employees for TB. A team of eight health workers utilized portable X-ray machines to conduct screenings and educate employees about the disease. After testing, shops found to be TB-free were awarded certificates. The intervention involved screening of 50 major sweet shops and over 1,000 customers using HHX-ray machines, leading to the identification of 30 presumptive cases and one confirmed TB diagnosis. The issuance of TB-Free Shop Certificates was overseen by the CTO Office, ensuring compliance with health standards and enhancing consumer confidence in the safety of sweet shop products during the festive season (Figure 12.8A and B).

A

B

Figure 12.8A and B: (A) A team of health workers and (B) Issuance of TB-Free Shop Certificates

Box 12.2 TB Mukt Panchayat Initiative and its innovation in **Maharashtra**

The objective of "TB Mukt Panchayat" is to empower the PRIs to realize the extent and magnitude of problems associated with TB, take necessary actions towards addressing these problems, create healthy competition among Panchayats to eliminate TB and to publicly appreciate their contributions. Panchayat Raj institute is a local government of villages that play a significant role in its development.

As of date in Maharashtra, there are 34 District Panchayats, 351 Block Panchayats and 27,156 Gram Panchayats. In Maharashtra, "TB Mukt Panchayat Initiative (TBMPI)" was launched by Hon'ble Health Minister on 15 August 2023 (Figure 12.9). Letters were issued by MD-NHM to CEOs regarding implementation of "TB Mukt Panchayat". Letter was also issued by MD-NHM to CEOs for conducting Gram Sabha in the month of August and discussions took place about TB Mukt Panchayat (Figures 12.10). Letter was issued by Principal Secretary Health to Principal Secretary Rural Development for joining hands to implement TB Mukt Panchayat Initiatives across Maharashtra (Figure 12.11).

Figure 12.9: The "TB Mukt Panchayat Initiative" in Maharashtra launched by Hon'ble Health Minister on 15 August 2023

Figure 12.10: "TB Mukt Panchayat Initiative – Regional Workshop", letters issued by different authorities

State level Workshop conducted for District level Staff	**Launch of TBMPI by Hon'ble Health Minister**	All **Collectors, CEOs, Deputy CEOs, DHO BDOs** are sensitized on TBMPI
2,476/27,893 (9%) Gram Panchayats submitted the claims for TBMP (A)	**More than 900 training sessions** were conducted for Gram Panchayat members at GP Level	**More than 1,220 Gram Sabha** conducted in GPs submitted the claims
More than 700 TB Champions were identified in GPs submitted the claims	**34/34 (100%) districts created Facebook account** and posted TBMPI activities	**Launched a handbook** on the updates on TB-Mukt Panchayat and IEC Materials

Figure 12.11: Key achievements in TBMPI

Innovations in TB Mukt Panchayats in Maharashtra

For instance, in Pune, collaboration with KEM Hospital Research Centre involved sensitization sessions and door-to-door screenings. In Raigad, partnerships with Mahatma Gandhi Mission Institute of Health Sciences and National Service Scheme volunteers facilitated various activities on "TB Mukt Panchayats". Additionally, private practitioners and NGOs joined the efforts in districts like Sindhudurg and Ahmednagar. The initiative's impact was extended beyond the local communities. This collaborative effort aims to achieve SDGs related to ending TB by 2025, emphasizing on early-case finding, robust surveillance and community ownership (Figure 12.12).

Figure 12.12: Volunteers facilitated various activities on "TB Mukt Panchayats"

Initiative: Transforming 1,000 villages across India as 'TB Mukt Panchayats' – a commitment towards 'PMTBMBA' in 5 Districts of Maharashtra in collaboration with JSW, USEA, CTD and Government of Maharashtra.

Hon'ble Prime Minister of India has committed to achieve SDGs related to ending TB by 2025 and has called for all stakeholders to come together to achieve this bold vision of "TB Mukt Bharat Abhiyaan". To strengthen these efforts, The Union South East Asia (USEA) with funding from JSW Foundation will be supporting NTEP in TBMPI in 1,000 villages in India. On 25 August 2023, Project was launched by Mr. Dheeraj Kumar, IAS MD (NHM), Maharashtra in Aarogya Bhavan, Mumbai in the presence of various stakeholders from CTD, JSW, State health Department, WHO partners and DTOs of concerned districts.

Aim: To demonstrate TBMPI of NTEP by filling the gaps in service delivery.

Objectives: Early-case finding through active and systematic screening, strengthening TB surveillance and diagnostic services, innovative approach on adherence to treatment, prophylaxis, and building community ownership – at the village level.

Geographies: Ratnagiri, Raigad, Thane, Palghar and Nagpur.

Box 12.3 Leveraging CSR support for strengthening TB care and infrastructure in Tamil Nadu

Leveraging CSR support has emerged as a crucial strategy in fortifying TB care and infrastructure within Tamil Nadu. The STC's strategic partnerships with various industries have facilitated nutritional support for TB patients and encouraged corporate involvement in screening their employees for TB. By engaging District Collectors to secure commitments from corporate sectors, accountability is ensured, and the seamless distribution of resources becomes feasible.

An exemplary instance of CSR impact is the collaboration with the IOCL, exemplified by the procurement and supply of 192 rapid molecular diagnostic equipment dedicated to TB diagnosis. Valued at INR 27.96 crores, this initiative is set to revolutionize TB detection, especially in rural areas, thereby augmenting the efficiency of the NTEP.

Integrating modern diagnostic tools, especially in Rural Block Primary Health Centres (PHCs) and selected Urban Block PHCs, signifies Tamil Nadu's commitment to leveraging technology for a healthier, TB-free future. Moreover, the active participation of society, stigma reduction and decreased OOP expenses for TB patients' families highlight the multifaceted benefits derived from CSR-supported TB initiatives.

In conclusion, Tamil Nadu's proactive approach, coupled with CSR support, underscores the state's dedication to public health and the well-being of its citizens. Tamil Nadu is paving the way towards achieving ambitious health goals and fostering a TB-free environment by forging collaborations between government, corporate sectors and CSOs.

RESEARCH AND INNOVATIONS

13

Under NTEP, the component of research has provided a lot of impetus to the CTD participating in various important studies over the past years. During the year 2023, several new studies have been permitted by the CTD to be conducted by various stakeholders ranging from research institutes, academic institutions, partners, and individuals.

Adult BCG Vaccination Study

This study is a collaborative initiative of CTD, Immunization Division and ICMR with CTD (NTEP) being the fulcrum and support of Immunization Division for coordinating implementation of head count surveys, logistics, vaccination and ICMR leading the Data Analysis. In total, 24 consented States include Andaman and Nicobar Islands, Andhra Pradesh, Assam, Dadra and Nagar Haveli and Daman and Diu, Goa, Haryana, Himachal Pradesh, Madhya Pradesh, Puducherry, Tamil Nadu, Tripura, Chhattisgarh, Delhi, Gujarat, Jammu and Kashmir, Jharkhand, Karnataka, Maharashtra, Odisha, Punjab, Rajasthan, Telangana, Uttar Pradesh and West Bengal.

With consideration of inputs from the TB Vaccine Committee and NTEG, a special committee looked into the feasibility to achieve maximum effect where some groups were to be identified for vaccination. The committee suggested that vaccination among adults aged more than 18 years, who belong to the following vulnerable groups could be beneficial considering their population-attributable fraction causing TB, from the data available from NATBPS.

The identified beneficiary groups are:

- Individuals with history of Previous TB Disease,
- Contact of TB patients,
- Individuals with BMI < 18.5 kg/m^2,
- Individuals with age > 60 year old,
- Individuals with history of smoking and
- Individuals with a history of reported diabetes.

There are some exclusion criteria which need to be considered before ruling-in a person eligible as per eligible groups. These are detailed in the SOP guidance document.

Methodology: The study design is a Parallel Arm Cluster randomized trial mode, where clusters districts. After randomization, 50% of the districts in any intervention State will be assigned to intervention arm and 50% to the control arm.

A study was designed accordingly with the objective of the study being:

- To evaluate the effectiveness of a strategy to vaccinate vulnerable individuals older than 18 years with BCG vaccine under programmatic settings on the occurrence of notified TB cases up to a period of 36 months post-intervention;
- To determine the effectiveness of adult BCG vaccination against active TB with annual review.

Figure 13.1: Launch of SOP, IEC and FAQs during National Launch of "Adult BCG Vaccination Study"

The outcomes, which will be measured, will be the change in notified TB cases from baseline in intervention districts; net adjusted for decline in control districts, at 12-24-36 months as per Ni-kshay portal. More details regarding the study can be obtained from the Standard Operational Guidelines for Adult BCG Vaccination (Figure 13.1).

Sample size: The number of people who will consent to the study among the eligible groups in the intervention district will be the sample size. Roughly this is assumed to be around 20% of the adult population in the States/UTs.

TB-WIN and SAFEVAC for Adult BCG Vaccination: A separate provision based on the U-WIN platform has been developed in collaboration with United Nations Development Programme (UNDP) by name TB-WIN for registration of the Adult BCG Vaccination beneficiaries. TB-WIN is integrated with Ni-kshay and SAFEVAC (Surveillance and Action for Events following vaccination) software to enable recording of the follow-up information of the Adult BCG vaccine beneficiaries and adverse effects following immunization respectively. TB-WIN was simultaneously launched on 10 January 2024 in South Goa District, Goa alongside the launch of Adult BCG Vaccination (Figure 13.2).

Ni-kshay has a dashboard made available, which will provide information about the registered eligible individuals, the categories they belong to and the number of people who have been vaccinated among the registered. This will be useful for monitoring the adult BCG vaccination (Figure 13.3A and B).

Figure 13.2: Launch of TB-WIN Platform

Figure 13.3A and B: (A) Registration of a beneficiary in TB-Win and (B) Vaccination for Adult BCG Vaccination study

Accelerated Efforts to END TB in India (AccEEND TB) Study

The Project Titled "Acceleration of TB Elimination in Selected Districts of India", is jointly undertaken by ICMR and CTD, MoHFW.

Aim: The aim of the project is to support and intensify the current NTEP practices and also introduce existing as well as new interventions/ innovations as per feasibility and availability.

Proposed interventions: ICMR along with CTD, NTEP proposes to launch an implementation research project in at least 35 districts of India. The project will focus on the intensifying the following six interventions (Summary Document along with the list of districts in each State/UT is at Correspondence):

1. **Intensified screening and treatment of TB close to home:** All households will be screened for TB symptoms.
   - Chest symptomatic will undergo chest X-ray by using HHXR unit and AI tool will be used for diagnosis.
   - Symptomatic household/chest X-ray, abnormal people will undergo sputum collection – testing centre by Truenat/other available molecular methods.
   - 100% DST with molecular test.
   - All diagnosed patients will be started on ATT.
   - Quick screening for severe TB – hospitalization, if needed to reduce mortality for those below BMI < 18.5 kg/m^2.
2. **Identification of all contacts and provision of TPT:** Ensure 100% coverage of all HHCs for TPT; use of short course regimes as soon as approved regimens become available.
3. **Providing nutritional supplementation:** Based on the data from the NATBPS, some of the key factors that have higher population-attributable fraction for acquisition of TB are as follows:
   - BMI < 18.5 kg/m^2
   - Diabetes mellitus
   - Aged 60 years and above
   - Following intervention is suggested:
     - » Additional PDS nutritional supplement for people having BMI < 18.5 kg/m^2.
     - » Anti-diabetic medication at doorstep, especially for individuals > 60 years age.
4. **Intensify IEC activities: with emphasis on:**
   - Importance of early screening, especially elderly person, smokers and alcoholics;
   - Address smoking cessation and healthy nutrition;
   - Complete treatment regimen and
   - Prevention of TB.
5. **Intensify Ni-kshay Mitra:**
   - Nutrition support to all TB patients and their household;
   - Patient-centred support to complete full treatment; and
   - Using TB Champions for social, emotional and mental health support.
6. **Expected outcome:** Project envisions establishment of a cost-effective, scalable strategic model district in each state where TB elimination will be demonstrated. The Model can later be replicated in each State/UT for elimination of TB from India.

How will NTEP be benefitted from the Project?

The project will ultimately leads to the development of a model district in each state/ UT, where reduction in TB cases will be demonstrated. Eventually this model can be replicated in other districts of the state to achieve the goal of TB elimination.

Other Research Studies Undertaken by Partners

1. **Evaluation of active case finding:** A study on evaluation of ACF supported by the USAID was undertaken by ICMR-NIE with the aim to determine the number of ACF cycles implemented in 2021 at national, 36 states and 768 district-level and quality indicators for the first ACF cycle. It was a descriptive ecological study where aggregate TB programme data for each ACF activity was extracted. It was further aggregated against each ACF cycle at the district level in 2021. Three TB-ACF quality indicators were calculated: (i) Percentage population screened (≥10%), (ii) percentage testing among screened (≥4.8%) and (iii) percentage diagnosed among tested (≥5%) the number needed to screen (NNS) for diagnosing one person with TB (≤1,538).

   Findings showed that out of 768 TB districts, data for 111 were unavailable in the ACF records. Among the remaining 657 districts, 642 (98%) were carried out one ACF cycle, while 15 districts implemented 2–3 cycles. None of these districts or states met the specified cut-offs for all three TB-ACF quality indicators. Nationally, during the initial ACF cycle, 9.3% of the population underwent screening, with 1% of those screened undergoing testing, and 3.7% of those tested being diagnosed. The NNS was 2,824 which are considered acceptable (≤1,538) in institutional facilities but poor for population-based groups. Consistent data were not available to determine the percentage of high-risk population covered, the proportion of presumptive TB cases among those screened, and the rate of testing among presumptive cases. Recommendations given by the study were related to sensitization of state and district officials regarding importance of ACF cycles, number of cycles required for better yield, optimum gap between two ACF cycles, frequent quality check mechanism involving all ACF quality indicators, comprehensive mapping of district before initiating ACF, timely reporting of data in Ni-kshay and cross-checking ACF numbers with Ni-kshay portal.

2. **Analysis of Ni-kshay data of DBT for nutritional support:** In this retrospective cohort study supported by the USAID, programmatic data of patients notified with TB in nine randomly selected between 2018 and 2022 was analysed. Aim was to estimate the proportion of patients who received at least one instalment and the median time to receive the first instalment and the factors associated: (i) with non-receipt of instalment and (ii) time taken to receive first instalment benefit in 2022.

   Findings showed that the proportion who received at least one NPY instalment had increased from 56.9% to 76.1%. Non-receipt was significantly higher among patients notified by private sector reactive for HIV and with missing/undetermined diabetic status. The median time to receive the first instalment had reduced from 200 days in 2018 to 91 days in 2022. Patients from private sector those with HIV-reactive DR-TB and missing/undetermined diabetic status experienced longer delays.

3. **Similar study was undertaken by CTD with collaboration of the World Bank** where programmatic data of patients from Andhra Pradesh, Assam, Bihar and Chhattisgarh who were given any outcomes between January–December 2022 was extracted. Aim of the study was to understand disbursement of NPY payments and factors affecting it. Final report is still awaited.

4. **An Independent Assessment Report of PMTBMBA:** The comprehensive assessment conducted by using a qualitative and quantitative research approaches looked at the following key things, among many other metrics (mentioned in the Chapter 15 on "Pradhan Mantri TB Mukt Bharat Abhiyaan"):

   - uptake of the scheme among the community and Ni-kshay Mitra;
   - number and type of beneficiaries served;
   - consistency of support provided to patients;
   - barriers and the impact the scheme had on patients' well-being, and
   - challenge faced by all stakeholders with possible solutions.

Impact of the scheme as observed from the study: TB patients with a Ni-kshay Mitra have a 95% successful treatment outcome, relative to 90% for those without one-point; suggesting a 5-point improvement which was statistically significant.

- » Those who received the kits were satisfied with the programme (92%);
- » 92% patients reported reduction in OOP expenditure;
- » Weight gain was 4.2 kg among beneficiaries and 3.8 kg among non-beneficiaries;
- » Higher number of health facility visits resulted in increased follow-up and treatment adherence.

It was also reported that the PMTBMBA scheme helped in addressing stigma due to increased awareness among the community leading to positive transformation.

5. **Studies with Population Research Centres (PRCs):** The PRCs were established to undertake research projects relating to family planning, demographic research, biological studies and qualitative aspect of population control, with a view to gainfully utilize the feedback from these research studies for plan formulation, strategies and modifications of ongoing schemes.

   In response to a call given by PRCs to various divisions in the Health Ministry to share areas of research priority that PRCs might be able to do in their capacity, CTD has shared the areas of research priority under NTEP. PRCs have come up with some studies out of which 6 studies have been approved to be conducted (Table 13.1).

6. **Research Studies Community Engagement**

   a. **Rapid assessment on TB in elderly person:** There is increasing evidence that older people are more vulnerable to develop TB as compared to younger people. With this context, a rapid assessment on TB in elderly was undertaken by REACH during 2022–23, in collaboration with NTEP and with support from the USAID. It employed desk review and qualitative research among TB-affected communities and TB programme implementers in seven States of Assam, Chhattisgarh, Delhi, Maharashtra, Sikkim, Uttar Pradesh and West Bengal, and TB technical and policy experts at national level. The main findings included:

   i. lower adherence, successful treatment outcomes and higher mortality among elderly persons;

   ii. physical vulnerabilities due to age;

   iii. loss of economic independence and poor linkages to financial support mechanisms;

   iv. challenges in access to information, nutrition and care due to societal and individual behavioural patterns around age and stigma,

   v. gaps in data reporting as age and sex disaggregated data is usually not reported.

Table 13.1: PRC Centres leading the study

S. no.	Title	PRC centres
1	Collaboration of RBSK and RKSK with National TB Elimination Programme: An Assessment based on Selected States of India	PRC Baroda, Madhya Pradesh
2	Nutritional status of contacts of TB patients in India: A comparative cross-sectional study	PRC Dharwad, Karnataka
3	Out of Pocket Expenditure incurred by MDR-TB patients in Rural and Urban settings of Bihar: A study of public health services in Bihar	PRC Patna, Bihar
4	Comparative study of acceptance of TB Preventive Therapy among contacts of TB patients in Maharashtra, Telangana, West Bengal, and Jharkhand	PRC Pune, Maharashtra
5	A Rapid Assessment to Review the Role of PRIs in TB Control Activities in Different States of India – A Pan Indian Study	PRC Sagar, Madhya Pradesh

b. TB and disability – rapid assessment: People with disabilities are among the most marginalized groups in India. In the context of TB and people with disabilities, there is a lack of knowledge on how TB plays out in terms of health outcomes and access to healthcare. A rapid assessment on "TB and Disability" was undertaken by REACH during 2022–23, in collaboration with NTEP and support obtained from the USAID. The assessment employed desk review and qualitative assessment by using in-depth semi-structured interviews with people with TB and/or disability, TB programme implementers/policymakers and TB and/or disability experts. It is found that the impact of TB extends beyond mortality and morbidity and needs to be understood from the lens of years lived with disabilities and quality of life measures, as for many TB survivors who acquired disabilities during or post-TB, life has irretrievably changed. The assessment suggests that disability needs to be acknowledged as outcome of TB and long-term care needs to be strengthened to ensure physical and social rehabilitation of TB survivors.

7. **Innovations: Tamil Nadu Kasanoi Erappila Thittam (TN-KET** meaning TB death-free project in Tamil) - India's first state-wide differentiated TB care model aimed at reducing TB deaths: Tamil Nadu decided to triage all adults with TB even at the point of diagnosis with an aim to reduce TB deaths. Starting in April 2022, Tamil Nadu (all NTEP districts except Chennai) prioritized all patients with very severe undernutrition, respiratory insufficiency or poor performance status for referral, comprehensive assessment and inpatient care immediately after TB diagnosis (see Figure 13.4 below). It is being implemented in routine health system settings as a routine activity of state NTEP. The ICMR-NIE is the lead institute in providing technical support in planning, implementation, monitoring and operational research. The operational research component is focussed on assessing the feasibility of implementing in routine programme settings and impact on TB deaths.

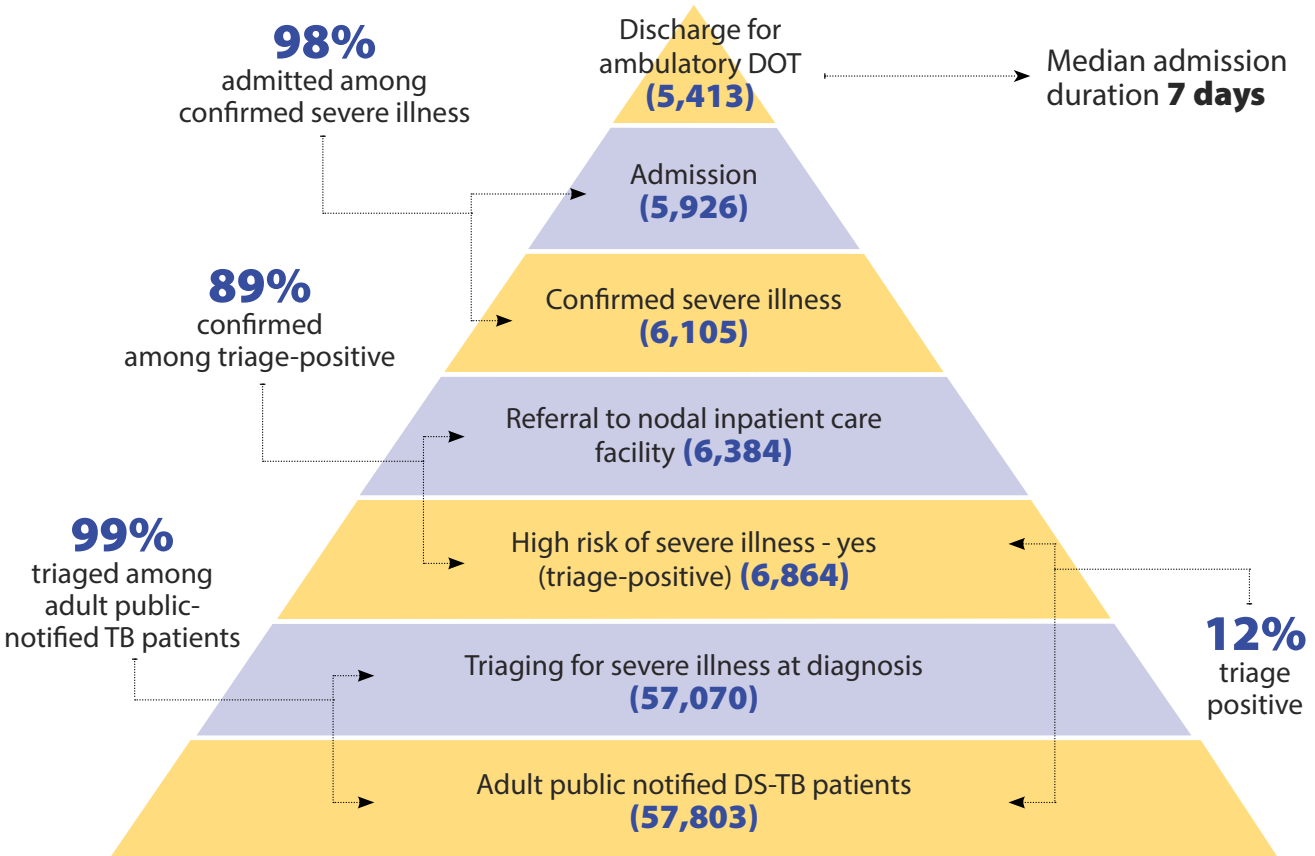


Figure 13.4: TN-KET care cascade, 2023

Observations: In 2023, of 57,803 adults with TB diagnosed from public facilities, 57,070 (99%) were triaged and 6,864 (12%) were triage-positive (eligible for referral). Of 6,864 eligible, 6,105 (89%) were referred, comprehensively assessed and confirmed as severely-ill at nodal inpatient facilities. Of 6,105 confirmed, 5,926 (98%) were admitted for inpatient care and 5,413 (92%) were successfully discharged for ambulatory directly observed treatment (DOT). The median admission duration was 7 days (IQR 4,9).

Impact: After implementing TN-KET for around 2 years, the losses in the care cascade have significantly reduced. From October 2023 onwards, a systematic follow-up of triage-positives at 1 month and 2 months has also been initiated. Routine monitoring of TB death rate in around 10 districts has shown reduction in TB death rate. The impact on early deaths and total TB deaths through individual-level data analysis is being evaluated.

TN-KET featured as a Tamil Nadu state innovation in India's 2023 Annual TB Report. In May 2023, with the technical support of ICMR-NIE and Tamil Nadu STC, CTD conducted a national consultation workshop to implement differentiated TB care in Chennai (https://rb.gy/fcrz10). Based on the learnings of TN-KET a draft SOP was prepared for national scale up. The 'how we did it' paper (Glob Health Action. 2023 Dec 31;16(1):2161231), the feasibility assessment paper (Glob Health Sci Pract. 2023 Apr 28;11(2):e2200505) and (Preventive Medicine: Research and Review 2024 Feb 13: 10.4103/PMRR.PMRR_33_23) and the sub-study justifying the TN-KET strategy (Indian Journal of TB 2023, doi 10.1016/j.ijtb.2023.12.006) are the four publications.

8. **RATIONS (Reducing Activation of Tuberculosis by Improvement of Nutritional Status) Trial:** The RATIONS study trial aimed to assess the impact of nutritional supplementation on TB incidence in HHCs of adults with microbiologically-confirmed pulmonary TB in India.

   Here are the key findings:

   - **Study Design:** The trial was an open-label, cluster-randomized controlled trial conducted in Jharkhand, India. It enrolled HHCs of 2,800 patients with confirmed pulmonary TB.
   - **Nutritional Intervention and Outcome:** 10,345 HHCs, of whom 5,328 (94.8%) of 5,621 HHCs were in the intervention group and 4,283 (90.7%) of 4,724 HHCs in the control group. Almost two-thirds population belonged to indigenous communities (e.g., Santhals, Ho, Munda, Oraon, and Bhumij). Both groups received food rations (1,200 kcal, 52 grams of protein per day with micronutrients) for 6 months, only HHCs in the intervention group received monthly food rations and micronutrients (750 kcal, 23 grams of protein per day with micronutrients). The primary outcome was incident TB (all forms). Participants were followed-up actively until 31 July 2022.
   - **Effect of nutritional supplementation:** This trial is significant because it is the first to address undernutrition as a strategy to reduce TB incidence in communities with high poverty and undernutrition prevalence. The study claimed that the nutritional intervention was associated with substantial (39–48%) reduction in TB incidence in the household during 2 years of follow-up. Link for Publication: Doi: https://doi.org/10.1016/S0140-6736(23)01231-X.


MEGHALAYA STATE HEALTH SOCIETY
TB KILLS DUE TO
IGNORANCE
&
NEGLIGENCE
INDIA
VS
TB
LET'S ELIMINATE TUBERCULOSIS (TB)
FROM MEGHALAYA BY 2025
Cough
Fever
Night sweat
Loss of
Appetite
All tests and medication for TB are
FREE of cost
TB is Curable

INSTITUTIONAL **STRENGTHENING** AND **CAPACITY BUILDING**

14

State TB Training and Demonstration Centres (STDCs)

The STDCs are state-level strategic institutions in the NTEP and the NSP 2017–25 emphasizes their vital significance in this regard. It supports the state in Programme Management by conducting its core activities of Supervision, Monitoring and Evaluation (SM&E) and Training in TB and NTEP along with, support in preparing the State PIP, implementation and scale-up of newer interventions, surveillance and TB burden estimation, ensure quality-assured laboratory services, conducting operational research (OR), evolve the state strategic plan for TB elimination and advocacy, etc., for TB elimination efforts in the state.

The NTEP has changed significantly since the last STDC guidelines were published in 2003. To stay up to date with the constant development, the CTD has been working to upgrade and modernize STDCs during the last 2 years.

In May 2023, the STDC guidelines were revised and published as "Guidelines and norms for STDC 2023", drawing on data from the baseline assessment of STDC that was carried out in 2022. Some of the highlights of the new guidelines are as follows:

- Identified the function of STDCs within the framework of the existing programme;
- Increases autonomy and strengthens STDCs as the State's technical arm for the TB programme;
- Equipment and infrastructure in-line with present requirements (e.g. Modernized Training Units);
- Confers ownership over all NTEP training completed by the state's STDCs at all levels, as well as monitoring and supportive supervision; and
- Increases the accountability of STDCs for their deeds and increases the accountability of CTD, State, and National Institutes with relation to STDC functions.

In 2023, STDCs implemented the Modernized NTEP Training System in accordance with the revised criteria. Overall 19 States and 2 UTs have implemented various cadre-wise courses using the Modernized NTEP Training System, and TOTs were held for cadre-wise courses for key STDC staff. The changeover process is underway for the remaining states. Model Training Units have been established at five STDCs: Delhi, Agra, Pune, Telangana and Ahmedabad. In the coming years, it is anticipated that further STDCs will enhance their training capabilities based on these models.

Strengthening STDCs' competence in this area was a programme priority, as SM&E is now a crucial function of STDCs according to the new criteria. The baseline assessment revealed a significant gap in the capacity of STDC and other state employees to track programme performance with the extensive data provided by Ni-kshay. At NTI in Bengaluru and NITRD in New Delhi, CTD held 5-day courses for State Programme Managers on Programme Monitoring skills. Around 128 employees from 29 States, including National Institutes and partners, attended the training.

Action-oriented input from STDCs to DTOs has also been tracked via an online application (https://sme.ntep.in/user/login). To help facilitate overall

SM&E activities, all STDCs have been granted special access to Ni-kshay. The 24 operational STDCs have also built virtual engagement services. The STDC uses these for IRL-related activities, SM&E, and NTEP cadre-wise training (Figure 14.1).

Understanding of range and depth of programme Information in Nikshay	Approaches to deal with in-depth service level data	Handling data in electronic spreadsheet (Excel)	Constructing data driven Action Oriented Feedback and Obtaining action taken from Districts
1. Various Ni-kshay Outputs (Reports/ Registers and Dashboards) 2. Purpose of each item and how to use/ access it 3. Types and meanings of each data elements in them	1. Prioritization 2. Root cause Analysis i. Time/Place/Person ii. Input/process/outputs iii. Care cascade 3. Creating indicators 4. Interventions using PDSA Apprpach	1. Basic Skills (sorting/filtering) 2. Common functions/ formulae (Sum/ Avg/Count/ Vlookup 3. Pivot Tables	1. What is/is not Action Oriented Feedback 2. Structure 3. Feedback Cycle/ Process 4. Do's and don'ts/ Quality 5. Examples

Figure 14.1: Skills imparted to STDC through 5-day programme monitoring course

The Union-led iDEFEAT-TB project, funded by the USAID, provided support to the STDC's strengthening efforts.

Human Resources (HRs)

A skilled workforce is essential for bolstering health systems' ability to combat TB. The foundation of the entire system is formed by the full chain of HRs involved in formulating policies, managing resources, coordinating with relevant parties, and ultimately delivering the services or benefits to the final recipients.

India has the largest TB patient population of any nation and is therefore essential to the TB elimination/eradication effort. The NTEP has set high standards for eliminating TB by 2025. The programme will need to scale-up current treatments and implement new policies to meet this aim. It will take enough competent employees in the appropriate places for NTEP to accomplish its goal. Building a cadre of committed health workers along the chain of service delivery is crucial, given the socio-cultural and geographic diversity of the nation. Additionally, the TB programme functions effectively within the overall healthcare system. To guarantee high-quality services, it is equally critical to maintain the proficiency of all medical personnel in providing TB services.

Both medical and non-medical staff are included in the programme's HRs, which is integrated with the broader public health system, particularly the NHM at the federal, state, local, district and block levels. Like other programmes under NHM, the HR rules of the contractual periods are managed by the relevant State and are based on state-specific circumstances.

The NSP (2017–25) focuses on developing HR reforms, implementing the NTEP, bolstering the management structure, and expanding the supply of technical support at the federal and state levels.

Challenges: The disparities in HR personnel across various States/UTs represent one of NTEP's largest problems (refer to Table 14.1). To facilitate the implementation of the NTEP, it is imperative that positions at every level of the programme be filled as well as that general health system personnel be used more effectively.

Table 14.1: The state-wise HR status in the year 2023

S. no.	States/UTs	State level			District level		
		Sanctioned posts	Filled posts	%	Sanctioned posts	Filled posts	%
1	Andaman and Nicobar Islands	21	18	86	42	34	81
2	Andhra Pradesh	40	38	95	951	820	86
3	Arunachal Pradesh	9	8	89	125	123	98
4	Assam	28	25	89	423	372	88
5	Bihar	53	32	60	1,549	917	59
6	Chandigarh	11	9	82	50	42	84
7	Chhattisgarh	27	21	78	625	514	82
8	Dadra and Nagar Haveli and Daman and Diu	12	7	58	24	19	79
9	Delhi	19	13	68	727	505	69
10	Goa	19	17	89	51	47	92
11	Gujarat	32	27	84	8,565	7,780	91
12	Haryana	19	12	63	692	539	78
13	Himachal Pradesh	6	3	50	454	339	75
14	Jammu and Kashmir	34	30	88	266	240	90
15	Jharkhand	16	12	75	745	581	78
16	Karnataka	47	25	53	1,207	1,118	93
17	Kerala	46	45	98	1,350	1,300	96
18	Ladakh	2	2	100	49	44	90
19	Lakshadweep	2	2	100	5	5	100
20	Madhya Pradesh	32	19	59	2,023	1,427	71
21	Maharashtra	93	75	81	2,480	2,251	91
22	Manipur	16	10	63	120	109	91
23	Meghalaya	9	4	44	110	106	96
24	Mizoram	15	15	100	90	86	96
25	Nagaland	12	12	100	113	113	100
26	Odisha	25	20	80	860	598	70
27	Puducherry	8	8	100	59	52	88
28	Punjab	6	4	67	552	349	63
29	Rajasthan	32	17	53	921	637	69
30	Sikkim	12	8	67	56	44	79
31	Tamil Nadu	60	31	52	1,965	1,737	88
32	Telangana	18	18	100	630	594	94
33	Tripura	7	5	71	64	53	83
34	Uttar Pradesh	211	108	51	4,922	3,342	68
35	Uttarakhand	21	18	86	317	281	89
36	West Bengal	36	19	53	1,647	1,490	90
	Total	**1,056**	**737**	**70**	**34,829**	**28,608**	**82**

Training

Determining and delivering the necessary training is another crucial aspect. It entails putting in place an extensive training programme that uses resources and technology to accommodate different skill categories at different levels. This is necessary to ensure that health workers are aware of and equipped to handle the programme's continuous evolution, including managing clinical interventions related to MDR/XDR-TB, TB-comorbidities, and public health initiatives like community and multisectoral engagement. There are numerous challenges to implement the most intricate and reliable programme such as NTEP with its goal-oriented approach. The main issue is that there are certain states with understaffed public health systems, which make it more difficult to share responsibilities and staffing levels. On the other hand, HR planners are constantly alert due to issues like the timely availability of skilled labour, meeting training demands due to turnover, keeping competent personnel, handling the scarcity of vital staff, and so on.

Up until recently NTI in Bengaluru and NITRD in New Delhi, STDC in Gujarat, etc., are supporting programme in conducting National Training (TOT) for state/district programme officers (STO/DTOs) Dy-STO/Director STDC/MO-STC/MO-STDC/facilities form medical colleges on basic TB (1–9 Modules), PMDT, PMTPT, training on laboratory components (EQA, LPA, LC), etc. The STDCs, located lower down the state hierarchy, also play a crucial role in bolstering the health system. Each state, through STDC conducts state-level training (DTOs/MODTC/MOTC/DOTs plus supervisor/STS/STLS/LTs/DPC, etc.) and district further conducts training for NTEP, etc., and DTC trains the Paramedical staff.

The NSP envisions the adoption of cutting-edge, approachable methods for developing capability. One of the most important tactics is to switch to an online and mobile learning environment through e-learning. E-training by using well-designed e-modules that are especially tailored to a given cadre of people facilitates easier access, a wider audience, prevents misunderstandings and provides redundant information and allows for self-paced study, among other benefits. Every module concludes with a self-assessment, which directs the learner to the following one. The programme will switch from using more traditional training approaches to using these more modern, flexible and agile methods, such as e-learning.

Based on this vision CTD has been working to modernize the NTEP Training System. Based on an extensive training and its capacity needs assessment conducted in 2022–23 as a revised training system has been developed and NTEP is in the process of transitioning to this system. Some of the key aspects of the modernization are, Digital Training content multilingual that is maintained live in alignment with programme evolution, Cadre-wise Standardized Training Courses in blended learning mode, and updated Planning, M&E framework for Training (Figure 14.2). Each of the three aspects has modern online tools supporting them such as the Knowledge Base (ntep.in), Learning Management Systems (www.swasth-eGurukul.in, https://lmis.nihfw.ac.in) and M&E Systems (https://tims.ntep.in/).

By the end of 2023, nearly 80 hours of digitized training materials were created, translating to 7 cadre-wise Courses, (for DTO, STS/TBHV, STLS, Laboratory Technician – Microscopy and NAAT, Pharmacists and Storekeepers, CHO and Health Volunteers and Treatment Supporters). The SOPs and trainers guide for these courses have been developed and rolled-out across India. The content in relation to Health Volunteers and Treatment Supporters were translated into six other languages. Three cadre-wise courses (Course for District PPM, Senior DR-TB/TB-HIV Supervisor and State ACSM) were prepared, pilot-tested and awaiting scale-up. Development of further cadre-wise courses for District and state-level officials and private practitioners are underway. Through the 19 States that have started transition to the Modernized Training System, about 5,000 personnel have been trained. The Modernization of the NTEP training system is being supported by the USAID supported, the Union-led iDEFEAT-TB project.

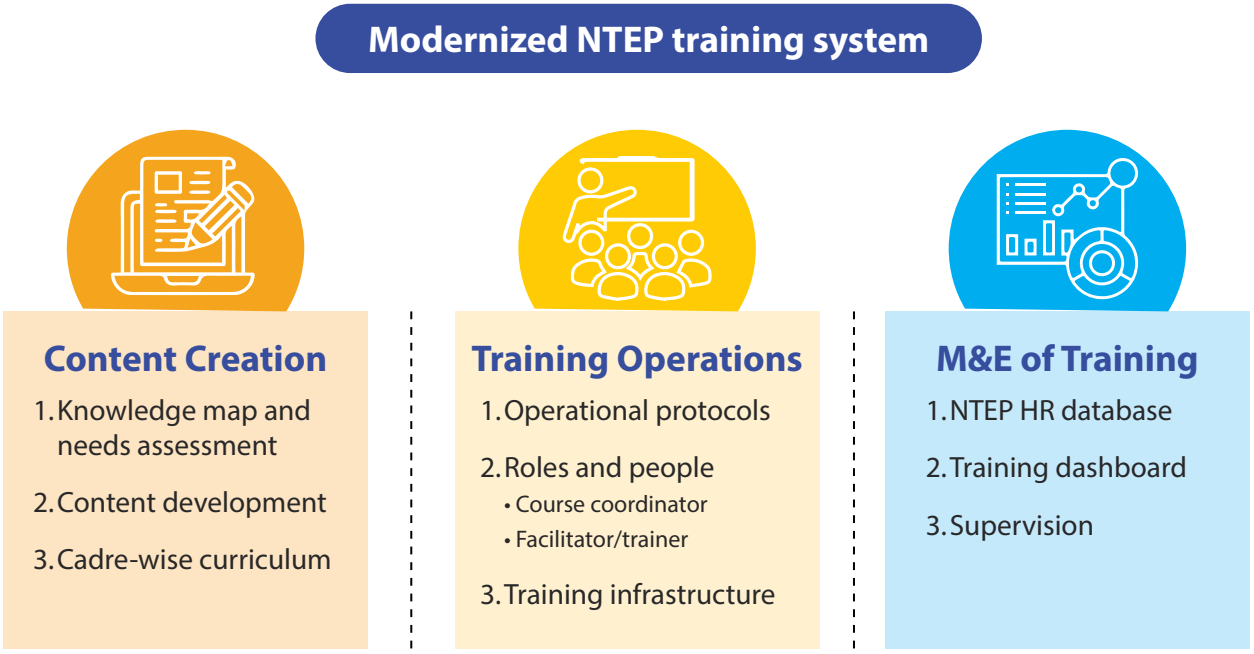


Figure 14.2: Modernized NTEP training system

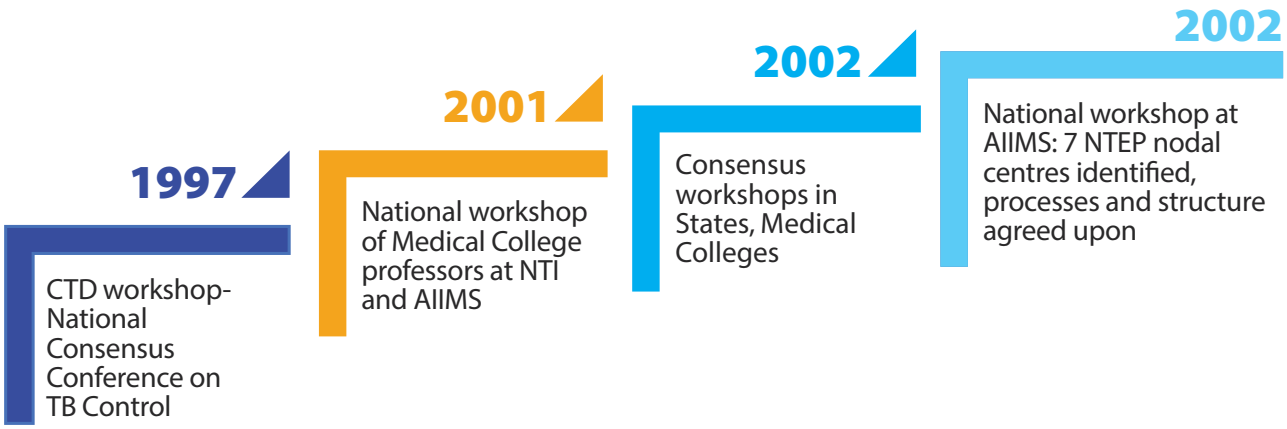
Medical College Activities

Medical Colleges, being tertiary referral units, do not have a limited geographical area to be covered. Patients are being referred to Medical Colleges from within the districts where the College is situated, and even from outside the districts and state too. There is huge potential for the detection of TB from the various departments like pulmonary medicine, medicine, paediatric, obstetrics and gynaecology (OB GYN), surgery, etc.

There are 651 Medical Colleges in India, of which 619 (95%) are involved under the NTEP by establishing TB detection and treatment centres, DR-TB Centre and C&DST laboratories.

Medical Colleges also have an important role not only in preventive, curative, or academic fields but also in research and advocacy. In addition to the treatment of TB cases, medical colleges are actively involved in the training of undergraduate and postgraduate doctors, interns, paramedics and researchers regarding the management of TB. Medical Colleges are involved in conducting operational research as part of the larger research goals in ending TB.

Process of medical college task force mechanism: The concept of involvement in medical colleges was first thought in the year 1996 and it was very well shaped in the first CTD National Consensus Workshop/Conference conducted in 1997. The involvement of the medical colleges' timeline explains the efforts initiated by CTD and WHO-India to involve potential medical institutes under NTEP as follows.



As a result, to strengthen the coordinated efforts by the individual medical colleges/institutions, the Medical College Task Force Mechanism comprising of National Task Force (NTF), Zonal Task Force (ZTF) and State Task Force (STF) for NTEP have been established under the guidance of CTD, MoHFW, Government of India. The task force at each level meets regularly to review the activities and performance in the clinical, training, and research initiatives under NTEP and the structure is given in Figure 14.3 below.

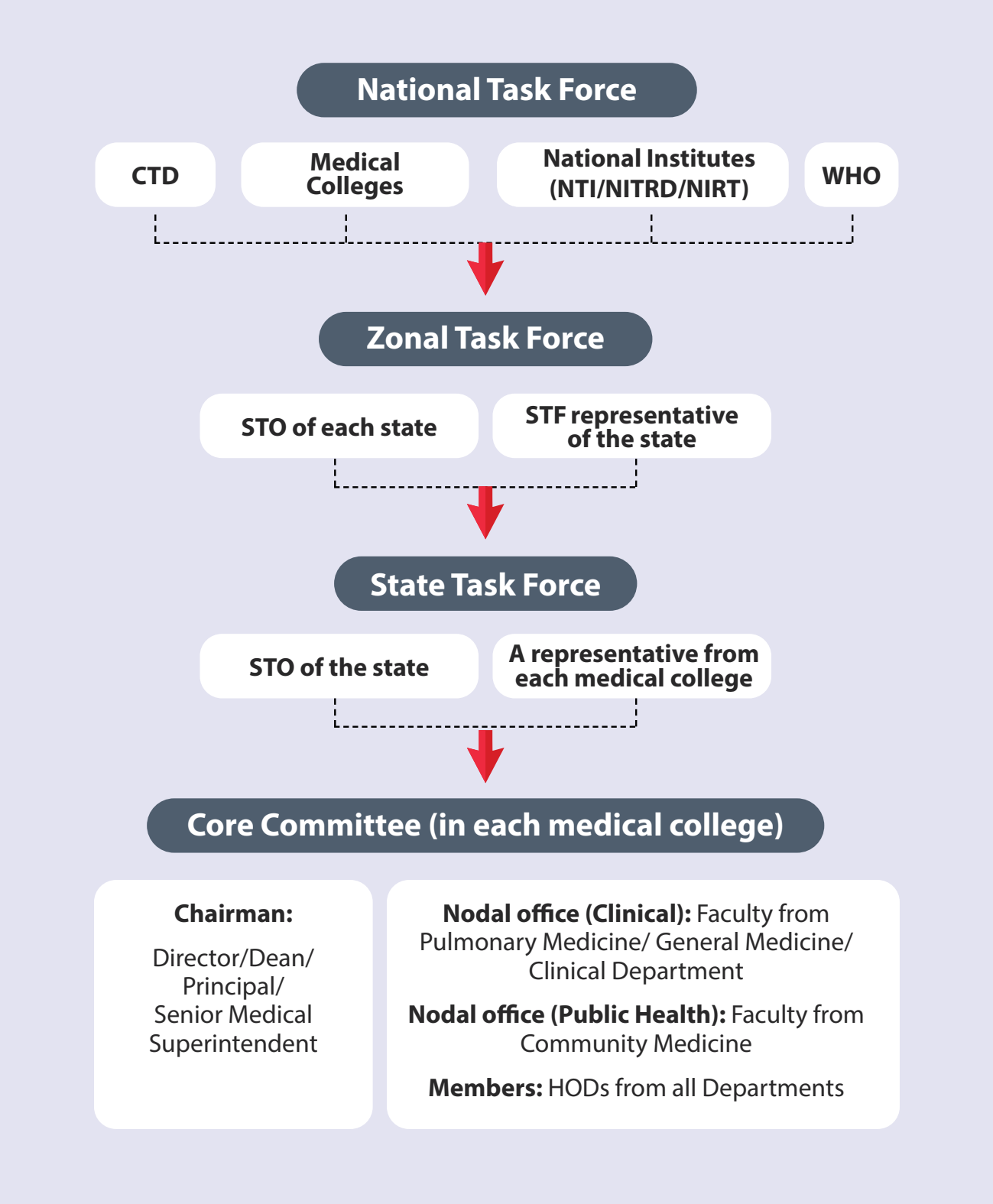


Figure 14.3: Medical College Task Force Mechanism

The six zones are depicted in Table 14.2 below and as shown through India map (Figure 14.4).

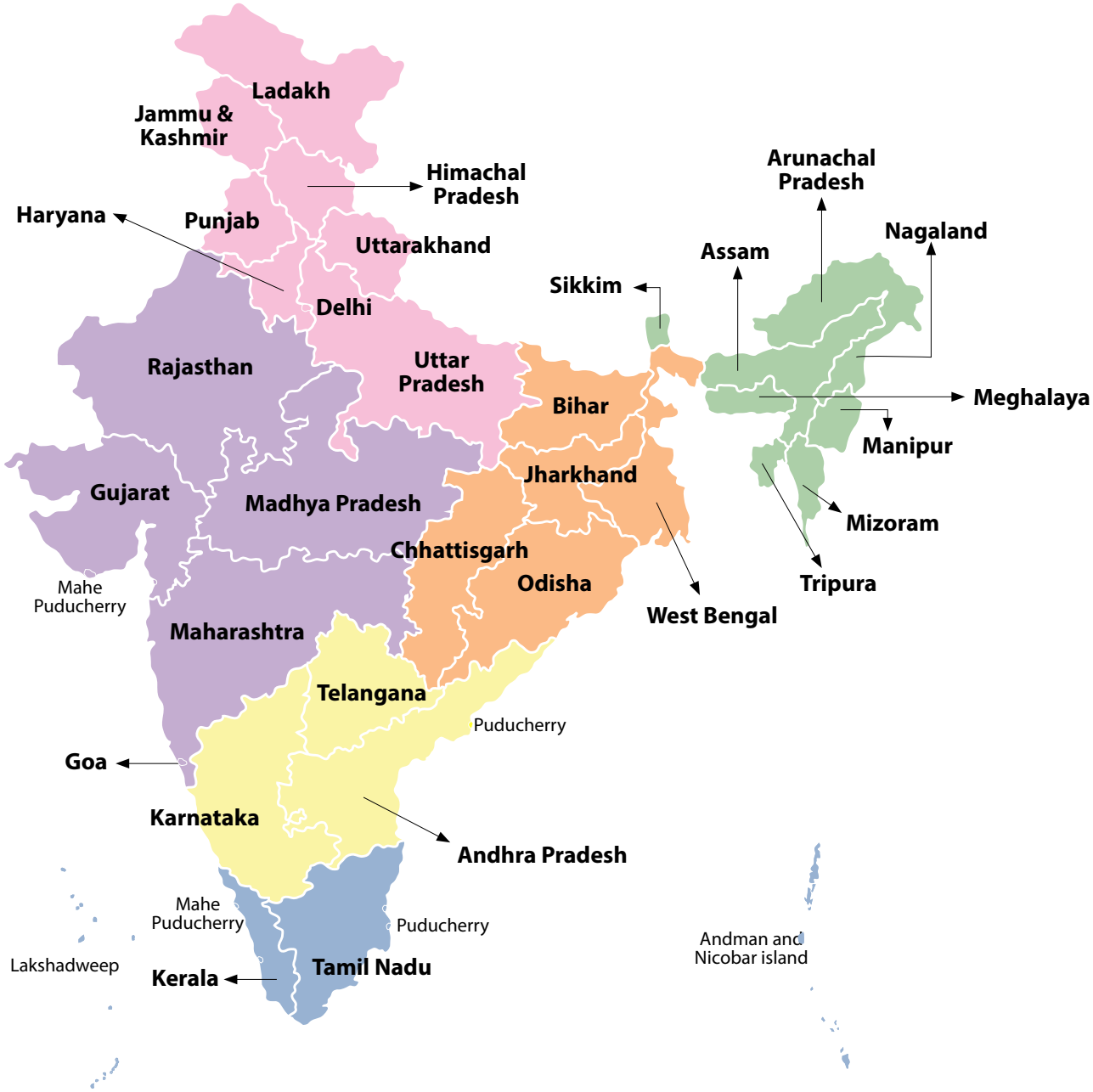


Figure 14.4: Map of India depicting six zones under NTEP

Table 14.2: Six zones depicted in States and UTs under NTEP

Zones	No. of state/UTs	States/UTs in the zone
North East	8	Meghalaya, Sikkim, Arunachal Pradesh, Assam, Tripura, Mizoram, Manipur, Nagaland
East	5	Bihar, Jharkhand, Odisha, Chhattisgarh, West Bengal
West	6	Gujarat, Madhya Pradesh, Maharashtra, Goa, Rajasthan, Diu and Nagar Haveli, and Diu and Daman
South-1	3	Karnataka, Telangana, Andhra Pradesh
South-2	5	Puducherry, Tamil Nadu, Kerala, Lakshadweep, Andaman and Nicobar Islands
North	9	Punjab, Haryana, Chandigarh, Jammu and Kashmir, Uttar Pradesh, Delhi, Uttarakhand, Ladakh, Himachal Pradesh
Total	36	

With the target of Ending TB in the country by 2025, Medical Colleges have assumed the role to provide Stewardship in Ending TB by adhering to NTEP guidelines [i.e., newer diagnostics, new drugs (BDQ, DLM)] with new regimens/policies (daily regimen, PMDT guidelines, PMTPT guidelines, digitalization of all TB patients and using web-based case-based software (Ni-kshay).

Contribution of medical colleges to the NTEP

Infrastructure: In the 651 medical colleges, 619 (95%) TB detection and treatment centres, 471 NAAT facilities, 336 DR-TB centres and 36 C&DST laboratories have been established; 20 AIIMS and 9 ESIS medical colleges are also supporting NTEP.

It is encouraging to see that 619/651 (95%) of India's medical colleges are involved, with 349 (57%) and 268 (43%) of those being public and private respectively. 195/346 (56%) non-medical college DNB institutes are involved, and most of them are in the South 1 and 2 zones (Table 14.3).

Contribution of medical colleges to total TB case notification: Medical colleges have witnessed a huge contribution of TB cases to the NTEP (Table 14.4).

Table 14.3: Contribution of medical colleges

Zone	Medical Colleges involved with NTEP					Non-medical DNB institutes	
	Total no. of medical colleges (Pub + Pvt) in the zone (A)	Out of (A) medical colleges (Pub) (B)	Out of (A) medical colleges (Pvt) (C)	Total colleges involved (D) (in %)		Total non-medical college DNB institutes zone (H)	Out of (H), total involved
East	91	68	22	90	99%	25	16
West	125	60	59	119	95%	61	49
North-East	23	20	1	21	91%	6	6
North	166	106	53	159	96%	0	0
South 1	131	43	78	123	92%	181	51
South 2	115	52	55	107	93%	73	73
Total	**651**	**349**	**268**	**619**	**95%**	**346**	**195**

Table 14.4: Year-wise contribution of colleges

Year	Total TB case notified (India)	Total TB cases notified by medical colleges	% contribution
2018	2,101,970	219,124	10.42
2019	2,401,351	330,486	13.76
2020	1,812,560	219,274	12.10
2021	2,120,133	257,062	12.12
2022	2,422,121	319,698	13.20
2023	2,552,257	348,520	13.66

Review of the medical college activities are conducted through 6 ZTF and NTF meetings in 2023. The NTF meeting was conducted on 22–23 September 2023 at Bengaluru in Karnataka.

Figure 14.5: Inauguration of NTF meeting by Shri Anilkumar T.K., IAS, Principal Secretary, MoHFW, Karnataka, Dr. Naveen Bhat Y, IAS, MDNHM, Karnataka, Dr. Ashok Bhardwaj, Chairperson NTF, Dr. Ranjani Ramchandran, NPO (WHO), Dr. Nishant Kumar, JD-CTD, Dr. Sanjay Kumar Mattoo, Additional DDG-CTD (from left to right)

The historic Kolkata Declaration (22–24 November 2022) aims to expedite the country's medical college network's efforts to end TB by 2025. Here is the statement (Figure 14.5):

"We, the members of the National Task Force for Involvement of Medical Colleges of India, supporting National Tuberculosis (TB) Elimination Programme at the National, Zonal, State and District level, comprising of Medical College faculty and State TB Cell officials with the support of Central TB Division, Ministry of Health and Family Welfare and World Health Organization country office for India, solemnly resolve to End TB in India by 2025 by contributing wholeheartedly towards establishing an effective and responsive task force mechanism by doing the following:

01 *Constitute a multi-disciplinary core committee in each of the medical colleges to organize and monitor all programme activities and standard operating procedures to contribute towards ending TB in India.*

02 *Provide free diagnostics to all presumptive TB, drug susceptible TB and drug resistant TB (DR-TB) patients as well as presumptive non-tuberculous mycobacterium and mixed infections.*

03 *Provide free anti-TB drugs as per the regimen according to the programme guidelines to all TB patients including DR-TB patients.*

04 *Inform, counsel, and provide TB preventive treatment to those who are eligible as per programme guidelines.*

05 *Notify all TB cases through the Ni-kshay portal from all the departments and digitally monitor them.*

06 *Sensitize, orient, and train all doctors, medical students, and paramedical staff about TB. Initially each State conducts 2 days TOT and followed by the cascade training in each medical college.*

07 *Advocate and motivate our doctor friends in the private sector for their involvement under the programme.*

08 *Advocate and involve all professional associations like IMA, IAP, IAPSM, ICS, NCCP and others under the programme.*

09 *Educate and counsel patients, their families, and the community regarding TB prevention and care.*

10 *Undertake scientifically sound and relevant operational research to develop new strategies (including TB preventive treatment and vaccines) to guide to update programme policy. State to conduct state OR workshop in each state.*

11 *We will become Ni-kshay Mitra and adopt TB patients and their families for nutritional support and any other support they may require and will also advocate for others to be.*

12 *Support and facilitate the activities in districts in moving towards ending TB by 2025.*

13 *We pledge to undertake sincere efforts for ending TB in India by 2025. Particularly, we as a Medical College or institute will select one geography (district, block, town, slum) and make every effort to make it TB FREE."*

Two days State-level training (TOT) as proposed in a National Workshop for medical college faculties for accelerating NTEP activities in medical college was conducted on 22–24 November 2022 at Kolkata. Madhya Pradesh is the first state to conduct training (TOT) for medical college faculty on 12–13 July 2023 at Bhopal (Figure 14.6) and then followed by Maharashtra (Figure 14.7), Goa, Panjab, Karnataka, etc. This is mandatory activity to be conducted by all the states followed by the cascade training in each medical college.

Figure 14.6: Madhya Pradesh, being the first state to conduct training (TOT) for medical college faculty on 12–13 July 2023 at Bhopal

Figure 14.7: Maharashtra, being the second state to conduct training (TOT) for medical college faculty on 27–28 July 2023 at Pune

Integrating TB Services at Ayushman Arogya Mandirs

Under the Ayushman Bharat programme more than 1.63 lakh Ayushman Arogya Mandirs (erstwhile AB-HWCs) are operational and equipped with trained primary healthcare teams. These HWCs are envisaged to deliver comprehensive primary healthcare with a focus on the delivery of an expanded range of services including TB services. The NTEP has made concerted efforts to integrate TB services at AB-HWCs so that primary healthcare teams are able to provide TB services closer to the community. AB-HWCs also play a pivotal role in improving awareness about TB, early identification, ensuring treatment adherence, and providing psycho-social support to TB patients and their families. Capacity building of CHOs on TB services is ongoing across India, and TB has been incorporated into e-Sanjeevani platform and TB indicators are included in AB-HWC reporting mechanisms.

Updates

- Out of the 163,812 Ayushman Arogya Mandirs operational as on 31 December 2023, 1.5 lakh have been mapped as HWCs on Ni-kshay portal.
- In 2023, a total of 2.16 crore individuals (2.3% of OPD) were referred for TB diagnosis by AB-HWCs, and out of them 10.42 lakh individuals were diagnosed with TB.

National-level campaign in 2023

The NTEP organized a 21 days' campaign titled "TB Mukt Bharat@AB-HWCs through Jan Arogya Samitis" from 24 March to 13 April 2023, to establish AB-HWCs as a hub for comprehensive TB services. The campaign aimed to integrate the objective of ending TB to the regular functioning of AB-HWCs across India. Key focus areas and activities during the campaign included: (1) Active Case Finding of TB among identified vulnerable population in the AB-HWC area, (2) Orientation of Jan Arogya Samiti on TB programme and its implementation, (3) Community engagement and awareness generation for TB at AB-HWCs through VHSNC meeting on TB, observation of Ni-kshay Diwas, identification and sensitization of TB survivors as TB Champions and Ni-kshay Poshan Kit distribution under the PMTBMBA;

89,973 AB-HWCs across 32 States/UTs reported the key achievements as listed below:

- **5.29 crores** (3.7% of estimated population) individuals were **identified as vulnerable population**, **2.86 crores** individuals **screened for TB, 5.23 lakh individuals** (1.8% of screened population) were **identified with symptoms suggestive of TB** and were offered TB testing service. **Total 4.39 lakh individuals were tested for TB and 11,806 new TB cases were identified;**
- **58,986 orientation sessions** on TB were conducted with participation from **4.37 lakh JAS members;**
- **81,424 special Gram Sabha's** on TB were held involving **5.91 lakh participants;**
- **91,689 VHSNC meetings** on TB were held during the campaign with a participation of **4.68 lakh VHSNC members;**
- **85,384 TB survivors (34,650 females and 47,597 males)** were identified and sensitized by the AB-HWCs on their potential role as TB Champions. As a result, on an average, one TB survivor was identified and designated as a TB Champion for each AB-HWC;
- **57,611 AB-HWCs** (64% of AB-HWCs reported on the campaign) celebrated Ni-kshay Diwas during the campaign period of 21 days (Figure 14.8).

Figure 14.8: TB awareness event during 21 days campaign in Madhya Pradesh

JHPIEGO through its USAID-funded NISHTHA project is supporting NTEP in integrating TB services at Ayushman Arogya Mandirs at national level and in 12 States (Figure 14.9). Over 76% of Ayushman Arogya Mandirs in the 12 intervention states have been mapped on the NI-KSHAY portal, providing TB-related healthcare services. Notably, a significant increase in enrolling presumptive TB cases has been observed, with a remarkable rise from 2% in 2021 to 46% in 2023 (Figure 14.10). This integration has led to improved identification and enrolment of presumptive TB cases, reaching 40% in 2023 (Box 14.1).

Figure 14.9: Active case finding – Lakshadweep

Figure 14.10: TB Mukt Pledge at HWC in Chandigarh

Box 14.1 Mission TB-Free Kolkata" – An Innovation

The State NTEP Division, in collaboration with the Clinical Establishment (CE) Cell of the Directorate of Health and Family Welfare Department, conducted four sensitization meetings over the past 2 years, focusing on TB case notification in Ni-kshay with private hospitals and laboratories. These meetings, attended by high-ranking officials including the Principal Secretary, MD-NHM, AMD-NHM and DHS, aimed at strengthening linkages between NTEP and private healthcare facilities. Following state-level sensitization, the NTEP team under Kolkata Municipal Corporation visited private hospitals and laboratory management to collect backlog data and provided hands-on training on real-time Ni-kshay data entry. As a result, approximately 75 private health facilities are now actively notifying TB cases in Ni-kshay in real-time mode. Furthermore, diagnostic laboratories are sharing daily reports in a uniform format with the City TB Officer via email and WhatsApp groups. This scalable model of private sector engagement has led to the establishment of a "No Cost Institutional Arrangement", with ULBs such as KMC taking ownership of the programme and advocating for TB inclusion in daily reporting alongside diseases like dengue and malaria.

Impact of the intervention: *TB case notification targets increased from 78% in 2022 to 99% in 2023 in West Bengal.*

17-member Private Hospitals under Association of Hospitals of Eastern India (AHEI), who are operating in Kolkata, were invited in the first round of meeting in which all of them actively participated (Figure 14.11).

Figure 14.11: First Sensitization Meeting with the representatives from Private Health Facilities of Kolkata, held at State Head Quarter, 2022


प्रधानमंत्री टी.बी. मुक्त भारत अभियान
pradhan mantri
टीबी मुक्त भारत
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नि-क्षय
मित्र
राष्ट्रीय क्षय उन्मूलन कार्यक्रम
टीबी मुक्त भारत
टीबी हारेगा देश जीतेगा
राष्ट्रीय क्षय उन्मूलन कार्यक्रम
जिला मन्दसौर

PRADHAN MANTRI TB MUKT BHARAT ABHIYAAN

15

'World's largest crowd-sourcing initiative for nutritional support to TB patients'

Background

The PMTBMBA envisions to bring together the community and the institutions of the society to support persons with TB and their families by providing them increased nutritional, diagnostic and vocational supports which would result in better treatment outcomes as well as decreased morbidity and mortality, thereby accelerating country's progress towards TB elimination.

The primary goals are providing additional support to individuals affected with TB, fostering greater community engagement and leveraging the support of businesses and institutions in this important endeavour and leveraging CSR activities.

Achievements

The initiative has seen participation of more than 1.57 lakh Ni-kshay Mitras from all walks of life including elected representatives, political parties, corporates, institutions, NGOs and individuals supporting more than 96% of consented TB patients and distributing more than 14.80 lakh nutrition baskets within 16 months since its launch on 9 September 2022 (Table 15.1 and Figure 15.1).

Table 15.1: Status of Ni-kshay Mitra (as on 1st March 2024)

Status	As on 1st March 2024
TB patients on treatment	13.46 lakh
TB patients consented to receive community support	9.57 lakh
No. of Ni-Kshay Mitra registered	1,57,641
Ni-Kshay Mitra agreed upon	1,23,278
Commitment by Ni-Kshay Mitra for TB patients	9.53 lakh
TB patients supported (linked to) by Ni-Kshay Mitra	9.49 lakh
Total number of food baskets distributed	14.80 lakh

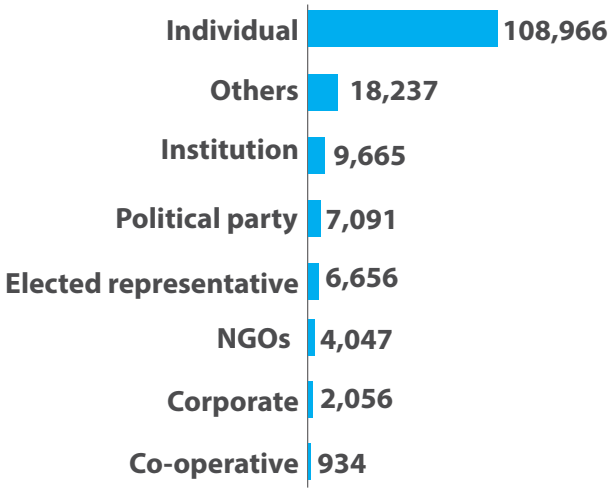

Figure 15.1: Types of Ni-kshay Mitra
(as on 1st March 2024)

The initiative has received commitment from the highest political leadership in the States with Hon'ble Governors of 27 States/UTs, **Hon'ble Ministers, Chief Ministers of many States/UTs coming forward to adopt TB patients.**

In this endeavour, **even the Indian Air Force (IAF), the air arm of the Armed forces** has come forward and registered as a Ni-kshay Mitra and are providing support to approximately 1,000 patients in New Delhi with the collective contributions received from their staff (Figure 15.2).

An event was organized at the CTD, MoHFW, Government of India, New Delhi on 23 August 2023 where the IAF team, led by Air Marshal RK Anand VSM, Air Officer-in-charge Administration, **handed over the IAF's contribution of INR 46 lakhs, collected through voluntary contribution,** to Ms. L.S. Changsan, Additional Secretary and Mission Director, NHM, MoHFW, Government of India. Through this contribution, **the IAF has committed to support 765 patients** undergoing treatment in the State of Delhi for a duration of 6 months.

Figure 15.2: Event organized at CTD, MoHFW

Many young children have also come forward to register as Ni-kshay Mitras and supported TB patients from their own pocket money.

In a short span of time, it has managed to galvanize support from different strands of society for TB patients, so they are better equipped – physically and mentally – to fight the disease.

Figure 15.3: Meenakshi Kshatriya appointed as Brand Ambassador for TB awareness by Madhya Pradesh administration

Figure 15.4: Nalini Singh felicitated as TB Champions and Ni-kshay Mitra by Hon'ble Governor of Himachal Pradesh

Himachal Pradesh: On the eve of Himachal day Hon'ble Governor, Shiv Pratap Shukla reviewed NTEP and felicitated TB Champions and **Ni-kshay Mitra – 7-year-old Nalini Singh**, of JS World Vision School. During the activity, the NTEP staff briefed the students about TB disease and the "PMTBMBA" campaign, which aimed to eliminate TB from India by 2025.

Independent external assessment of PMTBMBA key findings

An independent external assessment of PMTBMBA was conducted in order to provide insights into the PMTBMBA programme performance and the future strategies. Overall, the report has reflected that there is a positive impact on the TB patients in the form of better treatment outcomes, reduction in the OOP expenditure among the patients along with an increase in the number of visits to health facilities, thereby strengthening patient follow-ups.

Following are the key findings:

- TB patients with a Ni-kshay Mitra have a **95% successful treatment outcome**, relative to 90% for those without one, suggesting a 5% improvement which was statistically significant;
- Those who **received the kits were satisfied with programme (92%);**
- **92% patients** reported **reduction in OOP expenditure;**
- **Weight gain** was **4.2 kg** among **beneficiaries** and **3.8 kg** among **non-beneficiaries**;
- **Higher number of health facility visits** resulted in increased follow-up and treatment adherence;
- **Higher impact** observed among vulnerable population groups, **pregnant/lactating women (18%), migrants (48%) and urban slums (15%).**

The PMTBMBA initiative has made significant impact on health system as well stakeholders of the programmes during the process of implementations.

Strategic leveraging for comprehensive impact: Health officials observed a significant boost in NTEP's visibility due to PMTBMBA. This initiative has catalysed engagement from general health system staff, prompting increased attention to TB-related indicators during programme reviews.

Addressing stigma: Patients have increased willingness to seek support, signifying a positive transformation. Ni-kshay Mitra has reduced myths, misconceptions and fear among community on TB, thereby contributing to a shift in perceptions.

Versatility in PMTBMBA implementation: State demonstrated multiple models of service delivery involving Ni-kshay Mitra, NGOs, healthcare staff, grocery stores, supply chain partners, etc. These models exemplify diverse approaches tailored to local contexts.

Opportunities for wider inclusion of beneficiaries: Consent drive should be used as an opportunity to assess the needs of the patients. Denial of consent was observed primarily due to: (a) higher socio-economic status and (b) stigma and fear of being identified in public.

Types of support and patient-centric support system: Support from Ni-kshay Mitra was largely restricted to nutritional support while diagnostic and vocational supports were less visible; 30% of interviewed patients shared their desires for other supports like vocational support, diagnostic support or additional nutritional supplements.

Participation in various National and International Forums for advocating PMTBMBA

1

G-20 Health Working Group Meetings at Kerala, Goa, Gujarat and Telangana: The NTEP Stall on PMTBMBA, Community Engagement and Ni-kshay portal during G20 Health Working Group Meeting was visited by various International and National dignitaries and other delegates and they were given live demonstration of PMTBMBA initiative (Figure 15.5A and B).

Figure 15.5A and B: Live demonstration of PMTBMBA initiative

2

CPSEs Roundtable and Exhibition on 25–26 September 2023 in New Delhi: The Department of Public Enterprises (DPE) with the support of Central Public Sector Enterprises (CPSEs) in association with SCOPE, is organizing a 'CPSEs Roundtable and Exhibition 2023' on 25–26 September 2023 in New Delhi. The Union Minister of State for Finance, Dr. Bhagwat Kisanrao Karad presided as Chief Guest in the inaugural of the Roundtable and Exhibition. The exhibition showcased contributions of CPSEs through their CSR activities towards strengthening public health, nutrition, education, sports and others; presentation on PMTBMBA under NTEP by Joint Secretary, Shri Rajiv Manjhi during CPSEs roundtable (Figure 15.6A and B).

Figure 15.6A and B: Presentation on PMTBMBA by Joint Secretary, Shri Rajiv Manjhi during CPSEs roundtable

3

Pragati Maidan India International Trade Fair (14–27 November 2023): Demonstration about the details of PMTBMBA (i.e., objectives, scope, achievements till date, process of registration as Ni-kshay Mitra, etc.) is displayed at the NTEP stall at India International Trade Fair (IITF), Pragati Maidan in New Delhi. Dr. Mansukh Mandaviya, Hon'ble HFM, respected DGHS, Dr. Vinod Paul, Secretary Health, AS&MD, AS, JS, Ms. Deepa Malik and various other delegates from various countries visited NTEP stall and appreciated the efforts made by the CTD team in mobilizing community to achieve registration of more than 1 lakh Ni-kshay Mitras. Students from colleges/schools also learnt about the PMTBMBA Ni-kshay 2.0 dashboard, process of registration, facts about actual distribution of nutrition kits and appreciated the initiative. Many corporates and individuals registered as a Ni-kshay Mitra on the spot and supported the movement (Figure 15.7A to C).

Figure 15.7A to C: (A) Dr. Mansukh Mandaviya, (B) Ms. Deepa Malik and (C) various other delegates registered as a Ni-kshay Mitra

4 **Ayushman Bhavah Campaign:** The 'Ayushman Bhavah' initiative was envisaged to saturate all healthcare services in every village/town in-line with the commitment of PM Shri Narendra Modi ji to ensure reach to the last mile and enable access to healthcare services to everyone in the society. 'Ayushman Bhav' initiative involved a set of interventions that include 'Ayushman – Apke Dwar 3.0', 'Ayushman Sabhas', 'Ayushman Melas – at Health and Wellness level and Medical Camps by Medical Colleges at CHCs', and eventually ensuring Gram/Nagar Panchayat or Urban Ward to attain the status of 'Ayushman Panchayat' or 'Ayushman Urban Ward' in a saturation mode. Good performing districts/panchayats/urban wards and Ni-kshay Mitra under PMTBMBA were honoured/ awarded at the State and District level events at the hands of the participating public representatives after the main launch event. Ayushman Bhavah aims to increase the awareness on TB, increases the presumptive TB examination at the local/village level to improve treatment adherence and avoid treatment interruptions (Figure 15.8A to D).

Figure 15.8A to D: Ayushman Bhavah campaign

5 **Viksit Bharat Sankalp Yatra (15th Nov. 2023 to 25th Feb. 2024):** Hon'ble PM inaugurated the VBSY on Birsa Munda Jayanti by flagging off IEC Vans from Khunti district of Jharkhand on 15 November 2023. The campaign started on 22 November 2023 and will be available till 25 January 2024 across India. The focus is given on saturation of 30 schemes and on-spot services covering all 2.7 lakh Gram Panchayats. During the Yatra, more than 3,000 Raths will cover about 2.69 lakh Gram Panchayats in 765 districts and generate awareness among the rural population about various Government Schemes/achievements.

Under NTEP:

- **Nikshay Mitra Registration:** On-spot services for PMTBMBA:
  - A QR code will be placed in Rath Yatra which will support volunteers to register themselves to become Ni-kshay Mitras to support TB patients;
  - Encourage volunteers to register themselves as Ni-kshay Mitra to contribute to the initiative;
  - Felicitation of Ni-kshay Mitras during the event;
  - Consent from TB patients for PMTBMBA if pending;
- IEC materials for symptoms of TB stigma reduction;
- On-spot services for TB symptoms screening;
- On-spot services for Bank Account seeding for pending patients (Figure 15.9A and B).

Figure 15.9A and B: (A) President of India, Ms. Droupadi Murmu delivering speech on VBSY at Raj Bhawan, Gujarat and (B) A truck flagging off VBSY

Under VBSY, tremendous response has been seen with **more than 3.9 crore people screened** for TB and **more than 11.9 lakh people referred for TB.** In addition, under PMTBMBA, over **1.21 Ni-kshay Mitras have been registered and consents taken from more than 4.2 lakh TB patients.**

5

PM Mann Ki Baat: Hon'ble Prime Minister of India, during Mann Ki Baat held on 18 June 2023 appreciated the progress of PMTBMBA and the noble gestures of Ni-kshay Mitras like Sarpanch and young children who have come forward and adopted TB patients (Figure 15.10A to C).

A

B

C

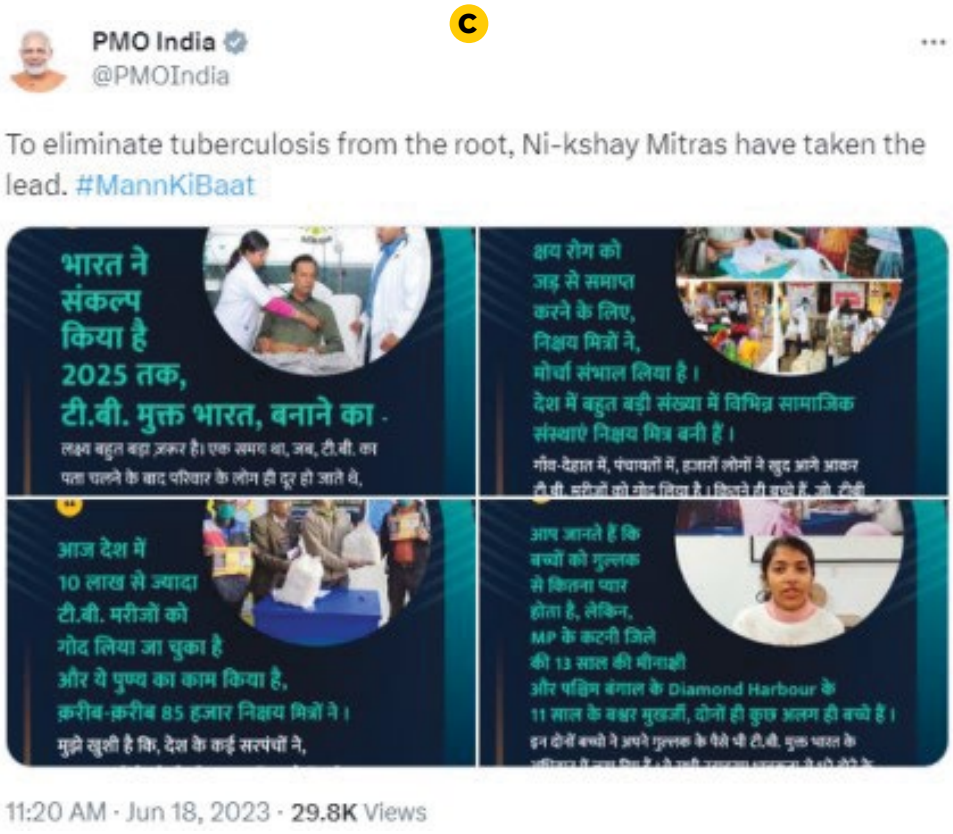

Figure 15.10A to C: PM Mann Ki Baat


MEGHA HEALTH INSURANCE SCH
PRADHAN MANTRI JAN AROGYA Y
STI - Sexually
Transmitted
Infections
Don't hide them
Get treatment
Embrace safety of
yourself as well as
your dear ones!

HEALTH FINANCING

16

Introduction

The NTEP is a centrally-sponsored scheme under NHM to implement the programme activities as envisaged under NSP 2017–25 as per NTEP guidelines. The procedures for the financial management are being followed as per the published manuals and guidelines available on the programme website (Financial Manual for NTEP). The financial management arrangements to account for and report on programme funds include both domestic budgetary support (DBS) and externally-aided component (EAC). The arrangements are as follows.

Institutional arrangements

The CTD, being a part of the NHM, is responsible for the financial management of the programme. Similarly, at the State and District level, the STC and the District TB Centre are responsible respectively.

Budget: Programme expenditures are budgeted under the Demand for Grants of the MoHFW flexible pool for communicable diseases funding arrangement. These are reflected in two separate budget lines: (i) General component (GC) and (ii) EAC.

1. **Funds flow and releases:** The fund flow remains within the existing financial management system of the MoHFW, which operates through the centralized Pay and Accounts Office (PAO). The release of funds to States is done in installments through State Treasury. The funds are released directly by NHM to States/UTs under RCH Flexible Pool as the NTEP funds are a part of Flexible Pool under RCH and utilized by States/UTs as per the dedicated FMR codes approved in States/UTs ROP.
2. **Sanctions and approvals:** All procurements of commodities are processed by the Central Medical Services Society (CMSS), an autonomous society under MoHFW, Government of India approved by the Cabinet. All fund releases for commodity advances for approved contracts are routed through the Integrated Finance Division (IFD) and processed by the Drawing and Disbursing Office (DDO) and PAO. All the programme expenditures follow the standard government systems of the PAO and are subject to control as per the General Financial Rules (GFR) of the Government of India. Payments are made through electronic funds transfer through treasury since the financial year 2014–15.
3. **Accounting:** The accounting records for all payments are made against approved budget. Budget lines are maintained by the Principal Accounts Officer and compiled by the Controller General of Accounts (CGA). The compiled monthly accounts are reconciled with the CTD record of transactions.
4. **Financial reporting:** A financial report is submitted by CTD to MoHFW and donors like The Global Fund and World Bank on periodic intervals based on the compiled monthly accounts and CTD's own record of expenditures.
5. **External audit:** The audits are being conducted as per the standard terms of reference. The audit

reports are being made available to all donors as per the agreement. At the State level audits are being done as per State NHM manual and guidance for audit by empaneled chartered accountancy firms, all the States are required to submit the annual audit report to CTD by 30th September every year (Table 16.1).

Table 16.1: Financial performance of NTEP

(INR in crores)

Descriptions	2017–18	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24	Total
Budget requested	2,200.00	4,115.00	3,525.00	3,554.00	3,628.85	3,088.87	305,742	23,169.14
Budget estimates/ approved budget	1,840.00	3,140.00	3,333.21	3,109.93	3,409.94	1,666.33*	188,882*	18,388.23
Total releases to States	871.36	907.65	870.81	629.71	545.78	(—)**	(—)**	3,825.31
Total expenditure	2,759.44	2,237.79	3,130.11	3,097.98	2,086.82	910.83	840.49^	15,063.46

**Excluding cash grant which are being released by NHM directly to States/UTs*

***Cash grant is being released by NHM directly under RCH Flexible Pool.*

^Expenditure as on 15.03.2024.

Program Implementation Planning

Introduction

The NHM is the prime vehicle for achievement in architectural corrections of the National Health Policy 2017 and SDG-3 targets especially for primary health care, Universal Health Coverage and TB along with Maternal, Child and Adolescent Health. The thrust of the NHM is to establish a fully functional, community-owned, decentralized health delivery system with intersectoral convergence at all levels.

The exercise of PIP under the NHM is a critical step in planning and resource allocation for key national and state health priorities and initiatives. Under the NHM, in order to reflect the requirements of the state a consolidated PIP is prepared.

The NTEP, which is a flagship programme under NHM, will utilize the resources under NHM to strengthen TB care and elimination activities in accordance with the NSP and State Strategic Plans (SSP). A district could plan all the activities to achieve TB elimination targets based on the DTPB strategies under NSP can be described and budgeted in PIP.

The NTEP is implemented through the general health system. The overall responsibility of implementing NTEP activities rests with the staff under general health services. The fund flow for NTEP activities is done through state treasuries followed by State and District Health Societies. The Health Societies are vehicles for receipt of funds from Government of India and implementation of the project activities.

Additional resources enabled for NTEP in FY 2022–24

To further strengthen the health infrastructure of the country, the MoHFW has taken various initiatives in the recent past. The 15th Finance Commission (15th FC) Health Sector Grants and the Pradhan Mantri Ayushman Bharat Health Infrastructure Mission (PM-ABHIM) are supporting the development of Critical Care Blocks (CCBs), Integrated Public Health Laboratories (IPHLs), Block Public Health Units (BPHUs), Ayushman Arogya Mandirs, diagnostic infrastructure, as well as some Human Resources for Health (HRH). The NTEP is also integrated with these services and TB diagnostics and treatment care services are being enhanced by utilizing the grants available under these resources.

Major reforms in FY 2022–24 planning cycle

Over the years with the exponential growth of NHM, and simultaneous increase in the number

of budget lines have led to the loss of flexibility which is one of the core characteristics of NHM. The detailed proposals lead to detailed approvals and Financial Management Reports (FMRs) rendering the newer changes in finance such as implementation of Single Nodal Agency and NFAMS very difficult. Given this background, in consultation with the States, this year a few reforms have been brought in the way PIPs. The planning process was simplified. Also, a 2-year PIP cycle was introduced. The discussions, which were held during the National Programme Coordination Committee (NPCC), were more focused on planning and target setting for outputs and outcomes.

A. Simplified PIP format: The planning and budget format in which the PIP is to be proposed is a simplified PIP matrix of 11 (columns) by 7 (NTEP programme rows). While the States may need to plan in terms of inputs, the PIP at MoHFW would be appraised based on the output for proposed budget. The following are the 7 NTEP programme rows to be proposed under National Digital Communications Policy 4 (NDCP-4) FMR code as described in Table 16.2.

B. Focus on outputs and key deliverables (KDs): The list of KDs under NTEP as mentioned in Tables 16.3 and 16.4 below was finalized in consultation with the States/UTs. The States and UTs were given reasonably ambitious deliverables based on the situational analysis and gaps vis-à-vis the desired levels to meet the TB elimination targets. These KDs are being monitored periodically at all levels.

Table 16.2: The 7 NTEP scheme

Pool	FMR code	Programme	S. no.	Scheme
NDCP flexi pool	NDCP-4	NTEP	73	DS-TB
			74	NPY
			75	PPP
			76	LTBI
			77	DR-TB
			78	"TB Harega, Desh Jeetega" Campaign
			79	State-specific initiatives and innovations

Table 16.3: Priority key deliverables (KDs) under NTEP

Indicator type	Key deliverables	Indicator	Unit
Output	Presumptive TB Examination	Presumptive TB examination/lakh population	Nos.
Output	Expansion of rapid molecular diagnostics for TB	% of TB patients tested for Rifampicin resistance	Percentage
Output	State TB Score	% Improvement in Annual TB Score **Numerator:** (State Annual TB Score in Current Year – State Annual TB Score in last year) **Denominator:** State Annual TB Score in last year	Percentage
Output	Ni-kshay Poshan Yojana	% of eligible patients receiving all benefits of DBT **Numerator:** No. of eligible patients receiving all benefits of DBT **Denominator:** No. of eligible patients	Percentage
Output	Districts with TB free status	No. of districts to achieve TB free Status # Bronze, # Silver, # Gold, #TB Free district/City	Nos.
Output	% of Gram Panchayat/wards with TB free Status	% of Gram Panchayat/ward to achieve TB free Status # Bronze, # Silver, # Gold, #TB Free	Percentage
Output	% of patients adopted by Ni-kshay Mitra	% of consented TB patients adopted by Ni-kshay Mitra	Percentage

Table 16.4: Introduction of NTEP key conditionalities

S. no.	Conditionality	Indicators	Source of verification	% incentive / penalty
1.	Percentage of districts achieving 90% of TB notification target	>80% of districts achieving 90% of targets +5 60–80% of districts achieving 90% of targets +2.5 <60% of districts achieving 90% of targets –2.5 <40% of districts achieving 90% of targets –5	NTEP Ni-kshay Portal	+5.0 to –5
2.	Percentage of districts achieving 85% of treatment success rate	>80% of districts achieving 90% of targets +5 60–80% of districts achieving 90% of targets +2.5 <60% of districts achieving 90% of targets –2.5 <40% of districts achieving 90% of targets –5	NTEP Ni-kshay Portal	+5.0 to –5
3.	Percentage of AB-HWCs providing drugs to TB patients	>80% of AB-HWCs providing drugs to TB patients +5 60–80% of AB-HWCs providing drugs to TB patients +2.5 <60% of AB-HWCs providing drugs to TB patients –2.5 <40% of AB-HWCs providing drugs to TB patients –5	NTEP Ni-kshay Portal and HWC Portal	+5.0 to –5

Achievements in 2023

- PIP guidance document to support States/UTs on planning NTEP activities in alignment with NHM-PIP template has been developed and disseminated (Figure 16.1).
- INR 3,113.76 crores have been recommended with approval of competent authority.

World Bank – PTETB

Introduction

To achieve SDGs related to TB by 2025, the Government of India has launched a robust response and is implementing a NSP for TB Elimination (2017–25). The MoHFW has availed a US $400 million International Bank for Reconstruction and Development (IBRD, World Bank) loan to advance progress towards priority outcomes of the NSP 2017–25 and is implementing the "Program Towards Elimination of Tuberculosis (PTETB)" project (PI 67523) (Loan no 8926).

The IBRD financing is US $400 million or 30% of the total programme cost estimate of US $1.334 billion. The Government of India will finance the remaining 70% (Figure 16.2).

Implementation arrangements

The PTETB was carved out of the NSP by result area, geographical area with the selection of priority States and timeframe. The programme focuses on four result areas (PfR) and these results areas are inter-linked and mutually reinforcing on:

i. Scaling up private sector engagement;
ii. Rolling out TB patient management and support interventions;

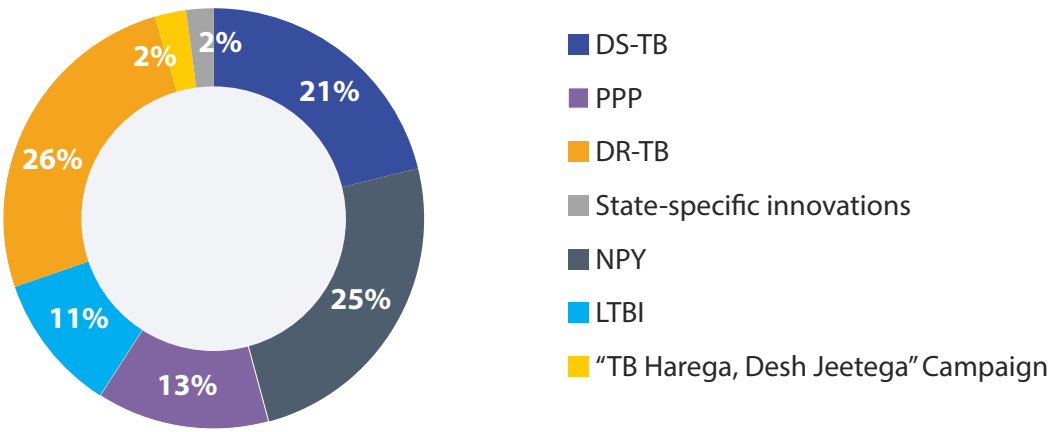

Figure 16.1: Planning of NTEP activities

iii. Strengthening diagnostics and management of DR-TB; and

iv. Strengthening Revised National Tuberculosis Control Programme (RNTCP) institutional capacity and information systems.

Achievements in 2023

- Programme Division prepared the claim of US $54.89 million for year 3 results by analysing the achievements of disbursement-linked indicators (DLIs) to WHO which is the Independent Verification Agency (IVA) and IVA is in the process of verification for year 3 claim on DLIs achievement;
- In 2023, the disbursements under the programme are at US $ 322.06 million against the allocation of US $ 400 million (i.e., at 80.5%). Of the US $40.6 million buy-down, US $28.81 million has been disbursed in year 3 itself;
- The Year-4 DLI claim of approximately US $ 30 million is being verified and expected to be submitted for disbursement during FY24, increasing the disbursements to around 91% (Figure 16.3);
- It has advanced significantly in its four result areas. Three out of four Project Development Objective (PDO) indicator targets for 2023 are achieved, and one (on the overall net increase in notifications from the private sector) is delayed. Out of 10 DLI targets for 2023, nine were achieved;
- The Programme Division is performing well in most of the DLIs, **6 DLIs out of total 10 DLIs** have achieved the final year targets in 2nd year itself. Hence a full claim has been submitted for disbursement; and
- Implementation Mission by the World Bank is undertaken biannually to understand the technical and financial implementation progress of PTETB. The last Biannual Implementation Mission was held on **October 2023.**

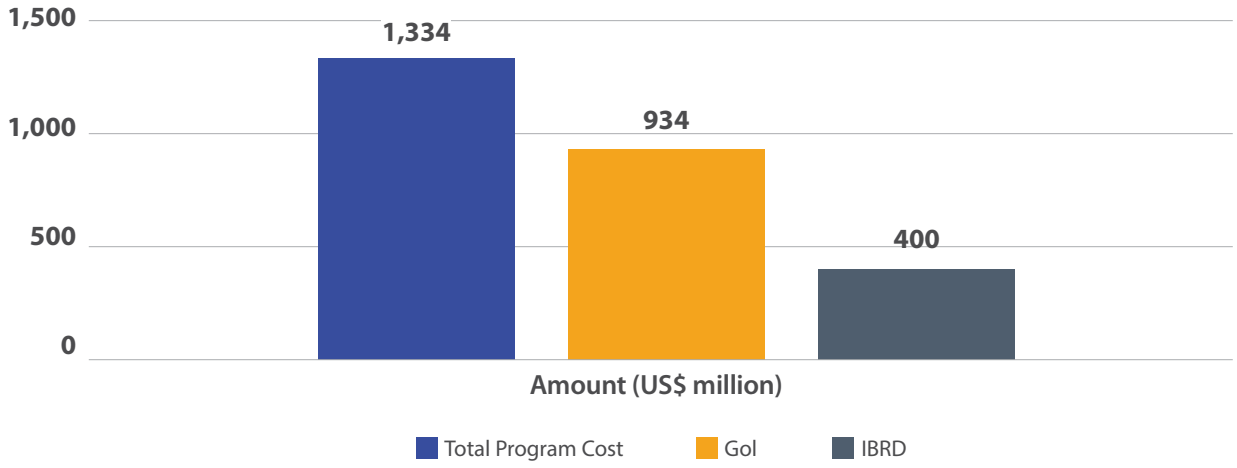

Figure 16.2: Programme financing (World Bank – PTETB)

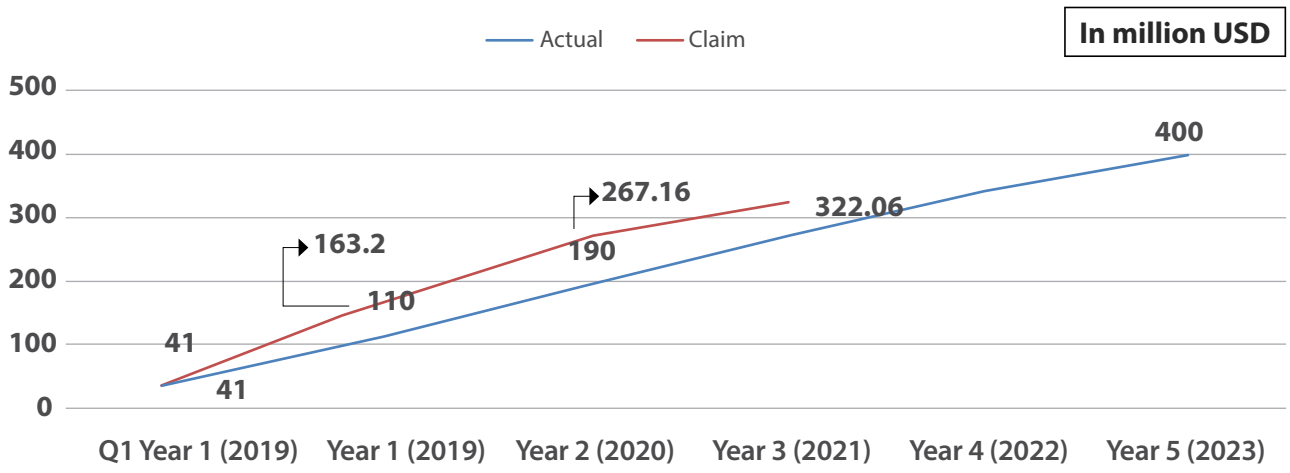

Figure 16.3: The Year-4 DLI claim

Tuberculosis

कब से शुरु है ये लड़ाई।
कभी गिरे नीचे तो कभी की चढ़ाई।।

पुरातन काल का है ये मर्ज।
रोज सैंकड़ों मरीज होते है दर्ज।।

बीमारियों का कहलाता है राजा।
बाकी सब बीमारियां तो है बस प्रजा।।

इंसान और जानवरो में भी है ये बीमारी।
किसी में क्षय कहलाया तो किसी में किल्लारी ।।

देवताओं को भी इसने पकड़ा ।
थोड़ी सी लापरवाही और बीमारी ने जकड़ा ।।

फेफड़ों के साथ साथ पूरे जिस्म पे ढाया कहर।
कभी कभी लगता है मर जाए ख़ाके जहर।।

सरकारी योजनाएं करती है आर्थिक सहाय।

मुफ्त में करती है जांच और देती है दवाई।।

छह से नौ महीने दवाई और पूरी सावधानी।
फिर कभी नही होगी क्षय से परेशानी।।

अपना और अपने परिवार का रखो ख्याल।
समय पे जांच और इलाज, वरना होगा बुरा हाल।।

डॉ. साहजिद मुखीदा


NATIONAL TUBERCULOSIS ELIMINATION PROGRAMME
TB HARega DESH JEETEGA
FAMILY WELFARE OF INDIA
STATE TB CELL
the fullest
BY — ISHA GOGOI, JENI, AMI, JONATHAN, TANVI

ANNEXURES

List of Annexures

1.1. Presumptive TB cases examination

States/UTs	Population - 2023 (in lakhs)	Number of cases examined by						Rate* (per lakh population)	Number of cases needed to test by	
		Microscopy	CBNAAT	TrueNat	Total NAAT	% of NAAT among total tested	Total		Microscopy	NAAT
Andaman and Nicobar Islands	3.93	4616	2987	1630	4617	50%	9233	2350	34	11
Andhra Pradesh	532.49	415094	90459	518366	608825	59%	1023919	1923	130	14
Arunachal Pradesh	25.83	10071	4339	7424	11763	54%	21834	845	13	8
Assam	363.54	560704	41758	42096	83854	13%	644558	1773	36	4
Bihar	1318.93	350492	80116	43663	123779	26%	474271	360	16	3
Chandigarh	12.08	13991	26108	3060	29168	68%	43159	3573	21	8
Chhattisgarh	301.80	568591	46442	30778	77220	12%	645811	2140	71	5
Dadra and Nagar Haveli and Daman and Diu	8.79	34271	5023	637	5660	14%	39931	4540	69	7
Delhi	198.21	158601	63322	22881	86203	35%	244804	1235	9	2
Goa	15.69	0	11202	18543	29745	100%	29745	1895	NA	21
Gujarat	724.39	1436908	68966	47132	116098	7%	1553006	2144	32	2
Haryana	308.57	392099	81796	33172	114968	23%	507067	1643	19	3
Himachal Pradesh	77.14	230367	77050	53652	130702	36%	361069	4681	62	12
Jammu and Kashmir	151.44	303250	34305	39191	73496	20%	376746	2488	106	10
Jharkhand	417.01	414098	53540	48985	102525	20%	516623	1239	22	4
Karnataka	740.18	1104670	251704	207356	459060	29%	1563730	2113	77	10
Kerala	354.59	308902	116112	90271	206383	40%	515285	1453	58	15
Ladakh	2.61	1257	14734	1382	16116	93%	17373	6649	27	46
Lakshadweep	0.67	739	272	37	309	29%	1048	1567	NA	52

States/UTs	Population - 2023 (in lakhs)	Number of cases examined by						Rate* (per lakh population)	Number of cases needed to test by	
		Microscopy	CBNAAT	TrueNat	Total NAAT	% of NAAT among total tested	Total		Microscopy	NAAT
Madhya Pradesh	883.49	1541472	190687	238262	428949	22%	1970421	2230	49	5
Maharashtra	1293.95	1806565	247756	79004	326760	15%	2133325	1649	37	4
Manipur	35.94	5550	7126	1633	8759	61%	14309	398	16	7
Meghalaya	38.93	10293	12995	30477	43472	81%	53765	1381	23	13
Mizoram	13.19	14520	9216	346	9562	40%	24082	1826	26	10
Nagaland	21.00	12245	5023	4269	9292	43%	21537	1026	15	4
Odisha	477.98	1228445	76215	166975	243190	17%	1471635	3079	54	6
Puducherry	15.82	19345	7366	4191	11557	37%	30902	1953	17	6
Punjab	305.76	251504	48531	20880	69411	22%	320915	1050	14	3
Rajasthan	810.25	1333574	155418	53268	208686	14%	1542260	1903	32	2
Sikkim	6.74	5219	9711	842	10553	67%	15772	2341	88	11
Tamil Nadu	784.34	1995443	219571	112613	332184	14%	2327627	2968	49	5
Telangana	406.44	294246	96569	290582	387151	57%	681397	1676	44	12
Tripura	40.53	119744	12031	3017	15048	11%	134792	3326	94	7
Uttar Pradesh	2433.27	2616706	231037	214385	445422	15%	3062128	1258	18	2
Uttarakhand	121.46	169685	13264	22970	36234	18%	205919	1695	15	3
West Bengal	1024.25	1567055	133375	98234	231609	13%	1798664	1756	48	4
INDIA	**14271.24**	**19300332**	**2546126**	**2552204**	**5098330**	**21%**	**24398662**	**1710**	**33**	**5**

1.2. TB case notification

States/UTs	Target of TB patients expected to be notified			TB patients notified, n(% of achievement against target)			TB case notification rate (per lakh population)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Andaman and Nicobar Islands	500	20	520	536 (107.2)	25 (125)	561 (107.9)	136.4	6.4	142.8
Andhra Pradesh	70000	35000	105000	58627 (83.8)	30437 (87)	89064 (84.8)	110.1	57.2	167.3
Arunachal Pradesh	3350	150	3500	2278 (68)	326 (217.3)	2604 (74.4)	88.2	12.6	100.8
Assam	49000	14000	63000	39123 (79.8)	12739 (91)	51862 (82.3)	107.6	35	142.7
Bihar	100000	150000	250000	84049 (84)	102925 (68.6)	186974 (74.8)	63.7	78	141.8
Chandigarh	6450	750	7200	5779 (89.6)	942 (125.6)	6721 (93.3)	478.4	78	556.4
Chhattisgarh	37900	17100	55000	25700 (67.8)	13224 (77.3)	38924 (70.8)	85.2	43.8	129
Dadra and Nagar Haveli and Daman and Diu	1100	100	1200	1060 (96.4)	107 (107)	1167 (97.3)	120.5	12.2	132.7
Delhi	80000	30000	110000	74640 (93.3)	25883 (86.3)	100523 (91.4)	376.6	130.6	507.2
Goa	1700	500	2200	1734 (102)	348 (69.6)	2082 (94.6)	110.5	22.2	132.7
Gujarat	91000	49000	140000	96858 (106.4)	47649 (97.2)	144507 (103.2)	133.7	65.8	199.5
Haryana	61000	35000	96000	53645 (87.9)	26845 (76.7)	80490 (83.8)	173.8	87	260.8
Himachal Pradesh	14000	1550	15550	14109 (100.8)	1539 (99.3)	15648 (100.6)	182.9	20	202.9
Jammu and Kashmir	10340	2160	12500	9777 (94.6)	1977 (91.5)	11754 (94)	64.6	13.1	77.6
Jharkhand	46700	23300	70000	46997 (100.6)	14720 (63.2)	61717 (88.2)	112.7	35.3	148
Karnataka	70000	30000	100000	58295 (83.3)	23567 (78.6)	81862 (81.9)	78.8	31.8	110.6
Kerala	16000	6000	22000	15173 (94.8)	6626 (110.4)	21799 (99.1)	42.8	18.7	61.5
Ladakh	243	7	250	312 (128.4)	8 (114.3)	320 (128)	119.4	3.1	122.5
Lakshadweep	12	0	12	6 (50)	NA	6 (50)	9	0	9
Madhya Pradesh	135000	75000	210000	128275 (95)	56416 (75.2)	184691 (87.9)	145.2	63.9	209
Maharashtra	140000	110000	250000	124453 (88.9)	103211 (93.8)	227664 (91.1)	96.2	79.8	175.9

States/UTs	Target of TB patients expected to be notified			TB patients notified, n(% of achievement against target)			TB case notification rate (per lakh population)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Manipur	2250	1250	3500	1543 (68.6)	952 (76.2)	2495 (71.3)	42.9	26.5	69.4
Meghalaya	4700	1000	5700	4056 (86.3)	852 (85.2)	4908 (86.1)	104.2	21.9	126.1
Mizoram	2540	460	3000	1835 (72.2)	438 (95.2)	2273 (75.8)	139.1	33.2	172.3
Nagaland	4250	750	5000	3553 (83.6)	734 (97.9)	4287 (85.7)	169.2	35	204.1
Odisha	55000	10000	65000	52265 (95)	10122 (101.2)	62387 (96)	109.3	21.2	130.5
Puducherry	4000	100	4100	4059 (101.5)	110 (110)	4169 (101.7)	256.6	7	263.5
Punjab	50000	20000	70000	42326 (84.7)	12898 (64.5)	55224 (78.9)	138.4	42.2	180.6
Rajasthan	137000	43000	180000	123511 (90.2)	41612 (96.8)	165123 (91.7)	152.4	51.4	203.8
Sikkim	1280	120	1400	1298 (101.4)	93 (77.5)	1391 (99.4)	192.6	13.8	206.4
Tamil Nadu	90690	29310	120000	74328 (82)	23923 (81.6)	98251 (81.9)	94.8	30.5	125.3
Telangana	52580	27420	80000	49871 (94.8)	25123 (91.6)	74994 (93.7)	122.7	61.8	184.5
Tripura	3100	100	3200	3187 (102.8)	199 (199)	3386 (105.8)	78.6	4.9	83.5
Uttar Pradesh	364300	185700	550000	409529 (112.4)	223343 (120.3)	632872 (115.1)	168.3	91.8	260.1
Uttarakhand	21000	7000	28000	20435 (97.3)	6394 (91.3)	26829 (95.8)	168.2	52.6	220.9
West Bengal	101660	28340	130000	74656 (73.4)	28072 (99.1)	102728 (79)	72.9	27.4	100.3
INDIA	**1825705**	**937127**	**2762832**	**1707878 (93.5)**	**844379 (90.1)**	**2552257 (92.4)**	**119.7**	**59.2**	**178.8**
TB patient's notification is based on notification by diagnosing PHI.									

1.3. Notified TB patients – characteristics

States/UTs	Types of cases, n(%)		Site of disease, n(%)		Basis of diagnosis, n(%)	
	New	Previously treated	Pulmonary	Extra-pulmonary	Bacteriologically confirmed	Clinically diagnosed
Andaman and Nicobar Islands	456 (81)	105 (19)	387 (69)	174 (31)	398 (70.9)	163 (29.1)
Andhra Pradesh	79743 (90)	9321 (10)	66743 (74.9)	22321 (25.1)	53493 (60.1)	35571 (39.9)
Arunachal Pradesh	2120 (81)	484 (19)	1542 (59.2)	1062 (40.8)	1934 (74.3)	670 (25.7)
Assam	45400 (88)	6462 (12)	40777 (78.6)	11085 (21.4)	28991 (55.9)	22871 (44.1)
Bihar	168090 (90)	18884 (10)	157292 (84.1)	29682 (15.9)	71759 (38.4)	115215 (61.6)
Chandigarh	5343 (79)	1378 (21)	3874 (57.6)	2847 (42.4)	4528 (67.4)	2193 (32.6)
Chhattisgarh	34525 (89)	4399 (11)	26163 (67.2)	12761 (32.8)	18566 (47.7)	20358 (52.3)
Dadra and Nagar Haveli and Daman and Diu	996 (85)	171 (15)	764 (65.5)	403 (34.5)	860 (73.7)	307 (26.3)
Delhi	76469 (76)	24054 (24)	63073 (62.7)	37450 (37.3)	61765 (61.4)	38758 (38.6)
Goa	1715 (82)	367 (18)	1360 (65.3)	722 (34.7)	1489 (71.5)	593 (28.5)
Gujarat	115740 (80)	28767 (20)	108968 (75.4)	35539 (24.6)	78132 (54.1)	66375 (45.9)
Haryana	66503 (83)	13987 (17)	60597 (75.3)	19893 (24.7)	54048 (67.1)	26442 (32.9)
Himachal Pradesh	13434 (86)	2214 (14)	10547 (67.4)	5101 (32.6)	11162 (71.3)	4486 (28.7)
Jammu and Kashmir	10037 (85)	1717 (15)	7687 (65.4)	4067 (34.6)	7827 (66.6)	3927 (33.4)
Jharkhand	55020 (89)	6697 (11)	53652 (86.9)	8065 (13.1)	33990 (55.1)	27727 (44.9)
Karnataka	71132 (87)	10730 (13)	59415 (72.6)	22447 (27.4)	58454 (71.4)	23408 (28.6)
Kerala	19525 (90)	2274 (10)	14859 (68.2)	6940 (31.8)	17640 (80.9)	4159 (19.1)
Ladakh	269 (84)	51 (16)	241 (75.3)	79 (24.7)	267 (83.4)	53 (16.6)
Lakshadweep	6 (100)	0 (0)	5 (83.3)	1 (16.7)	6 (100)	(0)
Madhya Pradesh	156079 (85)	28612 (15)	147417 (79.8)	37274 (20.2)	91197 (49.4)	93494 (50.6)
Maharashtra	190710 (84)	36954 (16)	152126 (66.8)	75538 (33.2)	120858 (53.1)	106806 (46.9)

States/UTs	Types of cases, n(%)		Site of disease, n(%)		Basis of diagnosis, n(%)	
	New	Previously treated	Pulmonary	Extra-pulmonary	Bacteriologically confirmed	Clinically diagnosed
Manipur	2059 (83)	436 (17)	1668 (66.9)	827 (33.1)	1646 (66)	849 (34)
Meghalaya	4082 (83)	826 (17)	3428 (69.8)	1480 (30.2)	3491 (71.1)	1417 (28.9)
Mizoram	1916 (84)	357 (16)	1296 (57)	977 (43)	1488 (65.5)	785 (34.5)
Nagaland	3547 (83)	740 (17)	2938 (68.5)	1349 (31.5)	2993 (69.8)	1294 (30.2)
Odisha	55809 (89)	6578 (11)	46379 (74.3)	16008 (25.7)	40933 (65.6)	21454 (34.4)
Puducherry	3464 (83)	705 (17)	3069 (73.6)	1100 (26.4)	3458 (82.9)	711 (17.1)
Punjab	45170 (82)	10054 (18)	41238 (74.7)	13986 (25.3)	33245 (60.2)	21979 (39.8)
Rajasthan	135618 (82)	29505 (18)	133887 (81.1)	31236 (18.9)	96819 (58.6)	68304 (41.4)
Sikkim	1086 (78)	305 (22)	900 (64.7)	491 (35.3)	975 (70.1)	416 (29.9)
Tamil Nadu	85460 (87)	12791 (13)	75514 (76.9)	22737 (23.1)	71527 (72.8)	26724 (27.2)
Telangana	64581 (86)	10413 (14)	56553 (75.4)	18441 (24.6)	44601 (59.5)	30393 (40.5)
Tripura	2890 (85)	496 (15)	2741 (81)	645 (19)	2640 (78)	746 (22)
Uttar Pradesh	556474 (88)	76398 (12)	496841 (78.5)	136031 (21.5)	279870 (44.2)	353002 (55.8)
Uttarakhand	23230 (87)	3599 (13)	19174 (71.5)	7655 (28.5)	13569 (50.6)	13260 (49.4)
West Bengal	89445 (87)	13283 (13)	76068 (74)	26660 (26)	78490 (76.4)	24238 (23.6)
INDIA	**2188133 (86)**	**364124 (14)**	**1939183 (76)**	**613074 (24)**	**1393109 (54.6)**	**1159148 (45.4)**

1.4. Patient transfer status and treatment initiation status

States/UTs	Patients notified (Based on diagnosing PHI); public–private disaggregated			Net TB patients* notified (Based on current PHI); public–private disaggregated			Patients initiated on treatment, n(% out of total TB)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Andaman and Nicobar Islands	536 (95.5)	25 (4.5)	561	569 (97.8)	13 (2.2)	582	535 (94)	1 (7.7)	536 (92.1)
Andhra Pradesh	58627 (65.8)	30437 (34.2)	89064	63428 (70.5)	26483 (29.5)	89911	61956 (97.7)	26331 (99.4)	88287 (98.2)
Arunachal Pradesh	2278 (87.5)	326 (12.5)	2604	2805 (99.5)	15 (0.5)	2820	2662 (94.9)	14 (93.3)	2676 (94.9)
Assam	39123 (75.4)	12739 (24.6)	51862	44033 (84.8)	7878 (15.2)	51911	41622 (94.5)	7549 (95.8)	49171 (94.7)
Bihar	84049 (45)	102925 (55)	186974	91773 (48)	99349 (52)	191122	84985 (92.6)	98428 (99.1)	183413 (96)
Chandigarh	5779 (86)	942 (14)	6721	4105 (96.7)	138 (3.3)	4243	3583 (87.3)	103 (74.6)	3686 (86.9)
Chhattisgarh	25700 (66)	13224 (34)	38924	28543 (73.2)	10438 (26.8)	38981	27899 (97.7)	10278 (98.5)	38177 (97.9)
Dadra and Nagar Haveli and Daman and Diu	1060 (90.8)	107 (9.2)	1167	790 (91.1)	77 (8.9)	867	786 (99.5)	75 (97.4)	861 (99.3)
Delhi	74640 (74.3)	25883 (25.7)	100523	77279 (86.8)	11702 (13.2)	88981	70877 (91.7)	7253 (62)	78130 (87.8)
Goa	1734 (83.3)	348 (16.7)	2082	1723 (84.7)	311 (15.3)	2034	1650 (95.8)	309 (99.4)	1959 (96.3)
Gujarat	96858 (67)	47649 (33)	144507	101655 (72.3)	38963 (27.7)	140618	98777 (97.2)	38612 (99.1)	137389 (97.7)
Haryana	53645 (66.6)	26845 (33.4)	80490	64141 (79.6)	16459 (20.4)	80600	61078 (95.2)	15462 (93.9)	76540 (95)
Himachal Pradesh	14109 (90.2)	1539 (9.8)	15648	15704 (97.9)	342 (2.1)	16046	15308 (97.5)	312 (91.2)	15620 (97.3)
Jammu and Kashmir	9777 (83.2)	1977 (16.8)	11754	11297 (96.2)	450 (3.8)	11747	10709 (94.8)	431 (95.8)	11140 (94.8)
Jharkhand	46997 (76.1)	14720 (23.9)	61717	50734 (80.4)	12403 (19.6)	63137	48940 (96.5)	12190 (98.3)	61130 (96.8)
Karnataka	58295 (71.2)	23567 (28.8)	81862	67144 (83.6)	13208 (16.4)	80352	64747 (96.4)	12490 (94.6)	77237 (96.1)
Kerala	15173 (69.6)	6626 (30.4)	21799	19240 (88.2)	2572 (11.8)	21812	18617 (96.8)	2398 (93.2)	21015 (96.3)
Ladakh	312 (97.5)	8 (2.5)	320	338 (97.7)	8 (2.3)	346	312 (92.3)	8 (100)	320 (92.5)
Lakshadweep	6 (100)	(0)	6	14 (100)	(0)	14	14 (100)	NA	14 (100)
Madhya Pradesh	128275 (69.5)	56416 (30.5)	184691	138062 (73.9)	48821 (26.1)	186883	129681 (93.9)	47741 (97.8)	177422 (94.9)

States/UTs	Patients notified (Based on diagnosing PHI); public–private disaggregated			Net TB patients* notified (Based on current PHI); public–private disaggregated			Patients initiated on treatment, n(% out of total TB)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Maharashtra	124453 (54.7)	103211 (45.3)	227664	144196 (64.3)	80069 (35.7)	224265	135663 (94.1)	73589 (91.9)	209252 (93.3)
Manipur	1543 (61.8)	952 (38.2)	2495	2303 (89.7)	264 (10.3)	2567	2107 (91.5)	150 (56.8)	2257 (87.9)
Meghalaya	4056 (82.6)	852 (17.4)	4908	4554 (92.7)	358 (7.3)	4912	4321 (94.9)	340 (95)	4661 (94.9)
Mizoram	1835 (80.7)	438 (19.3)	2273	2281 (98.7)	29 (1.3)	2310	2213 (97)	25 (86.2)	2238 (96.9)
Nagaland	3553 (82.9)	734 (17.1)	4287	3903 (89.3)	466 (10.7)	4369	3835 (98.3)	463 (99.4)	4298 (98.4)
Odisha	52265 (83.8)	10122 (16.2)	62387	57783 (93.4)	4091 (6.6)	61874	56086 (97.1)	3851 (94.1)	59937 (96.9)
Puducherry	4059 (97.4)	110 (2.6)	4169	1608 (99.9)	2 (0.1)	1610	1512 (94)	1 (50)	1513 (94)
Punjab	42326 (76.6)	12898 (23.4)	55224	47167 (81.8)	10516 (18.2)	57683	43434 (92.1)	9719 (92.4)	53153 (92.1)
Rajasthan	123511 (74.8)	41612 (25.2)	165123	129783 (78.1)	36315 (21.9)	166098	121399 (93.5)	35357 (97.4)	156756 (94.4)
Sikkim	1298 (93.3)	93 (6.7)	1391	1324 (94.2)	81 (5.8)	1405	1286 (97.1)	75 (92.6)	1361 (96.9)
Tamil Nadu	74328 (75.7)	23923 (24.3)	98251	81913 (81.5)	18542 (18.5)	100455	79739 (97.3)	18044 (97.3)	97783 (97.3)
Telangana	49871 (66.5)	25123 (33.5)	74994	52100 (69.4)	22965 (30.6)	75065	49772 (95.5)	21884 (95.3)	71656 (95.5)
Tripura	3187 (94.1)	199 (5.9)	3386	3556 (99.2)	27 (0.8)	3583	3437 (96.7)	24 (88.9)	3461 (96.6)
Uttar Pradesh	409529 (64.7)	223343 (35.3)	632872	456201 (71)	186573 (29)	642774	435809 (95.5)	183356 (98.3)	619165 (96.3)
Uttarakhand	20435 (76.2)	6394 (23.8)	26829	22566 (84.5)	4154 (15.5)	26720	21910 (97.1)	4040 (97.3)	25950 (97.1)
West Bengal	74656 (72.7)	28072 (27.3)	102728	95074 (91.8)	8486 (8.2)	103560	92138 (96.9)	7647 (90.1)	99785 (96.4)
INDIA	**1707878 (66.9)**	**844379 (33.1)**	**2552257**	**1889689 (74)**	**662568 (26)**	**2552257**	**1799399 (95.2)**	**638550 (96.4)**	**2437949 (95.5)**

*Net TB Patients – TB Notified patients that are currently in the facility/District/State whom are accounted after transferred out and transferred in patients.

1.5. Paediatric TB cases notification and treatment initiation status

States/UTs	Paediatric TB patients notified (Based on diagnosing PHI)			Net paediatric TB patients* notified (Based on current PHI)			Paediatric patients initiated on treatment, n(% out of total TB)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Andaman and Nicobar Islands	20 (95.2)	1 (4.8)	21	22 (100)	0 (0)	22	22 (100)	NA	22 (100)
Andhra Pradesh	1324 (51.4)	1253 (48.6)	2577	1721 (65.6)	903 (34.4)	2624	1684 (97.9)	900 (99.7)	2584 (98.5)
Arunachal Pradesh	189 (78.1)	53 (21.9)	242	261 (100)	0 (0)	261	246 (94.3)	NA	246 (94.3)
Assam	1158 (68.6)	529 (31.4)	1687	1382 (82.4)	296 (17.6)	1678	1291 (93.4)	286 (96.6)	1577 (94)
Bihar	4008 (22.2)	14036 (77.8)	18044	4825 (26.4)	13430 (73.6)	18255	4505 (93.4)	13385 (99.7)	17890 (98)
Chandigarh	483 (87.7)	68 (12.3)	551	281 (96.9)	9 (3.1)	290	232 (82.6)	8 (88.9)	240 (82.8)
Chhattisgarh	1028 (47.1)	1156 (52.9)	2184	1262 (57.8)	923 (42.2)	2185	1237 (98)	909 (98.5)	2146 (98.2)
Dadra and Nagar Haveli and Daman and Diu	66 (93)	5 (7)	71	45 (90)	5 (10)	50	44 (97.8)	5 (100)	49 (98)
Delhi	7335 (76.6)	2235 (23.4)	9570	7970 (92.2)	671 (7.8)	8641	7439 (93.3)	529 (78.8)	7968 (92.2)
Goa	44 (83)	9 (17)	53	52 (89.7)	6 (10.3)	58	48 (92.3)	6 (100)	54 (93.1)
Gujarat	3405 (50.7)	3317 (49.3)	6722	3890 (59.6)	2637 (40.4)	6527	3778 (97.1)	2623 (99.5)	6401 (98.1)
Haryana	2745 (65.2)	1467 (34.8)	4212	3510 (80.5)	849 (19.5)	4359	3362 (95.8)	811 (95.5)	4173 (95.7)
Himachal Pradesh	374 (93.3)	27 (6.7)	401	424 (97.7)	10 (2.3)	434	402 (94.8)	10 (100)	412 (94.9)
Jammu and Kashmir	435 (81.9)	96 (18.1)	531	497 (95.2)	25 (4.8)	522	472 (95)	25 (100)	497 (95.2)
Jharkhand	1799 (58.2)	1294 (41.8)	3093	2052 (64.8)	1113 (35.2)	3165	1988 (96.9)	1100 (98.8)	3088 (97.6)
Karnataka	1683 (52)	1554 (48)	3237	2170 (68.6)	991 (31.4)	3161	2093 (96.5)	956 (96.5)	3049 (96.5)
Kerala	295 (58.2)	212 (41.8)	507	451 (89.1)	55 (10.9)	506	427 (94.7)	50 (90.9)	477 (94.3)
Ladakh	8 (100)	0 (0)	8	9 (100)	0 (0)	9	9 (100)	NA	9 (100)
Lakshadweep	0	0	0	0	0	0	NA	NA	0
Madhya Pradesh	8253 (60)	5506 (40)	13759	9805 (70.6)	4087 (29.4)	13892	9440 (96.3)	4030 (98.6)	13470 (97)

States/UTs	Paediatric TB patients notified (Based on diagnosing PHI)			Net paediatric TB patients* notified (Based on current PHI)			Paediatric patients initiated on treatment, n(% out of total TB)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Maharashtra	5952 (48.9)	6225 (51.1)	12177	7194 (59.8)	4833 (40.2)	12027	6786 (94.3)	4576 (94.7)	11362 (94.5)
Manipur	39 (60)	26 (40)	65	60 (92.3)	5 (7.7)	65	60 (100)	3 (60)	63 (96.9)
Meghalaya	190 (64)	107 (36)	297	262 (87)	39 (13)	301	245 (93.5)	36 (92.3)	281 (93.4)
Mizoram	161 (89.9)	18 (10.1)	179	181 (100)	0 (0)	181	179 (98.9)	NA	179 (98.9)
Nagaland	216 (89.6)	25 (10.4)	241	204 (84.6)	37 (15.4)	241	204 (100)	37 (100)	241 (100)
Odisha	1798 (77.2)	532 (22.8)	2330	2039 (88.9)	254 (11.1)	2293	1979 (97.1)	246 (96.9)	2225 (97)
Puducherry	97 (98)	2 (2)	99	41 (100)	0 (0)	41	35 (85.4)	NA	35 (85.4)
Punjab	2059 (75.4)	673 (24.6)	2732	2427 (83.3)	485 (16.7)	2912	2272 (93.6)	456 (94)	2728 (93.7)
Rajasthan	4516 (58.4)	3223 (41.6)	7739	5068 (65.4)	2687 (34.6)	7755	4807 (94.9)	2642 (98.3)	7449 (96.1)
Sikkim	48 (92.3)	4 (7.7)	52	49 (90.7)	5 (9.3)	54	46 (93.9)	4 (80)	50 (92.6)
Tamil Nadu	1487 (47.8)	1624 (52.2)	3111	1817 (57.3)	1355 (42.7)	3172	1746 (96.1)	1340 (98.9)	3086 (97.3)
Telangana	1316 (62.2)	800 (37.8)	2116	1562 (73.9)	553 (26.1)	2115	1498 (95.9)	526 (95.1)	2024 (95.7)
Tripura	45 (88.2)	6 (11.8)	51	51 (100)	0 (0)	51	47 (92.2)	NA	47 (92.2)
Uttar Pradesh	19281 (48.2)	20695 (51.8)	39976	23236 (57.2)	17410 (42.8)	40646	22208 (95.6)	17233 (99)	39441 (97)
Uttarakhand	1007 (73.3)	366 (26.7)	1373	1128 (84.5)	207 (15.5)	1335	1113 (98.7)	204 (98.6)	1317 (98.7)
West Bengal	1927 (60.9)	1239 (39.1)	3166	2907 (91.6)	266 (8.4)	3173	2795 (96.1)	240 (90.2)	3035 (95.7)
INDIA	**74791 (52.2)**	**68383 (47.8)**	**143174**	**88855 (62.1)**	**54146 (37.9)**	**143001**	**84739 (95.4)**	**53176 (98.2)**	**137915 (96.4)**

TB Patients Notification is based on notification by diagnosing PHI.

* Net TB Patients – TB Notified patients that are currently in the facility/District/State whom are accounted after transferred out and transferred in patients.

1.6. Tribal TB cases notification and treatment initiation status

States/UTs	Number of districts mapped as tribal district (partly or wholly)	Tribal TB patients notified (Based on diagnosing PHI); public–private disaggregated			Nettribal TB patients* notified (Based on current PHI); public–private disaggregated			Tribal TB patients initiated on treatment, n(% out of total TB)		
		Public	Private	Total	Public	Private	Total	Public	Private	Total
Andaman and Nicobar Islands	1	66 (100)	0 (0)	66	87 (100)	0 (0)	87	80 (92)	NA	80 (92)
Andhra Pradesh	8	5567 (66.5)	2810 (33.5)	8377	5452 (71)	2227 (29)	7679	5352 (98.2)	2220 (99.7)	7572 (98.6)
Arunachal Pradesh	15	1982 (86.7)	303 (13.3)	2285	2794 (99.5)	15 (0.53)	2809	2651 (94.9)	14 (93.3)	2665 (94.9)
Assam	9	7532 (86)	1223 (14)	8755	8086 (87.9)	1109 (12.06)	9195	7797 (96.4)	1050 (94.7)	8847 (96.2)
Bihar	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chandigarh	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chhattisgarh	21	10265 (84.8)	1840 (15.2)	12105	12068 (89.8)	1367 (10.17)	13435	11786 (97.7)	1349 (98.7)	13135 (97.8)
Dadra and Nagar Haveli and Daman and Diu	1	629 (90.2)	68 (9.8)	697	450 (89.6)	52 (10.36)	502	450 (100)	52 (100)	502 (100)
Delhi	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Goa	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gujarat	14	16728 (74.1)	5832 (25.9)	22560	19567 (82.3)	4214 (17.72)	23781	19182 (98)	4194 (99.5)	23376 (98.3)
Haryana	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Himachal Pradesh	3	180 (100)	0 (0)	180	386 (100)	0 (0)	386	379 (98.2)	NA	379 (98.2)
Jammu and Kashmir	1	9 (56.3)	7 (43.8)	16	61 (87.1)	9 (12.86)	70	58 (95.1)	9 (100)	67 (95.7)
Jharkhand	14	24956 (75.6)	8037 (24.4)	32993	28922 (82.7)	6048 (17.29)	34970	28112 (97.2)	5940 (98.2)	34052 (97.4)
Karnataka	3	1607 (79.1)	424 (20.9)	2031	2588 (94.7)	144 (5.27)	2732	2514 (97.1)	138 (95.8)	2652 (97.1)
Kerala	4	406 (85.5)	69 (14.5)	475	815 (97.8)	18 (2.16)	833	802 (98.4)	13 (72.2)	815 (97.8)
Ladakh	2	261 (97)	8 (3)	269	323 (97.6)	8 (2.42)	331	299 (92.6)	8 (100)	307 (92.7)

States/UTs	Number of districts mapped as tribal district (partly or wholly)	Tribal TB patients notified (Based on diagnosing PHI); public–private disaggregated			Nettribal TB patients* notified (Based on current PHI); public–private disaggregated			Tribal TB patients initiated on treatment, n(% out of total TB)		
		Public	Private	Total	Public	Private	Total	Public	Private	Total
Lakshadweep	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Madhya Pradesh	20	21352 (78.6)	5805 (21.4)	27157	24393 (83.3)	4875 (16.66)	29268	23511 (96.4)	4798 (98.4)	28309 (96.7)
Maharashtra	16	12641 (75.5)	4094 (24.5)	16735	16815 (84.9)	2993 (15.11)	19808	15974 (95)	2924 (97.7)	18898 (95.4)
Manipur	7	553 (87.6)	78 (12.4)	631	912 (98.9)	10 (1.08)	922	872 (95.6)	10 (100)	882 (95.7)
Meghalaya	7	3825 (82.8)	796 (17.2)	4621	4554 (92.7)	358 (7.29)	4912	4321 (94.9)	340 (95)	4661 (94.9)
Mizoram	8	1595 (81.3)	368 (18.7)	1963	2280 (98.7)	29 (1.26)	2309	2212 (97)	25 (86.2)	2237 (96.9)
Nagaland	11	3082 (81.8)	684 (18.2)	3766	3903 (89.3)	466 (10.67)	4369	3835 (98.3)	463 (99.4)	4298 (98.4)
Odisha	13	20715 (88.6)	2674 (11.4)	23389	24331 (96)	1001 (3.95)	25332	23806 (97.8)	916 (91.5)	24722 (97.6)
Puducherry	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Punjab	1	87 (76.3)	27 (23.7)	114	1 (100)	0 (0)	1	0 (0)	NA	0 (0)
Rajasthan	9	14778 (83.7)	2871 (16.3)	17649	18725 (86.9)	2812 (13.06)	21537	17501 (93.5)	2735 (97.3)	20236 (94)
Sikkim	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tamil Nadu	7	193 (98.5)	3 (1.5)	196	557 (98.2)	10 (1.76)	567	546 (98)	10 (100)	556 (98.1)
Telangana	8	5027 (75)	1674 (25)	6701	5915 (80.4)	1439 (19.57)	7354	5585 (94.4)	1371 (95.3)	6956 (94.6)
Tripura	1	306 (98.7)	4 (1.3)	310	331 (98.8)	4 (1.19)	335	328 (99.1)	4 (100)	332 (99.1)
Uttar Pradesh	3	3554 (90.7)	365 (9.3)	3919	4109 (90.4)	438 (9.63)	4547	4023 (97.9)	437 (99.8)	4460 (98.1)
Uttarakhand	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
West Bengal	0	1 (100)	0 (0)	1	NA	NA	NA	NA	NA	NA
INDIA	**207**	**157897 (79.8)**	**40064 (20.2)**	**197961**	**188425 (86.4)**	**29646 (13.6)**	**218071**	**181976 (96.6)**	**29020 (97.9)**	**210996 (96.8)**

TB patients' notification is based on notification by diagnosing PHI.
*Net TB patients – TB notified patients that are currently in the facility/District/State whom are accounted after transferred out and transferred in patients.

1.7. Gender disaggregated data on total TB notification, paediatric TB notification and treatment initiation (current facility)

States/UTs	TB cases notified			Paediatric TB cases notified, n(% out of total TB)			Total TB cases initiated on treatment, n(% out of total TB)		
	Male	Female	Transgender	Male	Female	Transgender	Male	Female	Transgender
Andaman and Nicobar Islands	346 (59.5)	236 (40.5)	0 (0)	5 (22.7)	17 (77.3)	0 (0)	322 (93.1)	214 (90.7)	NA
Andhra Pradesh	57421 (63.9)	32472 (36.1)	18 (0.02)	1310 (49.9)	1313 (50)	1 (0.04)	56339 (98.1)	31931 (98.3)	17 (94.4)
Arunachal Pradesh	1555 (55.1)	1265 (44.9)	0 (0)	126 (48.3)	135 (51.7)	0 (0)	1478 (95)	1198 (94.7)	NA
Assam	34460 (66.4)	17429 (33.6)	22 (0.04)	811 (48.3)	866 (51.6)	1 (0.06)	32684 (94.8)	16467 (94.5)	20 (90.9)
Bihar	115696 (60.5)	75337 (39.4)	89 (0.05)	10881 (59.6)	7365 (40.3)	9 (0.05)	110646 (95.6)	72685 (96.5)	82 (92.1)
Chandigarh	2313 (54.5)	1927 (45.4)	3 (0.07)	126 (43.4)	163 (56.2)	1 (0.34)	2014 (87.1)	1669 (86.6)	3 (100)
Chhattisgarh	24219 (62.1)	14755 (37.9)	7 (0.02)	1090 (49.9)	1094 (50.1)	1 (0.05)	23705 (97.9)	14465 (98)	7 (100)
Dadra and Nagar Haveli and Daman and Diu	464 (53.5)	403 (46.5)	0 (0)	22 (44)	28 (56)	0 (0)	462 (99.6)	399 (99)	NA
Delhi	46099 (51.8)	42829 (48.1)	53 (0.06)	3419 (39.6)	5212 (60.3)	10 (0.12)	39798 (86.3)	38280 (89.4)	52 (98.1)
Goa	1217 (59.8)	817 (40.2)	0 (0)	31 (53.4)	27 (46.6)	0 (0)	1168 (96)	791 (96.8)	NA
Gujarat	89179 (63.4)	51413 (36.6)	26 (0.02)	3281 (50.3)	3245 (49.7)	1 (0.02)	86982 (97.5)	50382 (98)	25 (96.2)
Haryana	47870 (59.4)	32708 (40.6)	22 (0.03)	1856 (42.6)	2503 (57.4)	0 (0)	45242 (94.5)	31277 (95.6)	21 (95.5)
Himachal Pradesh	10046 (62.6)	5998 (37.4)	2 (0.01)	183 (42.2)	251 (57.8)	0 (0)	9773 (97.3)	5845 (97.4)	2 (100)
Jammu and Kashmir	7013 (59.7)	4734 (40.3)	0 (0)	221 (42.3)	301 (57.7)	0 (0)	6635 (94.6)	4505 (95.2)	NA
Jharkhand	42504 (67.3)	20602 (32.6)	31 (0.05)	1681 (53.1)	1484 (46.9)	0 (0)	41132 (96.8)	19968 (96.9)	30 (96.8)
Karnataka	51353 (63.9)	28971 (36.1)	28 (0.03)	1618 (51.2)	1542 (48.8)	1 (0.03)	49283 (96)	27929 (96.4)	25 (89.3)
Kerala	14758 (67.7)	7053 (32.3)	1 (0)	262 (51.8)	244 (48.2)	0 (0)	14194 (96.2)	6820 (96.7)	1 (100)
Ladakh	189 (54.6)	157 (45.4)	0 (0)	3 (33.3)	6 (66.7)	0 (0)	178 (94.2)	142 (90.4)	NA
Lakshadweep	10 (71.4)	4 (28.6)	0 (0)	0	0	0	10 (100)	4 (100)	NA
Madhya Pradesh	113908 (61)	72944 (39)	31 (0.02)	7200 (51.8)	6691 (48.2)	1 (0.01)	107565 (94.4)	69832 (95.7)	25 (80.6)

States/UTs	TB cases notified			Paediatric TB cases notified, n(% out of total TB)			Total TB cases initiated on treatment, n(% out of total TB)		
	Male	Female	Transgender	Male	Female	Transgender	Male	Female	Transgender
Maharashtra	123626 (55.1)	100517 (44.8)	122 (0.05)	5224 (43.4)	6796 (56.5)	7 (0.06)	114743 (92.8)	94399 (93.9)	110 (90.2)
Manipur	1607 (62.6)	960 (37.4)	0 (0)	39 (60)	26 (40)	0 (0)	1421 (88.4)	836 (87.1)	NA
Meghalaya	2983 (60.7)	1928 (39.3)	1 (0.02)	150 (49.8)	151 (50.2)	0 (0)	2823 (94.6)	1837 (95.3)	1 (100)
Mizoram	1349 (58.4)	961 (41.6)	0 (0)	89 (49.2)	92 (50.8)	0 (0)	1300 (96.4)	938 (97.6)	NA
Nagaland	2631 (60.2)	1738 (39.8)	0 (0)	122 (50.6)	119 (49.4)	0 (0)	2584 (98.2)	1714 (98.6)	NA
Odisha	40972 (66.2)	20868 (33.7)	34 (0.05)	1115 (48.6)	1175 (51.2)	3 (0.13)	39631 (96.7)	20273 (97.1)	33 (97.1)
Puducherry	1029 (63.9)	579 (36)	2 (0.12)	29 (70.7)	12 (29.3)	0 (0)	954 (92.7)	557 (96.2)	2 (100)
Punjab	32966 (57.2)	24688 (42.8)	29 (0.05)	1177 (40.4)	1735 (59.6)	0 (0)	30238 (91.7)	22888 (92.7)	27 (93.1)
Rajasthan	109521 (65.9)	56516 (34)	61 (0.04)	4109 (53)	3644 (47)	2 (0.03)	102952 (94)	53749 (95.1)	55 (90.2)
Sikkim	767 (54.6)	638 (45.4)	0 (0)	25 (46.3)	29 (53.7)	0 (0)	741 (96.6)	620 (97.2)	NA
Tamil Nadu	69264 (69)	31146 (31)	45 (0.04)	1594 (50.3)	1578 (49.7)	0 (0)	67358 (97.2)	30385 (97.6)	40 (88.9)
Telangana	44628 (59.5)	30408 (40.5)	29 (0.04)	910 (43)	1205 (57)	0 (0)	42395 (95)	29233 (96.1)	28 (96.6)
Tripura	2609 (72.8)	974 (27.2)	0 (0)	32 (62.7)	19 (37.3)	0 (0)	2525 (96.8)	936 (96.1)	NA
Uttar Pradesh	369926 (57.6)	272584 (42.4)	264 (0.04)	20226 (49.8)	20411 (50.2)	9 (0.02)	355146 (96)	263765 (96.8)	254 (96.2)
Uttarakhand	15766 (59)	10944 (41)	10 (0.04)	581 (43.5)	754 (56.5)	0 (0)	15243 (96.7)	10697 (97.7)	10 (100)
West Bengal	70130 (67.7)	33401 (32.3)	29 (0.03)	1514 (47.7)	1656 (52.2)	3 (0.09)	67579 (96.4)	32178 (96.3)	28 (96.6)
INDIA	**1550394 (60.7)**	**1000904 (39.2)**	**959 (0.04)**	**71062 (49.7)**	**71889 (50.3)**	**50 (0.03)**	**1477243 (95.3)**	**959808 (95.9)**	**898 (93.6)**

2.1. TB patients with known HIV status

TB patients with known HIV status, n (%)			
States/UTs	**Public**	**Private**	**Total**
Andaman and Nicobar Islands	531 (93%)	10 (77%)	541 (93%)
Andhra Pradesh	62795 (99%)	26412 (100%)	89207 (99%)
Arunachal Pradesh	2483 (89%)	13 (87%)	2496 (89%)
Assam	41141 (93%)	7460 (95%)	48601 (94%)
Bihar	77817 (85%)	88796 (89%)	166613 (87%)
Chandigarh	3663 (89%)	98 (71%)	3761 (89%)
Chhattisgarh	27493 (96%)	9808 (94%)	37301 (96%)
Dadra and Nagar Haveli and Daman and Diu	789 (100%)	77 (100%)	866 (100%)
Delhi	69906 (90%)	4293 (37%)	74199 (83%)
Goa	1458 (85%)	279 (90%)	1737 (85%)
Gujarat	100265 (99%)	36714 (94%)	136979 (97%)
Haryana	63231 (99%)	15969 (97%)	79200 (98%)
Himachal Pradesh	15544 (99%)	327 (96%)	15871 (99%)
Jammu and Kashmir	10842 (96%)	434 (96%)	11276 (96%)
Jharkhand	48153 (95%)	11600 (94%)	59753 (95%)
Karnataka	65168 (97%)	12238 (93%)	77406 (96%)
Kerala	18733 (97%)	2382 (93%)	21115 (97%)
Ladakh	328 (97%)	8 (100%)	336 (97%)
Lakshadweep	14 (100%)	-	14 (100%)
Madhya Pradesh	130007 (94%)	46103 (94%)	176110 (94%)
Maharashtra	140577 (97%)	75505 (94%)	216082 (96%)
Manipur	2034 (88%)	168 (64%)	2202 (86%)
Meghalaya	4088 (90%)	173 (48%)	4261 (87%)
Mizoram	2259 (99%)	25 (86%)	2284 (99%)
Nagaland	3736 (96%)	425 (91%)	4161 (95%)
Odisha	57195 (99%)	4029 (98%)	61224 (99%)
Puducherry	1594 (99%)	2 (100%)	1596 (99%)
Punjab	44334 (94%)	9521 (91%)	53855 (93%)
Rajasthan	122081 (94%)	33667 (93%)	155748 (94%)
Sikkim	1280 (97%)	73 (90%)	1353 (96%)
Tamil Nadu	80594 (98%)	15563 (84%)	96157 (96%)
Telangana	36741 (71%)	18334 (80%)	55075 (73%)
Tripura	3488 (98%)	26 (96%)	3514 (98%)
Uttar Pradesh	449652 (99%)	184413 (99%)	634065 (99%)
Uttarakhand	22035 (98%)	4004 (96%)	26039 (97%)
West Bengal	92129 (97%)	6964 (82%)	99093 (96%)
INDIA	**1804178 (95%)**	**615913 (93%)**	**2420091 (95%)**

2.2. TB HIV co-infection – Diagnosed, ART and CPT status

(January–December 2023)

S.No.	States/UTs	TB-HIV co-infected patients diagnosed	TB-HIV co-infected patients put on ART	TB-HIV co-infected patients put on CPT
1	Andaman and Nicobar Islands	4	4 (100%)	3 (75%)
2	Andhra Pradesh	3817	3825 (100%)	3801 (100%)
3	Arunachal Pradesh	16	17 (106%)	12 (75%)
4	Assam	365	315 (86%)	337 (92%)
5	Bihar	1593	1228 (77%)	1225 (77%)
6	Chandigarh	170	155 (91%)	168 (99%)
7	Chhattisgarh	427	402 (94%)	398 (93%)
8	Dadra and Nagar Haveli	310	285 (92%)	312 (101%)
9	Delhi	984	915 (93%)	972 (99%)
10	Goa	52	45 (87%)	52 (100%)
11	Gujarat	2364	2250 (95%)	2315 (98%)
12	Haryana	696	569 (82%)	552 (79%)
13	Himachal Pradesh	92	92 (100%)	92 (100%)
14	Jammu and Kashmir	51	48 (94%)	49 (96%)
15	Jharkhand	349	343 (98%)	253 (72%)
16	Karnataka	3665	3590 (98%)	3599 (98%)
17	Kerala	227	192 (85%)	223 (98%)
18	Madhya Pradesh	1392	1217 (87%)	1247 (90%)
19	Maharashtra	3789	3548 (94%)	3659 (97%)
20	Manipur	103	99 (96%)	101 (98%)
21	Meghalaya	163	157 (96%)	160 (98%)
22	Mizoram	226	219 (97%)	225 (100%)
23	Mumbai	1185	1133 (96%)	1166 (98%)
24	Nagaland	360	339 (94%)	355 (99%)
25	Odisha	686	670 (98%)	688 (100%)
26	Pondicherry	26	26 (100%)	26 (100%)
27	Punjab	1032	1018 (99%)	1044 (101%)
28	Rajasthan	1458	1416 (97%)	1411 (97%)
29	Sikkim	7	7 (100%)	7 (100%)
30	Tamil Nadu	2573	2478 (96%)	2566 (100%)
31	Telangana	1740	1635 (94%)	1215 (70%)
32	Tripura	53	54 (102%)	53 (100%)
33	Uttar Pradesh	3111	2970 (95%)	3056 (98%)
34	Uttarakhand	174	133 (76%)	122 (70%)
35	West Bengal	1216	1114 (92%)	1177 (97%)
INDIA		**34476**	**32508 (94%)**	**32641 (95%)**

Source: NACP

2.3. Provider initiated testing and counselling among presumptive TB patients

States/UTs	Examined	With known HIV status*
Andaman and Nicobar Islands	4616	1424
Andhra Pradesh	415094	408140
Arunachal Pradesh	10071	3676
Assam	560704	124337
Bihar	350492	72712
Chandigarh	13991	13439
Chhattisgarh	568591	43699
Dadra and Nagar Haveli and Daman and Diu	34271	9625
Delhi	158601	74875
Goa	0	18945
Gujarat	1436908	516364
Haryana	392099	206009
Himachal Pradesh	230367	17483
Jammu and Kashmir	303250	10962
Jharkhand	414098	96495
Karnataka	1104670	406420
Kerala	308902	18305
Ladakh	1257	96
Lakshadweep	739	0
Madhya Pradesh	1541472	542996
Maharashtra	1806565	938161
Manipur	5550	1567
Meghalaya	10293	8515
Mizoram	14520	8635
Nagaland	12245	3466
Odisha	1228445	196581
Puducherry	19345	13079
Punjab	251504	112509
Rajasthan	1333574	925058
Sikkim	5219	383
Tamil Nadu	1995443	1110747
Telangana	294246	183472
Tripura	119744	1179
Uttar Pradesh	2616706	859844
Uttarakhand	169685	19857
West Bengal	1567055	939647
INDIA	**19300332**	**7908702**

* Data source for HIV status among presumptive TB cases: Annexure M reports

2.4. Intensified TB case finding activities in ICTC centres

(January–December 2023)

S. No.	States/UTs	ICTC attendees (excl. pregnant women)	Clients attending ICTC Centres		
			Referred for TB testing, n(%)	Diagnosed with TB, n(%)	Put on treatment, n(%)
1	Andaman and Nicobar Islands	20735	689 (3%)	17 (2%)	17 (100%)
2	Andhra Pradesh	1159735	108703 (9%)	4320 (4%)	4312 (100%)
3	Arunachal Pradesh	20154	715 (4%)	6 (1%)	6 (100%)
4	Assam	251786	12502 (5%)	365 (3%)	233 (64%)
5	Bihar	795598	50231 (6%)	2465 (5%)	2450 (99%)
6	Chandigarh	94922	116 (0%)	1 (1%)	26 (2600%)
7	Chhattisgarh	459171	31604 (7%)	1141 (4%)	1046 (92%)
8	Dadra and Nagar Haveli and Daman and Diu	35080	737 (2%)	12 (2%)	30 (250%)
9	Delhi	569068	15654 (3%)	262 (2%)	261 (100%)
10	Goa	62622	2533 (4%)	4 (0%)	4 (100%)
11	Gujarat	1119358	109818 (10%)	3732 (3%)	3730 (100%)
12	Haryana	788700	21852 (3%)	1301 (6%)	802 (62%)
13	Himachal Pradesh	241683	7650 (3%)	182 (2%)	97 (53%)
14	Jammu and Kashmir	133463	1641 (1%)	24 (1%)	23 (96%)
15	Jharkhand	218803	16581 (8%)	1626 (10%)	1536 (94%)
16	Karnataka	2175253	202082 (9%)	4573 (2%)	4434 (97%)
17	Kerala	588851	39654 (7%)	243 (1%)	243 (100%)
18	Ladakh	4166	6 (0%)	0 (0%)	0 (0%)
19	Lakshadweep	229	0 (0%)	0 (0%)	0 (0%)
20	Madhya Pradesh	1016978	59698 (6%)	2269 (4%)	2190 (97%)
21	Maharashtra	3210559	294307 (9%)	11769 (4%)	11673 (99%)
22	Manipur	82877	531 (1%)	57 (11%)	55 (96%)
23	Meghalaya	67425	553 (1%)	41 (7%)	41 (100%)
24	Mizoram	62902	1635 (3%)	32 (2%)	30 (94%)
25	Nagaland	81060	3338 (4%)	132 (4%)	119 (90%)
26	Odisha	951529	90411 (10%)	2109 (2%)	2047 (97%)
27	Puducherry	106706	2838 (3%)	50 (2%)	38 (76%)
28	Punjab	764487	32171 (4%)	523 (2%)	522 (100%)
29	Rajasthan	1001762	56177 (6%)	1812 (3%)	1747 (96%)
30	Sikkim	22285	93 (0%)	9 (10%)	8 (89%)
31	Tamil Nadu	2654604	244757 (9%)	3138 (1%)	3137 (100%)
32	Telangana	767341	51872 (7%)	2105 (4%)	1983 (94%)
33	Tripura	82255	2037 (2%)	29 (1%)	29 (100%)
34	Uttar Pradesh	1643413	100573 (6%)	7275 (7%)	6566 (90%)
35	Uttarakhand	142978	4174 (3%)	275 (7%)	253 (92%)
36	West Bengal	1295099	75835 (6%)	1151 (2%)	1076 (93%)
INDIA		**22693637**	**1643768 (7%)**	**53050 (3%)**	**50764 (96%)**

Source: NACP

2.5. Intensified TB case finding activities in ART centres

(January–December 2023)

States/UTs	Cumulative no. of PLHIV on ART at ART Centres as on Dec 2023	No. of PLHIV visits to ART centre in 2023 till Dec 2023	PLHIV screened for TB, n(%)	PLHIV with presumptive TB, n(%)	PLHIV referred to TB diagnosis test, n(%)	PLHIV tested for TB, n(%)	PLHIV diagnosed with TB, n(%)	PLHIV with bacteriologically confirmed TB, n(%)
Andaman and Nicobar Islands	195	1239	1239 (100%)	7 (1%)	7 (100%)	7 (100%)	0 (0%)	0 (0%)
Andhra Pradesh	220482	1770443	1745881 (99%)	55679 (3%)	55656 (100%)	55557 (100%)	2531 (5%)	1805 (71%)
Arunachal Pradesh	1222	3574	3544 (99%)	287 (8%)	287 (100%)	283 (99%)	14 (5%)	13 (93%)
Assam	15316	74177	73704 (99%)	1586 (2%)	962 (61%)	677 (70%)	236 (35%)	73 (31%)
Bihar	83407	577008	557540 (97%)	11616 (2%)	11067 (95%)	6841 (62%)	1439 (21%)	737 (51%)
Chandigarh	5064	31946	31296 (98%)	414 (1%)	414 (100%)	300 (72%)	81 (27%)	41 (51%)
Chhattisgarh	20343	137078	123374 (90%)	3794 (3%)	3545 (93%)	2897 (82%)	398 (14%)	273 (69%)
Dadra and Nagar Haveli	414	69566	64488 (93%)	1404 (2%)	1046 (75%)	879 (84%)	219 (25%)	115 (53%)
Delhi	38428	219517	199090 (91%)	3873 (2%)	2887 (75%)	2556 (89%)	758 (30%)	372 (49%)
Goa	3370	30689	27064 (88%)	227 (1%)	172 (76%)	172 (100%)	11 (6%)	5 (45%)
Gujarat	83327	643946	635099 (99%)	37663 (6%)	37636 (100%)	37233 (99%)	1978 (5%)	786 (40%)
Haryana	33352	149172	146908 (98%)	8586 (6%)	4615 (54%)	4615 (100%)	612 (13%)	515 (84%)
Himachal Pradesh	5569	30384	30261 (100%)	557 (2%)	557 (100%)	545 (98%)	47 (9%)	32 (68%)
Jammu and Kashmir	3601	30671	29553 (96%)	168 (1%)	168 (100%)	168 (100%)	40 (24%)	20 (50%)
Jharkhand	15488	131743	129029 (98%)	4098 (3%)	3852 (94%)	3255 (85%)	285 (9%)	202 (71%)
Karnataka	187187	1651515	1602211 (97%)	78306 (5%)	66180 (85%)	64485 (97%)	3025 (5%)	1446 (48%)
Kerala	16432	118337	118149 (100%)	2143 (2%)	2039 (95%)	1983 (97%)	164 (8%)	75 (46%)
Madhya Pradesh	40485	248749	246092 (99%)	17710 (7%)	12222 (69%)	10722 (88%)	1104 (10%)	457 (41%)
Maharashtra	237593	1764802	1703372 (97%)	108313 (6%)	103635 (96%)	101098 (98%)	3481 (3%)	1475 (42%)

States/UTs	Cumulative no. of PLHIV on ART at ART Centres as on Dec 2023	No. of PLHIV visits to ART centre in 2023 till Dec 2023	PLHIV screened for TB, n(%)	PLHIV with presumptive TB, n(%)	PLHIV referred to TB diagnosis test, n(%)	PLHIV tested for TB, n(%)	PLHIV diagnosed with TB, n(%)	PLHIV with bacteriologically confirmed TB, n(%)
Manipur	14124	92684	89177 (96%)	440 (0%)	438 (100%)	420 (96%)	68 (16%)	41 (60%)
Meghalaya	5809	41067	36870 (90%)	425 (1%)	251 (59%)	206 (82%)	45 (22%)	26 (58%)
Mizoram	15791	92491	92490 (100%)	1081 (1%)	630 (58%)	535 (85%)	165 (31%)	110 (67%)
Mumbai	40143	268502	261558 (97%)	13958 (5%)	13955 (100%)	13345 (96%)	664 (5%)	287 (43%)
Nagaland	13370	73167	67882 (93%)	1159 (2%)	971 (84%)	902 (93%)	335 (37%)	133 (40%)
Odisha	26262	125765	120916 (96%)	6072 (5%)	6028 (99%)	5819 (97%)	332 (6%)	209 (63%)
Pondicherry	1400	13966	12911 (92%)	473 (4%)	473 (100%)	473 (100%)	27 (6%)	15 (56%)
Punjab	61772	445028	445009 (100%)	7630 (2%)	6475 (85%)	6368 (98%)	849 (13%)	535 (63%)
Rajasthan	59656	408044	403860 (99%)	14130 (3%)	14047 (99%)	10036 (71%)	1394 (14%)	668 (48%)
Sikkim	327	1801	1801 (100%)	17 (1%)	17 (100%)	16 (94%)	1 (6%)	1 (100%)
Tamil Nadu	131199	1119519	1072006 (96%)	69116 (6%)	61164 (88%)	61047 (100%)	2248 (4%)	1307 (58%)
Telangana	101742	908622	833734 (92%)	16969 (2%)	16866 (99%)	16178 (96%)	1719 (11%)	1317 (77%)
Tripura	5329	24132	24040 (100%)	282 (1%)	282 (100%)	245 (87%)	21 (9%)	11 (52%)
Uttar Pradesh	113812	1021248	1019715 (100%)	23437 (2%)	23425 (100%)	23355 (100%)	1951 (8%)	964 (49%)
Uttarakhand	6524	36376	33093 (91%)	1193 (4%)	1001 (84%)	739 (74%)	185 (25%)	90 (49%)
West Bengal	55077	289553	286682 (99%)	4201 (1%)	4200 (100%)	4121 (98%)	476 (12%)	274 (58%)
INDIA	**1663612**	**12646521**	**12269638 (97%)**	**497014 (4%)**	**457170 (92%)**	**438078 (96%)**	**26903 (6%)**	**14430 (54%)**

Source: NACP

2.6. TB case finding activities among core populations - 2023

States/UTs	Target	HRG screened	HRG referred for TB testing	HRG tested for TB	HRG diagnosed with TB	HRG put on TB treatment
Andhra Pradesh	732143	819612	66862	5724	13	12
Arunachal Pradesh	40961	29574	536	453	3	3
Assam	125710	98430	1989	1199	38	28
Bihar	47809	36618	627	595	14	14
Chandigarh	41620	29383	62	56	6	6
Chhattisgarh	110253	97448	5780	1909	47	47
Delhi	420888	414939	10630	2389	191	182
Goa	44600	36060	608	300	2	2
Gujarat	257850	217982	10690	9595	40	40
Haryana	99744	73935	686	534	18	15
Himachal Pradesh	39018	32879	786	708	5	4
Jammu and Kashmir	32023	18213	1282	798	1	1
Jharkhand	84613	74576	194	194	3	3
Karnataka	760545	1104336	18393	10157	47	35
Kerala	251907	144191	793	331	5	4
Madhya Pradesh	305261	259630	8983	4603	91	92
Maharashtra	520605	427501	14584	10985	113	91
Manipur	143610	49505	739	570	13	6
Meghalaya	16859	15616	474	313	2	2
Mizoram	64243	53492	194	155	9	9
Nagaland	143254	42567	777	412	15	15
Odisha	106555	89154	7970	7201	65	48
Puducherry	25492	23283	181	175	1	1
Punjab	212990	147805	1823	1292	27	26
Rajasthan	123404	132014	485	350	15	22
Sikkim	10512	4262	95	63	2	1
Tamil Nadu	411090	311819	10643	7364	24	24
Telangana	670963	739949	15071	10802	350	345
Tripura	49696	43901	1185	470	6	3
Uttar Pradesh	269700	227647	10188	5205	118	114
Uttrakhand	46740	41073	1107	830	28	28
West Bengal	107989	68287	1082	550	6	6
INDIA	**6318647**	**5905681**	**195499**	**86282**	**1318**	**1229**

Source: NACP

2.7. TB case finding activities among bridge populations - 2023

States/UTs	Target	HRG screened	HRG referred for TB testing	HRG tested for TB	HRG diagnosed with TB	HRG put on TB treatment
Andhra Pradesh	122839	70653	1864	317	3	3
Arunachal Pradesh	28450	39055	18	18	0	0
Assam	40966	26834	1128	299	2	0
Bihar	8418	8150	236	1	0	0
Chandigarh	28051	21336	121	121	1	1
Chhattisgarh	143785	130951	1637	778	1	1
Delhi	203180	139923	1862	550	44	44
Goa	30230	19586	164	6	0	0
Gujarat	278838	187965	4836	2026	39	39
Haryana	110250	89007	204	152	6	8
Himachal Pradesh	41414	44562	290	125	5	5
Jammu and Kashmir	43259	10218	49	16	0	0
Jharkhand	52400	43490	0	0	0	0
Karnataka	193379	189059	1144	875	3	5
Kerala	147716	119927	252	212	3	2
Madhya Pradesh	154242	157299	1231	880	51	51
Maharashtra	840630	581160	24648	5447	86	82
Manipur	10914	5610	1	1	0	0
Meghalaya	500	1358	0	0	0	0
Mizoram	27430	15914	344	1	0	0
Nagaland	17845	2444	99	2	1	1
Odisha	106977	88675	2687	2168	20	20
Puducherry	11815	9940	4	3	0	0
Punjab	51492	37883	118	35	9	7
Rajasthan	119493	145740	633	354	31	18
Tamil Nadu	137256	192879	503	426	5	0
Telangana	203778	206169	464	139	5	5
Tripura	13259	6902	1549	3	1	0
Uttar Pradesh	88617	63374	910	232	7	5
Uttrakhand	134360	114732	580	296	64	60
West Bengal	71485	45249	242	166	0	0
INDIA	**3463268**	**2816044**	**47818**	**15649**	**387**	**357**

Source: NACP

2.8. TB case finding activities in prisons - 2023

States/UTs	Number of prisons (Central & District)	Prisons covered under the programme	Number of prison inmates	Inmates screened for TB	Inmates identified as presumptive TB	Inmates referred for TB testing	Inmates tested for TB	Inmates diagnosed with TB	Inmates put on TB treatment
Andaman & Nicobar Islands	4	2	901	829	34	34	32	0	0
Andhra Pradesh	106	70	45466	38956	296	296	8	3	4
Arunachal Pradesh	2	7	779	610	1	1	1	0	0
Assam	31	31	30393	27231	853	853	750	4	4
Bihar	59	44	177066	85224	4429	4429	2776	174	151
Chandigarh	1	1	2419	2153	13	13	13	0	0
Chhattisgarh	33	28	36569	25759	2100	2100	2100	7	0
Dadra and Nagar Haveli and Daman and Diu	2	2	166	142	5	5	5	0	0
Delhi	16	15	26181	20451	429	429	428	80	78
Goa	1	1	1103	648	13	13	11	0	0
Gujarat	32	36	28675	22127	610	610	611	18	29
Haryana	19	20	58809	51913	1353	1353	1096	22	20
Himachal Pradesh	16	12	8519	8580	902	902	902	4	4
Jammu & Kashmir	14	12	9336	8915	1007	1007	701	3	2
Jharkhand	32	30	33579	32774	220	220	212	13	12
Karnataka	57	51	62980	56032	1707	1707	1367	20	21
Kerala	56	51	32985	26107	2170	2170	1607	6	6
Ladakh	2	0	0	0	0	0	0	0	0
Lakshadweep	4	0	0	0	0	0	0	0	0

States/UTs	Number of prisons (Central & District)	Prisons covered under the programme	Number of prison inmates	Inmates screened for TB	Inmates identified as presumptive TB	Inmates referred for TB testing	Inmates tested for TB	Inmates diagnosed with TB	Inmates put on TB treatment
Madhya Pradesh	131	123	187719	185040	32033	32033	24101	145	144
Maharashtra	64	44	86991	36660	3126	3126	2862	27	24
Manipur	5	2	1037	937	1	1	1	1	1
Meghalaya	5	5	2306	2267	112	112	111	0	0
Mizoram	10	9	4578	3167	233	233	194	1	1
Nagaland	11	12	1793	774	84	84	81	3	3
Odisha	92	81	59778	57834	3832	3832	3785	5	5
Puducherry	4	4	1230	1009	10	10	10	0	0
Punjab	26	22	78880	73847	4114	4114	4115	49	48
Rajasthan	144	113	116978	113143	1264	1264	1060	20	21
Sikkim	2	1	736	658	43	43	17	0	0
Tamil Nadu	142	123	76485	71140	6317	6317	5488	35	34
Telangana	37	36	46253	41044	706	706	389	2	2
Tripura	13	11	3500	3274	0	0	0	0	0
Uttar Pradesh	75	66	426523	318877	12317	12317	9845	236	239
Uttarakhand	11	10	32542	15845	270	270	255	6	6
West Bengal	60	53	48409	37324	1293	1293	1032	35	33
INDIA	**1319**	**1128**	**1731664**	**1371291**	**81897**	**81897**	**65966**	**919**	**892**

Source: NACP

2.9. TB case finding activities in Other Closed Settings - 2023

States/UTs	Number of closed settings including juvenile homes	OCS covered under the programme	Inmates in OCS including juvenile homes	Inmates Screened for TB	Inmates identified as presumptive TB	Inmates referred for TB testing	Inmates tested for TB	Inmates diagnosed with TB	Inmates put on TB treatment
Andaman & Nicobar Islands	0	0	0	0	0	0	0	0	0
Andhra Pradesh	35	19	173	75	49	49	0	0	0
Arunachal Pradesh	3	2	185	166	14	14	14	0	0
Assam	47	36	292	513	19	19	21	0	0
Bihar	19	17	1724	2479	69	69	55	0	0
Chandigarh	4	3	81	81	5	5	5	0	0
Chhattisgarh	3	4	353	285	91	91	88	0	0
Dadra and Nagar Haveli and Daman and Diu	0	0	0	0	0	0	0	0	0
Delhi	2	18	520	516	0	0	0	0	0
Goa	3	5	184	158	0	0	0	0	0
Gujarat	11	17	1536	1512	21	21	18	1	1
Haryana	2	1	1068	924	50	50	21	0	0
Himachal Pradesh	2	19	2660	2635	451	451	467	1	1
Jammu & Kashmir	4	5	542	242	0	0	0	0	0
Jharkhand	2	6	63	16	0	0	0	0	0
Karnataka	81	48	10774	5176	97	97	97	0	0
Kerala	34	2	342	279	12	12	57	0	0
Ladakh	0	0	0	0	0	0	0	0	0

States/UTs	Number of closed settings including juvenile homes	OCS covered under the programme	Inmates in OCS including juvenile homes	Inmates Screened for TB	Inmates identified as presumptive TB	Inmates referred for TB testing	Inmates tested for TB	Inmates diagnosed with TB	Inmates put on TB treatment
Lakshadweep	0	0	0	0	0	0	0	0	0
Madhya Pradesh	66	52	1667	1191	148	148	148	1	1
Maharashtra	93	47	10224	7083	295	295	278	14	14
Manipur	34	8	1009	889	8	8	8	0	0
Meghalaya	2	13	351	186	57	57	67	0	0
Mizoram	3	12	1560	1492	114	114	68	1	1
Nagaland	2	17	471	328	214	214	214	8	8
Odisha	90	34	3899	3761	327	327	327	1	1
Puducherry	1	1	86	86	0	0	0	0	0
Punjab	3	15	2616	1698	319	319	319	0	0
Rajasthan	20	8	1149	1059	2	2	1	0	0
Sikkim	1	10	455	484	38	38	20	1	1
Tamil Nadu	44	23	1903	1554	344	344	313	0	0
Telangana	29	7	1551	877	0	0	5	5	5
Tripura	4	4	161	96	0	0	0	0	0
Uttar Pradesh	80	16	3853	2423	32	32	26	1	1
Uttarakhand	13	3	1078	420	64	64	41	0	0
West Bengal	50	20	1405	917	44	44	41	0	0
INDIA	**787**	**492**	**53935**	**39601**	**2884**	**2884**	**2719**	**34**	**34**

Source: NACP

2.10. TB - Diabetes

States/UTs	TB patients with known DM status, n(%)			TB - DM patients diagnosed among tested, n(%)			TB- DM patients initiated on anti-diabetic treatment, n(%)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Andaman and Nicobar Islands	514 (90.3)	4 (30.8)	518 (89)	101 (19.6)	0 (0)	101 (19.5)	64 (63.4)	NA	64 (63.4)
Andhra Pradesh	61914 (97.6)	26315 (99.4)	88229 (98.1)	8107 (13.1)	2951 (11.2)	11058 (12.5)	5609 (69.2)	1392 (47.2)	7001 (63.3)
Arunachal Pradesh	1922 (68.5)	8 (53.3)	1930 (68.4)	54 (2.8)	0 (0)	54 (2.8)	22 (40.7)	NA	22 (40.7)
Assam	38865 (88.3)	7229 (91.8)	46094 (88.8)	2945 (7.6)	774 (10.7)	3719 (8.1)	1424 (48.4)	328 (42.4)	1752 (47.1)
Bihar	59649 (65)	87240 (87.8)	146889 (76.9)	3647 (6.1)	5049 (5.8)	8696 (5.9)	1752 (48)	939 (18.6)	2691 (30.9)
Chandigarh	3523 (85.8)	94 (68.1)	3617 (85.2)	389 (11)	5 (5.3)	394 (10.9)	315 (81)	4 (80)	319 (81)
Chhattisgarh	26131 (91.5)	9294 (89)	35425 (90.9)	2393 (9.2)	620 (6.7)	3013 (8.5)	1091 (45.6)	86 (13.9)	1177 (39.1)
Dadra and Nagar Haveli and Daman and Diu	786 (99.5)	77 (100)	863 (99.5)	55 (7)	6 (7.8)	61 (7.1)	40 (72.7)	5 (83.3)	45 (73.8)
Delhi	67816 (87.8)	3915 (33.5)	71731 (80.6)	5347 (7.9)	344 (8.8)	5691 (7.9)	2508 (46.9)	139 (40.4)	2647 (46.5)
Goa	1651 (95.8)	254 (81.7)	1905 (93.7)	364 (22)	36 (14.2)	400 (21)	275 (75.5)	20 (55.6)	295 (73.8)
Gujarat	99010 (97.4)	36360 (93.3)	135370 (96.3)	5502 (5.6)	1499 (4.1)	7001 (5.2)	4110 (74.7)	1120 (74.7)	5230 (74.7)
Haryana	62379 (97.3)	15373 (93.4)	77752 (96.5)	4683 (7.5)	666 (4.3)	5349 (6.9)	3685 (78.7)	510 (76.6)	4195 (78.4)
Himachal Pradesh	15529 (98.9)	332 (97.1)	15861 (98.8)	1329 (8.6)	19 (5.7)	1348 (8.5)	974 (73.3)	16 (84.2)	990 (73.4)
Jammu and Kashmir	10777 (95.4)	428 (95.1)	11205 (95.4)	819 (7.6)	30 (7)	849 (7.6)	581 (70.9)	27 (90)	608 (71.6)
Jharkhand	46757 (92.2)	11358 (91.6)	58115 (92)	2781 (5.9)	635 (5.6)	3416 (5.9)	1679 (60.4)	209 (32.9)	1888 (55.3)
Karnataka	64054 (95.4)	11904 (90.1)	75958 (94.5)	9760 (15.2)	1110 (9.3)	10870 (14.3)	7594 (77.8)	823 (74.1)	8417 (77.4)
Kerala	18660 (97)	2362 (91.8)	21022 (96.4)	6329 (33.9)	747 (31.6)	7076 (33.7)	5630 (89)	574 (76.8)	6204 (87.7)
Ladakh	293 (86.7)	8 (100)	301 (87)	9 (3.1)	0 (0)	9 (3)	2 (22.2)	NA	2 (22.2)
Lakshadweep	13 (92.9)	NA	13 (92.9)	2 (15.4)	NA	2 (15.4)	2 (100)	NA	2 (100)
Madhya Pradesh	123487 (89.4)	45620 (93.4)	169107 (90.5)	6654 (5.4)	3614 (7.9)	10268 (6.1)	2767 (41.6)	1025 (28.4)	3792 (36.9)

States/UTs	TB patients with known DM status, n(%)			TB - DM patients diagnosed among tested, n(%)			TB- DM patients initiated on anti-diabetic treatment, n(%)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Maharashtra	138154 (95.8)	74880 (93.5)	213034 (95)	8713 (6.3)	4080 (5.4)	12793 (6)	6188 (71)	2747 (67.3)	8935 (69.8)
Manipur	1875 (81.4)	156 (59.1)	2031 (79.1)	302 (16.1)	28 (17.9)	330 (16.2)	126 (41.7)	3 (10.7)	129 (39.1)
Meghalaya	3978 (87.4)	221 (61.7)	4199 (85.5)	175 (4.4)	8 (3.6)	183 (4.4)	91 (52)	1 (12.5)	92 (50.3)
Mizoram	2199 (96.4)	25 (86.2)	2224 (96.3)	118 (5.4)	5 (20)	123 (5.5)	102 (86.4)	5 (100)	107 (87)
Nagaland	3353 (85.9)	441 (94.6)	3794 (86.8)	170 (5.1)	20 (4.5)	190 (5)	47 (27.6)	6 (30)	53 (27.9)
Odisha	56223 (97.3)	3889 (95.1)	60112 (97.2)	4415 (7.9)	281 (7.2)	4696 (7.8)	3327 (75.4)	188 (66.9)	3515 (74.9)
Puducherry	1577 (98.1)	1 (50)	1578 (98)	501 (31.8)	0 (0)	501 (31.7)	433 (86.4)	NA	433 (86.4)
Punjab	43332 (91.9)	9392 (89.3)	52724 (91.4)	4956 (11.4)	707 (7.5)	5663 (10.7)	2589 (52.2)	263 (37.2)	2852 (50.4)
Rajasthan	116010 (89.4)	31997 (88.1)	148007 (89.1)	2938 (2.5)	867 (2.7)	3805 (2.6)	1765 (60.1)	467 (53.9)	2232 (58.7)
Sikkim	1263 (95.4)	74 (91.4)	1337 (95.2)	110 (8.7)	4 (5.4)	114 (8.5)	94 (85.5)	3 (75)	97 (85.1)
Tamil Nadu	80000 (97.7)	17022 (91.8)	97022 (96.6)	21067 (26.3)	4193 (24.6)	25260 (26)	19575 (92.9)	3500 (83.5)	23075 (91.3)
Telangana	48052 (92.2)	21379 (93.1)	69431 (92.5)	2762 (5.7)	1252 (5.9)	4014 (5.8)	2161 (78.2)	762 (60.9)	2923 (72.8)
Tripura	3401 (95.6)	25 (92.6)	3426 (95.6)	479 (14.1)	5 (20)	484 (14.1)	383 (80)	4 (80)	387 (80)
Uttar Pradesh	439843 (96.4)	180482 (96.7)	620325 (96.5)	23960 (5.4)	4648 (2.6)	28608 (4.6)	9237 (38.6)	955 (20.5)	10192 (35.6)
Uttarakhand	21708 (96.2)	3866 (93.1)	25574 (95.7)	1721 (7.9)	295 (7.6)	2016 (7.9)	662 (38.5)	161 (54.6)	823 (40.8)
West Bengal	88967 (93.6)	6254 (73.7)	95221 (91.9)	12082 (13.6)	789 (12.6)	12871 (13.5)	9067 (75)	605 (76.7)	9672 (75.1)
INDIA	**1753665 (92.8)**	**608279 (91.8)**	**2361944 (92.5)**	**145739 (8.3)**	**35287 (5.8)**	**181026 (7.7)**	**95971 (65.9)**	**16887 (47.9)**	**112858 (62.3)**

2.11. TB – Tobacco

States/UTs	TB patients with known tobacco usage status, n(%)			Tobacco users identified among screened, n(%)			Tobacco users linked with tobacco cessation centres, n(%)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Andaman and Nicobar Islands	459 (80.7)	4 (30.8)	463 (79.6)	55 (12)	0 (0)	55 (11.9)	13 (23.6)	NA	13 (23.6)
Andhra Pradesh	60433 (95.3)	25556 (96.5)	85989 (95.6)	8363 (13.8)	1300 (5.1)	9663 (11.2)	2181 (26.1)	247 (19)	2428 (25.1)
Arunachal Pradesh	1900 (67.7)	8 (53.3)	1908 (67.7)	228 (12)	0 (0)	228 (11.9)	88 (38.6)	NA	88 (38.6)
Assam	34886 (79.2)	6202 (78.7)	41088 (79.2)	8264 (23.7)	519 (8.4)	8783 (21.4)	1514 (18.3)	166 (32)	1680 (19.1)
Bihar	48035 (52.3)	42852 (43.1)	90887 (47.6)	4109 (8.6)	1091 (2.5)	5200 (5.7)	845 (20.6)	49 (4.5)	894 (17.2)
Chandigarh	3469 (84.5)	94 (68.1)	3563 (84)	247 (7.1)	5 (5.3)	252 (7.1)	42 (17)	1 (20)	43 (17.1)
Chhattisgarh	24160 (84.6)	6172 (59.1)	30332 (77.8)	7498 (31)	394 (6.4)	7892 (26)	3419 (45.6)	132 (33.5)	3551 (45)
Dadra and Nagar Haveli and Daman and Diu	466 (59)	43 (55.8)	509 (58.7)	59 (12.7)	8 (18.6)	67 (13.2)	32 (54.2)	3 (37.5)	35 (52.2)
Delhi	51637 (66.8)	1675 (14.3)	53312 (59.9)	3629 (7)	11 (0.7)	3640 (6.8)	970 (26.7)	1 (9.1)	971 (26.7)
Goa	1493 (86.7)	162 (52.1)	1655 (81.4)	160 (10.7)	0 (0)	160 (9.7)	29 (18.1)	NA	29 (18.1)
Gujarat	96434 (94.9)	36561 (93.8)	132995 (94.6)	15793 (16.4)	2783 (7.6)	18576 (14)	5932 (37.6)	1076 (38.7)	7008 (37.7)
Haryana	59245 (92.4)	13404 (81.4)	72649 (90.1)	2420 (4.1)	277 (2.1)	2697 (3.7)	962 (39.8)	105 (37.9)	1067 (39.6)
Himachal Pradesh	15200 (96.8)	327 (95.6)	15527 (96.8)	1782 (11.7)	10 (3.1)	1792 (11.5)	1600 (89.8)	9 (90)	1609 (89.8)
Jammu and Kashmir	10407 (92.1)	420 (93.3)	10827 (92.2)	739 (7.1)	17 (4)	756 (7)	603 (81.6)	15 (88.2)	618 (81.7)
Jharkhand	41685 (82.2)	6676 (53.8)	48361 (76.6)	5524 (13.3)	170 (2.5)	5694 (11.8)	1480 (26.8)	57 (33.5)	1537 (27)
Karnataka	59675 (88.9)	10895 (82.5)	70570 (87.8)	10903 (18.3)	568 (5.2)	11471 (16.3)	3274 (30)	165 (29)	3439 (30)
Kerala	17545 (91.2)	2020 (78.5)	19565 (89.7)	3048 (17.4)	122 (6)	3170 (16.2)	2189 (71.8)	84 (68.9)	2273 (71.7)
Ladakh	250 (74)	8 (100)	258 (74.6)	6 (2.4)	0 (0)	6 (2.3)	6 (100)	NA	6 (100)
Lakshadweep	13 (92.9)	NA	13 (92.9)	0 (0)	NA	0 (0)	NA	NA	NA
Madhya Pradesh	80540 (58.3)	22256 (45.6)	102796 (55)	13444 (16.7)	1795 (8.1)	15239 (14.8)	2641 (19.6)	334 (18.6)	2975 (19.5)

States/UTs	TB patients with known tobacco usage status, n(%)			Tobacco users identified among screened, n(%)			Tobacco users linked with tobacco cessation centres, n(%)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Maharashtra	120383 (83.5)	57752 (72.1)	178135 (79.4)	10830 (9)	1224 (2.1)	12054 (6.8)	3936 (36.3)	342 (27.9)	4278 (35.5)
Manipur	1685 (73.2)	70 (26.5)	1755 (68.4)	341 (20.2)	4 (5.7)	345 (19.7)	60 (17.6)	0 (0)	60 (17.4)
Meghalaya	3985 (87.5)	218 (60.9)	4203 (85.6)	1432 (35.9)	89 (40.8)	1521 (36.2)	241 (16.8)	7 (7.9)	248 (16.3)
Mizoram	2155 (94.5)	25 (86.2)	2180 (94.4)	691 (32.1)	5 (20)	696 (31.9)	636 (92)	5 (100)	641 (92.1)
Nagaland	3313 (84.9)	442 (94.8)	3755 (85.9)	565 (17.1)	61 (13.8)	626 (16.7)	283 (50.1)	8 (13.1)	291 (46.5)
Odisha	55063 (95.3)	3773 (92.2)	58836 (95.1)	10639 (19.3)	285 (7.6)	10924 (18.6)	4672 (43.9)	130 (45.6)	4802 (44)
Puducherry	1511 (94)	1 (50)	1512 (93.9)	200 (13.2)	0 (0)	200 (13.2)	190 (95)	NA	190 (95)
Punjab	40572 (86)	8521 (81)	49093 (85.1)	1845 (4.5)	123 (1.4)	1968 (4)	624 (33.8)	24 (19.5)	648 (32.9)
Rajasthan	101393 (78.1)	26686 (73.5)	128079 (77.1)	7282 (7.2)	1140 (4.3)	8422 (6.6)	2355 (32.3)	477 (41.8)	2832 (33.6)
Sikkim	1093 (82.6)	65 (80.2)	1158 (82.4)	118 (10.8)	13 (20)	131 (11.3)	15 (12.7)	5 (38.5)	20 (15.3)
Tamil Nadu	74782 (91.3)	12735 (68.7)	87517 (87.1)	15279 (20.4)	1209 (9.5)	16488 (18.8)	4157 (27.2)	323 (26.7)	4480 (27.2)
Telangana	47151 (90.5)	20841 (90.8)	67992 (90.6)	5252 (11.1)	766 (3.7)	6018 (8.9)	2637 (50.2)	450 (58.7)	3087 (51.3)
Tripura	2103 (59.1)	19 (70.4)	2122 (59.2)	413 (19.6)	1 (5.3)	414 (19.5)	82 (19.9)	0 (0)	82 (19.8)
Uttar Pradesh	335195 (73.5)	97328 (52.2)	432523 (67.3)	31281 (9.3)	3283 (3.4)	34564 (8)	7287 (23.3)	237 (7.2)	7524 (21.8)
Uttarakhand	21473 (95.2)	3855 (92.8)	25328 (94.8)	2721 (12.7)	318 (8.2)	3039 (12)	1073 (39.4)	167 (52.5)	1240 (40.8)
West Bengal	79766 (83.9)	5863 (69.1)	85629 (82.7)	19003 (23.8)	904 (15.4)	19907 (23.2)	6254 (32.9)	363 (40.2)	6617 (33.2)
INDIA	**1499555 (79.4)**	**413529 (62.4)**	**1913084 (75)**	**194163 (12.9)**	**18495 (4.5)**	**212658 (11.1)**	**62322 (32.1)**	**4982 (26.9)**	**67304 (31.6)**

2.12. TB – Alcohol

States/UTs	TB patients with known alcohol usage status, n(%)			Alcohol users identified among screened, n(%)			Alcohol users linked with de-addiction centres, n(%)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Andaman and Nicobar Islands	462 (81.2)	4 (30.8)	466 (80.1)	53 (11.5)	0 (0)	53 (11.4)	13 (24.5)	NA	13 (24.5)
Andhra Pradesh	59822 (94.3)	25405 (95.9)	85227 (94.8)	7297 (12.2)	1036 (4.1)	8333 (9.8)	1822 (25)	233 (22.5)	2055 (24.7)
Arunachal Pradesh	1866 (66.5)	7 (46.7)	1873 (66.4)	154 (8.3)	0 (0)	154 (8.2)	84 (54.5)	NA	84 (54.5)
Assam	33967 (77.1)	6049 (76.8)	40016 (77.1)	5017 (14.8)	271 (4.5)	5288 (13.2)	964 (19.2)	56 (20.7)	1020 (19.3)
Bihar	47398 (51.6)	40673 (40.9)	88071 (46.1)	734 (1.5)	220 (0.5)	954 (1.1)	281 (38.3)	64 (29.1)	345 (36.2)
Chandigarh	3460 (84.3)	94 (68.1)	3554 (83.8)	146 (4.2)	3 (3.2)	149 (4.2)	36 (24.7)	1 (33.3)	37 (24.8)
Chhattisgarh	23206 (81.3)	5918 (56.7)	29124 (74.7)	5161 (22.2)	314 (5.3)	5475 (18.8)	2535 (49.1)	129 (41.1)	2664 (48.7)
Dadra and Nagar Haveli and Daman and Diu	483 (61.1)	43 (55.8)	526 (60.7)	58 (12)	4 (9.3)	62 (11.8)	32 (55.2)	3 (75)	35 (56.5)
Delhi	50614 (65.5)	1626 (13.9)	52240 (58.7)	3062 (6)	13 (0.8)	3075 (5.9)	702 (22.9)	5 (38.5)	707 (23)
Goa	1483 (86.1)	158 (50.8)	1641 (80.7)	181 (12.2)	0 (0)	181 (11)	32 (17.7)	NA	32 (17.7)
Gujarat	95715 (94.2)	36574 (93.9)	132289 (94.1)	5659 (5.9)	548 (1.5)	6207 (4.7)	2251 (39.8)	247 (45.1)	2498 (40.2)
Haryana	58357 (91)	13183 (80.1)	71540 (88.8)	1651 (2.8)	179 (1.4)	1830 (2.6)	658 (39.9)	75 (41.9)	733 (40.1)
Himachal Pradesh	15053 (95.9)	322 (94.2)	15375 (95.8)	1386 (9.2)	14 (4.3)	1400 (9.1)	1131 (81.6)	4 (28.6)	1135 (81.1)
Jammu and Kashmir	10296 (91.1)	418 (92.9)	10714 (91.2)	416 (4)	12 (2.9)	428 (4)	318 (76.4)	9 (75)	327 (76.4)
Jharkhand	40594 (80)	6371 (51.4)	46965 (74.4)	4331 (10.7)	120 (1.9)	4451 (9.5)	1111 (25.7)	34 (28.3)	1145 (25.7)
Karnataka	59320 (88.3)	10565 (80)	69885 (87)	9072 (15.3)	438 (4.1)	9510 (13.6)	2508 (27.6)	139 (31.7)	2647 (27.8)
Kerala	17432 (90.6)	1964 (76.4)	19396 (88.9)	3036 (17.4)	122 (6.2)	3158 (16.3)	1891 (62.3)	65 (53.3)	1956 (61.9)
Ladakh	242 (71.6)	7 (87.5)	249 (72)	12 (5)	0 (0)	12 (4.8)	6 (50)	NA	6 (50)
Lakshadweep	13 (92.9)	NA	13 (92.9)	0 (0)	NA	0 (0)	NA	NA	NA
Madhya Pradesh	77105 (55.8)	21795 (44.6)	98900 (52.9)	5318 (6.9)	443 (2)	5761 (5.8)	1025 (19.3)	92 (20.8)	1117 (19.4)

States/UTs	TB patients with known alcohol usage status, n(%)			Alcohol users identified among screened, n(%)			Alcohol users linked with de-addiction centres, n(%)		
	Public	Private	Total	Public	Private	Total	Public	Private	Total
Maharashtra	118174 (82)	56518 (70.6)	174692 (77.9)	6562 (5.6)	656 (1.2)	7218 (4.1)	2503 (38.1)	187 (28.5)	2690 (37.3)
Manipur	1713 (74.4)	65 (24.6)	1778 (69.3)	224 (13.1)	4 (6.2)	228 (12.8)	43 (19.2)	1 (25)	44 (19.3)
Meghalaya	3952 (86.8)	172 (48)	4124 (84)	803 (20.3)	6 (3.5)	809 (19.6)	183 (22.8)	0 (0)	183 (22.6)
Mizoram	2154 (94.4)	25 (86.2)	2179 (94.3)	257 (11.9)	4 (16)	261 (12)	169 (65.8)	2 (50)	171 (65.5)
Nagaland	3293 (84.4)	437 (93.8)	3730 (85.4)	353 (10.7)	20 (4.6)	373 (10)	244 (69.1)	5 (25)	249 (66.8)
Odisha	54330 (94)	3740 (91.4)	58070 (93.9)	9521 (17.5)	275 (7.4)	9796 (16.9)	4335 (45.5)	135 (49.1)	4470 (45.6)
Puducherry	1504 (93.5)	1 (50)	1505 (93.5)	295 (19.6)	0 (0)	295 (19.6)	279 (94.6)	NA	279 (94.6)
Punjab	40055 (84.9)	8351 (79.4)	48406 (83.9)	1705 (4.3)	133 (1.6)	1838 (3.8)	569 (33.4)	13 (9.8)	582 (31.7)
Rajasthan	100272 (77.3)	27012 (74.4)	127284 (76.6)	2871 (2.9)	422 (1.6)	3293 (2.6)	1013 (35.3)	163 (38.6)	1176 (35.7)
Sikkim	1002 (75.7)	54 (66.7)	1056 (75.2)	83 (8.3)	7 (13)	90 (8.5)	9 (10.8)	4 (57.1)	13 (14.4)
Tamil Nadu	74710 (91.2)	12600 (68)	87310 (86.9)	18023 (24.1)	1286 (10.2)	19309 (22.1)	4656 (25.8)	226 (17.6)	4882 (25.3)
Telangana	46823 (89.9)	20609 (89.7)	67432 (89.8)	5896 (12.6)	955 (4.6)	6851 (10.2)	2767 (46.9)	443 (46.4)	3210 (46.9)
Tripura	2027 (57)	19 (70.4)	2046 (57.1)	348 (17.2)	1 (5.3)	349 (17.1)	84 (24.1)	0 (0)	84 (24.1)
Uttar Pradesh	326867 (71.6)	94624 (50.7)	421491 (65.6)	10664 (3.3)	968 (1)	11632 (2.8)	2864 (26.9)	81 (8.4)	2945 (25.3)
Uttarakhand	21251 (94.2)	3809 (91.7)	25060 (93.8)	1790 (8.4)	203 (5.3)	1993 (8)	861 (48.1)	100 (49.3)	961 (48.2)
West Bengal	78816 (82.9)	5743 (67.7)	84559 (81.7)	11703 (14.8)	447 (7.8)	12150 (14.4)	3882 (33.2)	197 (44.1)	4079 (33.6)
INDIA	**1473831 (78)**	**404955 (61.1)**	**1878786 (73.6)**	**123842 (8.4)**	**9124 (2.3)**	**132966 (7.1)**	**41861 (33.8)**	**2713 (29.7)**	**44574 (33.5)**

2.13. TB – Pregnancy

States/UTs	Female TB patients screened for pregnancy, n(%)			Pregnant TB patients identified, n(%)		
	Public	Private	Total	Public	Private	Total
Andaman and Nicobar Islands	187 (82)	1 (12.5)	188 (79.7)	2 (1.1)	0 (0)	2 (1.1)
Andhra Pradesh	19706 (92.3)	10415 (93.7)	30121 (92.8)	54 (0.3)	14 (0.1)	68 (0.2)
Arunachal Pradesh	761 (60.5)	4 (57.1)	765 (60.5)	0 (0)	0 (0)	0 (0)
Assam	9914 (67.9)	1774 (62.8)	11688 (67.1)	61 (0.6)	9 (0.5)	70 (0.6)
Bihar	15913 (47.4)	13478 (32.3)	29391 (39)	165 (1)	69 (0.5)	234 (0.8)
Chandigarh	1569 (84.3)	45 (68.2)	1614 (83.8)	14 (0.9)	0 (0)	14 (0.9)
Chhattisgarh	6285 (62.2)	2539 (54.5)	8824 (59.8)	30 (0.5)	14 (0.6)	44 (0.5)
Dadra and Nagar Haveli and Daman and Diu	202 (55.3)	22 (57.9)	224 (55.6)	5 (2.5)	0 (0)	5 (2.2)
Delhi	18127 (48.4)	639 (12)	18766 (43.8)	132 (0.7)	5 (0.8)	137 (0.7)
Goa	558 (84.8)	66 (41.5)	624 (76.4)	5 (0.9)	0 (0)	5 (0.8)
Gujarat	33295 (91.7)	13844 (91.7)	47139 (91.7)	243 (0.7)	33 (0.2)	276 (0.6)
Haryana	21034 (82.3)	5218 (72.9)	26252 (80.3)	146 (0.7)	23 (0.4)	169 (0.6)
Himachal Pradesh	4707 (80.3)	112 (81.2)	4819 (80.3)	33 (0.7)	0 (0)	33 (0.7)
Jammu and Kashmir	3651 (80.8)	131 (61.5)	3782 (79.9)	17 (0.5)	0 (0)	17 (0.4)
Jharkhand	10642 (66.7)	1676 (36.1)	12318 (59.8)	68 (0.6)	11 (0.7)	79 (0.6)
Karnataka	19352 (82.7)	4204 (75.3)	23556 (81.3)	122 (0.6)	14 (0.3)	136 (0.6)
Kerala	5209 (86.5)	786 (76)	5995 (85)	19 (0.4)	7 (0.9)	26 (0.4)
Ladakh	120 (77.9)	3 (100)	123 (78.3)	3 (2.5)	0 (0)	3 (2.4)
Lakshadweep	4 (100)	NA	4 (100)	0 (0)	NA	0 (0)
Madhya Pradesh	27846 (51.8)	8024 (41.8)	35870 (49.2)	197 (0.7)	32 (0.4)	229 (0.6)
Maharashtra	45309 (73.5)	24598 (63.3)	69907 (69.5)	244 (0.5)	64 (0.3)	308 (0.4)
Manipur	506 (59.9)	30 (26.1)	536 (55.8)	4 (0.8)	0 (0)	4 (0.7)
Meghalaya	1507 (84.8)	80 (53)	1587 (82.3)	22 (1.5)	0 (0)	22 (1.4)
Mizoram	890 (94)	13 (92.9)	903 (94)	1 (0.1)	1 (7.7)	2 (0.2)
Nagaland	1034 (66.8)	127 (67.2)	1161 (66.8)	2 (0.2)	0 (0)	2 (0.2)
Odisha	17030 (88.4)	1479 (92)	18509 (88.7)	65 (0.4)	2 (0.1)	67 (0.4)
Puducherry	508 (87.9)	1 (100)	509 (87.9)	0 (0)	0 (0)	0 (0)
Punjab	15342 (76.5)	3204 (69.2)	18546 (75.1)	72 (0.5)	14 (0.4)	86 (0.5)
Rajasthan	28258 (64.7)	7380 (57.4)	35638 (63.1)	118 (0.4)	30 (0.4)	148 (0.4)
Sikkim	202 (34.2)	9 (19.1)	211 (33.1)	0 (0)	0 (0)	0 (0)
Tamil Nadu	20366 (85.9)	4513 (60.7)	24879 (79.9)	199 (1)	17 (0.4)	216 (0.9)
Telangana	17977 (89.6)	9264 (89.6)	27241 (89.6)	76 (0.4)	32 (0.3)	108 (0.4)
Tripura	582 (60.4)	7 (63.6)	589 (60.5)	5 (0.9)	0 (0)	5 (0.8)
Uttar Pradesh	112391 (59.1)	39259 (47.5)	151650 (55.6)	552 (0.5)	157 (0.4)	709 (0.5)
Uttarakhand	7499 (81.2)	1047 (61.4)	8546 (78.1)	37 (0.5)	7 (0.7)	44 (0.5)
West Bengal	22922 (76.2)	2043 (61.3)	24965 (74.7)	153 (0.7)	9 (0.4)	162 (0.6)
INDIA	**491405 (68.4)**	**156035 (55.2)**	**647440 (64.7)**	**2866 (0.6)**	**564 (0.4)**	**3430 (0.5)**

3.1. Treatment outcome of TB patients notified in 2022 (public sector)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andaman and Nicobar Islands	504	225 (44.6)	429 (85.1)	14 (2.8)	16 (3.2)	8 (1.6)	13 (2.6)	0 (0)
Andhra Pradesh	64105	32946 (51.4)	59817 (93.3)	1352 (2.1)	55 (0.1)	125 (0.2)	1262 (2)	24 (0)
Arunachal Pradesh	2853	992 (34.8)	2353 (82.5)	64 (2.2)	213 (7.5)	22 (0.8)	63 (2.2)	4 (0.1)
Assam	41504	11680 (28.1)	36739 (88.5)	1566 (3.8)	604 (1.5)	190 (0.5)	427 (1)	151 (0.4)
Bihar	79195	19855 (25.1)	62727 (79.2)	1835 (2.3)	2833 (3.6)	463 (0.6)	1213 (1.5)	1127 (1.4)
Chandigarh	3616	1272 (35.2)	3033 (83.9)	147 (4.1)	108 (3)	29 (0.8)	63 (1.7)	12 (0.3)
Chhattisgarh	29622	12080 (40.8)	26285 (88.7)	1478 (5)	448 (1.5)	129 (0.4)	359 (1.2)	143 (0.5)
Dadra and Nagar Haveli and Daman and Diu	821	327 (39.8)	771 (93.9)	23 (2.8)	1 (0.1)	2 (0.2)	10 (1.2)	0 (0)
Delhi	75058	18373 (24.5)	59521 (79.3)	1737 (2.3)	3320 (4.4)	503 (0.7)	1994 (2.7)	332 (0.4)
Goa	1600	490 (30.6)	1184 (74)	158 (9.9)	74 (4.6)	18 (1.1)	77 (4.8)	3 (0.2)
Gujarat	105358	40980 (38.9)	93204 (88.5)	5193 (4.9)	1314 (1.2)	933 (0.9)	2022 (1.9)	88 (0.1)
Haryana	59216	25510 (43.1)	51333 (86.7)	2541 (4.3)	796 (1.3)	405 (0.7)	689 (1.2)	152 (0.3)
Himachal Pradesh	15706	6727 (42.8)	13644 (86.9)	909 (5.8)	231 (1.5)	48 (0.3)	282 (1.8)	20 (0.1)
Jammu and Kashmir	11258	4532 (40.3)	9706 (86.2)	425 (3.8)	138 (1.2)	36 (0.3)	72 (0.6)	34 (0.3)
Jharkhand	47469	17438 (36.7)	42330 (89.2)	1272 (2.7)	865 (1.8)	227 (0.5)	246 (0.5)	266 (0.6)
Karnataka	64794	31275 (48.3)	54378 (83.9)	4758 (7.3)	1494 (2.3)	316 (0.5)	1769 (2.7)	27 (0)
Kerala	20277	9056 (44.7)	16772 (82.7)	1686 (8.3)	483 (2.4)	123 (0.6)	305 (1.5)	58 (0.3)
Ladakh	332	190 (57.2)	293 (88.3)	16 (4.8)	1 (0.3)	2 (0.6)	1 (0.3)	0 (0)
Lakshadweep	21	15 (71.4)	21 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Madhya Pradesh	139392	36775 (26.4)	121356 (87.1)	5053 (3.6)	3673 (2.6)	889 (0.6)	1373 (1)	526 (0.4)
Maharashtra	142704	40901 (28.7)	122692 (86)	5927 (4.2)	2345 (1.6)	723 (0.5)	4207 (2.9)	481 (0.3)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Manipur	2341	951 (40.6)	1745 (74.5)	81 (3.5)	97 (4.1)	9 (0.4)	23 (1)	28 (1.2)
Meghalaya	4285	1737 (40.5)	3574 (83.4)	190 (4.4)	130 (3)	20 (0.5)	83 (1.9)	18 (0.4)
Mizoram	1975	715 (36.2)	1728 (87.5)	84 (4.3)	37 (1.9)	9 (0.5)	21 (1.1)	12 (0.6)
Nagaland	3764	1562 (41.5)	3307 (87.9)	94 (2.5)	179 (4.8)	28 (0.7)	34 (0.9)	47 (1.2)
Odisha	55329	25170 (45.5)	50344 (91)	2575 (4.7)	444 (0.8)	100 (0.2)	251 (0.5)	319 (0.6)
Puducherry	1483	673 (45.4)	1214 (81.9)	115 (7.8)	40 (2.7)	20 (1.3)	32 (2.2)	0 (0)
Punjab	47759	16425 (34.4)	39948 (83.6)	2033 (4.3)	1352 (2.8)	225 (0.5)	338 (0.7)	428 (0.9)
Rajasthan	128111	45630 (35.6)	112797 (88)	4066 (3.2)	2697 (2.1)	598 (0.5)	1248 (1)	248 (0.2)
Sikkim	1175	590 (50.2)	1066 (90.7)	41 (3.5)	6 (0.5)	4 (0.3)	17 (1.4)	2 (0.2)
Tamil Nadu	75937	38061 (50.1)	64618 (85.1)	4667 (6.1)	1943 (2.6)	515 (0.7)	1670 (2.2)	35 (0)
Telangana	52958	24642 (46.5)	48219 (91.1)	1428 (2.7)	306 (0.6)	232 (0.4)	854 (1.6)	212 (0.4)
Tripura	3226	1329 (41.2)	2803 (86.9)	181 (5.6)	79 (2.4)	13 (0.4)	35 (1.1)	2 (0.1)
Uttar Pradesh	408169	123198 (30.2)	361743 (88.6)	12933 (3.2)	5665 (1.4)	1755 (0.4)	5365 (1.3)	706 (0.2)
Uttarakhand	22207	8087 (36.4)	19480 (87.7)	853 (3.8)	526 (2.4)	172 (0.8)	279 (1.3)	39 (0.2)
West Bengal	86134	43041 (50)	74111 (86)	4382 (5.1)	1766 (2.1)	551 (0.6)	1749 (2)	281 (0.3)
INDIA	**1800258**	**643450 (35.7)**	**1565285 (86.9)**	**69877 (3.9)**	**34279 (1.9)**	**9442 (0.5)**	**28446 (1.6)**	**5825 (0.3)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.2. Treatment outcome of TB patients notified in 2022 (private sector)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andaman and Nicobar Islands	4	1 (25)	3 (75)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Andhra Pradesh	26735	4038 (15.1)	26187 (98)	132 (0.5)	9 (0)	54 (0.2)	252 (0.9)	9 (0)
Arunachal Pradesh	6	1 (16.7)	2 (33.3)	0 (0)	1 (16.7)	0 (0)	0 (0)	0 (0)
Assam	5900	485 (8.2)	5279 (89.5)	184 (3.1)	77 (1.3)	23 (0.4)	36 (0.6)	61 (1)
Bihar	84068	676 (0.8)	74252 (88.3)	3323 (4)	4556 (5.4)	320 (0.4)	501 (0.6)	259 (0.3)
Chandigarh	71	10 (14.1)	34 (47.9)	2 (2.8)	3 (4.2)	0 (0)	2 (2.8)	6 (8.5)
Chhattisgarh	9166	537 (5.9)	7971 (87)	618 (6.7)	270 (2.9)	52 (0.6)	71 (0.8)	26 (0.3)
Dadra and Nagar Haveli and Daman and Diu	74	4 (5.4)	73 (98.6)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Delhi	9959	176 (1.8)	5027 (50.5)	207 (2.1)	665 (6.7)	49 (0.5)	43 (0.4)	388 (3.9)
Goa	396	1 (0.3)	299 (75.5)	13 (3.3)	13 (3.3)	0 (0)	5 (1.3)	14 (3.5)
Gujarat	39327	789 (2)	37187 (94.6)	783 (2)	630 (1.6)	106 (0.3)	270 (0.7)	71 (0.2)
Haryana	16835	2515 (14.9)	14565 (86.5)	439 (2.6)	376 (2.2)	58 (0.3)	92 (0.5)	141 (0.8)
Himachal Pradesh	462	110 (23.8)	374 (81)	14 (3)	11 (2.4)	4 (0.9)	6 (1.3)	11 (2.4)
Jammu and Kashmir	544	97 (17.8)	498 (91.5)	10 (1.8)	6 (1.1)	2 (0.4)	3 (0.6)	3 (0.6)
Jharkhand	11527	395 (3.4)	10297 (89.3)	288 (2.5)	416 (3.6)	48 (0.4)	24 (0.2)	211 (1.8)
Karnataka	11893	1970 (16.6)	10467 (88)	357 (3)	109 (0.9)	37 (0.3)	114 (1)	93 (0.8)
Kerala	2858	457 (16)	2146 (75.1)	264 (9.2)	123 (4.3)	8 (0.3)	32 (1.1)	26 (0.9)
Ladakh	11	1 (9.1)	8 (72.7)	0 (0)	0 (0)	0 (0)	1 (9.1)	0 (0)
Lakshadweep	0	NA	NA	NA	NA	NA	NA	NA
Madhya Pradesh	47317	5129 (10.8)	41575 (87.9)	1504 (3.2)	2726 (5.8)	210 (0.4)	298 (0.6)	177 (0.4)
Maharashtra	76512	4056 (5.3)	67792 (88.6)	2632 (3.4)	650 (0.8)	242 (0.3)	1306 (1.7)	331 (0.4)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Manipur	243	33 (13.6)	104 (42.8)	4 (1.6)	11 (4.5)	0 (0)	1 (0.4)	2 (0.8)
Meghalaya	354	3 (0.8)	284 (80.2)	7 (2)	9 (2.5)	2 (0.6)	1 (0.3)	45 (12.7)
Mizoram	18	6 (33.3)	16 (88.9)	1 (5.6)	1 (5.6)	0 (0)	0 (0)	0 (0)
Nagaland	378	13 (3.4)	334 (88.4)	2 (0.5)	17 (4.5)	0 (0)	1 (0.3)	17 (4.5)
Odisha	4327	422 (9.8)	3964 (91.6)	71 (1.6)	46 (1.1)	7 (0.2)	11 (0.3)	92 (2.1)
Puducherry	2	1 (50)	1 (50)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Punjab	9614	342 (3.6)	8183 (85.1)	615 (6.4)	81 (0.8)	23 (0.2)	21 (0.2)	41 (0.4)
Rajasthan	38443	2638 (6.9)	34989 (91)	505 (1.3)	1235 (3.2)	355 (0.9)	207 (0.5)	97 (0.3)
Sikkim	57	27 (47.4)	54 (94.7)	2 (3.5)	0 (0)	0 (0)	0 (0)	0 (0)
Tamil Nadu	17720	2420 (13.7)	15735 (88.8)	567 (3.2)	443 (2.5)	68 (0.4)	134 (0.8)	118 (0.7)
Telangana	18530	4595 (24.8)	17367 (93.7)	231 (1.2)	39 (0.2)	55 (0.3)	110 (0.6)	265 (1.4)
Tripura	40	3 (7.5)	33 (82.5)	1 (2.5)	0 (0)	0 (0)	0 (0)	0 (0)
Uttar Pradesh	114932	4101 (3.6)	106416 (92.6)	2245 (2)	1582 (1.4)	484 (0.4)	856 (0.7)	764 (0.7)
Uttarakhand	4668	140 (3)	4035 (86.4)	73 (1.6)	91 (1.9)	14 (0.3)	19 (0.4)	18 (0.4)
West Bengal	6787	1379 (20.3)	5550 (81.8)	260 (3.8)	129 (1.9)	28 (0.4)	74 (1.1)	110 (1.6)
INDIA	**559778**	**37571 (6.7)**	**501101 (89.5)**	**15354 (2.7)**	**14325 (2.6)**	**2249 (0.4)**	**4491 (0.8)**	**3396 (0.6)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.3. Treatment outcome of TB patients notified in 2022 (total)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andaman and Nicobar Islands	508	226 (44.5)	432 (85)	14 (2.8)	16 (3.1)	8 (1.6)	13 (2.6)	0 (0)
Andhra Pradesh	90840	36984 (40.7)	86004 (94.7)	1484 (1.6)	64 (0.1)	179 (0.2)	1514 (1.7)	33 (0)
Arunachal Pradesh	2859	993 (34.7)	2355 (82.4)	64 (2.2)	214 (7.5)	22 (0.8)	63 (2.2)	4 (0.1)
Assam	47404	12165 (25.7)	42018 (88.6)	1750 (3.7)	681 (1.4)	213 (0.4)	463 (1)	212 (0.4)
Bihar	163263	20531 (12.6)	136979 (83.9)	5158 (3.2)	7389 (4.5)	783 (0.5)	1714 (1)	1386 (0.8)
Chandigarh	3687	1282 (34.8)	3067 (83.2)	149 (4)	111 (3)	29 (0.8)	65 (1.8)	18 (0.5)
Chhattisgarh	38788	12617 (32.5)	34256 (88.3)	2096 (5.4)	718 (1.9)	181 (0.5)	430 (1.1)	169 (0.4)
Dadra and Nagar Haveli and Daman and Diu	895	331 (37)	844 (94.3)	23 (2.6)	1 (0.1)	2 (0.2)	10 (1.1)	0 (0)
Delhi	85017	18549 (21.8)	64548 (75.9)	1944 (2.3)	3985 (4.7)	552 (0.6)	2037 (2.4)	720 (0.8)
Goa	1996	491 (24.6)	1483 (74.3)	171 (8.6)	87 (4.4)	18 (0.9)	82 (4.1)	17 (0.9)
Gujarat	144685	41769 (28.9)	130391 (90.1)	5976 (4.1)	1944 (1.3)	1039 (0.7)	2292 (1.6)	159 (0.1)
Haryana	76051	28025 (36.9)	65898 (86.6)	2980 (3.9)	1172 (1.5)	463 (0.6)	781 (1)	293 (0.4)
Himachal Pradesh	16168	6837 (42.3)	14018 (86.7)	923 (5.7)	242 (1.5)	52 (0.3)	288 (1.8)	31 (0.2)
Jammu and Kashmir	11802	4629 (39.2)	10204 (86.5)	435 (3.7)	144 (1.2)	38 (0.3)	75 (0.6)	37 (0.3)
Jharkhand	58996	17833 (30.2)	52627 (89.2)	1560 (2.6)	1281 (2.2)	275 (0.5)	270 (0.5)	477 (0.8)
Karnataka	76687	33245 (43.4)	64845 (84.6)	5115 (6.7)	1603 (2.1)	353 (0.5)	1883 (2.5)	120 (0.2)
Kerala	23135	9513 (41.1)	18918 (81.8)	1950 (8.4)	606 (2.6)	131 (0.6)	337 (1.5)	84 (0.4)
Ladakh	343	191 (55.7)	301 (87.8)	16 (4.7)	1 (0.3)	2 (0.6)	2 (0.6)	0 (0)
Lakshadweep	21	15 (71.4)	21 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Madhya Pradesh	186709	41904 (22.4)	162931 (87.3)	6557 (3.5)	6399 (3.4)	1099 (0.6)	1671 (0.9)	703 (0.4)
Maharashtra	219216	44957 (20.5)	190484 (86.9)	8559 (3.9)	2995 (1.4)	965 (0.4)	5513 (2.5)	812 (0.4)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Manipur	2584	984 (38.1)	1849 (71.6)	85 (3.3)	108 (4.2)	9 (0.3)	24 (0.9)	30 (1.2)
Meghalaya	4639	1740 (37.5)	3858 (83.2)	197 (4.2)	139 (3)	22 (0.5)	84 (1.8)	63 (1.4)
Mizoram	1993	721 (36.2)	1744 (87.5)	85 (4.3)	38 (1.9)	9 (0.5)	21 (1.1)	12 (0.6)
Nagaland	4142	1575 (38)	3641 (87.9)	96 (2.3)	196 (4.7)	28 (0.7)	35 (0.8)	64 (1.5)
Odisha	59656	25592 (42.9)	54308 (91)	2646 (4.4)	490 (0.8)	107 (0.2)	262 (0.4)	411 (0.7)
Puducherry	1485	674 (45.4)	1215 (81.8)	115 (7.7)	40 (2.7)	20 (1.3)	32 (2.2)	0 (0)
Punjab	57373	16767 (29.2)	48131 (83.9)	2648 (4.6)	1433 (2.5)	248 (0.4)	359 (0.6)	469 (0.8)
Rajasthan	166554	48268 (29)	147786 (88.7)	4571 (2.7)	3932 (2.4)	953 (0.6)	1455 (0.9)	345 (0.2)
Sikkim	1232	617 (50.1)	1120 (90.9)	43 (3.5)	6 (0.5)	4 (0.3)	17 (1.4)	2 (0.2)
Tamil Nadu	93657	40481 (43.2)	80353 (85.8)	5234 (5.6)	2386 (2.5)	583 (0.6)	1804 (1.9)	153 (0.2)
Telangana	71488	29237 (40.9)	65586 (91.7)	1659 (2.3)	345 (0.5)	287 (0.4)	964 (1.3)	477 (0.7)
Tripura	3266	1332 (40.8)	2836 (86.8)	182 (5.6)	79 (2.4)	13 (0.4)	35 (1.1)	2 (0.1)
Uttar Pradesh	523101	127299 (24.3)	468159 (89.5)	15178 (2.9)	7247 (1.4)	2239 (0.4)	6221 (1.2)	1470 (0.3)
Uttarakhand	26875	8227 (30.6)	23515 (87.5)	926 (3.4)	617 (2.3)	186 (0.7)	298 (1.1)	57 (0.2)
West Bengal	92921	44420 (47.8)	79661 (85.7)	4642 (5)	1895 (2)	579 (0.6)	1823 (2)	391 (0.4)
INDIA	**2360036**	**681021 (28.9)**	**2066386 (87.6)**	**85231 (3.6)**	**48604 (2.1)**	**11691 (0.5)**	**32937 (1.4)**	**9221 (0.4)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.4. Treatment outcome of new TB patients notified in 2022 (public sector)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andaman and Nicobar Islands	442	193 (43.7)	375 (84.8)	13 (2.9)	14 (3.2)	6 (1.4)	10 (2.3)	0 (0)
Andhra Pradesh	55915	28917 (51.7)	52422 (93.8)	1161 (2.1)	42 (0.1)	94 (0.2)	1068 (1.9)	22 (0)
Arunachal Pradesh	2517	860 (34.2)	2124 (84.4)	56 (2.2)	198 (7.9)	20 (0.8)	54 (2.1)	4 (0.2)
Assam	37536	10710 (28.5)	33686 (89.7)	1422 (3.8)	535 (1.4)	166 (0.4)	354 (0.9)	132 (0.4)
Bihar	67765	17830 (26.3)	56458 (83.3)	1617 (2.4)	2527 (3.7)	410 (0.6)	1035 (1.5)	1036 (1.5)
Chandigarh	2941	967 (32.9)	2483 (84.4)	113 (3.8)	84 (2.9)	21 (0.7)	49 (1.7)	7 (0.2)
Chhattisgarh	25749	10615 (41.2)	22918 (89)	1325 (5.1)	363 (1.4)	104 (0.4)	297 (1.2)	132 (0.5)
Dadra and Nagar Haveli and Daman and Diu	602	233 (38.7)	568 (94.4)	18 (3)	0 (0)	2 (0.3)	5 (0.8)	0 (0)
Delhi	62992	14520 (23.1)	51127 (81.2)	1334 (2.1)	2726 (4.3)	377 (0.6)	1459 (2.3)	296 (0.5)
Goa	1271	380 (29.9)	938 (73.8)	136 (10.7)	52 (4.1)	14 (1.1)	56 (4.4)	2 (0.2)
Gujarat	83309	31478 (37.8)	74658 (89.6)	3949 (4.7)	974 (1.2)	522 (0.6)	1222 (1.5)	67 (0.1)
Haryana	50811	21604 (42.5)	44781 (88.1)	2139 (4.2)	683 (1.3)	298 (0.6)	528 (1)	135 (0.3)
Himachal Pradesh	13919	5731 (41.2)	12129 (87.1)	794 (5.7)	211 (1.5)	39 (0.3)	240 (1.7)	17 (0.1)
Jammu and Kashmir	9836	3828 (38.9)	8557 (87)	374 (3.8)	113 (1.1)	24 (0.2)	58 (0.6)	29 (0.3)
Jharkhand	42290	16384 (38.7)	38580 (91.2)	1174 (2.8)	767 (1.8)	194 (0.5)	220 (0.5)	117 (0.3)
Karnataka	57296	27139 (47.4)	48408 (84.5)	4154 (7.3)	1282 (2.2)	226 (0.4)	1508 (2.6)	20 (0)
Kerala	18808	8420 (44.8)	15734 (83.7)	1566 (8.3)	431 (2.3)	110 (0.6)	274 (1.5)	52 (0.3)
Ladakh	276	158 (57.2)	247 (89.5)	11 (4)	0 (0)	2 (0.7)	0 (0)	0 (0)
Lakshadweep	21	15 (71.4)	21 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Madhya Pradesh	120452	31370 (26)	106400 (88.3)	4350 (3.6)	3190 (2.6)	688 (0.6)	1058 (0.9)	422 (0.4)
Maharashtra	124288	35727 (28.7)	108033 (86.9)	5125 (4.1)	1805 (1.5)	545 (0.4)	3654 (2.9)	317 (0.3)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Manipur	1971	857 (43.5)	1572 (79.8)	74 (3.8)	92 (4.7)	7 (0.4)	21 (1.1)	24 (1.2)
Meghalaya	3870	1551 (40.1)	3247 (83.9)	176 (4.5)	117 (3)	14 (0.4)	71 (1.8)	13 (0.3)
Mizoram	1718	609 (35.4)	1517 (88.3)	73 (4.2)	32 (1.9)	7 (0.4)	15 (0.9)	10 (0.6)
Nagaland	3262	1359 (41.7)	2903 (89)	81 (2.5)	162 (5)	19 (0.6)	27 (0.8)	35 (1.1)
Odisha	51283	23538 (45.9)	47054 (91.8)	2374 (4.6)	399 (0.8)	82 (0.2)	203 (0.4)	293 (0.6)
Puducherry	1259	558 (44.3)	1031 (81.9)	103 (8.2)	30 (2.4)	12 (1)	28 (2.2)	0 (0)
Punjab	40779	13763 (33.8)	35141 (86.2)	1737 (4.3)	1153 (2.8)	168 (0.4)	258 (0.6)	383 (0.9)
Rajasthan	109802	38419 (35)	98154 (89.4)	3359 (3.1)	2319 (2.1)	459 (0.4)	979 (0.9)	209 (0.2)
Sikkim	1020	508 (49.8)	940 (92.2)	33 (3.2)	6 (0.6)	3 (0.3)	11 (1.1)	2 (0.2)
Tamil Nadu	67582	33594 (49.7)	58153 (86)	4074 (6)	1600 (2.4)	367 (0.5)	1337 (2)	22 (0)
Telangana	46780	21921 (46.9)	43023 (92)	1253 (2.7)	232 (0.5)	174 (0.4)	677 (1.4)	171 (0.4)
Tripura	2776	1125 (40.5)	2419 (87.1)	154 (5.5)	65 (2.3)	11 (0.4)	29 (1)	2 (0.1)
Uttar Pradesh	359764	107762 (30)	324415 (90.2)	11324 (3.1)	5108 (1.4)	1481 (0.4)	4165 (1.2)	617 (0.2)
Uttarakhand	19591	6915 (35.3)	17302 (88.3)	750 (3.8)	486 (2.5)	158 (0.8)	230 (1.2)	35 (0.2)
West Bengal	77500	38956 (50.3)	67533 (87.1)	3963 (5.1)	1551 (2)	440 (0.6)	1468 (1.9)	143 (0.2)
INDIA	**1567993**	**558514 (35.6)**	**1385051 (88.3)**	**60359 (3.8)**	**29349 (1.9)**	**7264 (0.5)**	**22668 (1.4)**	**4766 (0.3)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.5. Treatment outcome of previously treated TB patients notified in 2022 (public sector)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andaman and Nicobar Islands	62	32 (51.6)	54 (87.1)	1 (1.6)	2 (3.2)	2 (3.2)	3 (4.8)	0 (0)
Andhra Pradesh	8190	4029 (49.2)	7395 (90.3)	191 (2.3)	13 (0.2)	31 (0.4)	194 (2.4)	2 (0)
Arunachal Pradesh	336	132 (39.3)	229 (68.2)	8 (2.4)	15 (4.5)	2 (0.6)	9 (2.7)	0 (0)
Assam	3968	970 (24.4)	3053 (76.9)	144 (3.6)	69 (1.7)	24 (0.6)	73 (1.8)	19 (0.5)
Bihar	11430	2025 (17.7)	6269 (54.8)	218 (1.9)	306 (2.7)	53 (0.5)	178 (1.6)	91 (0.8)
Chandigarh	675	305 (45.2)	550 (81.5)	34 (5)	24 (3.6)	8 (1.2)	14 (2.1)	5 (0.7)
Chhattisgarh	3873	1465 (37.8)	3367 (86.9)	153 (4)	85 (2.2)	25 (0.6)	62 (1.6)	11 (0.3)
Dadra and Nagar Haveli and Daman and Diu	219	94 (42.9)	203 (92.7)	5 (2.3)	1 (0.5)	0 (0)	5 (2.3)	0 (0)
Delhi	12066	3853 (31.9)	8394 (69.6)	403 (3.3)	594 (4.9)	126 (1)	535 (4.4)	36 (0.3)
Goa	329	110 (33.4)	246 (74.8)	22 (6.7)	22 (6.7)	4 (1.2)	21 (6.4)	1 (0.3)
Gujarat	22049	9502 (43.1)	18546 (84.1)	1244 (5.6)	340 (1.5)	411 (1.9)	800 (3.6)	21 (0.1)
Haryana	8405	3906 (46.5)	6552 (78)	402 (4.8)	113 (1.3)	107 (1.3)	161 (1.9)	17 (0.2)
Himachal Pradesh	1787	996 (55.7)	1515 (84.8)	115 (6.4)	20 (1.1)	9 (0.5)	42 (2.4)	3 (0.2)
Jammu and Kashmir	1422	704 (49.5)	1149 (80.8)	51 (3.6)	25 (1.8)	12 (0.8)	14 (1)	5 (0.4)
Jharkhand	5179	1054 (20.4)	3750 (72.4)	98 (1.9)	98 (1.9)	33 (0.6)	26 (0.5)	149 (2.9)
Karnataka	7498	4136 (55.2)	5970 (79.6)	604 (8.1)	212 (2.8)	90 (1.2)	261 (3.5)	7 (0.1)
Kerala	1469	636 (43.3)	1038 (70.7)	120 (8.2)	52 (3.5)	13 (0.9)	31 (2.1)	6 (0.4)
Ladakh	0	NA	NA	NA	NA	NA	NA	NA
Lakshadweep	56	32 (57.1)	46 (82.1)	5 (8.9)	1 (1.8)	0 (0)	1 (1.8)	0 (0)
Madhya Pradesh	18940	5405 (28.5)	14956 (79)	703 (3.7)	483 (2.6)	201 (1.1)	315 (1.7)	104 (0.5)
Maharashtra	18416	5174 (28.1)	14659 (79.6)	802 (4.4)	540 (2.9)	178 (1)	553 (3)	164 (0.9)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Manipur	370	94 (25.4)	173 (46.8)	7 (1.9)	5 (1.4)	2 (0.5)	2 (0.5)	4 (1.1)
Meghalaya	415	186 (44.8)	327 (78.8)	14 (3.4)	13 (3.1)	6 (1.4)	12 (2.9)	5 (1.2)
Mizoram	257	106 (41.2)	211 (82.1)	11 (4.3)	5 (1.9)	2 (0.8)	6 (2.3)	2 (0.8)
Nagaland	502	203 (40.4)	404 (80.5)	13 (2.6)	17 (3.4)	9 (1.8)	7 (1.4)	12 (2.4)
Odisha	4046	1632 (40.3)	3290 (81.3)	201 (5)	45 (1.1)	18 (0.4)	48 (1.2)	26 (0.6)
Puducherry	224	115 (51.3)	183 (81.7)	12 (5.4)	10 (4.5)	8 (3.6)	4 (1.8)	0 (0)
Punjab	6980	2662 (38.1)	4807 (68.9)	296 (4.2)	199 (2.9)	57 (0.8)	80 (1.1)	45 (0.6)
Rajasthan	18309	7211 (39.4)	14643 (80)	707 (3.9)	378 (2.1)	139 (0.8)	269 (1.5)	39 (0.2)
Sikkim	155	82 (52.9)	126 (81.3)	8 (5.2)	0 (0)	1 (0.6)	6 (3.9)	0 (0)
Tamil Nadu	8355	4467 (53.5)	6465 (77.4)	593 (7.1)	343 (4.1)	148 (1.8)	333 (4)	13 (0.2)
Telangana	6178	2721 (44)	5196 (84.1)	175 (2.8)	74 (1.2)	58 (0.9)	177 (2.9)	41 (0.7)
Tripura	450	204 (45.3)	384 (85.3)	27 (6)	14 (3.1)	2 (0.4)	6 (1.3)	0 (0)
Uttar Pradesh	48405	15436 (31.9)	37328 (77.1)	1609 (3.3)	557 (1.2)	274 (0.6)	1200 (2.5)	89 (0.2)
Uttarakhand	2616	1172 (44.8)	2178 (83.3)	103 (3.9)	40 (1.5)	14 (0.5)	49 (1.9)	4 (0.2)
West Bengal	8634	4085 (47.3)	6578 (76.2)	419 (4.9)	215 (2.5)	111 (1.3)	281 (3.3)	138 (1.6)
INDIA	**232265**	**84936 (36.6)**	**180234 (77.6)**	**9518 (4.1)**	**4930 (2.1)**	**2178 (0.9)**	**5778 (2.5)**	**1059 (0.5)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.6. Treatment outcome of TB-HIV patients notified in 2022 (public sector)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andaman and Nicobar Islands	4	2 (50)	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Andhra Pradesh	4005	1990 (49.7)	3550 (88.6)	216 (5.4)	8 (0.2)	9 (0.2)	90 (2.2)	6 (0.1)
Arunachal Pradesh	13	4 (30.8)	9 (69.2)	0 (0)	2 (15.4)	0 (0)	0 (0)	0 (0)
Assam	312	34 (10.9)	237 (76)	39 (12.5)	10 (3.2)	4 (1.3)	2 (0.6)	4 (1.3)
Bihar	1804	189 (10.5)	1355 (75.1)	114 (6.3)	59 (3.3)	9 (0.5)	9 (0.5)	48 (2.7)
Chandigarh	156	12 (7.7)	92 (59)	34 (21.8)	13 (8.3)	3 (1.9)	0 (0)	1 (0.6)
Chhattisgarh	508	162 (31.9)	407 (80.1)	66 (13)	9 (1.8)	0 (0)	14 (2.8)	1 (0.2)
Dadra and Nagar Haveli and Daman and Diu	10	3 (30)	6 (60)	3 (30)	0 (0)	0 (0)	0 (0)	0 (0)
Delhi	1443	186 (12.9)	1020 (70.7)	96 (6.7)	166 (11.5)	16 (1.1)	14 (1)	17 (1.2)
Goa	67	4 (6)	31 (46.3)	16 (23.9)	5 (7.5)	1 (1.5)	5 (7.5)	0 (0)
Gujarat	2824	706 (25)	2216 (78.5)	346 (12.3)	108 (3.8)	19 (0.7)	44 (1.6)	7 (0.2)
Haryana	730	254 (34.8)	600 (82.2)	80 (11)	8 (1.1)	4 (0.5)	5 (0.7)	1 (0.1)
Himachal Pradesh	100	37 (37)	83 (83)	13 (13)	0 (0)	0 (0)	3 (3)	0 (0)
Jammu and Kashmir	56	10 (17.9)	36 (64.3)	6 (10.7)	1 (1.8)	3 (5.4)	1 (1.8)	2 (3.6)
Jharkhand	333	63 (18.9)	253 (76)	35 (10.5)	3 (0.9)	2 (0.6)	0 (0)	2 (0.6)
Karnataka	4049	1393 (34.4)	3062 (75.6)	614 (15.2)	158 (3.9)	11 (0.3)	88 (2.2)	4 (0.1)
Kerala	220	31 (14.1)	151 (68.6)	45 (20.5)	9 (4.1)	3 (1.4)	1 (0.5)	0 (0)
Madhya Pradesh	1408	232 (16.5)	1147 (81.5)	158 (11.2)	32 (2.3)	11 (0.8)	12 (0.9)	4 (0.3)
Maharashtra	5499	1039 (18.9)	4250 (77.3)	624 (11.3)	172 (3.1)	29 (0.5)	126 (2.3)	10 (0.2)
Manipur	120	43 (35.8)	92 (76.7)	8 (6.7)	5 (4.2)	0 (0)	1 (0.8)	4 (3.3)
Meghalaya	140	17 (12.1)	108 (77.1)	17 (12.1)	8 (5.7)	0 (0)	3 (2.1)	0 (0)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Mizoram	293	63 (21.5)	241 (82.3)	23 (7.8)	4 (1.4)	3 (1)	5 (1.7)	6 (2)
Nagaland	379	54 (14.2)	303 (79.9)	19 (5)	12 (3.2)	3 (0.8)	4 (1.1)	20 (5.3)
Odisha	680	197 (29)	574 (84.4)	71 (10.4)	5 (0.7)	2 (0.3)	5 (0.7)	5 (0.7)
Puducherry	28	5 (17.9)	22 (78.6)	3 (10.7)	0 (0)	1 (3.6)	0 (0)	0 (0)
Punjab	1391	274 (19.7)	1099 (79)	141 (10.1)	48 (3.5)	7 (0.5)	6 (0.4)	12 (0.9)
Rajasthan	1583	327 (20.7)	1311 (82.8)	125 (7.9)	58 (3.7)	11 (0.7)	13 (0.8)	5 (0.3)
Sikkim	10	6 (60)	8 (80)	1 (10)	0 (0)	0 (0)	1 (10)	0 (0)
Tamil Nadu	2863	937 (32.7)	2205 (77)	408 (14.3)	85 (3)	16 (0.6)	39 (1.4)	4 (0.1)
Telangana	1690	741 (43.8)	1434 (84.9)	146 (8.6)	16 (0.9)	8 (0.5)	29 (1.7)	6 (0.4)
Tripura	53	13 (24.5)	39 (73.6)	4 (7.5)	5 (9.4)	0 (0)	1 (1.9)	0 (0)
Uttar Pradesh	2591	398 (15.4)	1998 (77.1)	263 (10.2)	52 (2)	14 (0.5)	32 (1.2)	9 (0.3)
Uttarakhand	221	54 (24.4)	182 (82.4)	25 (11.3)	4 (1.8)	0 (0)	2 (0.9)	0 (0)
West Bengal	1053	302 (28.7)	771 (73.2)	146 (13.9)	27 (2.6)	7 (0.7)	16 (1.5)	3 (0.3)
INDIA	**36636**	**9782 (26.7)**	**28896 (78.9)**	**3905 (10.7)**	**1092 (3)**	**196 (0.5)**	**571 (1.6)**	**181 (0.5)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.7. Treatment outcome of TB-HIV patients notified in 2022 (private sector)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andhra Pradesh	151	30 (19.9)	143 (94.7)	2 (1.3)	0 (0)	1 (0.7)	5 (3.3)	0 (0)
Assam	29	2 (6.9)	23 (79.3)	3 (10.3)	0 (0)	0 (0)	0 (0)	0 (0)
Bihar	329	4 (1.2)	224 (68.1)	86 (26.1)	11 (3.3)	2 (0.6)	1 (0.3)	2 (0.6)
Chhattisgarh	43	5 (11.6)	30 (69.8)	8 (18.6)	0 (0)	0 (0)	2 (4.7)	1 (2.3)
Delhi	36	0 (0)	13 (36.1)	1 (2.8)	7 (19.4)	0 (0)	0 (0)	1 (2.8)
Goa	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Gujarat	158	2 (1.3)	132 (83.5)	17 (10.8)	5 (3.2)	1 (0.6)	2 (1.3)	0 (0)
Haryana	69	15 (21.7)	54 (78.3)	11 (15.9)	2 (2.9)	1 (1.4)	0 (0)	1 (1.4)
Himachal Pradesh	1	1 (100)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Jammu and Kashmir	1	0 (0)	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)
Jharkhand	18	3 (16.7)	16 (88.9)	1 (5.6)	1 (5.6)	0 (0)	0 (0)	0 (0)
Karnataka	160	7 (4.4)	127 (79.4)	24 (15)	1 (0.6)	4 (2.5)	2 (1.3)	1 (0.6)
Kerala	6	0 (0)	5 (83.3)	0 (0)	1 (16.7)	0 (0)	0 (0)	0 (0)
Madhya Pradesh	113	8 (7.1)	101 (89.4)	11 (9.7)	1 (0.9)	0 (0)	0 (0)	0 (0)
Maharashtra	523	27 (5.2)	439 (83.9)	47 (9)	10 (1.9)	3 (0.6)	9 (1.7)	3 (0.6)
Manipur	18	2 (11.1)	13 (72.2)	2 (11.1)	2 (11.1)	0 (0)	0 (0)	0 (0)
Meghalaya	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Mizoram	2	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nagaland	11	2 (18.2)	11 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Odisha	8	2 (25)	4 (50)	3 (37.5)	0 (0)	0 (0)	0 (0)	1 (12.5)
Punjab	37	0 (0)	26 (70.3)	3 (8.1)	1 (2.7)	0 (0)	0 (0)	0 (0)
Rajasthan	137	20 (14.6)	117 (85.4)	2 (1.5)	12 (8.8)	1 (0.7)	2 (1.5)	1 (0.7)
Tamil Nadu	144	11 (7.6)	109 (75.7)	8 (5.6)	12 (8.3)	1 (0.7)	1 (0.7)	0 (0)
Telangana	94	17 (18.1)	85 (90.4)	6 (6.4)	0 (0)	0 (0)	1 (1.1)	1 (1.1)
Uttar Pradesh	186	11 (5.9)	157 (84.4)	13 (7)	1 (0.5)	4 (2.2)	5 (2.7)	0 (0)
Uttarakhand	6	0 (0)	5 (83.3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
West Bengal	26	4 (15.4)	19 (73.1)	0 (0)	1 (3.8)	0 (0)	0 (0)	1 (3.8)
INDIA	**2308**	**173 (7.5)**	**1858 (80.5)**	**249 (10.8)**	**68 (2.9)**	**18 (0.8)**	**30 (1.3)**	**13 (0.6)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.8. Treatment outcome of TB-HIV patients notified in 2022 (total)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andaman and Nicobar Islands	4	2 (50)	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Andhra Pradesh	4156	2020 (48.6)	3693 (88.9)	218 (5.2)	8 (0.2)	10 (0.2)	95 (2.3)	6 (0.1)
Arunachal Pradesh	13	4 (30.8)	9 (69.2)	0 (0)	2 (15.4)	0 (0)	0 (0)	0 (0)
Assam	341	36 (10.6)	260 (76.2)	42 (12.3)	10 (2.9)	4 (1.2)	2 (0.6)	4 (1.2)
Bihar	2133	193 (9)	1579 (74)	200 (9.4)	70 (3.3)	11 (0.5)	10 (0.5)	50 (2.3)
Chandigarh	156	12 (7.7)	92 (59)	34 (21.8)	13 (8.3)	3 (1.9)	0 (0)	1 (0.6)
Chhattisgarh	551	167 (30.3)	437 (79.3)	74 (13.4)	9 (1.6)	0 (0)	16 (2.9)	2 (0.4)
Dadra and Nagar Haveli and Daman and Diu	10	3 (30)	6 (60)	3 (30)	0 (0)	0 (0)	0 (0)	0 (0)
Delhi	1479	186 (12.6)	1033 (69.8)	97 (6.6)	173 (11.7)	16 (1.1)	14 (0.9)	18 (1.2)
Goa	68	4 (5.9)	32 (47.1)	16 (23.5)	5 (7.4)	1 (1.5)	5 (7.4)	0 (0)
Gujarat	2982	708 (23.7)	2348 (78.7)	363 (12.2)	113 (3.8)	20 (0.7)	46 (1.5)	7 (0.2)
Haryana	799	269 (33.7)	654 (81.9)	91 (11.4)	10 (1.3)	5 (0.6)	5 (0.6)	2 (0.3)
Himachal Pradesh	101	38 (37.6)	84 (83.2)	13 (12.9)	0 (0)	0 (0)	3 (3)	0 (0)
Jammu and Kashmir	57	10 (17.5)	36 (63.2)	7 (12.3)	1 (1.8)	3 (5.3)	1 (1.8)	2 (3.5)
Jharkhand	351	66 (18.8)	269 (76.6)	36 (10.3)	4 (1.1)	2 (0.6)	0 (0)	2 (0.6)
Karnataka	4209	1400 (33.3)	3189 (75.8)	638 (15.2)	159 (3.8)	15 (0.4)	90 (2.1)	5 (0.1)
Kerala	226	31 (13.7)	156 (69)	45 (19.9)	10 (4.4)	3 (1.3)	1 (0.4)	0 (0)
Madhya Pradesh	1521	240 (15.8)	1248 (82.1)	169 (11.1)	33 (2.2)	11 (0.7)	12 (0.8)	4 (0.3)
Maharashtra	6022	1066 (17.7)	4689 (77.9)	671 (11.1)	182 (3)	32 (0.5)	135 (2.2)	13 (0.2)
Manipur	138	45 (32.6)	105 (76.1)	10 (7.2)	7 (5.1)	0 (0)	1 (0.7)	4 (2.9)
Meghalaya	141	17 (12.1)	109 (77.3)	17 (12.1)	8 (5.7)	0 (0)	3 (2.1)	0 (0)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Mizoram	295	63 (21.4)	243 (82.4)	23 (7.8)	4 (1.4)	3 (1)	5 (1.7)	6 (2)
Nagaland	390	56 (14.4)	314 (80.5)	19 (4.9)	12 (3.1)	3 (0.8)	4 (1)	20 (5.1)
Odisha	688	199 (28.9)	578 (84)	74 (10.8)	5 (0.7)	2 (0.3)	5 (0.7)	6 (0.9)
Puducherry	28	5 (17.9)	22 (78.6)	3 (10.7)	0 (0)	1 (3.6)	0 (0)	0 (0)
Punjab	1428	274 (19.2)	1125 (78.8)	144 (10.1)	49 (3.4)	7 (0.5)	6 (0.4)	12 (0.8)
Rajasthan	1720	347 (20.2)	1428 (83)	127 (7.4)	70 (4.1)	12 (0.7)	15 (0.9)	6 (0.3)
Sikkim	10	6 (60)	8 (80)	1 (10)	0 (0)	0 (0)	1 (10)	0 (0)
Tamil Nadu	3007	948 (31.5)	2314 (77)	416 (13.8)	97 (3.2)	17 (0.6)	40 (1.3)	4 (0.1)
Telangana	1784	758 (42.5)	1519 (85.1)	152 (8.5)	16 (0.9)	8 (0.4)	30 (1.7)	7 (0.4)
Tripura	53	13 (24.5)	39 (73.6)	4 (7.5)	5 (9.4)	0 (0)	1 (1.9)	0 (0)
Uttar Pradesh	2777	409 (14.7)	2155 (77.6)	276 (9.9)	53 (1.9)	18 (0.6)	37 (1.3)	9 (0.3)
Uttarakhand	227	54 (23.8)	187 (82.4)	25 (11)	4 (1.8)	0 (0)	2 (0.9)	0 (0)
West Bengal	1079	306 (28.4)	790 (73.2)	146 (13.5)	28 (2.6)	7 (0.6)	16 (1.5)	4 (0.4)
INDIA	**38944**	**9955 (25.6)**	**30754 (79)**	**4154 (10.7)**	**1160 (3)**	**214 (0.5)**	**601 (1.5)**	**194 (0.5)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.9. Treatment outcome of paediatric TB patients notified in 2022 (public sector)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andaman and Nicobar Islands	18	2 (11.1)	14 (77.8)	0 (0)	3 (16.7)	1 (5.6)	0 (0)	0 (0)
Andhra Pradesh	1614	281 (17.4)	1557 (96.5)	15 (0.9)	0 (0)	1 (0.1)	9 (0.6)	3 (0.2)
Arunachal Pradesh	267	35 (13.1)	224 (83.9)	5 (1.9)	26 (9.7)	0 (0)	4 (1.5)	1 (0.4)
Assam	1156	168 (14.5)	1042 (90.1)	24 (2.1)	13 (1.1)	7 (0.6)	5 (0.4)	2 (0.2)
Bihar	4155	546 (13.1)	3374 (81.2)	51 (1.2)	126 (3)	22 (0.5)	47 (1.1)	67 (1.6)
Chandigarh	255	41 (16.1)	214 (83.9)	3 (1.2)	6 (2.4)	3 (1.2)	3 (1.2)	3 (1.2)
Chhattisgarh	1186	172 (14.5)	1089 (91.8)	21 (1.8)	28 (2.4)	1 (0.1)	5 (0.4)	9 (0.8)
Dadra and Nagar Haveli and Daman and Diu	48	12 (25)	46 (95.8)	0 (0)	0 (0)	0 (0)	1 (2.1)	0 (0)
Delhi	7683	883 (11.5)	6522 (84.9)	76 (1)	165 (2.1)	37 (0.5)	140 (1.8)	37 (0.5)
Goa	39	5 (12.8)	32 (82.1)	3 (7.7)	1 (2.6)	0 (0)	1 (2.6)	0 (0)
Gujarat	3601	386 (10.7)	3318 (92.1)	96 (2.7)	36 (1)	16 (0.4)	28 (0.8)	6 (0.2)
Haryana	2932	763 (26)	2662 (90.8)	41 (1.4)	22 (0.8)	21 (0.7)	21 (0.7)	13 (0.4)
Himachal Pradesh	500	124 (24.8)	454 (90.8)	6 (1.2)	11 (2.2)	1 (0.2)	0 (0)	0 (0)
Jammu and Kashmir	545	101 (18.5)	477 (87.5)	14 (2.6)	7 (1.3)	0 (0)	3 (0.6)	1 (0.2)
Jharkhand	1851	291 (15.7)	1625 (87.8)	25 (1.4)	51 (2.8)	5 (0.3)	10 (0.5)	65 (3.5)
Karnataka	2317	354 (15.3)	2125 (91.7)	43 (1.9)	53 (2.3)	5 (0.2)	11 (0.5)	0 (0)
Kerala	712	99 (13.9)	653 (91.7)	4 (0.6)	18 (2.5)	1 (0.1)	4 (0.6)	1 (0.1)
Ladakh	7	1 (14.3)	7 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Lakshadweep	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Madhya Pradesh	10587	690 (6.5)	9812 (92.7)	149 (1.4)	179 (1.7)	44 (0.4)	33 (0.3)	62 (0.6)
Maharashtra	6886	843 (12.2)	6081 (88.3)	116 (1.7)	84 (1.2)	27 (0.4)	204 (3)	37 (0.5)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Manipur	74	7 (9.5)	59 (79.7)	1 (1.4)	3 (4.1)	0 (0)	0 (0)	2 (2.7)
Meghalaya	229	47 (20.5)	188 (82.1)	8 (3.5)	6 (2.6)	0 (0)	3 (1.3)	0 (0)
Mizoram	138	10 (7.2)	130 (94.2)	1 (0.7)	2 (1.4)	1 (0.7)	0 (0)	1 (0.7)
Nagaland	171	52 (30.4)	155 (90.6)	3 (1.8)	12 (7)	0 (0)	0 (0)	1 (0.6)
Odisha	1832	301 (16.4)	1711 (93.4)	35 (1.9)	21 (1.1)	5 (0.3)	4 (0.2)	6 (0.3)
Puducherry	48	5 (10.4)	40 (83.3)	0 (0)	3 (6.3)	0 (0)	0 (0)	0 (0)
Punjab	2313	446 (19.3)	2041 (88.2)	43 (1.9)	49 (2.1)	17 (0.7)	9 (0.4)	23 (1)
Rajasthan	5008	844 (16.9)	4609 (92)	68 (1.4)	94 (1.9)	16 (0.3)	25 (0.5)	3 (0.1)
Sikkim	44	15 (34.1)	41 (93.2)	0 (0)	0 (0)	0 (0)	1 (2.3)	0 (0)
Tamil Nadu	1934	197 (10.2)	1786 (92.3)	32 (1.7)	34 (1.8)	5 (0.3)	10 (0.5)	1 (0.1)
Telangana	1442	343 (23.8)	1362 (94.5)	20 (1.4)	7 (0.5)	3 (0.2)	5 (0.3)	2 (0.1)
Tripura	51	9 (17.6)	48 (94.1)	1 (2)	0 (0)	0 (0)	0 (0)	0 (0)
Uttar Pradesh	19149	2505 (13.1)	17602 (91.9)	286 (1.5)	187 (1)	61 (0.3)	126 (0.7)	46 (0.2)
Uttarakhand	963	173 (18)	887 (92.1)	10 (1)	18 (1.9)	2 (0.2)	4 (0.4)	2 (0.2)
West Bengal	2197	432 (19.7)	1917 (87.3)	55 (2.5)	27 (1.2)	9 (0.4)	17 (0.8)	50 (2.3)
INDIA	**81953**	**11183 (13.6)**	**73905 (90.2)**	**1255 (1.5)**	**1292 (1.6)**	**311 (0.4)**	**733 (0.9)**	**444 (0.5)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.10. Treatment outcome of paediatric TB patients notified in 2022 (private sector)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andhra Pradesh	931	37 (4)	917 (98.5)	1 (0.1)	0 (0)	5 (0.5)	4 (0.4)	0 (0)
Arunachal Pradesh	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Assam	174	9 (5.2)	159 (91.4)	3 (1.7)	0 (0)	1 (0.6)	0 (0)	4 (2.3)
Bihar	10672	26 (0.2)	9700 (90.9)	169 (1.6)	611 (5.7)	41 (0.4)	16 (0.1)	51 (0.5)
Chandigarh	4	0 (0)	2 (50)	1 (25)	0 (0)	0 (0)	0 (0)	0 (0)
Chhattisgarh	753	18 (2.4)	698 (92.7)	15 (2)	25 (3.3)	3 (0.4)	0 (0)	4 (0.5)
Dadra and Nagar Haveli and Daman and Diu	7	0 (0)	7 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Delhi	711	8 (1.1)	415 (58.4)	3 (0.4)	42 (5.9)	10 (1.4)	3 (0.4)	32 (4.5)
Goa	6	0 (0)	6 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Gujarat	2833	7 (0.2)	2767 (97.7)	19 (0.7)	22 (0.8)	5 (0.2)	10 (0.4)	4 (0.1)
Haryana	942	105 (11.1)	873 (92.7)	2 (0.2)	12 (1.3)	4 (0.4)	2 (0.2)	7 (0.7)
Himachal Pradesh	12	4 (33.3)	12 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Jammu and Kashmir	24	2 (8.3)	23 (95.8)	0 (0)	1 (4.2)	0 (0)	0 (0)	0 (0)
Jharkhand	1246	15 (1.2)	1187 (95.3)	10 (0.8)	11 (0.9)	3 (0.2)	1 (0.1)	21 (1.7)
Karnataka	1007	36 (3.6)	956 (94.9)	2 (0.2)	6 (0.6)	2 (0.2)	1 (0.1)	6 (0.6)
Kerala	159	9 (5.7)	129 (81.1)	1 (0.6)	16 (10.1)	0 (0)	0 (0)	1 (0.6)
Madhya Pradesh	3563	116 (3.3)	3352 (94.1)	20 (0.6)	98 (2.8)	18 (0.5)	6 (0.2)	30 (0.8)
Maharashtra	4770	138 (2.9)	4400 (92.2)	43 (0.9)	38 (0.8)	14 (0.3)	78 (1.6)	21 (0.4)
Manipur	7	0 (0)	3 (42.9)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Meghalaya	65	0 (0)	54 (83.1)	0 (0)	3 (4.6)	0 (0)	0 (0)	8 (12.3)
Mizoram	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Nagaland	9	0 (0)	8 (88.9)	0 (0)	0 (0)	0 (0)	0 (0)	1 (11.1)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Odisha	324	20 (6.2)	310 (95.7)	1 (0.3)	3 (0.9)	0 (0)	1 (0.3)	6 (1.9)
Punjab	384	12 (3.1)	351 (91.4)	9 (2.3)	0 (0)	1 (0.3)	0 (0)	1 (0.3)
Rajasthan	3112	188 (6)	2806 (90.2)	9 (0.3)	66 (2.1)	175 (5.6)	4 (0.1)	4 (0.1)
Sikkim	2	1 (50)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Tamil Nadu	1357	173 (12.7)	1309 (96.5)	2 (0.1)	12 (0.9)	2 (0.1)	4 (0.3)	4 (0.3)
Telangana	463	90 (19.4)	437 (94.4)	1 (0.2)	2 (0.4)	1 (0.2)	3 (0.6)	2 (0.4)
Tripura	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Uttar Pradesh	10327	303 (2.9)	9917 (96)	72 (0.7)	92 (0.9)	35 (0.3)	32 (0.3)	57 (0.6)
Uttarakhand	209	4 (1.9)	187 (89.5)	0 (0)	2 (1)	0 (0)	0 (0)	0 (0)
West Bengal	151	8 (5.3)	133 (88.1)	1 (0.7)	2 (1.3)	1 (0.7)	2 (1.3)	1 (0.7)
INDIA	**44227**	**1329 (3)**	**41123 (93)**	**384 (0.9)**	**1064 (2.4)**	**321 (0.7)**	**167 (0.4)**	**265 (0.6)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.11. Treatment outcome of paediatric TB patients notified in 2022 (total)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andaman and Nicobar Islands	18	2 (11.1)	14 (77.8)	0 (0)	3 (16.7)	1 (5.6)	0 (0)	0 (0)
Andhra Pradesh	2545	318 (12.5)	2474 (97.2)	16 (0.6)	0 (0)	6 (0.2)	13 (0.5)	3 (0.1)
Arunachal Pradesh	268	35 (13.1)	225 (84)	5 (1.9)	26 (9.7)	0 (0)	4 (1.5)	1 (0.4)
Assam	1330	177 (13.3)	1201 (90.3)	27 (2)	13 (1)	8 (0.6)	5 (0.4)	6 (0.5)
Bihar	14827	572 (3.9)	13074 (88.2)	220 (1.5)	737 (5)	63 (0.4)	63 (0.4)	118 (0.8)
Chandigarh	259	41 (15.8)	216 (83.4)	4 (1.5)	6 (2.3)	3 (1.2)	3 (1.2)	3 (1.2)
Chhattisgarh	1939	190 (9.8)	1787 (92.2)	36 (1.9)	53 (2.7)	4 (0.2)	5 (0.3)	13 (0.7)
Dadra and Nagar Haveli and Daman and Diu	55	12 (21.8)	53 (96.4)	0 (0)	0 (0)	0 (0)	1 (1.8)	0 (0)
Delhi	8394	891 (10.6)	6937 (82.6)	79 (0.9)	207 (2.5)	47 (0.6)	143 (1.7)	69 (0.8)
Goa	45	5 (11.1)	38 (84.4)	3 (6.7)	1 (2.2)	0 (0)	1 (2.2)	0 (0)
Gujarat	6434	393 (6.1)	6085 (94.6)	115 (1.8)	58 (0.9)	21 (0.3)	38 (0.6)	10 (0.2)
Haryana	3874	868 (22.4)	3535 (91.2)	43 (1.1)	34 (0.9)	25 (0.6)	23 (0.6)	20 (0.5)
Himachal Pradesh	512	128 (25)	466 (91)	6 (1.2)	11 (2.1)	1 (0.2)	0 (0)	0 (0)
Jammu and Kashmir	569	103 (18.1)	500 (87.9)	14 (2.5)	8 (1.4)	0 (0)	3 (0.5)	1 (0.2)
Jharkhand	3097	306 (9.9)	2812 (90.8)	35 (1.1)	62 (2)	8 (0.3)	11 (0.4)	86 (2.8)
Karnataka	3324	390 (11.7)	3081 (92.7)	45 (1.4)	59 (1.8)	7 (0.2)	12 (0.4)	6 (0.2)
Kerala	871	108 (12.4)	782 (89.8)	5 (0.6)	34 (3.9)	1 (0.1)	4 (0.5)	2 (0.2)
Ladakh	7	1 (14.3)	7 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Lakshadweep	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Madhya Pradesh	14150	806 (5.7)	13164 (93)	169 (1.2)	277 (2)	62 (0.4)	39 (0.3)	92 (0.7)
Maharashtra	11656	981 (8.4)	10481 (89.9)	159 (1.4)	122 (1)	41 (0.4)	282 (2.4)	58 (0.5)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Manipur	81	7 (8.6)	62 (76.5)	1 (1.2)	3 (3.7)	0 (0)	0 (0)	2 (2.5)
Meghalaya	294	47 (16)	242 (82.3)	8 (2.7)	9 (3.1)	0 (0)	3 (1)	8 (2.7)
Mizoram	139	10 (7.2)	131 (94.2)	1 (0.7)	2 (1.4)	1 (0.7)	0 (0)	1 (0.7)
Nagaland	180	52 (28.9)	163 (90.6)	3 (1.7)	12 (6.7)	0 (0)	0 (0)	2 (1.1)
Odisha	2156	321 (14.9)	2021 (93.7)	36 (1.7)	24 (1.1)	5 (0.2)	5 (0.2)	12 (0.6)
Puducherry	48	5 (10.4)	40 (83.3)	0 (0)	3 (6.3)	0 (0)	0 (0)	0 (0)
Punjab	2697	458 (17)	2392 (88.7)	52 (1.9)	49 (1.8)	18 (0.7)	9 (0.3)	24 (0.9)
Rajasthan	8120	1032 (12.7)	7415 (91.3)	77 (0.9)	160 (2)	191 (2.4)	29 (0.4)	7 (0.1)
Sikkim	46	16 (34.8)	43 (93.5)	0 (0)	0 (0)	0 (0)	1 (2.2)	0 (0)
Tamil Nadu	3291	370 (11.2)	3095 (94)	34 (1)	46 (1.4)	7 (0.2)	14 (0.4)	5 (0.2)
Telangana	1905	433 (22.7)	1799 (94.4)	21 (1.1)	9 (0.5)	4 (0.2)	8 (0.4)	4 (0.2)
Tripura	52	9 (17.3)	49 (94.2)	1 (1.9)	0 (0)	0 (0)	0 (0)	0 (0)
Uttar Pradesh	29476	2808 (9.5)	27519 (93.4)	358 (1.2)	279 (0.9)	96 (0.3)	158 (0.5)	103 (0.3)
Uttarakhand	1172	177 (15.1)	1074 (91.6)	10 (0.9)	20 (1.7)	2 (0.2)	4 (0.3)	2 (0.2)
West Bengal	2348	440 (18.7)	2050 (87.3)	56 (2.4)	29 (1.2)	10 (0.4)	19 (0.8)	51 (2.2)
INDIA	**126180**	**12512 (9.9)**	**115028 (91.2)**	**1639 (1.3)**	**2356 (1.9)**	**632 (0.5)**	**900 (0.7)**	**709 (0.6)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.12. Treatment outcome of male TB patients notified in 2022

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andaman and Nicobar Islands	311	152 (48.9)	261 (83.9)	8 (2.6)	11 (3.5)	3 (1)	11 (3.5)	0 (0)
Andhra Pradesh	58790	26232 (44.6)	55285 (94)	1094 (1.9)	50 (0.1)	114 (0.2)	1142 (1.9)	23 (0)
Arunachal Pradesh	1581	605 (38.3)	1298 (82.1)	40 (2.5)	123 (7.8)	13 (0.8)	31 (2)	2 (0.1)
Assam	31433	8432 (26.8)	27687 (88.1)	1241 (3.9)	488 (1.6)	141 (0.4)	311 (1)	145 (0.5)
Bihar	98722	13209 (13.4)	82087 (83.1)	3348 (3.4)	4538 (4.6)	478 (0.5)	1033 (1)	892 (0.9)
Chandigarh	1980	714 (36.1)	1581 (79.8)	101 (5.1)	83 (4.2)	18 (0.9)	37 (1.9)	11 (0.6)
Chhattisgarh	24325	8541 (35.1)	21192 (87.1)	1510 (6.2)	477 (2)	124 (0.5)	304 (1.2)	108 (0.4)
Dadra and Nagar Haveli and Daman and Diu	512	217 (42.4)	480 (93.8)	12 (2.3)	0 (0)	2 (0.4)	7 (1.4)	0 (0)
Delhi	43200	10302 (23.8)	31594 (73.1)	1260 (2.9)	2488 (5.8)	309 (0.7)	1063 (2.5)	364 (0.8)
Goa	1189	309 (26)	837 (70.4)	119 (10)	70 (5.9)	16 (1.3)	48 (4)	13 (1.1)
Gujarat	91667	28382 (31)	81605 (89)	4388 (4.8)	1401 (1.5)	755 (0.8)	1425 (1.6)	110 (0.1)
Haryana	44935	17533 (39)	38104 (84.8)	2186 (4.9)	793 (1.8)	315 (0.7)	523 (1.2)	167 (0.4)
Himachal Pradesh	10029	4447 (44.3)	8562 (85.4)	660 (6.6)	177 (1.8)	32 (0.3)	201 (2)	18 (0.2)
Jammu and Kashmir	6956	2745 (39.5)	5911 (85)	289 (4.2)	94 (1.4)	28 (0.4)	50 (0.7)	25 (0.4)
Jharkhand	39713	12667 (31.9)	35275 (88.8)	1136 (2.9)	899 (2.3)	191 (0.5)	186 (0.5)	310 (0.8)
Karnataka	48327	22406 (46.4)	39985 (82.7)	3787 (7.8)	1204 (2.5)	261 (0.5)	1280 (2.6)	68 (0.1)
Kerala	14939	6986 (46.8)	12001 (80.3)	1429 (9.6)	402 (2.7)	94 (0.6)	237 (1.6)	52 (0.3)
Ladakh	172	90 (52.3)	152 (88.4)	7 (4.1)	1 (0.6)	2 (1.2)	1 (0.6)	0 (0)
Lakshadweep	12	9 (75)	12 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Madhya Pradesh	115271	27218 (23.6)	98755 (85.7)	4873 (4.2)	4387 (3.8)	758 (0.7)	1116 (1)	455 (0.4)
Maharashtra	120236	27007 (22.5)	103032 (85.7)	5701 (4.7)	2049 (1.7)	586 (0.5)	2789 (2.3)	439 (0.4)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Manipur	1599	652 (40.8)	1142 (71.4)	62 (3.9)	71 (4.4)	5 (0.3)	14 (0.9)	21 (1.3)
Meghalaya	2746	1090 (39.7)	2258 (82.2)	137 (5)	97 (3.5)	13 (0.5)	50 (1.8)	37 (1.3)
Mizoram	1164	430 (36.9)	999 (85.8)	60 (5.2)	25 (2.1)	6 (0.5)	16 (1.4)	8 (0.7)
Nagaland	2565	1004 (39.1)	2235 (87.1)	64 (2.5)	135 (5.3)	17 (0.7)	24 (0.9)	36 (1.4)
Odisha	39592	18148 (45.8)	35821 (90.5)	1925 (4.9)	360 (0.9)	75 (0.2)	185 (0.5)	250 (0.6)
Puducherry	932	478 (51.3)	730 (78.3)	87 (9.3)	33 (3.5)	18 (1.9)	20 (2.1)	0 (0)
Punjab	32665	9738 (29.8)	26896 (82.3)	1759 (5.4)	921 (2.8)	144 (0.4)	214 (0.7)	244 (0.7)
Rajasthan	109208	33142 (30.3)	95755 (87.7)	3471 (3.2)	2786 (2.6)	649 (0.6)	970 (0.9)	227 (0.2)
Sikkim	662	347 (52.4)	601 (90.8)	28 (4.2)	3 (0.5)	1 (0.2)	8 (1.2)	1 (0.2)
Tamil Nadu	63389	30132 (47.5)	53314 (84.1)	4097 (6.5)	1867 (2.9)	467 (0.7)	1393 (2.2)	96 (0.2)
Telangana	43006	18616 (43.3)	39008 (90.7)	1207 (2.8)	249 (0.6)	199 (0.5)	646 (1.5)	291 (0.7)
Tripura	2419	1035 (42.8)	2080 (86)	142 (5.9)	59 (2.4)	11 (0.5)	29 (1.2)	2 (0.1)
Uttar Pradesh	301603	78331 (26)	266520 (88.4)	10709 (3.6)	4534 (1.5)	1377 (0.5)	3558 (1.2)	865 (0.3)
Uttarakhand	15549	5083 (32.7)	13353 (85.9)	686 (4.4)	400 (2.6)	116 (0.7)	194 (1.2)	32 (0.2)
West Bengal	62334	32002 (51.3)	53064 (85.1)	3527 (5.7)	1353 (2.2)	397 (0.6)	1254 (2)	222 (0.4)
INDIA	**1433733**	**448431 (31.3)**	**1239472 (86.5)**	**61150 (4.3)**	**32628 (2.3)**	**7735 (0.5)**	**20370 (1.4)**	**5534 (0.4)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.13. Treatment outcome of female TB patients notified in 2022

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andaman and Nicobar Islands	197	74 (37.6)	171 (86.8)	6 (3)	5 (2.5)	5 (2.5)	2 (1)	0 (0)
Andhra Pradesh	32011	10734 (33.5)	30682 (95.8)	390 (1.2)	14 (0)	64 (0.2)	372 (1.2)	10 (0)
Arunachal Pradesh	1277	388 (30.4)	1056 (82.7)	24 (1.9)	91 (7.1)	9 (0.7)	32 (2.5)	2 (0.2)
Assam	15950	3732 (23.4)	14313 (89.7)	508 (3.2)	193 (1.2)	72 (0.5)	152 (1)	67 (0.4)
Bihar	64466	7311 (11.3)	54831 (85.1)	1808 (2.8)	2849 (4.4)	305 (0.5)	678 (1.1)	492 (0.8)
Chandigarh	1704	567 (33.3)	1484 (87.1)	48 (2.8)	27 (1.6)	11 (0.6)	28 (1.6)	7 (0.4)
Chhattisgarh	14448	4069 (28.2)	13050 (90.3)	586 (4.1)	241 (1.7)	57 (0.4)	126 (0.9)	61 (0.4)
Dadra and Nagar Haveli and Daman and Diu	383	114 (29.8)	364 (95)	11 (2.9)	1 (0.3)	0 (0)	3 (0.8)	0 (0)
Delhi	41757	8237 (19.7)	32910 (78.8)	684 (1.6)	1495 (3.6)	243 (0.6)	973 (2.3)	355 (0.9)
Goa	806	182 (22.6)	645 (80)	52 (6.5)	17 (2.1)	2 (0.2)	34 (4.2)	4 (0.5)
Gujarat	52966	13378 (25.3)	48740 (92)	1587 (3)	541 (1)	284 (0.5)	865 (1.6)	49 (0.1)
Haryana	31087	10484 (33.7)	27770 (89.3)	794 (2.6)	377 (1.2)	148 (0.5)	258 (0.8)	126 (0.4)
Himachal Pradesh	6135	2389 (38.9)	5452 (88.9)	263 (4.3)	65 (1.1)	20 (0.3)	87 (1.4)	13 (0.2)
Jammu and Kashmir	4844	1884 (38.9)	4291 (88.6)	146 (3)	50 (1)	10 (0.2)	25 (0.5)	12 (0.2)
Jharkhand	19259	5160 (26.8)	17332 (90)	424 (2.2)	380 (2)	83 (0.4)	83 (0.4)	167 (0.9)
Karnataka	28331	10827 (38.2)	24837 (87.7)	1325 (4.7)	398 (1.4)	92 (0.3)	603 (2.1)	52 (0.2)
Kerala	8191	2526 (30.8)	6915 (84.4)	520 (6.3)	203 (2.5)	37 (0.5)	100 (1.2)	32 (0.4)
Ladakh	171	101 (59.1)	149 (87.1)	9 (5.3)	0 (0)	0 (0)	1 (0.6)	0 (0)
Lakshadweep	9	6 (66.7)	9 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Madhya Pradesh	71387	14674 (20.6)	64132 (89.8)	1681 (2.4)	2012 (2.8)	341 (0.5)	554 (0.8)	247 (0.3)
Maharashtra	98878	17930 (18.1)	87366 (88.4)	2851 (2.9)	944 (1)	378 (0.4)	2724 (2.8)	373 (0.4)

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Manipur	984	332 (33.7)	707 (71.8)	23 (2.3)	37 (3.8)	4 (0.4)	10 (1)	9 (0.9)
Meghalaya	1892	650 (34.4)	1600 (84.6)	60 (3.2)	42 (2.2)	9 (0.5)	34 (1.8)	26 (1.4)
Mizoram	829	291 (35.1)	745 (89.9)	25 (3)	13 (1.6)	3 (0.4)	5 (0.6)	4 (0.5)
Nagaland	1577	571 (36.2)	1406 (89.2)	32 (2)	61 (3.9)	11 (0.7)	11 (0.7)	28 (1.8)
Odisha	20040	7438 (37.1)	18466 (92.1)	721 (3.6)	129 (0.6)	32 (0.2)	77 (0.4)	159 (0.8)
Puducherry	553	196 (35.4)	485 (87.7)	28 (5.1)	7 (1.3)	2 (0.4)	12 (2.2)	0 (0)
Punjab	24683	7020 (28.4)	21213 (85.9)	886 (3.6)	512 (2.1)	104 (0.4)	145 (0.6)	225 (0.9)
Rajasthan	57280	15107 (26.4)	51967 (90.7)	1099 (1.9)	1146 (2)	304 (0.5)	485 (0.8)	118 (0.2)
Sikkim	570	270 (47.4)	519 (91.1)	15 (2.6)	3 (0.5)	3 (0.5)	9 (1.6)	1 (0.2)
Tamil Nadu	30224	10336 (34.2)	27001 (89.3)	1133 (3.7)	518 (1.7)	116 (0.4)	411 (1.4)	57 (0.2)
Telangana	28440	10609 (37.3)	26541 (93.3)	452 (1.6)	96 (0.3)	88 (0.3)	317 (1.1)	186 (0.7)
Tripura	847	297 (35.1)	756 (89.3)	40 (4.7)	20 (2.4)	2 (0.2)	6 (0.7)	0 (0)
Uttar Pradesh	221277	48930 (22.1)	201442 (91)	4462 (2)	2711 (1.2)	861 (0.4)	662 (1.2)	605 (0.3)
Uttarakhand	11314	3141 (27.8)	10150 (89.7)	240 (2.1)	217 (1.9)	70 (0.6)	104 (0.9)	25 (0.2)
West Bengal	30565	12411 (40.6)	26578 (87)	1114 (3.6)	542 (1.8)	182 (0.6)	569 (1.9)	169 (0.6)
INDIA	**925332**	**232366 (25.1)**	**826075 (89.3)**	**24047 (2.6)**	**15957 (1.7)**	**3952 (0.4)**	**12557 (1.4)**	**3681 (0.4)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.14. Treatment outcome of transgender TB patients notified in 2022

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen change, n(%)	Not evaluated, n(%)
Andhra Pradesh	39	18 (46.2)	37 (94.9)	0 (0)	0 (0)	1 (2.6)	0 (0)	0 (0)
Arunachal Pradesh	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Assam	21	1 (4.8)	18 (85.7)	1 (4.8)	0 (0)	0 (0)	0 (0)	0 (0)
Bihar	75	11 (14.7)	61 (81.3)	2 (2.7)	2 (2.7)	0 (0)	3 (4)	2 (2.7)
Chandigarh	3	1 (33.3)	2 (66.7)	0 (0)	1 (33.3)	0 (0)	0 (0)	0 (0)
Chhattisgarh	15	7 (46.7)	14 (93.3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Delhi	60	10 (16.7)	44 (73.3)	0 (0)	2 (3.3)	0 (0)	1 (1.7)	1 (1.7)
Goa	1	0 (0)	1 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Gujarat	52	9 (17.3)	46 (88.5)	1 (1.9)	2 (3.8)	0 (0)	2 (3.8)	0 (0)
Haryana	29	8 (27.6)	24 (82.8)	0 (0)	2 (6.9)	0 (0)	0 (0)	0 (0)
Himachal Pradesh	4	1 (25)	4 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Jammu and Kashmir	2	0 (0)	2 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Jharkhand	24	6 (25)	20 (83.3)	0 (0)	2 (8.3)	1 (4.2)	1 (4.2)	0 (0)
Karnataka	29	12 (41.4)	23 (79.3)	3 (10.3)	1 (3.4)	0 (0)	0 (0)	0 (0)
Kerala	5	1 (20)	2 (40)	1 (20)	1 (20)	0 (0)	0 (0)	0 (0)
Madhya Pradesh	51	12 (23.5)	44 (86.3)	3 (5.9)	0 (0)	0 (0)	1 (2)	1 (2)
Maharashtra	102	20 (19.6)	86 (84.3)	7 (6.9)	2 (2)	1 (1)	0 (0)	0 (0)
Manipur	1	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Meghalaya	1	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Odisha	24	6 (25)	21 (87.5)	0 (0)	1 (4.2)	0 (0)	0 (0)	2 (8.3)
Punjab	25	9 (36)	22 (88)	3 (12)	0 (0)	0 (0)	0 (0)	0 (0)
Rajasthan	66	19 (28.8)	64 (97)	1 (1.5)	0 (0)	0 (0)	0 (0)	0 (0)
Tamil Nadu	44	13 (29.5)	38 (86.4)	4 (9.1)	1 (2.3)	0 (0)	0 (0)	0 (0)
Telangana	42	12 (28.6)	37 (88.1)	0 (0)	0 (0)	0 (0)	1 (2.4)	0 (0)
Uttar Pradesh	221	38 (17.2)	197 (89.1)	7 (3.2)	2 (0.9)	1 (0.5)	1 (0.5)	0 (0)
Uttarakhand	12	3 (25)	12 (100)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
West Bengal	22	7 (31.8)	19 (86.4)	1 (4.5)	0 (0)	0 (0)	0 (0)	0 (0)
INDIA	**971**	**224 (23.1)**	**839 (86.4)**	**34 (3.5)**	**19 (2)**	**4 (0.4)**	**10 (1)**	**6 (0.6)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

3.15. Treatment outcome of tribal TB patients notified in 2022

States/UTs	TB patients notified	Cure rate, n(%)	Success rate, n(%)	Death rate, n(%)	Lost to follow up, n(%)	Treatment failure rate, n(%)	Regimen Change, n(%)	Not evaluated, n(%)
Andaman and Nicobar Islands	82	36 (43.9)	79 (96.3)	1 (1.2)	0 (0)	0 (0)	1 (1.2)	0 (0)
Andhra Pradesh	12316	5829 (47.3)	11662 (94.7)	270 (2.2)	20 (0.2)	33 (0.3)	134 (1.1)	80 (0.65)
Arunachal Pradesh	2848	986 (34.6)	2346 (82.4)	68 (2.4)	214 (7.5)	22 (0.8)	62 (2.2)	81 (2.84)
Assam	8436	2747 (32.6)	7613 (90.2)	325 (3.9)	156 (1.8)	29 (0.3)	69 (0.8)	145 (1.72)
Chhattisgarh	14456	5339 (36.9)	12974 (89.7)	680 (4.7)	222 (1.5)	60 (0.4)	95 (0.7)	120 (0.83)
Dadra and Nagar Haveli and Daman and Diu	549	174 (31.7)	516 (94)	19 (3.5)	0 (0)	2 (0.4)	3 (0.5)	2 (0.36)
Gujarat	24058	8555 (35.6)	21914 (91.1)	976 (4.1)	317 (1.3)	142 (0.6)	302 (1.3)	107 (0.44)
Himachal Pradesh	447	238 (53.2)	401 (89.7)	18 (4)	4 (0.9)	2 (0.4)	5 (1.1)	4 (0.89)
Jammu and Kashmir	71	24 (33.8)	54 (76.1)	8 (11.3)	2 (2.8)	0 (0)	3 (4.2)	1 (1.41)
Jharkhand	32952	10360 (31.4)	29561 (89.7)	1000 (3)	611 (1.9)	159 (0.5)	155 (0.5)	770 (2.34)
Karnataka	2694	1494 (55.5)	2295 (85.2)	200 (7.4)	54 (2)	9 (0.3)	73 (2.7)	23 (0.85)
Kerala	883	425 (48.1)	743 (84.1)	77 (8.7)	15 (1.7)	3 (0.3)	25 (2.8)	4 (0.45)
Ladakh	328	182 (55.5)	290 (88.4)	16 (4.9)	1 (0.3)	1 (0.3)	2 (0.6)	1 (0.3)
Madhya Pradesh	29833	7564 (25.4)	26508 (88.9)	1198 (4)	731 (2.5)	165 (0.6)	172 (0.6)	593 (1.99)
Maharashtra	20647	5927 (28.7)	18581 (90)	826 (4)	268 (1.3)	76 (0.4)	269 (1.3)	336 (1.63)
Manipur	990	415 (41.9)	788 (79.6)	38 (3.8)	32 (3.2)	3 (0.3)	14 (1.4)	86 (8.69)
Meghalaya	4639	1740 (37.5)	3860 (83.2)	230 (5)	139 (3)	22 (0.5)	84 (1.8)	101 (2.18)
Mizoram	1993	721 (36.2)	1746 (87.6)	99 (5)	38 (1.9)	9 (0.5)	21 (1.1)	16 (0.8)
Nagaland	4142	1575 (38)	3641 (87.9)	96 (2.3)	196 (4.7)	28 (0.7)	35 (0.8)	105 (2.54)
Odisha	24490	12218 (49.9)	22293 (91)	1321 (5.4)	200 (0.8)	31 (0.1)	54 (0.2)	416 (1.7)
Rajasthan	20518	9204 (44.9)	18665 (91)	538 (2.6)	323 (1.6)	100 (0.5)	106 (0.5)	401 (1.95)
Tamil Nadu	543	295 (54.3)	479 (88.2)	32 (5.9)	6 (1.1)	3 (0.6)	11 (2)	3 (0.55)
Telangana	7886	2304 (29.2)	7019 (89)	222 (2.8)	81 (1)	40 (0.5)	129 (1.6)	174 (2.21)
Tripura	286	207 (72.4)	267 (93.4)	11 (3.8)	1 (0.3)	0 (0)	1 (0.3)	5 (1.75)
Uttar Pradesh	3785	1252 (33.1)	3536 (93.4)	103 (2.7)	39 (1)	23 (0.6)	29 (0.8)	5 (0.13)
INDIA	**219872**	**79811 (36.3)**	**197831 (90)**	**8372 (3.8)**	**3670 (1.7)**	**962 (0.4)**	**1854 (0.8)**	**3579 (1.63)**

Note: Numerator is outcomes in DSTB patients initiated on treatment, and Denominator is total notified DSTB cases by current facility.

4.1. PMDT infrastructure

States/UTs	No. of nodal DR-TB centres	No. of district DR-TB centres	Out of the total, no. (%) of Nodal/ District DR-TB centres are airborne infection control compliant	No. of nodal/ district DR-TB centres are in private hospital/ corporate hospital (excluding private medical colleges)	No. of Nodal/ district DR-TB centres are in private hospital/ corporate hospital functional through partnership options through PIP (excluding private medical colleges)	Number of medical colleges within the State (including private medical colleges)	No. (%) of medical colleges where facility for management of DR-TB available (outdoor or indoor facility)	Whether the State has started State-level difficult to treat TB clinic (S-DT3C)?	No. of State level experts (clinicians) engaged in the panel for case solving under S-DT3C (Add '0' if S-DT3C not started)	No. of paediatricians engaged in the panel under S-DT3C (Add '0' if S-DT3C not started)	No. of private practitioners engaged in the panel under S-DT3C (if any) (Add '0' if S-DT3C not started)	No. of difficult to treat TB patients referred to S-DT3C experts in 2023 (A) (Add '0' if S-DT3C not started)	Out of A, no. of difficult to treat TB patients guided by S-DT3C (B) (Add '0' if S-DT3C not started)	Out of B, responded to within 48 hours of timeline by S-DT3C (C) (Add '0' if S-DT3C not started)	No. of S-DT3C webinars held in 2023 (D) (Add '0' if S-DT3C not started)
Andaman and Nicobar Islands	1	2	3 (100%)	0	0	1	1 (100%)	Yes	2	1	0	0	0	0	0
Andhra Pradesh	4	13	13 (76%)	0	0	36	15 (42%)	Yes	35	1	3	5	5	5	3
Arunachal Pradesh	2	13	2 (13%)	0	0	1	1 (100%)	Yes	1	0	1	0	0	0	2
Assam	3	33	36 (100%)	0	0	13	3 (23%)	Yes	3	0	1	15	15	0	0
Bihar	6	38	6 (14%)	0	0	21	6 (29%)	Yes	10	0	1	0	0	0	2
Chandigarh	1	0	1 (100%)	0	0	2	1 (50%)	Yes	11	2	0	0	0	0	1
Chhattisgarh	4	23	4 (15%)	0	0	14	9 (64%)	Yes	4	1	0	3	3	0	3
Dadra and Nagar Haveli and Daman and Diu	0	1	0 (0%)	0	0	1	0 (0%)	No	0	0	0	0	0	0	0
Delhi	4	28	28 (88%)	3	0	14	14 (100%)	Yes	6	2	0	12	12	12	12
Goa	1	1	2 (100%)	0	0	1	1 (100%)	Yes	4	0	0	5	5	0	3
Gujarat	5	41	41 (89%)	1	1	38	36 (95%)	Yes	53	0	0	5	5	5	5
Haryana	3	22	3 (12%)	1	0	14	9 (64%)	Yes	6	2	1	5	5	2	8
Himachal Pradesh	4	15	19 (100%)	3	3	8	8 (100%)	Yes	8	8	0	15	7	7	29
Jammu and Kashmir	2	5	1 (14%)	0	1	12	9 (75%)	Yes	8	2	1	11	11	6	18
Jharkhand	5	19	24 (100%)	0	0	9	2 (22%)	Yes	14	1	0	8	18	12	0
Karnataka	6	28	6 (18%)	4	0	67	28 (42%)	Yes	4	0	0	16	16	16	16
Kerala	3	14	17 (100%)	0	0	32	14 (44%)	Yes	13	1	2	34	34	34	15

States/UTs	No. of nodal DR-TB centres	No. of district DR-TB centres	Out of the total, no. (%) of Nodal/ District DR-TB centres are airborne infection control compliant	No. of nodal/ district DR-TB centres are in private hospital/ corporate hospital (excluding private medical colleges)	No. of Nodal/ district DR-TB centres are in private hospital/ corporate hospital functional through partnership options through PIP (excluding private medical colleges)	Number of medical colleges within the State (including private medical colleges)	No. (%) of medical colleges where facility for management of DR-TB available (outdoor or indoor facility)	Whether the State has started State-level difficult to treat TB clinic (S-DT3C)?	No. of State level experts (clinicians) engaged in the panel for case solving under S-DT3C (Add '0' if S-DT3C not started)	No. of paediatricians engaged in the panel under S-DT3C (Add '0' if S-DT3C not started)	No. of private practitioners engaged in the panel under S-DT3C (if any) (Add '0' if S-DT3C not started)	No. of difficult to treat TB patients referred to S-DT3C experts in 2023 (A) (Add '0' if S-DT3C not started)	Out of A, no. of difficult to treat TB patients guided by S-DT3C (B) (Add '0' if S-DT3C not started)	Out of B, responded to within 48 hours of timeline by S-DT3C (C) (Add '0' if S-DT3C not started)	No. of S-DT3C webinars held in 2023 (D) (Add '0' if S-DT3C not started)
Ladakh	1	1	1 (50%)	0	0	0	NA	No	0	0	0	0	0	0	0
Lakshadweep	0	0	NA	0	0	0	NA	No	0	0	0	0	0	0	0
Madhya Pradesh	9	52	61 (100%)	0	0	25	25 (100%)	Yes	6	1	1	13	13	0	13
Maharashtra	21	55	75 (99%)	7	6	63	34 (54%)	Yes	14	5	4	194	194	15	20
Manipur	1	2	2 (67%)	0	0	4	2 (50%)	No	0	0	0	0	0	0	0
Meghalaya	2	7	9 (100%)	0	0	1	0 (0%)	No	0	0	0	0	0	0	0
Mizoram	1	2	3 (100%)	0	0	1	1 (100%)	Yes	5	0	0	0	0	0	7
Nagaland	2	5	2 (29%)	0	0	1	0 (0%)	Yes	1	0	0	1	1	1	11
Odisha	3	28	28 (90%)	0	0	17	13 (76%)	Yes	10	1	10	10	10	10	9
Puducherry	1	9	6 (60%)	0	0	10	9 (90%)	Yes	5	1	2	4	4	4	4
Punjab	3	20	17 (74%)	0	0	11	6 (55%)	Yes	16	3	0	0	0	0	6
Rajasthan	6	34	40 (100%)	0	1	30	22 (73%)	Yes	15	0	0	8	8	0	8
Sikkim	1	5	0 (0%)	0	0	1	1 (100%)	Yes	3	1	1	1	1	1	11
Tamil Nadu	7	24	31 (100%)	0	0	71	37 (52%)	Yes	8	1	0	12	12	0	0
Telangana	4	24	4 (14%)	3	0	41	21 (51%)	Yes	10	2	4	10	10	4	0
Tripura	1	3	1 (25%)	0	0	2	2 (100%)	Yes	2	4	4	6	4	6	5
Uttar Pradesh	25	62	86 (99%)	0	0	67	49 (73%)	Yes	10	2	0	52	52	52	24
Uttarakhand	2	5	7 (100%)	1	1	8	5 (63%)	Yes	4	0	0	4	4	0	4
West Bengal	9	39	39 (81%)	4	0	33	17 (52%)	Yes	19	1	3	14	14	7	11
INDIA	**153**	**673**	**618 (75%)**	**27**	**13**	**670**	**401 (60%)**								

4.2. Testing in Truenat

States/UTs	Number of truenat machines	Total MTB Tests performed	Samples with *Mycobacterium TB* (MTB) detected	Total RIF tests performed	Samples with RR/MDR-TB detected	Paediatric Testing			Private Samples Testing		
						Total Tests performed	Number of Samples with Mycobacterium TB (MTB) detected	Number of samples with RR/MDR-TB detected	Total tests performed	Number of samples with mycobacterium TB (MTB) detected	Number of samples with RR/MDR-TB detected
Andaman and Nicobar Islands	6	1874	87	117	8	130	0	0	25	5	0
Andhra Pradesh	578	589996	28670	27574	434	10618	356	405	18778	2457	132
Arunachal Pradesh	24	9282	809	853	68	712	51	3	13	5	0
Assam	118	51421	7000	7460	238	2548	190	12	2017	302	30
Bihar	194	79117	15071	14877	763	3406	593	143	19410	4595	369
Chandigarh	5	3316	286	327	6	95	1	0	7	0	0
Chhattisgarh	232	37358	4954	5062	244	1287	70	35	2167	436	14
Dadra and Nagar Haveli	1	770	27	37	0	33	1	0	5	1	0
Daman and Diu	0	0	0	0	0	0	0	0	0	0	0
Delhi	41	27706	4315	3814	183	5308	485	21	38	15	1
Goa	16	19487	637	664	19	1496	29	1	106	28	1
Gujarat	95	63912	8221	7471	286	2673	161	45	4279	1215	38
Haryana	55	44043	10008	8942	391	2528	458	156	2961	751	89
Himachal Pradesh	69	59403	3068	3574	43	3561	83	90	1430	158	3
Jammu and Kashmir	26	45614	3648	3544	52	2030	86	0	1001	51	1
Jharkhand	299	62103	9975	9305	572	1053	70	27	4806	491	26
Karnataka	133	231333	11712	12890	555	10635	231	17	9864	1498	43

States/UTs	Number of truenat machines	Total MTB Tests performed	Samples with *Mycobacterium TB* (MTB) detected	Total RIF tests performed	Samples with RR/MDR-TB detected	Paediatric Testing			Private Samples Testing		
						Total Tests performed	Number of Samples with Mycobacterium TB (MTB) detected	Number of samples with RR/MDR-TB detected	Total tests performed	Number of samples with mycobacterium TB (MTB) detected	Number of samples with RR/MDR-TB detected
Kerala	88	103860	4725	5372	92	4423	48	14	6584	687	9
Ladakh	2	1399	3	3	0	0	0	0	0	0	0
Lakshadweep	9	37	2	2	0	0	0	0	0	0	0
Madhya Pradesh	365	289802	38130	33193	1316	6701	367	139	20304	5523	312
Maharashtra	316	113907	15978	15927	1224	7822	781	156	12695	2858	208
Manipur	10	1854	159	156	4	110	2	0	0	0	0
Meghalaya	56	32816	1572	1603	62	4338	57	2	131	23	12
Mizoram	6	473	8	7	1	3	0	0	0	0	0
Nagaland	18	5293	463	472	16	15	4	0	42	9	2
Odhisa	347	195314	19522	19850	704	6820	273	16	2886	567	116
Pondicherry	7	4546	393	345	18	35	4	0	17	5	0
Punjab	84	29151	6971	6555	113	1523	362	5	882	203	13
Rajasthan	307	65533	10229	8928	176	1368	210	3	916	249	3
Sikkim	17	1153	53	0	4	59	10	12	0	0	0
Tamil Nadu	151	144935	15954	16590	516	4875	219	168	7627	1785	43
Telangana	93	329471	18287	20806	564	11308	496	9	7730	1060	25
Tripura	16	3529	229	234	1	80	3	0	19	3	0
Uttar Pradesh	584	304773	67261	69907	3458	14747	3196	345	19985	4163	497
Uttarakhand	116	31579	4892	3592	264	1470	251	11	833	159	13
West Bengal	283	127824	24323	24735	730	4498	414	46	3584	838	35
INDIA	**4767**	**3113984**	**337642**	**334788**	**13125**	**118308**	**9562**	**1881**	**151142**	**30140**	**2035**

4.3. Testing in CBNAAT

States/UTs	Number of CBNAAT machines (including mobile vans)	Total tests performed	Samples with *Mycobacterium TB* (MTB) detected	Samples with RR/MDR-TB detected	Paediatric testing			Private samples testing		
					Total Tests performed	Number of samples with MTB detected	Number of samples with RR/MDR-TB detected	Total tests performed	Number of samples with MTB detected	Number of samples with RR/MDR-TB detected
Andaman and Nicobar Islands	5	3466	344	52	419	23	1	41	8	1
Andhra Pradesh	50	141352	16060	816	4068	125	4	28585	4579	219
Arunachal Pradesh	13	5084	699	91	348	28	2	4	0	0
Assam	36	57031	13444	652	4021	547	30	3082	837	37
Bihar	88	154117	34356	3217	9787	1685	214	47334	11258	961
Chandigarh	11	27411	3600	216	3680	258	14	98	32	0
Chhattisgarh	36	66786	10390	373	3862	240	7	12508	1856	83
Dadra and Nagar Haveli	3	3429	545	35	209	11	1	59	11	0
Daman and Diu	3	2735	287	15	174	7	0	35	21	1
Delhi	49	118134	35507	3280	20193	2810	287	574	235	38
Goa	4	11801	805	39	1448	59	0	103	23	1
Gujarat	73	155679	43424	2370	11466	1208	110	20442	5862	319
Haryana	39	115451	31570	1645	8234	1557	231	8241	2738	179
Himachal Pradesh	35	85941	8056	207	6372	308	68	4663	718	19
Jammu and Kashmir	19	38795	3813	134	2820	129	6	1952	294	5
Jharkhand	41	70925	15528	893	3408	259	35	8676	1907	141
Karnataka	111	306908	33350	1561	18790	2831	66	31653	5745	195
Kerala	44	141635	8724	297	13214	231	4	24344	1836	74
Ladakh	15	14832	346	8	231	13	0	69	5	0
Lakshadweep	1	273	4	1	0	0	0	0	0	0

States/UTs	Number of CBNAAT machines (including mobile vans)	Total tests performed	Samples with *Mycobacterium TB* (MTB) detected	Samples with RR/MDR-TB detected	Paediatric testing			Private samples testing		
					Total Tests performed	Number of samples with MTB detected	Number of samples with RR/MDR-TB detected	Total tests performed	Number of samples with MTB detected	Number of samples with RR/MDR-TB detected
Madhya Pradesh	94	254422	48422	3409	16673	1412	156	32869	10480	765
Maharashtra	180	371510	61771	8070	0	3668	646	0	12654	1903
Manipur	11	7610	1062	44	408	17	1	99	8	0
Meghalaya	11	18644	1902	189	2424	114	20	971	162	16
Mizoram	10	10792	990	116	1233	32	2	491	41	7
Nagaland	11	9286	1622	104	598	163	10	1536	213	11
Odhisa	48	102768	18385	585	5128	387	53	8901	1257	52
Pondicherry	5	13808	1655	59	594	27	0	0	0	0
Punjab	34	68075	20497	770	4891	1066	46	3442	655	17
Rajasthan	191	242957	75492	4664	20222	9586	120	24114	8126	502
Sikkim	10	11156	898	183	1478	79	21	1159	114	23
Tamil Nadu	127	298577	44588	1692	14561	326	62	29941	6361	150
Telangana	41	126178	14063	899	4131	202	9	13361	2515	132
Tripura	12	15030	2081	37	565	19	10	47	7	0
Uttar Pradesh	166	444184	150887	13796	36514	7848	789	76500	25996	2752
Uttarakhand	16	25109	5669	331	1035	180	15	4421	795	54
West Bengal	86	177218	35771	1877	10579	700	54	6584	1140	68
INDIA	**1729**	**3719109**	**746607**	**52727**	**233778**	**38155**	**3094**	**396899**	**108489**	**8725**

4.4. Testing in Line Probe Assay (LPA)

States/UTs	First line line probe assay					Second line line probe assay					
	Samples tested	Susceptible to both isoniazid and rifampicin	Resistant to both isoniazid and rifampicin	Resistant to rifampicin	Resistant to isoniazid	Samples tested	Susceptible to both FQ and SLI	Resistant to both FQ and SLI	Resistant to FQ	Resistant to SLI	Resistant to mono low level kanamycin
Andaman and Nicobar Islands	143	92	28	2	3	102	73	3	21	2	0
Andhra Pradesh	17002	14016	324	121	1474	1480	1280	6	118	6	0
Arunachal Pradesh	412	331	49	4	28	108	92	0	16	0	0
Assam	6214	5580	191	64	379	757	668	9	74	5	0
Bihar	14252	10250	1950	466	912	3377	1449	93	1382	23	11
Chandigarh	916	829	32	4	54	89	61	1	14	1	0
Chhattisgarh	7788	7143	155	54	391	781	559	6	125	12	1
Dadra and Nagar Haveli	139	124	2	0	6	12	2	1	3	0	0
Daman and Diu	69	61	1	0	2	8	2	0	6	0	0
Delhi	24112	18906	1738	188	1455	3112	1752	92	881	35	17
Goa	869	792	26	4	45	96	75	3	16	0	0
Gujarat	17103	12300	411	162	993	4315	2274	99	1097	38	6
Haryana	21207	18614	415	180	1325	1626	1116	4	227	11	0
Himachal Pradesh	7380	6588	114	43	261	468	375	1	44	3	0
Jammu and Kashmir	3381	2758	35	16	143	233	154	1	23	1	1
Jharkhand	5824	5194	232	48	216	258	166	2	19	1	0
Karnataka	45858	36681	925	521	2512	5172	3302	32	425	9	10
Kerala	8197	7095	120	37	472	563	320	8	44	4	0

States/UTs	First line line probe assay					Second line line probe assay					
	Samples tested	Susceptible to both isoniazid and rifampicin	Resistant to both isoniazid and rifampicin	Resistant to rifampicin	Resistant to isoniazid	Samples tested	Susceptible to both FQ and SLI	Resistant to both FQ and SLI	Resistant to FQ	Resistant to SLI	Resistant to mono low level kanamycin
Ladakh	28	27	1	0	0	0	0	0	0	0	0
Lakshdweep	1	0	0	0	0	0	0	0	0	0	0
Madhya Pradesh	39955	33624	1462	603	2123	4611	2869	44	1049	15	5
Maharashtra	52671	41294	4489	1019	2892	13031	6724	491	2111	156	106
Manipur	74	67	6	0	1	8	5	0	3	0	0
Meghalaya	3228	2773	199	31	210	249	183	2	45	3	1
Mizoram	297	241	37	4	14	48	38	0	10	0	0
Nagaland	372	320	20	6	25	51	42	0	9	0	0
Odhisa	12143	10647	191	35	246	615	465	6	59	3	0
Puducherry	11555	10310	82	89	762	975	887	1	46	1	0
Punjab	8523	4685	184	59	460	796	390	36	142	3	0
Rajasthan	22080	17311	943	635	1041	5353	2793	82	791	39	6
Sikkim	504	355	89	36	92	189	116	11	43	4	4
Tamil Naidu	35153	28610	604	1237	2348	4003	2951	17	347	21	4
Telangana	19037	12176	476	372	948	3976	2202	19	201	17	1
Tripura	1536	928	25	18	82	278	231	1	7	0	0
Uttar Pradesh	33021	21982	4909	993	1967	7891	3607	334	2799	235	92
Uttrakhand	3910	2982	136	35	250	438	250	3	69	3	5
West Bengal	26038	21503	988	246	1462	2975	1975	135	518	91	28
INDIA	**450992**	**357189**	**21589**	**7332**	**25594**	**68044**	**39448**	**1543**	**12784**	**742**	**298**

4.5. Testing in culture and DST (CDST)

States/UTs	SL-DST					Culture		
	Samples tested	Susceptible to FQ and SLI	MDR + FQ resistance detected	XDR detected	MDR + Mox (1) resistance detected	Samples tested	MTB +ve	Culture -ve
Andaman and Nicobar Islands	16	3	2	0	3	360	47	132
Andhra Pradesh	38	35	4	2	9	11288	2653	4003
Arunachal Pradesh	0	0	0	0	0	32	2	5
Assam	0	0	0	0	0	978	475	257
Bihar	83	0	32	16	38	16396	3398	6054
Chandigarh	0	0	0	0	0	1303	267	345
Chhattisgarh	86	38	2	0	4	6704	1024	3394
Dadra and Nagar Haveli	0	0	0	0	0	0	0	0
Daman and Diu	0	0	0	0	0	0	0	0
Delhi	1372	821	226	80	226	37226	5983	12754
Goa	65	29	0	0	5	3081	276	999
Gujarat	1485	234	432	28	152	6448	1915	236
Haryana	0	0	0	0	0	3495	401	1274
Himachal Pradesh	0	0	0	0	0	4570	1007	778
Jammu and Kashmir	0	0	0	0	2	219	19	48
Jharkhand	3	13	0	0	28	3258	396	388
Karnataka	3883	1997	679	59	137	28472	4347	11888
Kerala	133	49	11	2	3	4611	706	1803
Ladakh	0	0	0	0	0	0	0	0
Lakshdweep	0	0	0	0	0	3	1	2
Madhya Pradesh	797	379	231	14	534	22731	3799	10519

States/UTs	SL-DST					Culture		
	Samples tested	Susceptible to FQ and SLI	MDR + FQ resistance detected	XDR detected	MDR + Mox (1) resistance detected	Samples tested	MTB +ve	Culture -ve
Maharashtra	6417	1105	781	25	744	85160	7917	24852
Manipur	0	0	0	0	0	225	13	70
Meghalaya	2	0	0	0	0	456	81	5
Mizoram	0	0	0	0	0	78	15	12
Nagaland	0	0	0	0	0	81	29	27
Odisha	56	51	0	0	8	6492	1018	1925
Puducherry	56	13	6	0	4	1637	1282	835
Punjab	308	165	11	4	23	8912	894	3556
Rajasthan	500	218	64	101	58	13848	2938	4448
Sikkim	12	2	7	0	3	1900	287	0
Tamil Nadu	2317	1336	65	8	86	20482	5690	9564
Telangana	43	17	2	0	3	2476	501	498
Tripura	0	0	0	0	0	1604	157	313
Uttar Pradesh	328	59	7	0	44	36862	1310	3731
Uttarakhand	0	0	0	0	0	0	0	0
West Bengal	505	405	86	15	65	14109	2262	6888
INDIA	**18505**	**6969**	**2648**	**354**	**2179**	**345497**	**51110**	**111603**

4.6. Laboratory Infrastructure

Public sector laboratory							
S. No.	States/UTs	Name of the culture and DST Laboratory	Liquid culture	FL LCDST	SL LCDST	FL LPA	SL LPA
1	Andhra Pradesh	IRL, Visakhaptnam	Available	Certified	Certified	Certified	Certified
2	Andhra Pradesh	C&DST Laboratory, SMC, Vijayawada	Available	Certified	Certified	Certified	Certified
3	Andhra Pradesh	C&DST Laboratory, DTRC (DFIT), Nellore, A.P	Not Available	Not Certified	Not Certified	Certified	Certified
4	Andhra Pradesh	C&DST Laboratory, RDT Hospital Bathalapalli	Available	Certified	Not Certified	Certified	Certified
5	Assam	IRL Guwahati	Available	Certified	Certified	Certified	Certified
6	Assam	Silchar	Available	Not Certified	Not Certified	Not Certified	Not Certified
7	Bihar	C&DST Laboratory, JLNMCH Bhagalpur	Available	Certified	Certified	Certified	Certified
8	Bihar	IRL, Patna	Available	Certified	Certified	Certified	Certified
9	Bihar	C&DST Laboratory, IGIMS, Patna	Available	Certified	Not Certified	Certified	Certified
10	Bihar	DFIT Darbhanga	Available	Not Certified	Not Certified	Certified	Certified
11	Chandigarh	IRL, PGIMER Chandigarh	Available	Certified	Certified	Certified	Certified
12	Chhattisgarh	IRL, STDC Raipur	Available	Certified	Certified	Certified	Certified
13	Chhattisgarh	C&DST Laboratory, AIIMS, Raipur	Available	Not Certified	Not Certified	Certified	Certified
14	Delhi	IRL, New Delhi TB Centre (NDTB), Delhi	Available	Certified	Certified	Certified	Certified
15	Delhi	IRL, AIIMS (Medicine), Delhi	Available	Certified	Certified	Certified	Certified
16	Delhi	NRL, NITRD, Delhi	Available	Certified	Certified	Certified	Certified
17	Delhi	C&DST Laboratory, RBIPMT, Delhi	Available	Certified	Not Certified	Not Certified	Not Certified
18	Goa	IRL Goa	Available	Certified	Certified	Certified	Certified
19	Gujarat	IRL, STDC-Ahmedabad	Available	Certified	Certified	Certified	Certified
20	Gujarat	C&DST Laboratory, MPSMS, Jamnagar	Available	Certified	Certified	Certified	Certified

Public sector laboratory							
S. No.	States/UTs	Name of the culture and DST Laboratory	Liquid culture	FL LCDST	SL LCDST	FL LPA	SL LPA
21	Gujarat	C&DST Laboratory, GMC Surat	Available	Certified	Certified	Certified	Certified
22	Himachal Pradesh	IRL Dharampur	Available	Certified	Not Certified	Certified	Certified
23	Haryana	IRL Karnal	Available	Not Certified	Not Certified	Certified	Certified
24	Haryana	C&DST Lab PGI Rohtak	Available	Not Centified	Not Certified	Certified	Certified
25	Jharkhand	IRL, Ranchi	Available	Certified	Certified	Certified	Certified
26	Jammu and Kashmir	IRL Srinagar	Not Available	Not Certified	Not Certified	Certified	Certified
27	Karnataka	IRL Bangalore	Available	Certified	Certified	Certified	Certified
28	Karnataka	C&DST Laboratory, KIMS, Hubli	Available	Certified	Certified	Certified	Certified
29	Karnataka	C&DST Laboratory, RIMS, Raichur	Available	Certified	Certified	Certified	Certified
30	Karnataka	NRL NTI, Bangalore	Available	Certified	Certified	Certified	Certified
31	Kerala	IRL Trivandrum	Available	Certified	Certified	Certified	Certified
32	Kerala	C&DST Laboratory, GMC, Kozhikode	Available	Not Certified	Not Certified	Certified	Certified
33	Madhya Pradesh	C&DST Laboratory, NIRTH, Jabalpur	Available	Certified	Certified	Certified	Certified
34	Madhya Pradesh	IRL, STDC Indore	Available	Certified	Certified	Certified	Certified
35	Madhya Pradesh	NRL, BMHRC, Bhopal	Available	Certified	Certified	Certified	Certified
36	Madhya Pradesh	C&DST Laboratory, GRMC, Gwalior	Available	Certified	Certified	Certified	Certified
37	Madhya Pradesh	IRL STDC Bhopal	Available	Certified	Certified	Certified	Certified
38	Madhya Pradesh	C&DST Laboratory, AIIMS, Bhopal	Available	Not Certified	Not Certified	Certified	Certified
39	Maharashtra	IRL Nagpur	Available	Certified	Certified	Certified	Certified
40	Maharashtra	IRL Pune	Available	Certified	Certified	Certified	Certified
41	Maharashtra	C&DST Laboratory, JJ Hospital, Mumbai	Available	Certified	Certified	Certified	Certified
42	Maharashtra	B J Medical College, Pune	Available	Certified	Certified	Not Certified	Not Certified
43	Maharashtra	C&DST Laboratory, GMC, Aurangabad	Available	Certified	Certified	Certified	Certified
44	Maharashtra	IRL, GTB Hospital, Sewree, Mumbai	Available	Certified	Certified	Certified	Certified

Public sector laboratory							
S. No.	States/UTs	Name of the culture and DST Laboratory	Liquid culture	FL LCDST	SL LCDST	FL LPA	SL LPA
45	Maharashtra	Military Hospital, Pune	Not Available	Not Certified	Not Certified	Certified	Not Certified
46	Maharashtra	C&DST Laboratory, KEM Hospital and Medical College, Mumbai	Available	Certified	Certified	Not Certified	Not Certified
47	Maharashtra	AFMC, Pune	Not Available	Not Certified	Not Certified	Certified	Certified
48	Manipur	IRL Imphal	Available	Not Certified	Not Certified	Certified	Not Certified
49	Odisha	IRL Cuttack,	Available	Certified	Certified	Certified	Certified
50	Odisha	NRL RMRC, Bhubaneswar	Available	Certified	Certified	Certified	Certified
51	Punjab	IRL, Patiala	Available	Certified	Certified	Certified	Certified
52	Punjab	C&DST Laboratory,Guru Gobind Singh Medical College, Faridkot	Available	Not Certified	Not Certified	Certified	Not Certified
53	Puducherry	IRL Puducherry	Available	Certified	Certified	Certified	Certified
54	Rajasthan	IRL Ajmer	Available	Certified	Certified	Certified	Certified
55	Rajasthan	C&DST Laboratory, SMS Medical College, Jaipur	Available	Certified	Certified	Certified	Certified
56	Rajasthan	C&DST Laboratory, SNMC Jodhpur	Available	Certified	Certified	Certified	Certified
57	Rajasthan	C&DST Laboratory, AIIMS, Jodhpur	Not Available	Not Certified	Not Certified	Certified	Certified
58	Rajasthan	C&DST Laboratory, GMC, Jhalawar	Available	Not Certified	Not Certified	Certified	Certified
59	Rajasthan	C&DST Laboratory, SPMC, Bikaner	Available	Not Certified	Not Certified	Certified	Certified
60	Sikkim	IRL, Gangtok	Available	Certified	Certified	Certified	Certified
61	Tamil Nadu	IRL STDC CHENNAI	Available	Certified	Certified	Certified	Certified
62	Tamil Nadu	IRL GMC MADURAI	Available	Certified	Certified	Certified	Certified
63	Tamil Nadu	C&DST Laboratory, Coimbatore Medical College Hospital,	Available	Certified	Certified	Certified	Certified
64	Tamil Nadu	C&DST Laboratory, GHTM Tambaram, Chennai	Available	Certified	Certified	Certified	Certified

Public sector laboratory							
S. No.	States/UTs	Name of the culture and DST Laboratory	Liquid culture	FL LCDST	SL LCDST	FL LPA	SL LPA
65	Tamil Nadu	C&DST Laboratory, K.A.P.V. Government Medical College, Trichy	Available	Certified	Certified	Certified	Certified
66	Tamil Nadu	NRL NIRT, Chennai	Available	Certified	Certified	Certified	Certified
67	Tripura	C&DST Laboratory, GMC, Agartala	Available	Certified	Not Certified	Certified	Certified
68	Telangana	IRL Hyderabad	Available	Certified	Certified	Certified	Certified
69	Telangana	Rajiv Gandhi Institute of Medical Sciences (RGIMS), Adilabad	Available	Not Certified	Not Certified	Not Certified	Not Certified
70	Telangana	C&DST Laboratory, BPHRC Hyderabad	Available	Certified	Certified	Certified	Certified
71	Uttarakhand	IRL Dehradun	Not Available	Not Certified	Not Certified	Certified	Certified
72	Uttar Pradesh	IRL KGMU, Lucknow	Available	Certified	Certified	Certified	Certified
73	Uttar Pradesh	NRL, ICMR0NJIL&OMD, AGRA	Available	Certified	Certified	Certified	Certified
74	Uttar Pradesh	C&DST Laboratory, JNMC, AMU, Aligarh	Not Available	Not Certified	Not Certified	Certified	Certified
75	Uttar Pradesh	IRL Agra	Available	Certified	Certified	Certified	Certified
76	Uttar Pradesh	C&DST Laboratory, BHU, Varanasi	Available	Certified	Certified	Certified	Certified
77	Uttar Pradesh	C&DST Laboratory, LLRM Meerut, Uttar Pradesh	Available	Certified	Not Certified	Certified	Certified
78	Uttar Pradesh	C&DST Laboratory, Dr. RMLIMS, Lucknow	Available	Not Certified	Not Certified	Not Certified	Not Certified
79	Uttar Pradesh	C&DST Laboratory, UPUMS, Safai, Etawah	Not Available	Not Certified	Not Certified	Certified	Not Certified
80	Uttar Pradesh	C&DST Laboratory, BRD Medical College, Gorakhpur	Available	Not Certified	Not Certified	Certified	Certified
81	West Bengal	IRL, Kolkata West Bengal	Available	Certified	Certified	Certified	Certified
82	West Bengal	C&DST Laboratory, NBMC, West Bengal	Available	Certified	Certified	Certified	Certified
83	West Bengal	C&DST Laboratory, Burdwan Medical College, Burdwan	Available	Not Certified	Not Certified	Certified	Certified
84	West Bengal	C&DST Laboratory, Murshidabad Medical College and Hospital, Murshidabad	Available	Not Certified	Not Certified	Certified	Certified

Private sector laboratory							
S. No.	States/UTs	Name of the culture and DST Laboratory	Liquid culture	FL LCDST	SL LCDST	FL LPA	SL LPA
1	Karnataka	Kasturba Medical College, Manipal	Not Available	Not Certified	Not Certified	Certified	Not Certified
2	Meghalaya	Nazerath Hospital, Shilong	Available	Not Certified	Not Certified	Certified	Certified
3	Maharashtra	Thyrocare, Mumbai	Available	Certified	Certified	Certified	Certified
4	Maharashtra	P D Hinduja Hospital, Mumbai	Available	Certified	Certified	Certified	Certified
5	Maharashtra	Agilus Diagnostics Limited (erstwhile SRL Diagnostics), Mumbai	Available	Certified	Certified	Certified	Certified
6	Maharashtra	Metropolis, Mumbai	Available	Certified	Certified	Certified	Not Certified
7	Maharashtra	INFEXN Laboratory, Thane	Available	Certified	Certified	Certified	Certified
8	Maharashtra	Aspira Path Lab, Navi Mumbai	Available	Certified	Not Certified	Certified	Not Certified
9	Manipur	Babina Diagnostics, Imphal	Available	Not Certified	Not Certified	Not Certified	Not Certified
10	Tamil Nadu	Christian Medical College,Vellore	Available	Certified	Certified	Certified	Certified
11	Uttar Pradesh	Subharti Medical College, Meerut	Not Available	Not Certified	Not Certified	Certified	Not Certified
12	Uttar Pradesh	Shri Ram Murti Smarak Institutions, Bareilly	Available	Not Certified	Not Certified	Not Certified	Not Certified
13	West Bengal	Agilus Diagnostics Limited (erstwhile SRL Diagnostics), Kolkata	Available	Certified	Not Certified	Not Certified	Not Certified

4.7. PMDT case finding in 2023 - I

States/UTs	Total TB cases notified (2023)			No. of bacteriological confirmed TB cases among notified			No. of bacteriologically confirmed TB cases with valid rapid DRT result for at least rifampicin (RS/RR)			No. of rifampicin resistant TB cases diagnosed (MDR/RR-TB)		
	Public sector	Private sector	Total	Public sector	Private sector	Total	Public sector	Private sector	Total	Public sector	Private sector	Total
Andaman and Nicobar Islands	655	92	747	431 (66%)	69 (75%)	500 (67%)	329 (76%)	19 (28%)	348 (70%)	66	1	67
Andhra Pradesh	62332	26277	88609	39451 (63%)	6905 (26%)	46356 (52%)	33044 (84%)	5837 (85%)	38881 (84%)	1175	89	1264
Arunachal Pradesh	2654	15	2669	1452 (55%)	7 (47%)	1459 (55%)	1107 (76%)	3 (43%)	1110 (76%)	157	0	157
Assam	43635	7825	51460	24531 (56%)	2444 (31%)	26975 (52%)	16537 (67%)	1639 (67%)	18176 (67%)	852	48	900
Bihar	90514	98797	189311	49103 (54%)	18683 (19%)	67786 (36%)	30337 (62%)	15386 (82%)	45723 (67%)	4128	505	4633
Chandigarh	3952	136	4088	2452 (62%)	59 (43%)	2511 (61%)	2251 (92%)	32 (54%)	2283 (91%)	130	2	132
Chhattisgarh	27515	10310	37825	13891 (50%)	2412 (23%)	16303 (43%)	11335 (82%)	1892 (78%)	13227 (81%)	395	68	463
Dadra and Nagar Haveli and Daman and Diu	762	77	839	454 (60%)	21 (27%)	475 (57%)	435 (96%)	17 (81%)	452 (95%)	28	0	28
Delhi	75093	11528	86621	39232 (52%)	5837 (51%)	45069 (52%)	33911 (86%)	3028 (52%)	36939 (82%)	3035	138	3173
Goa	1643	302	1945	1058 (64%)	104 (34%)	1162 (60%)	1025 (97%)	75 (72%)	1100 (95%)	37	0	37
Gujarat	99133	38613	137746	58544 (59%)	8875 (23%)	67419 (49%)	50871 (87%)	7803 (88%)	58674 (87%)	2655	151	2806
Haryana	62616	16287	78903	41223 (66%)	6047 (37%)	47270 (60%)	35790 (87%)	3987 (66%)	39777 (84%)	1879	93	1972

States/UTs	Total TB cases notified (2023)			No. of bacteriological confirmed TB cases among notified			No. of bacteriologically confirmed TB cases with valid rapid DRT result for at least rifampicin (RS/RR)			No. of rifampicin resistant TB cases diagnosed (MDR/RR-TB)		
	Public sector	Private sector	Total	Public sector	Private sector	Total	Public sector	Private sector	Total	Public sector	Private sector	Total
Himachal Pradesh	15516	337	15853	10408 (67%)	201 (60%)	10609 (67%)	9917 (95%)	190 (95%)	10107 (95%)	221	6	227
Jammu and Kashmir	11112	444	11556	6550 (59%)	151 (34%)	6701 (58%)	5446 (83%)	137 (91%)	5583 (83%)	149	1	150
Jharkhand	49341	12295	61636	28689 (58%)	3872 (31%)	32561 (53%)	19237 (67%)	2109 (54%)	21346 (66%)	1099	80	1179
Karnataka	65978	13073	79051	43385 (66%)	5376 (41%)	48761 (62%)	39569 (91%)	4289 (80%)	43858 (90%)	1583	67	1650
Kerala	18876	2568	21444	13258 (70%)	1559 (61%)	14817 (69%)	11698 (88%)	1148 (74%)	12846 (87%)	301	22	323
Ladakh	330	8	338	238 (72%)	3 (38%)	241 (71%)	225 (95%)	3 (100%)	228 (95%)	6	0	6
Lakshadweep	14	0	14	9 (64%)	#DIV/0!	9 (64%)	9 (100%)	#DIV/0!	9 (100%)	1	0	1
Madhya Pradesh	136307	48429	184736	71029 (52%)	15649 (32%)	86678 (47%)	56464 (79%)	13138 (84%)	69602 (80%)	3616	280	3896
Maharashtra	140953	78959	219912	73854 (52%)	30468 (39%)	104322 (47%)	61534 (83%)	22782 (75%)	84316 (81%)	9297	1043	10340
Manipur	2241	273	2514	1310 (58%)	129 (47%)	1439 (57%)	1008 (77%)	82 (64%)	1090 (76%)	60	2	62
Meghalaya	4470	314	4784	3060 (68%)	64 (20%)	3124 (65%)	2479 (81%)	45 (70%)	2524 (81%)	243	7	250
Mizoram	2180	29	2209	1296 (59%)	21 (72%)	1317 (60%)	1210 (93%)	18 (86%)	1228 (93%)	152	2	154
Nagaland	3657	453	4110	2200 (60%)	111 (25%)	2311 (56%)	1814 (82%)	66 (59%)	1880 (81%)	108	3	111

States/UTs	Total TB cases notified (2023)			No. of bacteriological confirmed TB cases among notified			No. of bacteriologically confirmed TB cases with valid rapid DRT result for at least rifampicin (RS/RR)			No. of rifampicin resistant TB cases diagnosed (MDR/RR-TB)		
	Public sector	Private sector	Total	Public sector	Private sector	Total	Public sector	Private sector	Total	Public sector	Private sector	Total
Odisha	57468	4080	61548	36130 (63%)	993 (24%)	37123 (60%)	32807 (91%)	892 (90%)	33699 (91%)	493	12	505
Puducherry	1555	3	1558	1120 (72%)	2 (67%)	1122 (72%)	1024 (91%)	2 (100%)	1026 (91%)	15	0	15
Punjab	45973	10426	56399	28994 (63%)	2917 (28%)	31911 (57%)	22713 (78%)	1626 (56%)	24339 (76%)	916	44	960
Rajasthan	128535	36029	164564	79209 (62%)	10588 (29%)	89797 (55%)	60659 (77%)	7608 (72%)	68267 (76%)	4311	224	4535
Sikkim	1217	78	1295	768 (63%)	48 (62%)	816 (63%)	750 (98%)	46 (96%)	796 (98%)	147	6	153
Tamil Nadu	79086	18225	97311	56544 (71%)	8594 (47%)	65138 (67%)	53516 (95%)	7398 (86%)	60914 (94%)	1727	95	1822
Telangana	51564	22787	74351	29207 (57%)	9158 (40%)	38365 (52%)	24562 (84%)	7409 (81%)	31971 (83%)	1365	182	1547
Tripura	3384	26	3410	2187 (65%)	10 (38%)	2197 (64%)	1950 (89%)	7 (70%)	1957 (89%)	37	0	37
Uttar Pradesh	447660	184661	632321	224557 (50%)	35562 (19%)	260119 (41%)	194539 (87%)	30598 (86%)	225137 (87%)	15871	1142	17013
Uttarakhand	22232	4133	26365	11153 (50%)	936 (23%)	12089 (46%)	7726 (69%)	371 (40%)	8097 (67%)	503	25	528
West Bengal	93121	8373	101494	65893 (71%)	4188 (50%)	70081 (69%)	53597 (81%)	2817 (67%)	56414 (80%)	2728	105	2833
INDIA	**1853274**	**656262**	**2509536**	**1062870 (57%)**	**182063 (28%)**	**1244933 (50%)**	**881425 (83%)**	**142499 (78%)**	**1023924 (82%)**	**59486**	**4443**	**63929**

*Based on case concept, no. of cases based on current facility in Ni-kshay

4.8. PMDT case finding in 2023 - II

States/UTs	No. of Rifampicin resistant TB cases diagnosed (MDR/RR-TB)	No. of Rifampicin resistance TB cases with a DST result available for at least fluoroquinolone	No. of Rifampicin resistant TB cases with FQ resistant diagnosed (Pre-XDR-TB)	No. of Rifampicin resistant TB cases with FQ resistant with a DST result available for Bedaquiline/ Linezolid	No. of Rifampicin resistant TB cases with FQ resistant diagnosed with resistant to Bedaquline/ Linezolid or both (XDR-TB)	No. of Bacteriologically confirmed cases (with Rifampicin resistant not detected) with a DST result available for at least Isoniazid	No. of Rifampicin resistant not detected cases with Isoniazid resistant diagnosed (H Mono-poly DR-TB)	No. of cases initiated on DR-TB regimen with no pertinent DST result entered in Ni-kshay	No. of Rifampicin resistant TB cases diagnosed in the age group <14 years (MDR/RR-TB)
Andaman & Nicobar Islands	67	34 (51%)	10	#N/A	#N/A	89 (21%)	5	19	2
Andhra Pradesh	1264	438 (35%)	92	3 (3%)	1	4039 (9%)	1363	14	12
Arunachal Pradesh	157	54 (34%)	10	#N/A	#N/A	391 (30%)	25	1	3
Assam	900	289 (32%)	55	3 (5%)	#N/A	7002 (27%)	474	10	14
Bihar	4633	1609 (35%)	1015	23 (2%)	3	10175 (16%)	762	105	103
Chandigarh	132	24 (18%)	9	#N/A	#N/A	1001 (42%)	61	#N/A	7
Chhattisgarh	463	173 (37%)	48	#N/A	#N/A	5406 (34%)	309	3	4
Dadra and Nagar Haveli and Daman and Diu	28	20 (71%)	10	2 (20%)	#N/A	147 (33%)	7	1	1
Delhi	3173	1213 (38%)	534	109 (20%)	2	17775 (42%)	1253	105	177
Goa	37	26 (70%)	8	8 (100%)	2	743 (66%)	37	3	#N/A
Gujarat	2806	1823 (65%)	755	76 (10%)	3	16217 (25%)	1060	129	37
Haryana	1972	743 (38%)	254	#N/A	#N/A	16190 (36%)	1353	96	50
Himachal Pradesh	227	124 (55%)	26	#N/A	#N/A	5885 (57%)	217	3	5
Jammu & Kashmir	150	40 (27%)	12	#N/A	#N/A	2202 (34%)	96	1	3
Jharkhand	1179	294 (25%)	141	5 (4%)	#N/A	5422 (17%)	216	20	22
Karnataka	1650	992 (60%)	264	152 (58%)	20	31382 (67%)	2012	28	11
Kerala	323	121 (37%)	33	15 (45%)	#N/A	7045 (49%)	449	7	2

States/UTs	No. of Rifampicin resistant TB cases diagnosed (MDR/RR-TB)	No. of Rifampicin resistance TB cases with a DST result available for at least fluoroquinolone	No. of Rifampicin resistant TB cases with FQ resistant diagnosed (Pre-XDR-TB)	No. of Rifampicin resistant TB cases with FQ resistant with a DST result available for Bedaquiline/ Linezolid	No. of Rifampicin resistant TB cases with FQ resistant diagnosed with resistant to Bedaquline/ Linezolid or both (XDR-TB)	No. of Bacteriologically confirmed cases (with Rifampicin resistant not detected) with a DST result available for at least Isoniazid	No. of Rifampicin resistant not detected cases with Isoniazid resistant diagnosed (H Mono-poly DR-TB)	No. of cases initiated on DR-TB regimen with no pertinent DST result entered in Ni-kshay	No. of Rifampicin resistant TB cases diagnosed in the age group <14 years (MDR/RR-TB)
Ladakh	6	2 (33%)	#N/A	#N/A	#N/A	75 (32%)	3	#N/A	#N/A
Lakshadweep	1	#N/A	#N/A	#N/A	#N/A	2 (25%)	#N/A	#N/A	#N/A
Madhya Pradesh	3896	1747 (45%)	678	139 (21%)	14	30753 (37%)	1731	72	68
Maharashtra	10340	5754 (56%)	3227	1388 (43%)	42	35227 (37%)	2512	367	362
Manipur	62	3 (5%)	1	#N/A	#N/A	15 (1%)	1	4	#N/A
Meghalaya	250	112 (45%)	41	#N/A	#N/A	812 (28%)	70	8	9
Mizoram	154	18 (12%)	4	#N/A	#N/A	135 (12%)	1	4	1
Nagaland	111	24 (22%)	7	#N/A	#N/A	379 (17%)	29	2	1
Odisha	505	190 (38%)	45	3 (7%)	#N/A	11058 (30%)	201	4	17
Puducherry	15	9 (60%)	5	#N/A	#N/A	719 (65%)	43	1	#N/A
Punjab	960	272 (28%)	103	3 (3%)	1	6873 (22%)	323	23	32
Rajasthan	4535	1729 (38%)	666	3 (0%)	#N/A	12110 (14%)	656	98	59
Sikkim	153	78 (51%)	40	#N/A	#N/A	371 (56%)	23	2	3
Tamil Nadu	1822	1095 (60%)	160	24 (15%)	2	40542 (64%)	2761	37	14
Telangana	1547	416 (27%)	96	4 (4%)	#N/A	11349 (31%)	815	36	29
Tripura	37	14 (38%)	1	#N/A	#N/A	820 (38%)	49	#N/A	#N/A
Uttar Pradesh	17013	5586 (33%)	3039	250 (8%)	22	29054 (12%)	2563	270	388
Uttarakhand	528	107 (20%)	46	6 (13%)	2	2140 (19%)	216	19	17
West Bengal	2833	785 (28%)	314	6 (2%)	#N/A	16504 (25%)	1323	48	30
Grand Total	**63929**	**25958 (41%)**	**11749**	**2222 (19%)**	**114**	**330049 (28%)**	**23019**	**1540**	**1483**

4.9. Treatment initiation in MDR/RR-TB, Pre-XDR-TB, XDR- TB and H-mono/poly resistance TB diagnosed* (2023 cohort)

States/UTs	Multidrug-resistant/rifampicin-resistant TB cases initiated on treatment among diagnosed			Multidrug-resistant/rifampicin-resistant TB cases initiated on second-line treatment among diagnosed			Multidrug-resistant/rifampicin-resistant TB patients initiated on shorter MDR-TB regimen treatment (among initiated on 2nd line treatment)			Multidrug-resistant/Rifampicin-resistant TB patients initiated on longer oral M/XDR-TB treatment regimen (among initiated on 2nd line treatment)			H mono/poly DR-TB cases initiated on treatment among diagnosed		
	Public sector	Private sector	Total	Public sector	Private sector	Total	Public sector	Private sector	Total	Public sector	Private sector	Total	Public sector	Private sector	Total
Andaman and Nicobar Islands	59 (89%)	1 (100%)	60 (90%)	54 (82%)	0 (0%)	54 (81%)	1 (2%)	#DIV/0!	1 (2%)	53 (98%)	#DIV/0!	53 (98%)	5 (100%)	#DIV/0!	5 (100%)
Andhra Pradesh	1105 (94%)	82 (92%)	1187 (94%)	971 (83%)	22 (25%)	993 (79%)	782 (81%)	16 (73%)	798 (80%)	189 (19%)	6 (27%)	195 (20%)	1226 (97%)	103 (98%)	1329 (98%)
Arunachal Pradesh	139 (89%)	#DIV/0!	139 (89%)	117 (75%)	#DIV/0!	117 (75%)	91 (78%)	#DIV/0!	91 (78%)	26 (22%)	#DIV/0!	26 (22%)	21 (84%)	#DIV/0!	21 (84%)
Assam	792 (93%)	40 (83%)	832 (92%)	671 (79%)	15 (31%)	686 (76%)	572 (85%)	10 (67%)	582 (85%)	99 (15%)	5 (33%)	104 (15%)	447 (97%)	12 (92%)	459 (97%)
Bihar	3595 (87%)	448 (89%)	4043 (87%)	3212 (78%)	60 (12%)	3272 (71%)	1165 (36%)	23 (38%)	1188 (36%)	2047 (64%)	37 (62%)	2084 (64%)	557 (85%)	104 (95%)	661 (87%)
Chandigarh	91 (70%)	2 (100%)	93 (70%)	74 (57%)	2 (100%)	76 (58%)	17 (23%)	0 (0%)	17 (22%)	57 (77%)	2 (100%)	59 (78%)	54 (90%)	1 (100%)	55 (90%)
Chhattisgarh	350 (89%)	56 (82%)	406 (88%)	246 (62%)	17 (25%)	263 (57%)	195 (79%)	12 (71%)	207 (79%)	51 (21%)	5 (29%)	56 (21%)	269 (93%)	20 (100%)	289 (94%)
Dadra and Nagar Haveli and Daman and Diu	27 (96%)	#DIV/0!	27 (96%)	26 (93%)	#DIV/0!	26 (93%)	#N/A	#N/A	#N/A	26 (100%)	#DIV/0!	26 (100%)	5 (83%)	1 (100%)	6 (86%)
Delhi	2657 (88%)	52 (38%)	2709 (85%)	2182 (72%)	15 (11%)	2197 (69%)	109 (5%)	0 (0%)	109 (5%)	2073 (95%)	15 (100%)	2088 (95%)	1199 (97%)	10 (67%)	1209 (96%)
Goa	31 (84%)	#DIV/0!	31 (84%)	31 (84%)	#DIV/0!	31 (84%)	8 (26%)	#DIV/0!	8 (26%)	23 (74%)	#DIV/0!	23 (74%)	32 (89%)	1 (100%)	33 (89%)
Gujarat	2529 (95%)	142 (94%)	2671 (95%)	2296 (86%)	91 (60%)	2387 (85%)	684 (30%)	27 (30%)	711 (30%)	1612 (70%)	64 (70%)	1676 (70%)	1001 (98%)	32 (94%)	1033 (97%)
Haryana	1797 (96%)	79 (85%)	1876 (95%)	1594 (85%)	48 (52%)	1642 (83%)	822 (52%)	29 (60%)	851 (52%)	772 (48%)	19 (40%)	791 (48%)	1255 (97%)	59 (92%)	1314 (97%)
Himachal Pradesh	206 (93%)	5 (83%)	211 (93%)	175 (79%)	5 (83%)	180 (79%)	74 (42%)	2 (40%)	76 (42%)	101 (58%)	3 (60%)	104 (58%)	210 (98%)	2 (67%)	212 (98%)
Jammu and Kashmir	139 (93%)	0 (0%)	139 (93%)	109 (73%)	0 (0%)	109 (73%)	75 (69%)	#DIV/0!	75 (69%)	34 (31%)	#DIV/0!	34 (31%)	88 (92%)	#DIV/0!	88 (92%)
Jharkhand	971 (88%)	72 (90%)	1043 (88%)	798 (73%)	18 (23%)	816 (69%)	456 (57%)	7 (39%)	463 (57%)	342 (43%)	11 (61%)	353 (43%)	201 (97%)	8 (89%)	209 (97%)
Karnataka	1450 (92%)	51 (76%)	1501 (91%)	1165 (74%)	17 (25%)	1182 (72%)	380 (33%)	6 (35%)	386 (33%)	785 (67%)	11 (65%)	796 (67%)	1883 (97%)	60 (91%)	1943 (97%)
Kerala	280 (93%)	20 (91%)	300 (93%)	197 (65%)	9 (41%)	206 (64%)	108 (55%)	2 (22%)	110 (53%)	89 (45%)	7 (78%)	96 (47%)	425 (98%)	13 (87%)	438 (98%)

States/UTs	Multidrug-resistant/rifampicin-resistant TB cases initiated on treatment among diagnosed			Multidrug-resistant/rifampicin-resistant TB cases initiated on second-line treatment among diagnosed			Multidrug-resistant/rifampicin-resistant TB patients initiated on shorter MDR-TB regimen treatment (among initiated on 2nd line treatment)			Multidrug-resistant/Rifampicin-resistant TB patients initiated on longer oral M/XDR-TB treatment regimen (among initiated on 2nd line treatment)			H mono/poly DR-TB cases initiated on treatment among diagnosed		
	Public sector	Private sector	Total	Public sector	Private sector	Total	Public sector	Private sector	Total	Public sector	Private sector	Total	Public sector	Private sector	Total
Ladakh	6 (100%)	#DIV/0!	6 (100%)	4 (67%)	#DIV/0!	4 (67%)	4 (100%)	#DIV/0!	4 (100%)	#N/A	#N/A	#N/A	2 (67%)	#DIV/0!	2 (67%)
Lakshadweep	1 (100%)	#DIV/0!	1 (100%)	1 (100%)	#DIV/0!	1 (100%)	#N/A	#N/A	#N/A	1 (100%)	#DIV/0!	1 (100%)	#N/A	#N/A	#N/A
Madhya Pradesh	3256 (90%)	239 (85%)	3495 (90%)	2843 (79%)	64 (23%)	2907 (75%)	1701 (60%)	37 (58%)	1738 (60%)	1142 (40%)	27 (42%)	1169 (40%)	1451 (93%)	157 (96%)	1608 (93%)
Maharashtra	8596 (92%)	721 (69%)	9317 (90%)	7900 (85%)	321 (31%)	8221 (80%)	542 (7%)	49 (15%)	591 (7%)	7358 (93%)	272 (85%)	7630 (93%)	2092 (94%)	254 (86%)	2346 (93%)
Manipur	46 (77%)	1 (50%)	47 (76%)	32 (53%)	0 (0%)	32 (52%)	20 (63%)	#DIV/0!	20 (63%)	12 (38%)	#DIV/0!	12 (38%)	#N/A	#N/A	#N/A
Meghalaya	220 (91%)	5 (71%)	225 (90%)	189 (78%)	3 (43%)	192 (77%)	132 (70%)	2 (67%)	134 (70%)	57 (30%)	1 (33%)	58 (30%)	69 (99%)	#DIV/0!	69 (99%)
Mizoram	123 (81%)	1 (50%)	124 (81%)	119 (78%)	1 (50%)	120 (78%)	24 (20%)	0 (0%)	24 (20%)	95 (80%)	1 (100%)	96 (80%)	1 (100%)	#DIV/0!	1 (100%)
Nagaland	93 (86%)	3 (100%)	96 (86%)	80 (74%)	2 (67%)	82 (74%)	64 (80%)	1 (50%)	65 (79%)	16 (20%)	1 (50%)	17 (21%)	22 (76%)	#DIV/0!	22 (76%)
Odisha	463 (94%)	8 (67%)	471 (93%)	401 (81%)	4 (33%)	405 (80%)	223 (56%)	3 (75%)	226 (56%)	178 (44%)	1 (25%)	179 (44%)	188 (96%)	3 (60%)	191 (95%)
Puducherry	11 (73%)	#DIV/0!	11 (73%)	10 (67%)	#DIV/0!	10 (67%)	6 (60%)	#DIV/0!	6 (60%)	4 (40%)	#DIV/0!	4 (40%)	32 (74%)	#DIV/0!	32 (74%)
Punjab	811 (89%)	37 (84%)	848 (88%)	684 (75%)	18 (41%)	702 (73%)	246 (36%)	7 (39%)	253 (36%)	438 (64%)	11 (61%)	449 (64%)	284 (91%)	10 (100%)	294 (91%)
Rajasthan	3948 (92%)	200 (89%)	4148 (91%)	3430 (80%)	87 (39%)	3517 (78%)	1948 (57%)	60 (69%)	2008 (57%)	1482 (43%)	27 (31%)	1509 (43%)	535 (91%)	57 (88%)	592 (90%)
Sikkim	131 (89%)	5 (83%)	136 (89%)	125 (85%)	5 (83%)	130 (85%)	61 (49%)	2 (40%)	63 (48%)	64 (51%)	3 (60%)	67 (52%)	18 (86%)	2 (100%)	20 (87%)
Tamil Nadu	1615 (94%)	77 (81%)	1692 (93%)	1360 (79%)	35 (37%)	1395 (77%)	758 (56%)	20 (57%)	778 (56%)	602 (44%)	15 (43%)	617 (44%)	2576 (97%)	110 (96%)	2686 (97%)
Telangana	1235 (90%)	147 (81%)	1382 (89%)	897 (66%)	45 (25%)	942 (61%)	576 (64%)	29 (64%)	605 (64%)	321 (36%)	16 (36%)	337 (36%)	715 (95%)	62 (94%)	777 (95%)
Tripura	32 (86%)	#DIV/0!	32 (86%)	28 (76%)	#DIV/0!	28 (76%)	25 (89%)	#DIV/0!	25 (89%)	3 (11%)	#DIV/0!	3 (11%)	47 (96%)	#DIV/0!	47 (96%)
Uttar Pradesh	15052 (95%)	1075 (94%)	16127 (95%)	14159 (89%)	851 (75%)	15010 (88%)	6901 (49%)	465 (55%)	7366 (49%)	7258 (51%)	386 (45%)	7644 (51%)	2273 (95%)	162 (95%)	2435 (95%)
Uttarakhand	476 (95%)	20 (80%)	496 (94%)	416 (83%)	3 (12%)	419 (79%)	31 (7%)	0 (0%)	31 (7%)	385 (93%)	3 (100%)	388 (93%)	197 (94%)	6 (100%)	203 (94%)
West Bengal	2531 (93%)	71 (68%)	2602 (92%)	2157 (79%)	43 (41%)	2200 (78%)	947 (44%)	9 (21%)	956 (43%)	1210 (56%)	34 (79%)	1244 (57%)	1270 (97%)	17 (94%)	1287 (97%)
INDIA	**54864 (92%)**	**3660 (82%)**	**58524 (92%)**	**48753 (82%)**	**1801 (41%)**	**50554 (79%)**	**19748 (41%)**	**818 (45%)**	**20566 (41%)**	**29005 (59%)**	**983 (55%)**	**29988 (59%)**	**20650 (95%)**	**1266 (92%)**	**21916 (95%)**

*Definitions as per the Guidelines for PMDT in India - 2021

4.10. Treatment outcome of MDR/RR-TB patients initiated on shorter MDR-TB regimen in 2022

States/UTs	Total MDR/ RR- TB initiated on treatment	Cured	Treatment success	Died	Lost to follow-up	Treatment failure	Not evaluated
Andaman and Nicobar Islands	7	0 (0%)	5 (71%)	1 (14%)	0 (0%)	0 (0%)	1 (14%)
Andhra Pradesh	932	550 (59%)	812 (87%)	83 (9%)	8 (1%)	11 (1%)	18 (2%)
Arunachal Pradesh	111	37 (33%)	82 (74%)	10 (9%)	19 (17%)	0 (0%)	0 (0%)
Assam	514	104 (20%)	392 (76%)	51 (10%)	45 (9%)	10 (2%)	16 (3%)
Bihar	1182	250 (21%)	735 (62%)	112 (9%)	156 (13%)	32 (3%)	147 (12%)
Chandigarh	11	7 (64%)	8 (73%)	0 (0%)	3 (27%)	0 (0%)	0 (0%)
Chhattisgarh	215	79 (37%)	157 (73%)	20 (9%)	21 (10%)	4 (2%)	13 (6%)
Dadra and Nagar Haveli and Daman and Diu	6	2 (33%)	5 (83%)	0 (0%)	0 (0%)	0 (0%)	1 (17%)
Delhi	348	106 (30%)	257 (74%)	10 (3%)	64 (18%)	6 (2%)	11 (3%)
Goa	11	6 (55%)	7 (64%)	2 (18%)	2 (18%)	0 (0%)	0 (0%)
Gujarat	982	544 (55%)	752 (77%)	82 (8%)	85 (9%)	48 (5%)	15 (2%)
Haryana	845	358 (42%)	660 (78%)	98 (12%)	65 (8%)	16 (2%)	6 (1%)
Himachal Pradesh	103	34 (33%)	79 (77%)	18 (17%)	3 (3%)	1 (1%)	2 (2%)
Jammu and Kashmir	53	31 (58%)	35 (66%)	6 (11%)	6 (11%)	2 (4%)	4 (8%)
Jharkhand	531	164 (31%)	391 (74%)	49 (9%)	73 (14%)	7 (1%)	11 (2%)
Karnataka	503	251 (50%)	381 (76%)	61 (12%)	56 (11%)	3 (1%)	2 (0%)
Kerala	93	35 (38%)	70 (75%)	13 (14%)	7 (8%)	2 (2%)	1 (1%)
Ladakh	3	1 (33%)	3 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Lakshadweep	1	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Madhya Pradesh	1658	372 (22%)	1193 (72%)	174 (10%)	226 (14%)	41 (2%)	24 (1%)
Maharashtra	1165	374 (32%)	889 (76%)	102 (9%)	84 (7%)	23 (2%)	67 (6%)

States/UTs	Total MDR/ RR- TB initiated on treatment	Cured	Treatment success	Died	Lost to follow-up	Treatment failure	Not evaluated
Manipur	30	13 (43%)	18 (60%)	1 (3%)	8 (27%)	2 (7%)	1 (3%)
Meghalaya	132	18 (14%)	80 (61%)	13 (10%)	18 (14%)	5 (4%)	16 (12%)
Mizoram	51	20 (39%)	39 (76%)	7 (14%)	2 (4%)	2 (4%)	1 (2%)
Nagaland	61	14 (23%)	35 (57%)	4 (7%)	13 (21%)	1 (2%)	8 (13%)
Odisha	236	91 (39%)	185 (78%)	19 (8%)	15 (6%)	4 (2%)	13 (6%)
Puducherry	6	5 (83%)	5 (83%)	0 (0%)	1 (17%)	0 (0%)	0 (0%)
Punjab	241	84 (35%)	178 (74%)	23 (10%)	27 (11%)	2 (1%)	11 (5%)
Rajasthan	1996	596 (30%)	1508 (76%)	180 (9%)	195 (10%)	54 (3%)	59 (3%)
Sikkim	83	49 (59%)	70 (84%)	6 (7%)	2 (2%)	2 (2%)	3 (4%)
Tamil Nadu	783	337 (43%)	547 (70%)	92 (12%)	99 (13%)	40 (5%)	5 (1%)
Telangana	642	365 (57%)	509 (79%)	73 (11%)	26 (4%)	5 (1%)	29 (5%)
Tripura	18	5 (28%)	10 (56%)	3 (17%)	5 (28%)	0 (0%)	0 (0%)
Uttar Pradesh	6578	1536 (23%)	4936 (75%)	729 (11%)	614 (9%)	140 (2%)	159 (2%)
Uttarakhand	48	11 (23%)	37 (77%)	5 (10%)	3 (6%)	2 (4%)	1 (2%)
West Bengal	1106	254 (23%)	880 (80%)	102 (9%)	85 (8%)	21 (2%)	18 (2%)
INDIA	**21285**	**6703 (31%)**	**15951 (75%)**	**2149 (10%)**	**2036 (10%)**	**486 (2%)**	**663 (3%)**

4.11. Treatment outcome of H-mono/poly resistance TB patients initiated on treatment in 2022

States/UTs	Total H mono/poly DR-TB initiated on treatment	Cured	Treatment success	Died	Lost to follow-up	Treatment failure	Not evaluated
Andaman and Nicobar Islands	6	2 (33%)	5 (83%)	0 (0%)	0 (0%)	0 (0%)	1 (17%)
Andhra Pradesh	1078	690 (64%)	1014 (94%)	48 (4%)	4 (0%)	4 (0%)	8 (1%)
Arunachal Pradesh	11	6 (55%)	11 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Assam	112	40 (36%)	100 (89%)	4 (4%)	5 (4%)	2 (2%)	1 (1%)
Bihar	168	39 (23%)	135 (80%)	4 (2%)	10 (6%)	6 (4%)	13 (8%)
Chandigarh	36	20 (56%)	32 (89%)	0 (0%)	4 (11%)	0 (0%)	0 (0%)
Chhattisgarh	186	103 (55%)	154 (83%)	8 (4%)	8 (4%)	2 (1%)	14 (8%)
Dadra and Nagar Haveli and Daman and Diu	3	3 (100%)	3 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Delhi	945	481 (51%)	799 (85%)	25 (3%)	87 (9%)	24 (3%)	10 (1%)
Goa	21	14 (67%)	19 (90%)	0 (0%)	2 (10%)	0 (0%)	0 (0%)
Gujarat	459	282 (61%)	375 (82%)	40 (9%)	22 (5%)	22 (5%)	0 (0%)
Haryana	206	91 (44%)	183 (89%)	14 (7%)	6 (3%)	1 (0%)	2 (1%)
Himachal Pradesh	158	72 (46%)	142 (90%)	12 (8%)	3 (2%)	1 (1%)	0 (0%)
Jammu and Kashmir	29	22 (76%)	25 (86%)	1 (3%)	1 (3%)	1 (3%)	1 (3%)
Jharkhand	19	13 (68%)	18 (95%)	0 (0%)	0 (0%)	0 (0%)	1 (5%)
Karnataka	1256	746 (59%)	1089 (87%)	75 (6%)	72 (6%)	20 (2%)	0 (0%)
Kerala	210	125 (60%)	189 (90%)	12 (6%)	8 (4%)	1 (0%)	0 (0%)
Ladakh	2	0 (0%)	2 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Lakshadweep	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Madhya Pradesh	461	164 (36%)	403 (87%)	15 (3%)	31 (7%)	11 (2%)	1 (0%)
Maharashtra	1647	747 (45%)	1390 (84%)	78 (5%)	95 (6%)	35 (2%)	49 (3%)
Manipur	2	2 (100%)	2 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

States/UTs	Total H mono/poly DR-TB initiated on treatment	Cured	Treatment success	Died	Lost to follow-up	Treatment failure	Not evaluated
Meghalaya	63	19 (30%)	56 (89%)	1 (2%)	3 (5%)	1 (2%)	2 (3%)
Mizoram	1	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Nagaland	13	6 (46%)	12 (92%)	0 (0%)	0 (0%)	0 (0%)	1 (8%)
Odisha	42	26 (62%)	36 (86%)	6 (14%)	0 (0%)	0 (0%)	0 (0%)
Puducherry	26	21 (81%)	22 (85%)	2 (8%)	1 (4%)	1 (4%)	0 (0%)
Punjab	100	42 (42%)	89 (89%)	5 (5%)	5 (5%)	1 (1%)	0 (0%)
Rajasthan	279	116 (42%)	240 (86%)	14 (5%)	15 (5%)	5 (2%)	5 (2%)
Sikkim	4	2 (50%)	4 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Tamil Nadu	1118	647 (58%)	921 (82%)	67 (6%)	87 (8%)	40 (4%)	3 (0%)
Telangana	572	377 (66%)	530 (93%)	21 (4%)	7 (1%)	3 (1%)	11 (2%)
Tripura	20	13 (65%)	17 (85%)	2 (10%)	1 (5%)	0 (0%)	0 (0%)
Uttar Pradesh	577	188 (33%)	493 (85%)	42 (7%)	26 (5%)	7 (1%)	9 (2%)
Uttarakhand	125	33 (26%)	109 (87%)	9 (7%)	7 (6%)	0 (0%)	0 (0%)
West Bengal	535	169 (32%)	475 (89%)	18 (3%)	26 (5%)	10 (2%)	6 (1%)
INDIA	**10490**	**5321 (51%)**	**9095 (87%)**	**523 (5%)**	**536 (5%)**	**198 (2%)**	**138 (1%)**

4.12. Treatment outcome of MDR/RR-TB patients initiated on longer oral M/XDR-TB regimen in 2021

States/UTs	Total MDR/RR- TB initiated on treatment	Cured	Treatment success	Died	Lost to follow-up	Treatment failure	Not evaluated
Andaman and Nicobar Islands	25	6 (24%)	18 (72%)	5 (20%)	0 (0%)	2 (8%)	0 (0%)
Andhra Pradesh	322	144 (45%)	238 (74%)	66 (20%)	9 (3%)	4 (1%)	5 (2%)
Arunachal Pradesh	30	9 (30%)	23 (77%)	1 (3%)	6 (20%)	0 (0%)	0 (0%)
Assam	152	44 (29%)	104 (68%)	27 (18%)	16 (11%)	4 (3%)	1 (1%)
Bihar	701	173 (25%)	492 (70%)	92 (13%)	64 (9%)	14 (2%)	39 (6%)
Chandigarh	47	20 (43%)	38 (81%)	3 (6%)	6 (13%)	0 (0%)	0 (0%)
Chhattisgarh	63	17 (27%)	39 (62%)	16 (25%)	5 (8%)	0 (0%)	3 (5%)
Dadra and Nagar Haveli and Daman and Diu	19	11 (58%)	18 (95%)	0 (0%)	1 (5%)	0 (0%)	0 (0%)
Delhi	1129	318 (28%)	822 (73%)	163 (14%)	110 (10%)	18 (2%)	16 (1%)
Goa	35	17 (49%)	28 (80%)	4 (11%)	2 (6%)	1 (3%)	0 (0%)
Gujarat	1262	631 (50%)	887 (70%)	236 (19%)	70 (6%)	67 (5%)	2 (0%)
Haryana	337	100 (30%)	234 (69%)	64 (19%)	30 (9%)	7 (2%)	2 (1%)
Himachal Pradesh	92	35 (38%)	71 (77%)	14 (15%)	5 (5%)	2 (2%)	0 (0%)
Jammu and Kashmir	45	30 (67%)	34 (76%)	7 (16%)	2 (4%)	2 (4%)	0 (0%)
Jharkhand	193	49 (25%)	130 (67%)	35 (18%)	21 (11%)	4 (2%)	3 (2%)
Karnataka	486	196 (40%)	334 (69%)	102 (21%)	35 (7%)	15 (3%)	0 (0%)
Kerala	108	45 (42%)	84 (78%)	14 (13%)	3 (3%)	3 (3%)	4 (4%)
Ladakh	2	0 (0%)	1 (50%)	1 (50%)	0 (0%)	0 (0%)	0 (0%)
Lakshadweep	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Madhya Pradesh	545	130 (24%)	362 (66%)	107 (20%)	62 (11%)	5 (1%)	9 (2%)

States/UTs	Total MDR/RR- TB initiated on treatment	Cured	Treatment success	Died	Lost to follow-up	Treatment failure	Not evaluated
Maharashtra	7497	2451 (33%)	5690 (76%)	874 (12%)	604 (8%)	162 (2%)	167 (2%)
Manipur	17	7 (41%)	12 (71%)	4 (24%)	1 (6%)	0 (0%)	0 (0%)
Meghalaya	74	11 (15%)	47 (64%)	17 (23%)	6 (8%)	2 (3%)	2 (3%)
Mizoram	48	23 (48%)	35 (73%)	3 (6%)	9 (19%)	1 (2%)	0 (0%)
Nagaland	35	10 (29%)	19 (54%)	7 (20%)	7 (20%)	0 (0%)	2 (6%)
Odisha	139	56 (40%)	99 (71%)	25 (18%)	10 (7%)	1 (1%)	4 (3%)
Puducherry	8	5 (63%)	6 (75%)	1 (13%)	0 (0%)	1 (13%)	0 (0%)
Punjab	273	73 (27%)	173 (63%)	50 (18%)	28 (10%)	3 (1%)	19 (7%)
Rajasthan	917	292 (32%)	657 (72%)	171 (19%)	61 (7%)	14 (2%)	14 (2%)
Sikkim	113	55 (49%)	95 (84%)	14 (12%)	2 (2%)	2 (2%)	0 (0%)
Tamil Nadu	471	185 (39%)	307 (65%)	102 (22%)	50 (11%)	12 (3%)	0 (0%)
Telangana	393	205 (52%)	278 (71%)	71 (18%)	23 (6%)	6 (2%)	15 (4%)
Tripura	14	6 (43%)	9 (64%)	1 (7%)	4 (29%)	0 (0%)	0 (0%)
Uttar Pradesh	3329	860 (26%)	2429 (73%)	622 (19%)	185 (6%)	36 (1%)	57 (2%)
Uttarakhand	275	68 (25%)	210 (76%)	33 (12%)	29 (11%)	2 (1%)	1 (0%)
West Bengal	763	145 (19%)	571 (75%)	120 (16%)	49 (6%)	13 (2%)	10 (1%)
INDIA	**19959**	**6427 (32%)**	**14594 (73%)**	**3072 (15%)**	**1515 (8%)**	**403 (2%)**	**375 (2%)**

4.13. Treatment outcome of MDR/RR-TB cases initiated on treatment in 2021 (excluding Pre-XDR-TB and XDR-TB)

States/UTs	Total MDR/RR-TB initiated on treatment	Cured	Treatment success	Died	Lost to follow-up	Treatment failure	Not evaluated
Andaman and Nicobar Islands	31	8 (26%)	27 (87%)	2 (6%)	0 (0%)	2 (6%)	0 (0%)
Andhra Pradesh	1089	552 (51%)	868 (80%)	154 (14%)	27 (2%)	34 (3%)	6 (1%)
Arunachal Pradesh	110	29 (26%)	81 (74%)	7 (6%)	20 (18%)	0 (0%)	2 (2%)
Assam	389	101 (26%)	280 (72%)	48 (12%)	38 (10%)	20 (5%)	3 (1%)
Bihar	2239	410 (18%)	1570 (70%)	237 (11%)	250 (11%)	118 (5%)	64 (3%)
Chandigarh	56	19 (34%)	43 (77%)	3 (5%)	6 (11%)	4 (7%)	0 (0%)
Chhattisgarh	432	166 (38%)	322 (75%)	48 (11%)	36 (8%)	14 (3%)	12 (3%)
Dadra and Nagar Haveli and Daman and Diu	19	9 (47%)	15 (79%)	2 (11%)	2 (11%)	0 (0%)	0 (0%)
Delhi	1405	371 (26%)	973 (69%)	156 (11%)	170 (12%)	92 (7%)	14 (1%)
Goa	31	13 (42%)	22 (71%)	2 (6%)	3 (10%)	4 (13%)	0 (0%)
Gujarat	1473	723 (49%)	1110 (75%)	199 (14%)	74 (5%)	86 (6%)	4 (0%)
Haryana	1439	497 (35%)	1132 (79%)	157 (11%)	91 (6%)	45 (3%)	14 (1%)
Himachal Pradesh	181	77 (43%)	150 (83%)	23 (13%)	7 (4%)	1 (1%)	0 (0%)
Jammu and Kashmir	150	98 (65%)	128 (85%)	12 (8%)	1 (1%)	6 (4%)	3 (2%)
Jharkhand	853	203 (24%)	594 (70%)	76 (9%)	123 (14%)	50 (6%)	10 (1%)
Karnataka	848	384 (45%)	594 (70%)	150 (18%)	72 (8%)	31 (4%)	1 (0%)
Kerala	235	118 (50%)	185 (79%)	29 (12%)	8 (3%)	6 (3%)	7 (3%)
Ladakh	6	4 (67%)	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Lakshadweep	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Madhya Pradesh	1569	364 (23%)	1117 (71%)	171 (11%)	194 (12%)	59 (4%)	28 (2%)
Maharashtra	6580	2038 (31%)	5034 (77%)	711 (11%)	455 (7%)	250 (4%)	130 (2%)

States/UTs	Total MDR/RR-TB initiated on treatment	Cured	Treatment success	Died	Lost to follow-up	Treatment failure	Not evaluated
Manipur	48	23 (48%)	35 (73%)	7 (15%)	4 (8%)	0 (0%)	2 (4%)
Meghalaya	134	44 (33%)	104 (78%)	17 (13%)	9 (7%)	4 (3%)	0 (0%)
Mizoram	98	44 (45%)	82 (84%)	4 (4%)	11 (11%)	1 (1%)	0 (0%)
Nagaland	86	25 (29%)	58 (67%)	8 (9%)	16 (19%)	0 (0%)	4 (5%)
Odisha	415	185 (45%)	347 (84%)	43 (10%)	19 (5%)	3 (1%)	3 (1%)
Puducherry	16	8 (50%)	13 (81%)	0 (0%)	2 (13%)	1 (6%)	0 (0%)
Punjab	585	184 (31%)	424 (72%)	71 (12%)	62 (11%)	12 (2%)	16 (3%)
Rajasthan	1825	588 (32%)	1356 (74%)	214 (12%)	176 (10%)	61 (3%)	18 (1%)
Sikkim	166	54 (33%)	128 (77%)	31 (19%)	5 (3%)	2 (1%)	0 (0%)
Tamil Nadu	983	416 (42%)	684 (70%)	132 (13%)	109 (11%)	53 (5%)	5 (1%)
Telangana	955	525 (55%)	748 (78%)	112 (12%)	44 (5%)	27 (3%)	24 (3%)
Tripura	21	9 (43%)	14 (67%)	2 (10%)	5 (24%)	0 (0%)	0 (0%)
Uttar Pradesh	7271	1616 (22%)	5200 (72%)	1027 (14%)	707 (10%)	281 (4%)	56 (1%)
Uttarakhand	483	125 (26%)	369 (76%)	40 (8%)	47 (10%)	26 (5%)	1 (0%)
West Bengal	1334	318 (24%)	980 (73%)	191 (14%)	99 (7%)	53 (4%)	11 (1%)
INDIA	**33555**	**10348 (31%)**	**24793 (74%)**	**4086 (12%)**	**2892 (9%)**	**1346 (4%)**	**438 (1%)**

4.14. Treatment outcome of Pre-XDR and XDR-TB patients initiated on treatment in 2021

States/UTs	Treatment outcome of Pre-XDR-TB cases initiated on treatment in 2021 (Excluding XDR-TB)							Treatment outcome of XDR-TB cases initiated on treatment in 2021						
	Total Pre-XDR-TB initiated on treatment	Cured	Treatment success	Died	Lost to follow-up	Treatment failure	Not evaluated	Total XDR-TB initiated on treatment	Cured	Treatment success	Died	Lost to follow-up	Treatment failure	Not evaluated
Andaman and Nicobar Islands	6	1 (17%)	4 (67%)	2 (33%)	0 (0%)	0 (0%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Andhra Pradesh	100	49 (49%)	75 (75%)	24 (24%)	0 (0%)	0 (0%)	1 (1%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Arunachal Pradesh	9	2 (22%)	7 (78%)	0 (0%)	2 (22%)	0 (0%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Assam	54	16 (30%)	34 (63%)	9 (17%)	3 (6%)	8 (15%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Bihar	559	130 (23%)	350 (63%)	80 (14%)	65 (12%)	43 (8%)	21 (4%)	2	1 (50%)	2 (100%)	0 (0%)	0 (0%)	#N/A	#N/A
Chandigarh	6	2 (33%)	4 (67%)	0 (0%)	2 (33%)	0 (0%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Chhattisgarh	36	14 (39%)	24 (67%)	9 (25%)	0 (0%)	1 (3%)	2 (6%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Dadra and Nagar Haveli and Daman and Diu	6	6 (100%)	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Delhi	489	148 (30%)	322 (66%)	60 (12%)	54 (11%)	46 (9%)	7 (1%)	2	0 (0%)	0 (0%)	0 (0%)	1 (50%)	#N/A	#N/A
Goa	13	4 (31%)	8 (62%)	3 (23%)	1 (8%)	1 (8%)	0 (0%)	3	0 (0%)	1 (33%)	1 (33%)	1 (33%)	#N/A	#N/A
Gujarat	609	293 (48%)	402 (66%)	104 (17%)	35 (6%)	66 (11%)	2 (0%)	6	4 (67%)	4 (67%)	0 (0%)	0 (0%)	#N/A	#N/A
Haryana	113	33 (29%)	77 (68%)	16 (14%)	6 (5%)	11 (10%)	3 (3%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Himachal Pradesh	25	10 (40%)	22 (88%)	2 (8%)	1 (4%)	0 (0%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Jammu and Kashmir	10	6 (60%)	8 (80%)	0 (0%)	1 (10%)	1 (10%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Jharkhand	90	22 (24%)	52 (58%)	10 (11%)	18 (20%)	8 (9%)	2 (2%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Karnataka	213	85 (40%)	130 (61%)	47 (22%)	20 (9%)	15 (7%)	1 (0%)	7	1 (14%)	3 (43%)	1 (14%)	0 (0%)	#N/A	#N/A
Kerala	24	7 (29%)	21 (88%)	1 (4%)	0 (0%)	2 (8%)	0 (0%)	2	0 (0%)	0 (0%)	1 (50%)	0 (0%)	#N/A	#N/A
Ladakh	1	0 (0%)	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Lakshadweep	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Madhya Pradesh	375	82 (22%)	229 (61%)	63 (17%)	58 (15%)	19 (5%)	6 (2%)	1	0 (0%)	0 (0%)	1 (100%)	0 (0%)	#N/A	#N/A
Maharashtra	2966	1009 (34%)	2136 (72%)	422 (14%)	245 (8%)	108 (4%)	55 (2%)	37	8 (22%)	17 (46%)	6 (16%)	2 (5%)	#N/A	#N/A
Manipur	2	2 (100%)	2 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

States/UTs	Treatment outcome of Pre-XDR-TB cases initiated on treatment in 2021 (Excluding XDR-TB)							Treatment outcome of XDR-TB cases initiated on treatment in 2021						
	Total Pre-XDR-TB initiated on treatment	Cured	Treatment success	Died	Lost to follow-up	Treatment failure	Not evaluated	Total XDR-TB initiated on treatment	Cured	Treatment success	Died	Lost to follow-up	Treatment failure	Not evaluated
Meghalaya	47	6 (13%)	28 (60%)	12 (26%)	4 (9%)	1 (2%)	2 (4%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Mizoram	3	2 (67%)	2 (67%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Nagaland	9	3 (33%)	6 (67%)	1 (11%)	2 (22%)	0 (0%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Odisha	35	16 (46%)	22 (63%)	7 (20%)	2 (6%)	2 (6%)	2 (6%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Puducherry	3	2 (67%)	2 (67%)	1 (33%)	0 (0%)	0 (0%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Punjab	73	19 (26%)	42 (58%)	15 (21%)	5 (7%)	8 (11%)	3 (4%)	3	1 (33%)	2 (67%)	1 (33%)	0 (0%)	#N/A	#N/A
Rajasthan	529	158 (30%)	348 (66%)	100 (19%)	47 (9%)	23 (4%)	11 (2%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Sikkim	42	24 (57%)	36 (86%)	1 (2%)	2 (5%)	3 (7%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Tamil Nadu	94	38 (40%)	57 (61%)	16 (17%)	10 (11%)	11 (12%)	0 (0%)	2	0 (0%)	0 (0%)	1 (50%)	0 (0%)	#N/A	#N/A
Telangana	83	45 (54%)	62 (75%)	12 (14%)	5 (6%)	1 (1%)	3 (4%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Tripura	2	2 (100%)	2 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Uttar Pradesh	2343	548 (23%)	1546 (66%)	476 (20%)	168 (7%)	126 (5%)	27 (1%)	2	1 (50%)	1 (50%)	0 (0%)	0 (0%)	#N/A	#N/A
Uttarakhand	46	10 (22%)	38 (83%)	5 (11%)	0 (0%)	3 (7%)	0 (0%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
West Bengal	192	28 (15%)	137 (71%)	21 (11%)	11 (6%)	20 (10%)	3 (2%)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
INDIA	**9207**	**2822 (31%)**	**6241 (68%)**	**1521 (17%)**	**767 (8%)**	**527 (6%)**	**151 (2%)**	**67**	**16 (24%)**	**30 (45%)**	**12 (18%)**	**4 (6%)**	**#N/A**	**#N/A**

5.1. Private health facilities registration status

States/UTs	Hospitals	Laboratories	Chemists	Health facilities registered
Andaman and Nicobar Islands	16			16
Andhra Pradesh	9754	2592	22368	34714
Arunachal Pradesh	62	9	35	106
Assam	2514	960	3175	6649
Bihar	9812	988	1159	11959
Chandigarh	165	68	126	359
Chhattisgarh	2529	530	4039	7098
Dadra and Nagar Haveli and Daman and Diu	115	22	67	204
Delhi	4024	457	53	4534
Goa	651	87	347	1085
Gujarat	11388	838	6698	18924
Haryana	3019	849	3183	7051
Himachal Pradesh	610	612	285	1507
Jammu and Kashmir	721	412	337	1470
Jharkhand	2790	288	1042	4120
Karnataka	18804	2632	14982	36418
Kerala	6489	1566	10	8065
Ladakh	38	211	3	252
Lakshadweep				0
Madhya Pradesh	9211	785	1454	11450
Maharashtra	47639	5117	9617	62373
Manipur	97	63	201	361
Meghalaya	103	23	44	170
Mizoram	36	18	1129	1183
Nagaland	68	22	75	165
Odisha	2778	433	1109	4320
Puducherry	34	4	10	48
Punjab	2842	586	210	3638
Rajasthan	3069	831	724	4624
Sikkim	77	26	175	278
Tamil Nadu	20012	3692	5149	28853
Telangana	5905	910	1747	8562
Tripura	89	175	30	294
Uttar Pradesh	20522	2272	1793	24587
Uttarakhand	631	138	217	986
West Bengal	9940	3894	5178	19012
INDIA	**196554**	**32110**	**86771**	**315435**

5.2. Private health facilities that have notified at least one TB patient during the year 2023

States/UTs	Hospitals	Laboratories	Chemists	Total health facilities notifying TB case
Andaman and Nicobar Islands	24			24
Andhra Pradesh	24126	6071	252	30449
Arunachal Pradesh	303	25		328
Assam	6047	6233	475	12755
Bihar	98550	4121	212	102883
Chandigarh	564	373	2	939
Chhattisgarh	10885	2189	153	13227
Dadra and Nagar Haveli and Daman and Diu	72	35		107
Delhi	16538	9335		25873
Goa	286	62		348
Gujarat	44976	2639	29	47644
Haryana	17344	9457	71	26872
Himachal Pradesh	932	606		1538
Jammu and Kashmir	852	1123	5	1980
Jharkhand	12898	1503	292	14693
Karnataka	13829	9575	140	23544
Kerala	3761	2857		6618
Ladakh	4	4		8
Lakshadweep				0
Madhya Pradesh	52819	3537	67	56423
Maharashtra	61209	41784	343	103336
Manipur	197	757		954
Meghalaya	575	275		850
Mizoram	136	302		438
Nagaland	463	261	8	732
Odisha	7273	2667	201	10141
Puducherry	88	22		110
Punjab	9679	2841	347	12867
Rajasthan	33907	7629	62	41598
Sikkim	54	39		93
Tamil Nadu	18243	5366	262	23871
Telangana	16604	7844	646	25094
Tripura	29	169		198
Uttar Pradesh	201574	20783	857	223214
Uttarakhand	4752	1640	1	6393
West Bengal	9126	18654	271	28051
Grand Total	**668719**	**170778**	**4696**	**844193**

6. Active case finding

States/UTs	Total population screened for presumptive TB	Presumptive TB cases tested out of those screened, n(%)	TB cases diagnosed among tested, n(%)
Andaman and Nicobar Islands	372	44 (11.8)	0 (0)
Andhra Pradesh	811875	30930 (3.8)	723 (2.3)
Arunachal Pradesh	32508	1087 (3.3)	17 (1.6)
Assam	2270952	99626 (4.4)	840 (0.8)
Bihar	1197890	31710 (2.6)	1129 (3.6)
Chandigarh	227248	516 (0.2)	18 (3.5)
Chhattisgarh	174317	11233 (6.4)	192 (1.7)
Dadra and Nagar Haveli and Daman and Diu	126695	2562 (2)	5 (0.2)
Delhi	264864	403 (0.2)	35 (8.7)
Goa	87112	1105 (1.3)	0 (0)
Gujarat	13385294	67798 (0.5)	1589 (2.3)
Haryana	1740650	30899 (1.8)	193 (0.6)
Himachal Pradesh	3096177	22630 (0.7)	68 (0.3)
Jammu and Kashmir	689564	484454 (70.3)	26 (0)
Jharkhand	2018256	13289 (0.7)	464 (3.5)
Karnataka	919828	10414 (1.1)	173 (1.7)
Kerala	139078	20751 (14.9)	261 (1.3)
Ladakh	35260	1767 (5)	11 (0.6)
Lakshadweep	958	27 (2.8)	0 (0)
Madhya Pradesh	6362020	148955 (2.3)	2762 (1.9)
Maharashtra	104781109	514240 (0.5)	8972 (1.7)
Manipur	2	0 (0)	#DIV/0!
Meghalaya	1199544	8142 (0.7)	147 (1.8)
Mizoram	68351	701 (1)	7 (1)
Nagaland	36684	5206 (14.2)	60 (1.2)
Odisha	1913959	50493 (2.6)	936 (1.9)
Puducherry	324728	2954 (0.9)	49 (1.7)
Punjab	314585	2331 (0.7)	68 (2.9)
Rajasthan	5327990	84744 (1.6)	517 (0.6)
Sikkim	3259	640 (19.6)	2 (0.3)
Tamil Nadu	763120	40678 (5.3)	1584 (3.9)
Telangana	273774	41812 (15.3)	1083 (2.6)
Tripura	887540	15524 (1.7)	68 (0.4)
Uttar Pradesh	52515685	357851 (0.7)	12786 (3.6)
Uttarakhand	191270	1778 (0.9)	39 (2.2)
West Bengal	3149023	68395 (2.2)	614 (0.9)
INDIA	**205331541**	**2175689 (1.1)**	**35438 (1.6)**

7.1. Contact tracing for pulmonary bacteriologically confirmed TB (PBCT) 2023

States/UTs	Notified PBCT	No. of notified PBCT visited for contact tracing (%)	No. of HHC <5 years enumerated during contact tracing visit among notified PBCT	Average no. of <5 years HHC per notified PBCT visited	No. of HHC ≥5 years enumerated during contact tracing visit among notified PBCT	Average no. of ≥5 years HHC per notified PBCT visited	No. of HHC (any age) enumerated during contact tracing visit among notified PBCT	Average no. of HHC (any age) per notified PBCT visited	No. of notified PBCT with "0" HHC <5 years reported during visits (%)	No. of notified PBCT with "0" HHC ≥5 years reported during visits (%)	No. of notified PBCT with "0" HHC (any age) reported during visits (%)
Andaman and Nicobar Islands	248	236 (95%)	63 (7%)	0.3	861 (93%)	3.6	924	3.9	127 (54%)	2 (1%)	2 (1%)
Andhra Pradesh	42565	40583 (95%)	4607 (4%)	0.1	100395 (96%)	2.5	105002	2.6	23874 (59%)	186 (0%)	181 (0%)
Arunachal Pradesh	1158	789 (68%)	657 (20%)	0.8	2560 (80%)	3.2	3217	4.1	250 (32%)	25 (3%)	16 (2%)
Assam	23622	19786 (84%)	8114 (10%)	0.4	72176 (90%)	3.6	80290	4.1	3767 (19%)	61 (0%)	45 (0%)
Bihar	57226	34898 (61%)	26243 (14%)	0.8	163668 (86%)	4.7	189911	5.4	6134 (18%)	366 (1%)	278 (1%)
Chandigarh	1738	1510 (87%)	446 (9%)	0.3	4295 (91%)	2.8	4741	3.1	145 (10%)	13 (1%)	12 (1%)
Chhattisgarh	14424	13338 (92%)	5829 (10%)	0.4	51884 (90%)	3.9	57713	4.3	2656 (20%)	69 (1%)	53 (0%)
Dadra and Nagar Haveli and Daman and Diu	408	406 (100%)	69 (5%)	0.2	1327 (95%)	3.3	1396	3.4	143 (35%)	1 (0%)	1 (0%)
Delhi	30534	25945 (85%)	7137 (8%)	0.3	78131 (92%)	3.0	85268	3.3	1987 (8%)	152 (1%)	144 (1%)
Goa	978	866 (89%)	177 (7%)	0.2	2508 (93%)	2.9	2685	3.1	475 (55%)	10 (1%)	10 (1%)
Gujarat	61000	58029 (95%)	19847 (10%)	0.3	182789 (90%)	3.1	202636	3.5	14178 (24%)	305 (1%)	233 (0%)
Haryana	40030	37558 (94%)	12255 (8%)	0.3	143792 (92%)	3.8	156047	4.2	5969 (16%)	57 (0%)	49 (0%)
Himachal Pradesh	9186	8998 (98%)	2196 (7%)	0.2	28139 (93%)	3.1	30335	3.4	2429 (27%)	61 (1%)	56 (1%)
Jammu and Kashmir	5720	5384 (94%)	2202 (10%)	0.4	20915 (90%)	3.9	23117	4.3	1486 (28%)	10 (0%)	7 (0%)
Jharkhand	29392	24617 (84%)	12573 (12%)	0.5	91167 (88%)	3.7	103740	4.2	3381 (14%)	58 (0%)	36 (0%)
Karnataka	41632	39805 (96%)	7819 (6%)	0.2	123848 (94%)	3.1	131667	3.3	13711 (34%)	196 (0%)	187 (0%)
Kerala	12280	11542 (94%)	2872 (7%)	0.2	36386 (93%)	3.2	39258	3.4	2319 (20%)	33 (0%)	32 (0%)
Ladakh	207	185 (89%)	64 (10%)	0.3	605 (90%)	3.3	669	3.6	67 (36%)	5 (3%)	5 (3%)

States/UTs	Notified PBCT	No. of notified PBCT visited for contact tracing (%)	No. of HHC <5 years enumerated during contact tracing visit among notified PBCT	Average no. of <5 years HHC per notified PBCT visited	No. of HHC ≥5 years enumerated during contact tracing visit among notified PBCT	Average no. of ≥5 years HHC per notified PBCT visited	No. of HHC (any age) enumerated during contact tracing visit among notified PBCT	Average no. of HHC (any age) per notified PBCT visited	No. of notified PBCT with "0" HHC <5 years reported during visits (%)	No. of notified PBCT with "0" HHC ≥5 years reported during visits (%)	No. of notified PBCT with "0" HHC (any age) reported during visits (%)
Lakshadweep	8	8 (100%)	5 (23%)	0.6	17 (77%)	2.1	22	2.8	6 (75%)	1 (13%)	0%
Madhya Pradesh	73176	66282 (91%)	27787 (10%)	0.4	239035 (90%)	3.6	266822	4.0	11502 (17%)	174 (0%)	101 (0%)
Maharashtra	72095	67216 (93%)	14818 (7%)	0.2	207661 (93%)	3.1	222479	3.3	23022 (34%)	420 (1%)	393 (1%)
Manipur	1133	949 (84%)	487 (11%)	0.5	3864 (89%)	4.1	4351	4.6	252 (27%)	7 (1%)	0 (0%)
Meghalaya	2477	2130 (86%)	1109 (14%)	0.5	6904 (86%)	3.2	8013	3.8	395 (19%)	50 (2%)	46 (2%)
Mizoram	988	958 (97%)	448 (14%)	0.5	2818 (86%)	2.9	3266	3.4	182 (19%)	66 (7%)	23 (2%)
Nagaland	2107	1773 (84%)	405 (7%)	0.2	5645 (93%)	3.2	6050	3.4	579 (33%)	26 (1%)	22 (1%)
Odisha	33657	32468 (96%)	9229 (8%)	0.3	105691 (92%)	3.3	114920	3.5	9773 (30%)	147 (0%)	66 (0%)
Puducherry	922	901 (98%)	73 (4%)	0.1	1990 (96%)	2.2	2063	2.3	480 (53%)	12 (1%)	12 (1%)
Punjab	26613	23881 (90%)	7682 (8%)	0.3	87856 (92%)	3.7	95538	4.0	4614 (19%)	69 (0%)	59 (0%)
Rajasthan	76753	62383 (81%)	21578 (9%)	0.3	229601 (91%)	3.7	251179	4.0	15978 (26%)	244 (0%)	187 (0%)
Sikkim	572	461 (81%)	67 (5%)	0.1	1247 (95%)	2.7	1314	2.9	194 (42%)	3 (1%)	2 (0%)
Tamil Nadu	57997	55987 (97%)	6190 (5%)	0.1	117501 (95%)	2.1	123691	2.2	30829 (55%)	570 (1%)	554 (1%)
Telangana	31990	28939 (90%)	4600 (6%)	0.2	78582 (94%)	2.7	83182	2.9	14500 (50%)	40 (0%)	36 (0%)
Tripura	2034	1901 (93%)	276 (5%)	0.1	5453 (95%)	2.9	5729	3.0	910 (48%)	4 (0%)	4 (0%)
Uttar Pradesh	224916	204868 (91%)	81463 (8%)	0.4	955376 (92%)	4.7	1036839	5.1	37275 (18%)	450 (0%)	349 (0%)
Uttarakhand	10673	9272 (87%)	3799 (10%)	0.4	35105 (90%)	3.8	38904	4.2	2176 (23%)	44 (0%)	12 (0%)
West Bengal	61452	57365 (93%)	18775 (10%)	0.3	174916 (90%)	3.0	193691	3.4	12667 (22%)	397 (1%)	338 (1%)
INDIA	**1051911**	**942217 (90%)**	**311961 (8%)**	**0.3**	**3364708 (92%)**	**3.6**	**3676669**	**3.9**	**248432 (26%)**	**4334 (0%)**	**3551 (0%)**

Note: Household contacts include close contacts who are not in the household but shared an enclosed space, such as at a social gathering, workplace or facility for extended periods.

7.2. TB preventive treatment among eligible household contacts (<5 years of age) of PBCT

States/UTs	No. of HHC <5years of PBCT	Screening, diagnosis and treatment of TB					Ruling out active TB and TPT initiation	
		No. of HHC <5 years of PBCT screened for TB (%)	No. of HHC <5 years of PBCT symptomatic for TB (%)	No. of HHC <5 years of PBCT evaluated for TB (%)	No. of HHC <5 years of PBCT diagnosed with TB (%)	No. of HHC <5 years of PBCT put on TB treatment (%)	No. of HHC <5 years of PBCT not diagnosed TB and eligible for TPT	No. of HHC <5 years of PBCT initiated TPT (%)
Andaman and Nicobar Islands	63.0	56 (89%)	4 (7%)	0 (0%)	NA	NA	63 (100%)	21 (33%)
Andhra Pradesh	4607.0	4301 (93%)	20 (0%)	14 (70%)	10 (71%)	9 (90%)	4597 (100%)	1866 (41%)
Arunachal Pradesh	657.0	572 (87%)	53 (9%)	53 (100%)	53 (100%)	53 (100%)	604 (92%)	69 (11%)
Assam	8114.0	5845 (72%)	101 (2%)	66 (65%)	13 (20%)	9 (69%)	8101 (100%)	3628 (45%)
Bihar	26243.0	20914 (80%)	368 (2%)	174 (47%)	143 (82%)	112 (78%)	26100 (99%)	5615 (22%)
Chandigarh	446.0	377 (85%)	6 (2%)	2 (33%)	0 (0%)	NA	446 (100%)	294 (66%)
Chhattisgarh	5829.0	5471 (94%)	75 (1%)	49 (65%)	39 (80%)	10 (26%)	5790 (99%)	3430 (59%)
Dadra and Nagar Haveli and Daman and Diu	69.0	69 (100%)	0 (0%)	NA	NA	NA	69 (100%)	69 (100%)
Delhi	7137.0	6403 (90%)	304 (5%)	201 (66%)	51 (25%)	31 (61%)	7086 (99%)	3809 (54%)
Goa	177.0	171 (97%)	1 (1%)	1 (100%)	1 (100%)	1 (100%)	176 (99%)	58 (33%)
Gujarat	19847.0	17725 (89%)	361 (2%)	271 (75%)	63 (23%)	39 (62%)	19784 (100%)	8444 (43%)
Haryana	12255.0	12137 (99%)	78 (1%)	26 (33%)	11 (42%)	7 (64%)	12244 (100%)	11568 (94%)
Himachal Pradesh	2196.0	2185 (99%)	22 (1%)	20 (91%)	7 (35%)	8 (114%)	2189 (100%)	2091 (96%)
Jammu and Kashmir	2202.0	2061 (94%)	22 (1%)	18 (82%)	9 (50%)	9 (100%)	2193 (100%)	1864 (85%)
Jharkhand	12573.0	10224 (81%)	144 (1%)	81 (56%)	32 (40%)	23 (72%)	12541 (100%)	6448 (51%)
Karnataka	7819.0	7379 (94%)	214 (3%)	177 (83%)	45 (25%)	42 (93%)	7774 (99%)	5586 (72%)
Kerala	2872.0	2189 (76%)	72 (3%)	48 (67%)	20 (42%)	12 (60%)	2852 (99%)	765 (27%)

States/UTs	No. of HHC <5years of PBCT	Screening, diagnosis and treatment of TB					Ruling out active TB and TPT initiation	
		No. of HHC <5 years of PBCT screened for TB (%)	No. of HHC <5 years of PBCT symptomatic for TB (%)	No. of HHC <5 years of PBCT evaluated for TB (%)	No. of HHC <5 years of PBCT diagnosed with TB (%)	No. of HHC <5 years of PBCT put on TB treatment (%)	No. of HHC <5 years of PBCT not diagnosed TB and eligible for TPT	No. of HHC <5 years of PBCT initiated TPT (%)
Ladakh	64.0	63 (98%)	2 (3%)	0 (0%)	NA	NA	64 (100%)	48 (75%)
Lakshadweep	5.0	5 (100%)	0 (0%)	NA	NA	NA	5 (100%)	5 (100%)
Madhya Pradesh	27787.0	24637 (89%)	308 (1%)	162 (53%)	80 (49%)	61 (76%)	27707 (100%)	11640 (42%)
Maharashtra	14818.0	13790 (93%)	347 (3%)	286 (82%)	72 (25%)	59 (82%)	14746 (100%)	9953 (67%)
Manipur	487.0	461 (95%)	3 (1%)	2 (67%)	1 (50%)	2 (200%)	486 (100%)	157 (32%)
Meghalaya	1109.0	1052 (95%)	4 (0%)	2 (50%)	0 (0%)	NA	1109 (100%)	723 (65%)
Mizoram	448.0	443 (99%)	5 (1%)	4 (80%)	4 (100%)	4 (100%)	444 (99%)	209 (47%)
Nagaland	405.0	323 (80%)	10 (3%)	6 (60%)	1 (17%)	0 (0%)	404 (100%)	288 (71%)
Odisha	9229.0	8898 (96%)	45 (1%)	28 (62%)	20 (71%)	19 (95%)	9209 (100%)	5948 (65%)
Puducherry	73.0	73 (100%)	2 (3%)	2 (100%)	0 (0%)	NA	73 (100%)	70 (96%)
Punjab	7682.0	6935 (90%)	80 (1%)	60 (75%)	38 (63%)	12 (32%)	7644 (100%)	3978 (52%)
Rajasthan	21578.0	20203 (94%)	388 (2%)	193 (50%)	71 (37%)	43 (61%)	21507 (100%)	9469 (44%)
Sikkim	67.0	46 (69%)	2 (4%)	0 (0%)	NA	NA	67 (100%)	47 (70%)
Tamil Nadu	6190.0	5883 (95%)	198 (3%)	169 (85%)	41 (24%)	34 (83%)	6149 (99%)	4222 (69%)
Telangana	4600.0	4235 (92%)	286 (7%)	252 (88%)	19 (8%)	9 (47%)	4581 (100%)	2582 (56%)
Tripura	276.0	263 (95%)	5 (2%)	5 (100%)	1 (20%)	0 (0%)	275 (100%)	178 (65%)
Uttar Pradesh	81463.0	78768 (97%)	447 (1%)	273 (61%)	218 (80%)	105 (48%)	81245 (100%)	69460 (85%)
Uttarakhand	3799.0	3436 (90%)	49 (1%)	13 (27%)	10 (77%)	9 (90%)	3789 (100%)	1163 (31%)
West Bengal	18775.0	17622 (94%)	179 (1%)	106 (59%)	22 (21%)	15 (68%)	18753 (100%)	11232 (60%)
INDIA	**311961.0**	**285215 (91%)**	**4205 (1%)**	**2764 (66%)**	**1095 (40%)**	**737 (67%)**	**310866 (100%)**	**186997 (60%)**

7.3. TB preventive treatment (TPT) in eligible children ≥5 years, adolescent and adult household contact (HHC) of PBCT – 2023

States/UTs	No. of HHC ≥5years of PBCT	Screening, diagnosis and tratment of TB					Ruling out active TB, TBI testing and TPT initiation				
		No. of HHC ≥5 years of PBCT screened for TB (%)	No. of HHC ≥5 years of PBCT symptomatic for TB (%)	No. of HHC ≥5 years of PBCT evaluated for TB (%)	No. of HHC ≥5 years of PBCT diagnosed with TB (%)	No. of HHC ≥5 years of PBCT put on TB treatment (%)	No. of HHC ≥5 years of PBCT and TB not diagnosed (B-F)	No. of HHC ≥5 years of PBCT tested for TB infection	No. of HHC ≥5 years of PBCT postives for TB infection	No. of HHC ≥5 years of PBCT eligible for TPT (TBI positives + testing not done among TB not diagnosed {J+[H-I]})	No. of HHC ≥5 years of PBCT initiated TPT (%)
A	B	C	D	E	F	G	H	I	J	K	L
Andaman and Nicobar Islands	861	837 (97%)	2 (0%)	0 (0%)	NA	NA	861 (100%)	11 (1.3%)	11 (100%)	861 (100%)	102 (12%)
Andhra Pradesh	100395	97960 (98%)	559 (1%)	381 (68%)	143 (38%)	66 (46%)	100252 (100%)	31 (0%)	0 (0%)	100221 (100%)	23264 (23%)
Arunachal Pradesh	2560	2203 (86%)	94 (4%)	92 (98%)	83 (90%)	82 (99%)	2477 (97%)	11 (0.4%)	10 (90.9%)	2476 (97%)	35 (1%)
Assam	72176	63972 (89%)	1366 (2%)	1007 (74%)	384 (38%)	201 (52%)	71792 (99%)	14976 (20.9%)	3623 (24.2%)	60439 (84%)	22618 (37%)
Bihar	163668	132162 (81%)	1273 (1%)	541 (42%)	443 (82%)	369 (83%)	163225 (100%)	3 (0%)	1 (33.3%)	163223 (100%)	19549 (12%)
Chandigarh	4295	3835 (89%)	90 (2%)	85 (94%)	10 (12%)	10 (100%)	4285 (100%)	0 (0%)	NA	4285 (100%)	2185 (51%)
Chhattisgarh	51884	49345 (95%)	1580 (3%)	1133 (72%)	615 (54%)	167 (27%)	51269 (99%)	2 (0%)	0 (0%)	51267 (99%)	26581 (52%)
Dadra and Nagar Haveli and Daman and Diu	1327	1326 (100%)	168 (13%)	168 (100%)	2 (1%)	2 (100%)	1325 (100%)	1 (0.1%)	1 (100%)	1325 (100%)	67 (5%)

States/UTs	No. of HHC ≥5years of PBCT	Screening, diagnosis and tratment of TB					Ruling out active TB, TBI testing and TPT initiation				
		No. of HHC ≥5 years of PBCT screened for TB (%)	No. of HHC ≥5 years of PBCT symptomatic for TB (%)	No. of HHC ≥5 years of PBCT evaluated for TB (%)	No. of HHC ≥5 years of PBCT diagnosed with TB (%)	No. of HHC ≥5 years of PBCT put on TB treatment (%)	No. of HHC ≥5 years of PBCT and TB not diagnosed (B-F)	No. of HHC ≥5 years of PBCT tested for TB infection	No. of HHC ≥5 years of PBCT postives for TB infection	No. of HHC ≥5 years of PBCT eligible for TPT (TBI positives + testing not done among TB not diagnosed {J+[H-I]})	No. of HHC ≥5 years of PBCT initiated TPT (%)
Delhi	78131	73089 (94%)	2177 (3%)	1763 (81%)	358 (20%)	260 (73%)	77773 (100%)	160 (0.2%)	51 (31.9%)	77664 (99%)	20507 (26%)
Goa	2508	2447 (98%)	13 (1%)	12 (92%)	5 (42%)	5 (100%)	2503 (100%)	574 (22.9%)	251 (43.7%)	2180 (87%)	35 (2%)
Gujarat	182789	175052 (96%)	5193 (3%)	4414 (85%)	542 (12%)	382 (70%)	182247 (100%)	4378 (2.4%)	2890 (66%)	180759 (99%)	63948 (35%)
Haryana	143792	139838 (97%)	812 (1%)	444 (55%)	338 (76%)	249 (74%)	143454 (100%)	6570 (4.6%)	5523 (84.1%)	142407 (99%)	3242 (2%)
Himachal Pradesh	28139	27919 (99%)	255 (1%)	206 (81%)	58 (28%)	51 (88%)	28081 (100%)	17290 (61.6%)	3011 (17.4%)	13802 (49%)	2395 (17%)
Jammu and Kashmir	20915	20138 (96%)	839 (4%)	789 (94%)	49 (6%)	39 (80%)	20866 (100%)	926 (4.4%)	506 (54.6%)	20446 (98%)	2929 (14%)
Jharkhand	91167	77050 (85%)	1847 (2%)	1143 (62%)	796 (70%)	691 (87%)	90371 (99%)	3 (0%)	0 (0%)	90368 (99%)	40124 (44%)
Karnataka	123848	119180 (96%)	2260 (2%)	1922 (85%)	274 (14%)	204 (74%)	123574 (100%)	16654 (13.5%)	7020 (42.2%)	113940 (92%)	17385 (15%)
Kerala	36386	31043 (85%)	592 (2%)	393 (66%)	104 (26%)	81 (78%)	36282 (100%)	8871 (24.5%)	2946 (33.2%)	30357 (83%)	670 (2%)
Ladakh	605	575 (95%)	7 (1%)	5 (71%)	5 (100%)	5 (100%)	600 (99%)	147 (24.5%)	116 (78.9%)	569 (94%)	92 (16%)

States/UTs	No. of HHC ≥5years of PBCT	Screening, diagnosis and tratment of TB					Ruling out active TB, TBI testing and TPT initiation				
		No. of HHC ≥5 years of PBCT screened for TB (%)	No. of HHC ≥5 years of PBCT symptomatic for TB (%)	No. of HHC ≥5 years of PBCT evaluated for TB (%)	No. of HHC ≥5 years of PBCT diagnosed with TB (%)	No. of HHC ≥5 years of PBCT put on TB treatment (%)	No. of HHC ≥5 years of PBCT and TB not diagnosed (B-F)	No. of HHC ≥5 years of PBCT tested for TB infection	No. of HHC ≥5 years of PBCT postives for TB infection	No. of HHC ≥5 years of PBCT eligible for TPT (TBI positives + testing not done among TB not diagnosed {J+[H-I]})	No. of HHC ≥5 years of PBCT initiated TPT (%)
Lakshadweep	17	17 (100%)	0 (0%)	NA	NA	NA	17 (100%)	0 (0%)	NA	17 (100%)	17 (100%)
Madhya Pradesh	239035	218402 (91%)	2954 (1%)	2074 (70%)	892 (43%)	748 (84%)	238143 (100%)	7806 (3.3%)	2986 (38.3%)	233323 (98%)	74975 (32%)
Maharashtra	207661	196865 (95%)	4331 (2%)	3564 (82%)	405 (11%)	325 (80%)	207256 (100%)	8723 (4.2%)	4203 (48.2%)	202736 (98%)	86838 (43%)
Manipur	3864	3346 (87%)	33 (1%)	24 (73%)	19 (79%)	11 (58%)	3845 (100%)	0 (0%)	NA	3845 (100%)	875 (23%)
Meghalaya	6904	6604 (96%)	49 (1%)	40 (82%)	15 (38%)	15 (100%)	6889 (100%)	0 (0%)	NA	6889 (100%)	3536 (51%)
Mizoram	2818	2776 (99%)	13 (0%)	13 (100%)	8 (62%)	8 (100%)	2810 (100%)	4 (0.1%)	1 (25%)	2807 (100%)	909 (32%)
Nagaland	5645	4567 (81%)	24 (1%)	18 (75%)	12 (67%)	10 (83%)	5633 (100%)	0 (0%)	NA	5633 (100%)	2186 (39%)
Odisha	105691	103722 (98%)	1095 (1%)	825 (75%)	536 (65%)	509 (95%)	105155 (99%)	82 (0.1%)	5 (6.1%)	105078 (99%)	47596 (45%)
Puducherry	1990	1984 (100%)	228 (11%)	218 (96%)	8 (4%)	4 (50%)	1982 (100%)	389 (19.6%)	64 (16.5%)	1657 (83%)	357 (22%)
Punjab	87856	79672 (91%)	990 (1%)	775 (78%)	457 (59%)	444 (97%)	87399 (99%)	25 (0%)	0 (0%)	87374 (99%)	25403 (29%)

States/UTs	No. of HHC ≥5years of PBCT	Screening, diagnosis and tratment of TB					Ruling out active TB, TBI testing and TPT initiation				
		No. of HHC ≥5 years of PBCT screened for TB (%)	No. of HHC ≥5 years of PBCT symptomatic for TB (%)	No. of HHC ≥5 years of PBCT evaluated for TB (%)	No. of HHC ≥5 years of PBCT diagnosed with TB (%)	No. of HHC ≥5 years of PBCT put on TB treatment (%)	No. of HHC ≥5 years of PBCT and TB not diagnosed (B-F)	No. of HHC ≥5 years of PBCT tested for TB infection	No. of HHC ≥5 years of PBCT postives for TB infection	No. of HHC ≥5 years of PBCT eligible for TPT (TBI positives + testing not done among TB not diagnosed {J+[H-I]})	No. of HHC ≥5 years of PBCT initiated TPT (%)
Rajasthan	229601	222214 (97%)	3744 (2%)	3065 (82%)	477 (16%)	261 (55%)	229124 (100%)	40 (0%)	23 (57.5%)	229107 (100%)	85004 (37%)
Sikkim	1247	1181 (95%)	32 (3%)	13 (41%)	4 (31%)	4 (100%)	1243 (100%)	118 (9.5%)	76 (64.4%)	1201 (96%)	50 (4%)
Tamil Nadu	117501	114054 (97%)	2518 (2%)	2108 (84%)	212 (10%)	182 (86%)	117289 (100%)	4398 (3.7%)	1373 (31.2%)	114264 (97%)	31618 (28%)
Telangana	78582	75506 (96%)	4703 (6%)	4275 (91%)	413 (10%)	277 (67%)	78169 (99%)	2556 (3.3%)	1349 (52.8%)	76962 (98%)	20357 (26%)
Tripura	5453	5308 (97%)	271 (5%)	245 (90%)	12 (5%)	5 (42%)	5441 (100%)	3 (0.1%)	3 (100%)	5441 (100%)	821 (15%)
Uttar Pradesh	955376	918057 (96%)	6017 (1%)	4169 (69%)	3150 (76%)	2170 (69%)	952226 (100%)	4931 (0.5%)	3704 (75.1%)	950999 (100%)	115285 (12%)
Uttarakhand	35105	32158 (92%)	259 (1%)	140 (54%)	119 (85%)	111 (93%)	34986 (100%)	968 (2.8%)	256 (26.4%)	34274 (98%)	1557 (5%)
West Bengal	174916	166563 (95%)	4265 (3%)	3533 (83%)	467 (13%)	326 (70%)	174449 (100%)	6 (0%)	0 (0%)	174443 (100%)	97362 (56%)
INDIA	**3364708**	**3170967 (94%)**	**50653 (2%)**	**39597 (78%)**	**11415 (29%)**	**8274 (72%)**	**3353293 (100%)**	**100658 (3%)**	**40003 (39.7%)**	**3292638 (98%)**	**840474 (26%)**

Note: Data source of TPT care cascade is contact tracing aggregate report while TBI testing (column I) and Positives (column J) is from Ni-kshay TPT dashboard

7.4. TB preventive treatment (TPT) among eligible HHC children <5 year plus eligible HHC ≥5 year

States/UTs	No. of HHC of PBCT	Screening, diagnosis and treatment of TB					Ruling out active TB, TBI testing and TPT initiation			
		No. of HHC of PBCT screened for TB (%)	No. of HHC of PBCT symptomatic for TB (%)	No. of HHC of PBCT evaluated for TB (%)	No. of HHC of PBCT diagnosed with TB (%)	No. of HHC of PBCT put on TB treatment (%)	No. of HHC ≥5 years of PBCT tested for TB infection	No. of HHC ≥5 years of PBCT positives for TB infection	No. of HHC of PBCT eligible* for TPT	No. of HHC of PBCT provided TPT (%)
Andaman and Nicobar Islands	924	893 (89%)	6 (7%)	0 (0%)	NA	NA	11 (1.3%)	11 (100%)	924 (100%)	123 (13%)
Andhra Pradesh	105002	102261 (93%)	579 (0%)	395 (70%)	153 (71%)	75 (90%)	31 (0%)	0 (0%)	104818 (100%)	25130 (24%)
Arunachal Pradesh	3217	2775 (87%)	147 (9%)	145 (100%)	136 (100%)	135 (100%)	11 (0.4%)	10 (90.9%)	3080 (96%)	104 (3%)
Assam	80290	69817 (72%)	1467 (2%)	1073 (65%)	397 (20%)	210 (69%)	14976 (20.9%)	3623 (24.2%)	68540 (85%)	26246 (38%)
Bihar	189911	153076 (80%)	1641 (2%)	715 (47%)	586 (82%)	481 (78%)	3 (0%)	1 (33.3%)	189323 (100%)	25164 (13%)
Chandigarh	4741	4212 (85%)	96 (2%)	87 (33%)	10 (0%)	NA	0 (0%)	NA	4731 (100%)	2479 (52%)
Chhattisgarh	57713	54816 (94%)	1655 (1%)	1182 (65%)	654 (80%)	177 (26%)	2 (0%)	0 (0%)	57057 (99%)	30011 (53%)
Dadra and Nagar Haveli and Daman and Diu	1396	1395 (100%)	168 (0%)	NA	NA	NA	1 (0.1%)	1 (100%)	1394 (100%)	136 (10%)
Delhi	85268	79492 (90%)	2481 (5%)	1964 (66%)	409 (25%)	291 (61%)	160 (0.2%)	51 (31.9%)	84750 (99%)	24316 (29%)
Goa	2685	2618 (97%)	14 (1%)	13 (100%)	6 (100%)	6 (100%)	574 (22.9%)	251 (43.7%)	2356 (88%)	93 (4%)
Gujarat	202636	192777 (89%)	5554 (2%)	4685 (75%)	605 (23%)	421 (62%)	4378 (2.4%)	2890 (66%)	200543 (99%)	72392 (36%)
Haryana	156047	151975 (99%)	890 (1%)	470 (33%)	349 (42%)	256 (64%)	6570 (4.6%)	5523 (84.1%)	154651 (99%)	14810 (10%)

States/UTs	No. of HHC of PBCT	Screening, diagnosis and treatment of TB					Ruling out active TB, TBI testing and TPT initiation			
		No. of HHC of PBCT screened for TB (%)	No. of HHC of PBCT symptomatic for TB (%)	No. of HHC of PBCT evaluated for TB (%)	No. of HHC of PBCT diagnosed with TB (%)	No. of HHC of PBCT put on TB treatment (%)	No. of HHC ≥5 years of PBCT tested for TB infection	No. of HHC ≥5 years of PBCT positives for TB infection	No. of HHC of PBCT eligible* for TPT	No. of HHC of PBCT provided TPT (%)
Himachal Pradesh	30335	30104 (99%)	277 (1%)	226 (91%)	65 (35%)	59 (114%)	17290 (61.6%)	3011 (17.4%)	15991 (53%)	4486 (28%)
Jammu and Kashmir	23117	22199 (94%)	861 (1%)	807 (82%)	58 (50%)	48 (100%)	926 (4.4%)	506 (54.6%)	22639 (98%)	4793 (21%)
Jharkhand	103740	87274 (81%)	1991 (1%)	1224 (56%)	828 (40%)	714 (72%)	3 (0%)	0 (0%)	102909 (99%)	46572 (45%)
Karnataka	131667	126559 (94%)	2474 (3%)	2099 (83%)	319 (25%)	246 (93%)	16654 (13.5%)	7020 (42.2%)	121714 (92%)	22971 (19%)
Kerala	39258	33232 (76%)	664 (3%)	441 (67%)	124 (42%)	93 (60%)	8871 (24.5%)	2946 (33.2%)	33209 (85%)	1435 (4%)
Ladakh	669	638 (98%)	9 (3%)	5 (0%)	NA	NA	147 (24.5%)	116 (78.9%)	633 (95%)	140 (22%)
Lakshadweep	22	22 (100%)	0 (0%)	NA	NA	NA	0 (0%)	NA	22 (100%)	22 (100%)
Madhya Pradesh	266822	243039 (89%)	3262 (1%)	2236 (53%)	972 (49%)	809 (76%)	7806 (3.3%)	2986 (38.3%)	261030 (98%)	86615 (33%)
Maharashtra	222479	210655 (93%)	4678 (3%)	3850 (82%)	477 (25%)	384 (82%)	8723 (4.2%)	4203 (48.2%)	217482 (98%)	96791 (45%)
Manipur	4351	3807 (95%)	36 (1%)	26 (67%)	20 (50%)	13 (200%)	0 (0%)	NA	4331 (100%)	1032 (24%)
Meghalaya	8013	7656 (95%)	53 (0%)	42 (50%)	15 (0%)	NA	0 (0%)	NA	7998 (100%)	4259 (53%)
Mizoram	3266	3219 (99%)	18 (1%)	17 (80%)	12 (100%)	12 (100%)	4 (0.1%)	1 (25%)	3251 (100%)	1118 (34%)
Nagaland	6050	4890 (80%)	34 (3%)	24 (60%)	13 (17%)	10 (0%)	0 (0%)	NA	6037 (100%)	2474 (41%)

States/UTs	No. of HHC of PBCT	Screening, diagnosis and treatment of TB					Ruling out active TB, TBI testing and TPT initiation			
		No. of HHC of PBCT screened for TB (%)	No. of HHC of PBCT symptomatic for TB (%)	No. of HHC of PBCT evaluated for TB (%)	No. of HHC of PBCT diagnosed with TB (%)	No. of HHC of PBCT put on TB treatment (%)	No. of HHC ≥5 years of PBCT tested for TB infection	No. of HHC ≥5 years of PBCT positives for TB infection	No. of HHC of PBCT eligible* for TPT	No. of HHC of PBCT provided TPT (%)
Odisha	114920	112620 (96%)	1140 (1%)	853 (62%)	556 (71%)	528 (95%)	82 (0.1%)	5 (6.1%)	114287 (99%)	53544 (47%)
Puducherry	2063	2057 (100%)	230 (3%)	220 (100%)	8 (0%)	NA	389 (19.6%)	64 (16.5%)	1730 (84%)	427 (25%)
Punjab	95538	86607 (90%)	1070 (1%)	835 (75%)	495 (63%)	456 (32%)	25 (0%)	0 (0%)	95018 (99%)	29381 (31%)
Rajasthan	251179	242417 (94%)	4132 (2%)	3258 (50%)	548 (37%)	304 (61%)	40 (0%)	23 (57.5%)	250614 (100%)	94473 (38%)
Sikkim	1314	1227 (69%)	34 (4%)	13 (0%)	NA	NA	118 (9.5%)	76 (64.4%)	1268 (96%)	97 (8%)
Tamil Nadu	123691	119937 (95%)	2716 (3%)	2277 (85%)	253 (24%)	216 (83%)	4398 (3.7%)	1373 (31.2%)	120413 (97%)	35840 (30%)
Telangana	83182	79741 (92%)	4989 (7%)	4527 (88%)	432 (8%)	286 (47%)	2556 (3.3%)	1349 (52.8%)	81543 (98%)	22939 (28%)
Tripura	5729	5571 (95%)	276 (2%)	250 (100%)	13 (20%)	5 (0%)	3 (0.1%)	3 (100%)	5716 (100%)	999 (17%)
Uttar Pradesh	1036839	996825 (97%)	6464 (1%)	4442 (61%)	3368 (80%)	2275 (48%)	4931 (0.5%)	3704 (75.1%)	1032244 (100%)	184745 (18%)
Uttarakhand	38904	35594 (90%)	308 (1%)	153 (27%)	129 (77%)	120 (90%)	968 (2.8%)	256 (26.4%)	38063 (98%)	2720 (7%)
West Bengal	193691	184185 (94%)	4444 (1%)	3639 (59%)	489 (21%)	341 (68%)	6 (0%)	0 (0%)	193196 (100%)	108594 (56%)
INDIA	**3676669**	**3456182 (91%)**	**54858 (1%)**	**42361 (66%)**	**12510 (40%)**	**9011 (67%)**	**100658 (3%)**	**40003 (39.7%)**	**3603504 (98%)**	**1027471 (29%)**

* total eligible for TPT = children <5 years HHC not diagnosed TB plus HHC >5 years positives for IGRA or TBI testing not done

8.1. State level – programme staffing status in 2024

States/UTs	State TB officer		Epidemiologist (APO)		MO – State TB Cell		TB-HIV coordinator
	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned
Andaman and Nicobar Islands	1	1	0	0	1	0	1
Andhra Pradesh	1	1	1	1	1	1	1
Arunachal Pradesh	1	1	1	1	1	0	0
Assam	1	1	0	0	1	0	1
Bihar	1	1	1	1	1	0	1
Chandigarh	1	1	0	0	1	1	1
Chhattisgarh	1	1	1	1	1	0	0
Dadra and Nagar Haveli and Daman and Diu	1	1	2	0	1	1	0
Delhi	1	1	1	1	1	1	1
Goa	1	1	1	1	1	1	1
Gujarat	1	1	1	1	1	1	1
Haryana	1	1	1	1	1	1	1
Himachal Pradesh	1	1	1	1	0	0	0
Jammu	0	1	1	1	1	0	1
Kashmir	0	1	1	1	1	1	1
Ladakh	1	1	0	0	0	0	0
Jharkhand	1	1	1	1	1	0	1
Karnataka	1	1	1	0	1	0	1
Kerala	1	1	1	1	1	1	1
Lakshdweep	1	1	0	0	0	0	0
Maharashtra	1	1	2	2	1	0	1
Manipur	1	1	1	0	1	1	1
Mizoram	1	1	0	0	1	1	1
Meghalaya	1	1	1	1	1	0	1
Madhya Pradesh	1	1	1	0	1	0	1
Nagaland	1	1	1	1	1	1	0
Odisha	1	1	1	1	1	1	1
Puducherry	1	1	0	0	1	1	1
Punjab	1	1	1	0	1	0	1
Rajasthan	1	1	1	0	1	0	1
Sikkim	1	1	1	1	1	0	1
Telangana	1	1	1	0	0	0	1
Tamil Nadu	1	1	0	0	1	1	1
Tripura	1	1	1	1	1	1	0
Uttar Pradesh	1	1	2	1	2	0	2
Uttarakhand	1	1	1	1	1	1	0
West Bengal	1	1	2	1	1	0	2

States/UTs	TB-HIV Coordinator	PPM Coordinator		DR-TB Coordinator		State IEC Officer	
	In Place	Sanctioned	In Place	Sanctioned	In Place	Sanctioned	In Place
Andaman and Nicobar Islands	0	0	0	0	0	1	1
Andhra Pradesh	1	1	1	1	1	1	1
Arunachal Pradesh	0	0	0	0	0	1	1
Assam	0	0	0	0	0	1	1
Bihar	0	1	0	1	1	1	1
Chandigarh	1	1	0	0	0	1	1
Chhattisgarh	0	1	1	0	0	1	1
Dadra and Nagar Haveli and Daman and Diu	0	0	0	0	0	1	1
Delhi	1	1	0	1	1	1	1
Goa	0	0	0	0	0	1	1
Gujarat	1	1	0	1	1	1	1
Haryana	1	1	1	1	1	1	1
Himachal Pradesh	0	0	0	0	0	1	1
Jammu	1	1	1	1	0	1	1
Kashmir	1	1	0	0	0	1	1
Ladakh	0	0	0	0	0	0	0
Jharkhand	0	1	1	1	0	1	1
Karnataka	0	1	0	1	0	1	0
Kerala	0	1	1	1	1	1	1
Lakshdweep	0	0	0	0	0	1	1
Maharashtra	0	1	0	1	0	1	1
Manipur	0	1	1	1	0	1	1
Mizoram	1	1	1	0	0	1	1
Meghalaya	0	1	1	1	0	1	0
Madhya Pradesh	0	1	1	1	0	0	0
Nagaland	0	1	1	0	0	1	1
Odisha	1	1	1	1	1	1	0
Puducherry	1	0	0	0	0	1	1
Punjab	1	0	0	0	0	0	0
Rajasthan	0	1	1	1	0	1	1
Sikkim	0	1	1	1	0	1	1
Telangana	1	1	0	1	1	1	1
Tamil Nadu	1	1	1	1	0	1	1
Tripura	0	1	0	0	0	1	1
Uttar Pradesh	1	2	1	2	0	2	2
Uttarakhand	0	0	0	1	0	1	1
West Bengal	0	2	2	2	0	2	1

States/UTs	State accountant		Technical officer-proc. and logistics		Data analyst		DEO-STC
	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned
Andaman and Nicobar Islands	1	1	0	0	1	1	1
Andhra Pradesh	1	1	1	1	1	1	1
Arunachal Pradesh	1	1	1	0	0	0	1
Assam	1	1	1	0	1	1	1
Bihar	1	0	1	0	0	0	1
Chandigarh	1	1	0	0	0	0	1
Chhattisgarh	1	1	1	0	0	0	1
Dadra and Nagar Haveli and Daman and Diu	2	1	0	0	0	0	2
Delhi	1	1	1	0	1	1	1
Goa	1	1	1	1	0	0	1
Gujarat	1	1	1	1	0	0	1
Haryana	1	1	1	1	1	1	1
Himachal Pradesh	1	1	1	0	0	0	1
Jammu	1	1	1	0	0	0	1
Kashmir	1	1	1	1	0	0	1
Ladakh	1	1	0	0	0	0	0
Jharkhand	2	1	1	1	1	1	1
Karnataka	2	2	1	1	1	0	2
Kerala	2	2	0	0	0	0	1
Lakshdweep	0	0	0	0	0	0	1
Maharashtra	3	3	1	0	2	2	2
Manipur	1	1	0	0	0	0	1
Mizoram	1	1	0	0	0	0	1
Meghalaya	1	0	1	0	1	1	1
Madhya Pradesh	1	1	1	0	1	0	1
Nagaland	1	1	1	1	0	0	1
Odisha	1	1	0	0	0	0	1
Puducherry	1	1	0	0	0	0	1
Punjab	1	1	0	0	0	0	1
Rajasthan	1	1	1	1	1	1	2
Sikkim	1	1	1	0	1	1	1
Telangana	1	1	0	0	1	0	2
Tamil Nadu	2	1	1	1	1	0	2
Tripura	1	1	1	0	1	1	1
Uttar Pradesh	2	2	2	2	2	1	2
Uttarakhand	1	1	0	0	0	0	1
West Bengal	2	2	1	0	2	2	2

States/UTs	DEO-STC	Pharmacist - SDS		Secretarial assistant		Store Assistant - SDS	
	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place
Andaman and Nicobar Islands	1	1	1	1	1	1	1
Andhra Pradesh	1	1	0	1	1	1	1
Arunachal Pradesh	1	1	0	1	1	1	1
Assam	1	1	1	1	1	1	1
Bihar	1	2	0	1	0	2	1
Chandigarh	1	1	1	1	1	1	1
Chhattisgarh	1	1	0	1	0	1	1
Dadra and Nagar Haveli and Daman and Diu	1	2	2	1	1	1	0
Delhi	1	2	0	1	1	2	0
Goa	1	1	1	1	1	1	1
Gujarat	1	1	0	0	0	1	0
Haryana	1	1	1	1	1	1	1
Himachal Pradesh	1	1	1	1	1	1	1
Jammu	1	1	1	1	1	1	1
Kashmir	1	1	1	1	1	1	1
Ladakh	0	1	1	0	0	0	0
Jharkhand	1	2	1	1	0	2	1
Karnataka	2	2	2	1	1	2	2
Kerala	1	1	1	1	1	1	1
Lakshdweep	1	0	0	0	0	0	0
Maharashtra	2	5	4	2	2	8	8
Manipur	1	1	1	1	1	1	0
Mizoram	1	1	1	1	1	1	0
Meghalaya	1	1	1	1	0	1	0
Madhya Pradesh	1	1	1	1	1	1	1
Nagaland	1	1	1	1	1	1	1
Odisha	1	1	0	1	0	1	0
Puducherry	1	1	1	1	1	1	1
Punjab	1	0	0	0	0	0	0
Rajasthan	1	3	2	1	1	4	0
Sikkim	1	1	1	1	1	1	1
Telangana	2	1	1	1	0	2	1
Tamil Nadu	1	4	2	1	0	3	2
Tripura	0	1	1	1	1	1	0
Uttar Pradesh	2	4	3	1	1	8	5
Uttarakhand	1	2	2	1	0	2	2
West Bengal	1	2	1	1	1	4	2

8.2. STDC – programme staffing status in 2024

States/UTs	Director (STDC)		MO - STDC		Epidemiologist		NIKSHAY Operator		Secretarial assistant-STDC	
	Sanctioned	In Place	Sanctioned	In place	sanctioned	In place	Sanctioned	In place	Sanctioned	In place
Andaman and Nicobar Islands	0	0	0	0	0	0	0	0	0	0
Andhra Pradesh	0	0	0	0	0	0	1	1	0	0
Arunachal Pradesh	0	0	0	0	0	0	0	0	0	0
Assam	0	0	0	0	0	0	0	0	0	0
Bihar	2	2	14	10	1	0	0	0	0	0
Chandigarh	0	0	0	0	0	0	0	0	0	0
Chhattisgarh	0	0	2	0	1	0	1	0	0	0
Dadra and Nagar Haveli and Daman and Diu	0	0	0	0	0	0	0	0	0	0
Delhi	1	1	1	1	1	1	0	0	0	0
Goa	0	0	0	0	0	0	0	0	0	0
Gujarat	2	2	6	6	0	0	1	1	1	1
Haryana	0	0	0	0	0	0	0	0	0	0
Himachal Pradesh	1	1	1	1	1	1	0	0	1	1
Jammu	0	0	0	0	0	0	0	0	0	0
Kashmir	1	1	5	5	1	0	0	0	0	0
Ladakh	0	0	0	0	0	0	0	0	0	0
Jharkhand	1	1	1	1	1	0	1	0	0	0
Karnataka	1	1	0	0	0	0	2	2	0	0
Kerala	1	0	2	2	0	0	0	0	0	0
Lakshdweep	0	0	0	0	0	0	0	0	0	0
Maharashtra	3	3	2	1	0	0	0	0	0	0

States/UTs	Director (STDC)		MO - STDC		Epidemiologist		NIKSHAY Operator		Secretarial assistant-STDC	
	Sanctioned	In Place	Sanctioned	In place	sanctioned	In place	Sanctioned	In place	Sanctioned	In place
Manipur	1	0	0	0	0	0	1	0	0	0
Mizoram	0	0	0	0	0	0	0	0	0	0
Meghalaya	0	0	0	0	0	0	0	0	0	0
Madhya Pradesh	1	1	4	3	1	0	1	1	1	0
Nagaland	0	0	0	0	0	0	0	0	0	0
Odisha	1	1	3	2	0	0	0	0	0	0
Puducherry	1	1	0	0	0	0	1	1	0	0
Punjab	1	1	0	0	1	1	0	0	0	0
Rajasthan	1	1	6	6	1	0	1	0	1	0
Sikkim	1	1	1	0	1	0	1	0	1	0
Telangana	1	1	2	2	1	1	0	0	0	0
Tamil Nadu	1	1	0	0	1	0	0	0	0	0
Tripura	0	0	0	0	0	0	0	0	0	0
Uttar Pradesh	1	1	5	3	3	0	3	0	0	0
Uttarakhand	0	1	2	0	1	0	1	0	1	0
West Bengal	1	1	2	1	1	1	1	1	0	0

8.3. IRL – programme staffing status in 2024

States/UTs	Microbiologist (IRL)		Microbiologist (EQA)		Senior lab. tech.		Technical Officer		Lab Technicians		Data Entry Operator		Lab Attendant	
	Sanctioned	In place	Sanctioned	In place	Sanctioned	In Place	Sanctioned	In Place	Sanctioned	In Place	Sanctioned	In Place	Sanctioned	In Place
Andaman and Nicobar Islands	1	1	1	1	1	1	0	0	1	1	1	1	0	0
Andhra Pradesh	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Arunachal Pradesh	1	1	0	0	1	1	0	0	1	1	1	1	0	0
Assam	1	1	1	1	4	4	0	0	5	4	1	1	2	2
Bihar	1	1	1	0	6	4	0	0	0	0	1	1	0	0
Chandigarh	1	1	0	0	0	0	0	0	3	3	1	1	2	1
Chhattisgarh	1	1	1	1	7	6	0	0	6	0	1	1	1	1
Dadra and Nagar Haveli and Daman and Diu	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delhi	2	2	2	1	10	1	0	0	0	0	2	2	0	0
Goa	1	1	1	1	2	2	0	0	0	0	1	1	0	0
Gujarat	1	1	1	0	8	1	0	0	14	9	2	2	7	3
Haryana	1	1	1	1	5	5	0	0	1	1	1	1	2	1
Himachal Pradesh	1	1	1	1	3	3	1	1	5	2	1	1	1	1
Jammu	1	1	1	1	1	1	0	0	0	0	1	1	0	0
Kashmir	1	1	0	0	1	1	0	0	2	2	1	1	1	1
Ladakh	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jharkhand	1	1	1	1	5	1	1	0	2	2	1	0	1	0
Karnataka	2	1	1	1	7	3	0	0	8	0	1	1	7	6
Kerala	1	0	1	1	1	1	2	2	10	10	2	2	3	3
Lakshdweep	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maharashtra	4	3	4	3	22	19	6	3	248	190	4	2	7	4
Manipur	1	1	1	1	1	1	0	0	4	0	1	1	2	1
Mizoram	0	0	0	0	0	0	0	0	0	0	0	0	0	0

States/UTs	Microbiologist (IRL)		Microbiologist (EQA)		Senior lab. tech.		Technical Officer		Lab Technicians		Data Entry Operator		Lab Attendant	
	Sanctioned	In place	Sanctioned	In place	Sanctioned	In Place	Sanctioned	In Place	Sanctioned	In Place	Sanctioned	In Place	Sanctioned	In Place
Meghalaya	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Madhya Pradesh	1	1	1	0	1	1	1	1	5	4	1	1	1	1
Nagaland	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Odisha	3	3	1	1	2	1	0	0	6	4	2	1	4	2
Puducherry	1	1	1	1	1	1	0	0	0	0	1	0	0	0
Punjab	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Rajasthan	1	1	1	1	7	0	0	0	8	0	1	1	3	0
Sikkim	1	1	1	0	1	1	1	1	7	7	1	1	1	1
Telangana	1	1	1	1	1	0	1	0	3	3	2	2	1	0
Tamil Nadu	2	2	2	2	1	1	0	0	9	9	3	1	8	2
Tripura	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uttar Pradesh	8	6	5	1	29	15	0	0	5	2	6	5	6	6
Uttarakhand	1	1	1	1	1	1	0	0	7	7	1	1	3	3
West Bengal	3	3	1	0	6	4	1	0	1	1	1	1	1	0

8.4. CDST – programme staffing status in 2024

States/UTs	Microbiologist (C-DST)		Technical Officer		Senior lab. tech.		Data entry operator		Lab technicians		Lab attendant	
	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place
Andaman and Nicobar Islands	0	0	0	0	0	0	0	0	0	0	0	0
Andhra Pradesh	2	2	0	0	10	10	2	2	4	4	2	2
Arunachal Pradesh	1	1	0	0	1	1	0	0	0	0	4	4
Assam	1	1	0	0	2	2	0	0	0	0	0	0
Bihar	4	3	0	0	15	10	4	3	0	0	0	0
Chandigarh	0	0	0	0	0	0	0	0	0	0	0	0
Chhattisgarh	2	1	0	0	0	0	1	0	2	0	0	0
Dadra and Nagar Haveli and Daman and Diu	0	0	0	0	0	0	0	0	0	0	0	0
Delhi	1	1	0	0	5	0	6	4	0	0	0	0
Goa	0	0	0	0	0	0	0	0	0	0	0	0
Gujarat	2	0	0	0	3	0	2	1	18	17	8	8
Haryana	2	2	0	0	5	5	0	0	5	5	1	1
Himachal Pradesh	2	2	0	0	5	2	0	0	4	2	0	0
Jammu	0	0	0	0	0	0	0	0	0	0	1	1
Kashmir	0	0	0	0	0	0	0	0	0	0	0	0
Ladakh	0	0	0	0	0	0	0	0	0	0	0	0
Jharkhand	2	1	0	0	10	0	2	0	4	0	2	0
Karnataka	4	4	0	0	13	13	3	3	1	0	2	2
Kerala	1	1	0	0	0	0	1	1	2	2	2	2
Lakshdweep	0	0	0	0	0	0	0	0	0	0	0	0
Maharashtra	11	5	0	0	30	22	2	2	8	2	0	0
Manipur	0	0	0	0	0	0	0	0	0	0	0	0

States/UTs	Microbiologist (C-DST)		Technical Officer		Senior lab. tech.		Data entry operator		Lab technicians		Lab attendant	
	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place
Mizoram	1	1	0	0	2	2	1	1	2	2	0	0
Meghalaya	0	1	0	0	0	0	0	0	0	4	0	0
Madhya Pradesh	4	3	1	1	0	0	4	4	20	15	4	4
Nagaland	1	1	0	0	3	3	0	0	2	2	0	0
Odisha	1	1	0	0	1	0	0	0	2	0	2	0
Puducherry	1	1	0	0	0	0	0	0	4	4	1	1
Punjab	0	0	0	0	0	0	0	0	0	0	0	0
Rajasthan	4	2	0	0	26	1	4	2	11	9	5	4
Sikkim	1	1	0	0	0	0	0	0	0	0	0	0
Telangana	2	2	0	0	0	0	1	1	2	2	1	1
Tamil Nadu	3	3	0	0	27	20	5	3	5	5	2	0
Tripura	1	1	0	0	1	1	1	1	4	2	1	1
Uttar Pradesh	10	3	0	0	28	8	8	4	4	2	8	4
Uttarakhand	0	0	0	0	0	0	0	0	0	0	0	0
West Bengal	5	1	0	0	20	4	1	0	4	4	0	0

8.5. DRTB centre level – programme staffing status in 2024

States/UTs	Senior MO – DR-TB Centre		Counsellor – DR-TB Centre		SA – DR-TB Centre	
	Sanctioned	In place	Sanctioned	In Place	Sanctioned	In place
Andaman and Nicobar Islands	1	1	1	1	1	1
Andhra Pradesh	9	4	13	12	13	12
Arunachal Pradesh	2	2	0	0	2	2
Assam	5	2	5	2	5	3
Bihar	9	2	44	19	9	6
Chandigarh	1	0	1	1	1	1
Chhattisgarh	4	2	4	4	4	4
Dadra and Nagar Haveli and Daman and Diu	0	0	0	0	0	0
Delhi	4	2	14	0	4	4
Goa	1	0	1	1	1	1
Gujarat	5	5	5	3	5	5
Haryana	2	1	3	3	3	2
Himachal Pradesh	3	0	4	3	3	3
Jammu	1	0	1	0	1	1
Kashmir	1	1	0	0	1	1
Ladakh	1	0	0	0	1	1
Jharkhand	5	1	5	4	5	4
Karnataka	7	5	7	5	7	7
Kerala	2	1	0	0	2	2
Lakshdweep	0	0	0	0	0	0
Maharashtra	17	13	20	18	22	19
Manipur	1	0	1	1	2	0
Mizoram	1	1	1	1	1	1
Meghalaya	2	1	2	2	2	2
Madhya Pradesh	9	4	9	2	9	0
Nagaland	2	2	2	2	2	2
Odisha	4	2	4	3	4	2
Puducherry	1	0	0	0	1	1
Punjab	3	1	0	0	2	1
Rajasthan	7	2	7	6	6	6
Sikkim	1	0	1	0	1	1
Telangana	1	0	4	1	7	4
Tamil Nadu	8	5	13	8	8	6
Tripura	1	1	1	1	1	1
Uttar Pradesh	23	17	23	17	23	18
Uttarakhand	2	0	2	2	2	2
West Bengal	9	7	9	8	9	8

8.6. District level – programme staffing status in 2024

States/UTs	District TB Officers		District Programme Coordinator		MO – DTC
	Sanctioned	In Place	Sanctioned	In Place	Sanctioned
Andaman and Nicobar Islands	3	3	3	3	3
Andhra Pradesh	26	26	26	14	18
Arunachal Pradesh	15	15	0	0	15
Assam	27	27	0	0	10
Bihar	38	38	38	14	38
Chandigarh	1	1	0	0	1
Chhattisgarh	33	33	28	26	13
Dadra and Nagar Haveli and Daman and Diu	0	0	1	1	1
Delhi	25	25	25	0	11
Goa	2	2	2	2	0
Gujarat	41	41	40	34	42
Haryana	22	22	21	20	0
Himachal Pradesh	12	12	10	8	5
Jammu	6	3	6	4	9
Kashmir	6	6	6	6	1
Ladakh	2	2	2	2	2
Jharkhand	24	24	24	17	13
Karnataka	33	33	35	32	7
Kerala	14	5	0	0	17
Lakshdweep	0	0	0	0	0
Maharashtra	80	80	34	29	17
Manipur	16	8	0	0	1
Mizoram	8	8	0	0	1
Meghalaya	7	5	7	7	0
Madhya Pradesh	52	52	52	33	52
Nagaland	11	11	0	0	3
Odisha	31	31	31	27	9
Puducherry	1	1	0	0	0
Punjab	23	23	0	0	3
Rajasthan	34	34	34	24	36
Sikkim	5	5	5	5	0
Telangana	11	11	21	9	11
Tamil Nadu	31	31	36	33	22
Tripura	8	8	0	0	2
Uttar Pradesh	75	75	75	65	10
Uttarakhand	13	13	13	12	13
West Bengal	37	23	28	26	7

States/UTs	MO – DTC	MO-TC		Senior DR-TB – TB-HIV supervisor	
	In place	Sanctioned	In place	Sanctioned	In place
Andaman and Nicobar Islands	3	9	9	3	3
Andhra Pradesh	2	239	239	26	19
Arunachal Pradesh	15	6	6	15	15
Assam	0	150	140	34	26
Bihar	25	544	534	38	30
Chandigarh	0	48	48	1	1
Chhattisgarh	6	155	155	27	26
Dadra and Nagar Haveli and Daman and Diu	0	0	0	2	2
Delhi	8	38	20	27	23
Goa	0	12	12	2	2
Gujarat	37	259	250	39	36
Haryana	0	0	0	21	21
Himachal Pradesh	1	77	77	12	11
Jammu	5	41	40	6	6
Kashmir	1	57	57	6	6
Ladakh	2	0	0	2	2
Jharkhand	3	205	205	24	19
Karnataka	3	0	0	34	34
Kerala	16	73	68	14	12
Lakshdweep	0	0	0	0	0
Maharashtra	9	349	346	84	80
Manipur	0	13	4	9	9
Mizoram	0	1	1	8	8
Meghalaya	0	24	24	7	7
Madhya Pradesh	25	305	205	52	36
Nagaland	3	0	0	11	11
Odisha	4	308	305	31	30
Puducherry	0	4	4	1	1
Punjab	3	134	134	23	18
Rajasthan	32	283	265	34	28
Sikkim	0	5	2	5	3
Telangana	10	171	114	11	11
Tamil Nadu	16	461	461	38	35
Tripura	1	18	18	8	5
Uttar Pradesh	7	1160	1160	106	77
Uttarakhand	13	95	95	13	13
West Bengal	2	470	470	48	42

States/UTs	District PPM coordinator		Accountant		Senior Treatment Supervisor (STS)
	Sanctioned	In place	Sanctioned	In place	Sanctioned
Andaman and Nicobar Islands	0	0	3	3	9
Andhra Pradesh	26	18	26	15	239
Arunachal Pradesh	0	0	15	15	21
Assam	33	21	33	22	153
Bihar	0	0	0	0	534
Chandigarh	1	0	0	0	4
Chhattisgarh	28	25	27	24	162
Dadra and Nagar Haveli and Daman and Diu	0	0	0	0	8
Delhi	25	0	25	0	72
Goa	2	2	1	1	14
Gujarat	35	26	36	33	321
Haryana	21	20	21	21	119
Himachal Pradesh	0	0	13	13	102
Jammu	6	3	6	3	47
Kashmir	3	3	6	4	57
Ladakh	2	0	2	2	5
Jharkhand	24	16	24	18	207
Karnataka	34	33	31	30	284
Kerala	7	7	14	14	96
Lakshdweep	0	0	0	0	1
Maharashtra	79	74	79	77	617
Manipur	9	8	9	8	27
Mizoram	8	8	8	7	14
Meghalaya	4	2	7	7	24
Madhya Pradesh	0	0	0	0	414
Nagaland	2	2	4	4	22
Odisha	31	28	31	29	322
Puducherry	0	0	1	0	7
Punjab	0	0	23	0	135
Rajasthan	34	29	34	24	440
Sikkim	5	4	5	5	5
Telangana	21	14	11	3	171
Tamil Nadu	38	36	36	35	462
Tripura	0	0	8	6	20
Uttar Pradesh	106	73	76	66	1798
Uttarakhand	0	0	13	10	111
West Bengal	35	34	28	28	482

States/UTs	Senior treatment supervisor (STS)	Senior TB lab supervisor (STLS)		Lab technicians (LT) – RNTCP Contractual	
	In place	Sanctioned	In Place	Sanctioned	In place
Andaman and Nicobar Islands	9	5	4	7	3
Andhra Pradesh	228	134	118	210	186
Arunachal Pradesh	21	21	21	12	12
Assam	146	78	74	88	80
Bihar	413	223	145	436	198
Chandigarh	4	5	5	14	12
Chhattisgarh	147	69	62	145	97
Dadra and Nagar Haveli and Daman and Diu	6	3	3	5	3
Delhi	31	38	30	186	168
Goa	14	5	4	9	8
Gujarat	316	170	162	189	176
Haryana	114	52	45	254	194
Himachal Pradesh	74	57	48	144	98
Jammu	38	18	18	0	0
Kashmir	56	21	21	21	20
Ladakh	5	4	4	2	2
Jharkhand	167	101	76	138	140
Karnataka	273	149	146	228	218
Kerala	67	78	75	109	103
Lakshdweep	1	1	1	3	0
Maharashtra	568	318	298	344	302
Manipur	15	19	12	23	0
Mizoram	14	9	9	7	7
Meghalaya	24	15	15	20	19
Madhya Pradesh	262	357	227	624	278
Nagaland	22	13	13	13	13
Odisha	302	109	75	156	70
Puducherry	5	5	5	4	4
Punjab	94	60	45	148	87
Rajasthan	241	152	118	67	29
Sikkim	5	5	5	5	5
Telangana	158	96	86	164	150
Tamil Nadu	441	146	126	492	375
Tripura	17	13	10	9	9
Uttar Pradesh	1007	608	499	1288	885
Uttarakhand	103	31	27	74	63
West Bengal	459	204	175	393	370

States/UTs	MO – PHI		TB-HV	
	Sanctioned	In place	Sanctioned	In place
Andaman and Nicobar Islands	201	135	6	4
Andhra Pradesh	1600	1618	161	150
Arunachal Pradesh	830	800	11	11
Assam	4911	4002	44	32
Bihar	2686	852	110	31
Chandigarh	44	44	14	12
Chhattisgarh	2573	2447	50	38
Dadra and Nagar Haveli and Daman and Diu	0	0	3	3
Delhi	286	286	189	172
Goa	225	210	9	7
Gujarat	3730	3194	247	239
Haryana	0	0	99	93
Himachal Pradesh	590	583	21	12
Jammu	831	346	7	5
Kashmir	1103	660	18	18
Ladakh	0	0	2	2
Jharkhand	1920	1297	74	53
Karnataka	0	0	298	282
Kerala	0	0	86	80
Lakshdweep	0	0	0	0
Maharashtra	3470	2857	520	463
Manipur	0	0	8	8
Mizoram	230	141	4	4
Meghalaya	1381	1344	5	5
Madhya Pradesh	593	434	304	190
Nagaland	0	0	7	7
Odisha	1068	917	64	61
Puducherry	123	123	9	8
Punjab	3169	3135	108	62
Rajasthan	4908	3859	90	43
Sikkim	43	43	1	1
Telangana	891	623	100	97
Tamil Nadu	2977	1860	375	343
Tripura	0	0	3	3
Uttar Pradesh	5767	5427	635	432
Uttarakhand	450	450	26	19
West Bengal	3950	2815	251	229

8.7. Medical college – programme staffing status in 2024

States/UTs	TBHV – Medical College		LT – DMC (All sources)		MO – Medical College		LT – Medical College		Data Entry Operator	
	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place
Andaman and Nicobar Islands	1	1	28	20	0	0	1	1	0	0
Andhra Pradesh	23	22	610	580	22	1	28	23	13	13
Arunachal Pradesh	0	0	39	39	0	0	1	0	15	15
Assam	6	6	769	647	6	3	6	6	33	21
Bihar	11	5	858	585	11	3	11	2	38	35
Chandigarh	2	2	17	15	2	1	2	2	0	0
Chhattisgarh	9	7	794	794	9	3	9	5	27	24
Dadra and Nagar Haveli and Daman and Diu	0	0	19	19	0	0	0	0	1	1
Delhi	14	8	215	189	14	7	14	6	26	26
Goa	1	1	24	24	1	1	1	1	2	2
Gujarat	29	29	2183	2142	17	13	26	25	38	36
Haryana	9	9	0	0	9	6	13	9	21	21
Himachal Pradesh	7	6	245	221	561	432	193	107	12	12
Jammu	2	1	151	146	2	2	2	2	6	5
Kashmir	3	3	81	81	3	3	3	3	6	6
Ladakh	0	0	2	2	0	0	0	0	2	2
Jharkhand	3	3	415	365	3	3	3	3	24	21
Karnataka	0	0	0	0	37	31	0	0	33	33
Kerala	20	19	866	849	16	16	24	23	14	14
Lakshdweep	0	0	3	3	0	0	0	0	0	0

States/UTs	TBHV – Medical College		LT – DMC (All sources)		MO – Medical College		LT – Medical College		Data Entry Operator	
	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place	Sanctioned	In place
Maharashtra	39	36	1222	1079	41	29	58	49	67	67
Manipur	2	2	23	19	2	1	2	1	9	9
Mizoram	0	0	73	65	0	0	0	0	8	8
Meghalaya	1	1	157	157	1	1	1	1	7	7
Madhya Pradesh	14	11	625	472	14	6	14	11	52	48
Nagaland	0	0	0	0	0	0	0	0	11	11
Odisha	7	7	584	551	6	4	7	7	31	13
Puducherry	10	9	28	28	4	1	9	8	0	0
Punjab	10	4	268	208	10	5	10	4	23	19
Rajasthan	18	5	1415	1337	21	2	23	4	42	31
Sikkim	1	1	43	43	1	1	1	1	1	0
Telangana	8	4	550	345	8	4	16	11	11	8
Tamil Nadu	53	44	2557	2524	41	29	50	34	36	33
Tripura	2	2	59	59	1	1	2	2	8	7
Uttar Pradesh	36	27	2279	1981	36	20	40	28	113	86
Uttarakhand	5	5	154	143	1	1	10	9	13	13
West Bengal	27	17	945	916	15	9	21	17	38	32

9. Nikshay Poshan Yojana

States/UTs	Eligible beneficiaries	Bank details available of total eligible	Bank details validated of total eligible	Beneficiaries paid at least one benefit of total eligible beneficiaries
Andaman and Nicobar Islands	571	536	498	393
Andhra Pradesh	89107	82531	76277	62687
Arunachal Pradesh	2787	2588	2504	2229
Assam	51775	47529	45377	42452
Bihar	188579	151683	141081	113895
Chandigarh	4484	3780	3477	2941
Chhattisgarh	39166	36305	34625	30329
Dadra and Nagar Haveli and Daman and Diu	910	907	887	857
Delhi	85038	65679	61742	56336
Goa	2077	1497	1358	1213
Gujarat	142277	129863	123739	116952
Haryana	81957	75144	71989	67932
Himachal Pradesh	16740	16319	16103	15781
Jammu and Kashmir	11627	10909	10487	9526
Jharkhand	60495	53474	50704	46026
Karnataka	-	-	-	52925
Kerala	21726	19737	18610	16098
Ladakh	354	321	317	281
Lakshadweep	14	14	14	11
Madhya Pradesh	187211	172591	163709	156862
Maharashtra	225255	183764	173023	157337
Manipur	2474	2093	1988	1351
Meghalaya	4861	4211	2526	3766
Mizoram	2344	2211	2129	1911
Nagaland	4314	3525	3373	2949
Odisha	62392	60018	58277	54063
Puducherry	1651	1529	1464	1283
Punjab	55824	45493	41017	2796
Rajasthan	163204	144460	135572	119045
Sikkim	1396	1299	1238	1160
Tamil Nadu	101354	94449	90954	79947
Telangana	73975	62884	58802	41799
Tripura	3570	3437	3376	3216
Uttar Pradesh	643208	577025	540830	505055
Uttarakhand	26841	24818	23601	21311
West Bengal	102992	94606	90984	82795
INDIA	**2462550**	**2177229**	**2052652**	**1875510**

10. Pradhan Mantri TB Mukt Bharat Abhiyaan (PMTBMBA) Monitoring Report as on 1st March 2024 (as per the food baskets distributed)

S. no.	States/UTs	Nikshay Mitra registered	Nikshay Mitra agreed upon	Nikshay M itra pending to be agreed upon	TB patients on treatment	TB patients consented to receive community support	TB patients declined to receive community support	TB patients consent pending	TB patients supported (linked to) by Nikshay itra	TB patients likely to be supported by Nikshay Mitra	TB patients pending linkage	Total no. of food baskets distributed
1	Lakshadweep	24	24	0	7	7	0	0	7	7	0	178
2	Manipur	124	69	55	1292	967	2	323	967	967	0	860
3	Arunachal Pradesh	337	255	82	1378	884	16	478	884	884	0	1332
4	Ladakh	79	66	13	135	111	1	23	111	111	0	1421
5	Sikkim	180	145	35	664	644	1	19	644	644	0	2279
6	Mizoram	193	181	12	1389	1290	1	98	1290	1290	0	2357
7	Goa	539	514	25	1367	955	320	92	955	955	0	2597
8	Tripura	1823	1758	65	1591	1522	0	69	1522	1522	0	3394
9	DNH and DD	37	37	0	551	532	0	19	532	532	0	3589
10	Chandigarh	76	72	4	2087	1920	5	162	1920	1920	0	3594
11	A and NI	177	150	27	541	219	64	258	214	214	0	3688
12	Kerala	379	220	159	11368	4930	2758	3680	4231	4930	699	3702
13	Nagaland	364	328	36	2260	2127	2	131	2100	2100	0	4077
14	Meghalaya	166	99	67	2537	2059	2	476	1998	2059	61	4600
15	Puducherry	154	149	5	861	665	46	150	665	665	0	5340
16	Jammu and Kashmir	5607	4863	744	5710	4600	677	433	4600	4600	0	8328
17	Punjab	426	307	119	29530	22360	124	7046	22360	22360	0	13775
18	Himachal Pradesh	2804	2211	593	7446	6365	471	610	6365	6365	0	17491

S. no.	States/UTs	Nikshay Mitra registered	Nikshay Mitra agreed upon	Nikshay M itra pending to be agreed upon	TB patients on treatment	TB patients consented to receive community support	TB patients declined to receive community support	TB patients consent pending	TB patients supported (linked to) by Nikshay itra	TB patients likely to be supported by Nikshay Mitra	TB patients pending linkage	Total no. of food baskets distributed
19	Chhattisgarh	7653	6027	1626	21765	17306	1682	2777	17173	17173	0	20130
20	Telangana	1764	866	898	41318	31762	1644	7912	31762	31762	0	21449
21	Tamil Nadu	892	554	NA	53736	NA	NA	NA	NA	NA	NA	26546
22	Bihar	2415	1935	480	118535	68371	214	49950	66691	66691	0	27598
23	West Bengal	2875	2172	703	50884	26871	387	23626	25623	26867	1244	27945
24	Uttarakhand	10323	9265	1058	22646	9158	2339	11149	9158	9158	0	31012
25	Delhi	512	474	38	47044	35078	2060	9906	35078	35078	0	39657
26	Madhya Pradesh	20496	16797	3699	90070	79591	1773	8706	79591	79591	0	42117
27	Jharkhand	2868	2540	328	37052	29190	40	7822	28060	28543	483	46978
28	Karnataka	3823	3431	392	38271	26008	2979	9284	25743	26008	265	62131
29	Andhra Pradesh	3616	3239	377	43584	36263	945	6376	36263	36263	0	62645
30	Haryana	6106	3406	2700	36324	30451	1437	4436	30451	30451	0	63272
31	Assam	7662	6248	1414	24331	20776	550	3005	20761	20776	15	64695
32	Rajasthan	8948	4251	4697	72811	62453	2249	8109	62453	62453	0	96330
33	Odisha	2364	2172	192	32022	25888	91	6043	23467	24317	850	107212
34	Uttar Pradesh	38878	29760	9118	338427	244640	14504	79283	244640	244640	0	184962
35	Gujarat	9102	8700	402	67550	57016	6708	3826	57016	57016	0	237754
36	Maharashtra	13556	10871	2685	144351	107667	9385	27299	107667	107667	0	240966
	INDIA	**157342**	**124156**	**32848**	**1351435**	**960646**	**53477**	**283576**	**952962**	**956579**	**3617**	**1486001**

***** Offline data has been added here for Tamil Nadu as there is backlog data entry in the portal, hence added manually in this report

11. TB Forum Meetings

S. no.	States/UTs	Number of State/ UT level TB Forum Meetings held in 2023	Number of community representatives (TB Champions/ persons with TB, PLHIV, any other) participated in State/UT level TB forum meetings	Number of district level TB Forum Meetings held in 2023	Total number of Community representatives (TB Champions/persons with TB, PLHIV, any other) participated in District level TB forum meetings	Number of block level TB Forums constituted till 31st december 2023, if any	Number of block level TB Forum Meetings held in 2023	Number of Gram panchayat level TB forums constituted till 31st december 2023, if any	Number of gram panchayat level TB Forum Meetings held in 2023
1	Andaman and Nicobar Islands	0	0	0	0	0	0	0	0
2	Andhra Pradesh	1	4	8	12	6	6	6	6
3	Arunachal Pradesh	1	5	15	60	0	0	0	0
4	Assam	1	6	15	140	0	0	0	0
5	Bihar	0	0	17	2	0	0	0	0
6	Chandigarh	1	2	0	0	0	0	0	0
7	Chhattisgarh	2	1	35	77	146	99	0	0
8	Dadra and Nagar Haveli and Daman and Diu	0	0	1	3	0	0	0	0
9	Delhi	1	5	2	10	0	0	0	0
10	Goa	1	1	4	1	1	1	0	0
11	Gujarat	0	0	63	194	124	72	1084	1084
12	Haryana	1	5	36	98	47	32	28	28
13	Himachal Pradesh	2	8	22	53	77	93	3615	3662
14	Jammu	2	0	13	26	44	0	0	0
15	Jharkhand	0	0	10	48	0	0	0	0
16	Karnataka	0	0	26	143	8	3	4	4
17	Kashmir	1	3	8	16	0	0	0	0
18	Kerala	0	0	7	15	38	28	424	214

S. no.	States/UTs	Number of State/ UT level TB Forum Meetings held in 2023	Number of community representatives (TB Champions/ persons with TB, PLHIV, any other) participated in State/UT level TB forum meetings	Number of district level TB Forum Meetings held in 2023	Total number of Community representatives (TB Champions/persons with TB, PLHIV, any other) participated in District level TB forum meetings	Number of block level TB Forums constituted till 31st december 2023, if any	Number of block level TB Forum Meetings held in 2023	Number of Gram panchayat level TB forums constituted till 31st december 2023, if any	Number of gram panchayat level TB Forum Meetings held in 2023
19	Ladakh	0	0	2	8	1	0	49	35
20	Lakshadweep	5	3	9	1	4	4	0	0
21	Madhya Pradesh	1	21	49	125	61	47	111	86
22	Maharashtra	2	7	54	160	31	16	206	179
23	Manipur	0	0	0	0	0	0	0	0
24	Meghalaya	1	4	8	16	15	0	0	0
25	Mizoram	1	3	8	16	0	0	0	0
26	Nagaland	1	3	10	25	3	3	0	0
27	Odisha	1	5	20	260	33	24	0	0
28	Puducherry	0	0	0	0	0	0	15	15
29	Punjab	1	5	17	34	0	0	18	18
30	Rajasthan	1	6	32	132	0	0	1106	1106
31	Sikkim	0	0	6	10	70	70	94	143
32	Tamil Nadu	2	30	12	50	22	14	0	0
33	Telangana	1	8	14	165	120	137	6012	4793
34	Tripura	1	3	12	51	28	18	0	0
35	Uttar Pradesh	1	1	75	75	0	0	0	0
36	Uttarakhand	1	5	7	19	2	0	0	0
37	West Bengal	0	0	25	129	0	0	0	0
	INDIA	**34**	**144**	**642**	**2174**	**881**	**667**	**12772**	**11373**

#TBHaregaDeshJeetega

#टीबीहारेगादेशजीतेगा

Central TB Division

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TB Mukt Bharat

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