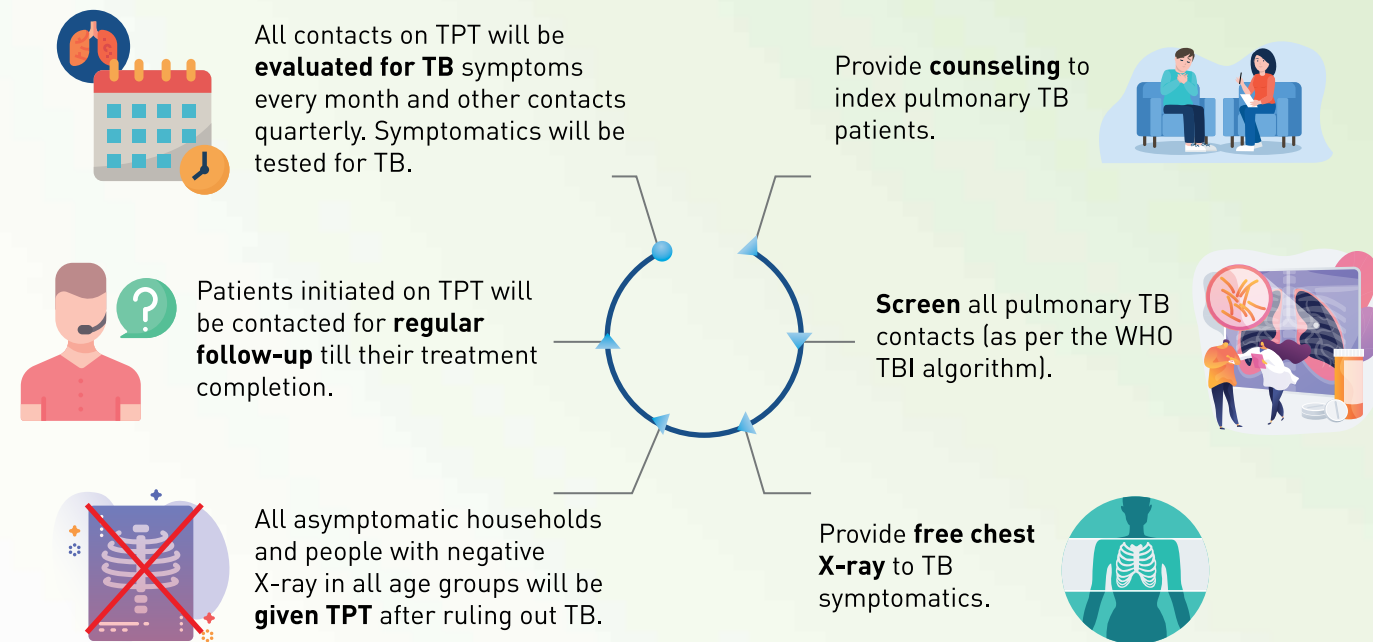
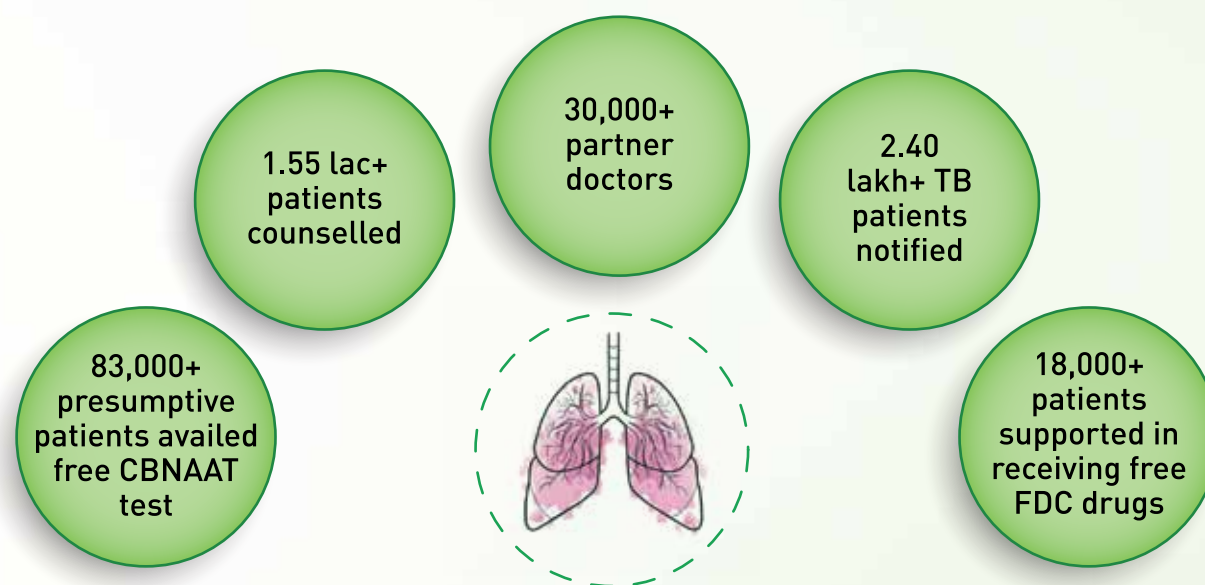


Activities under JEET TBI project:



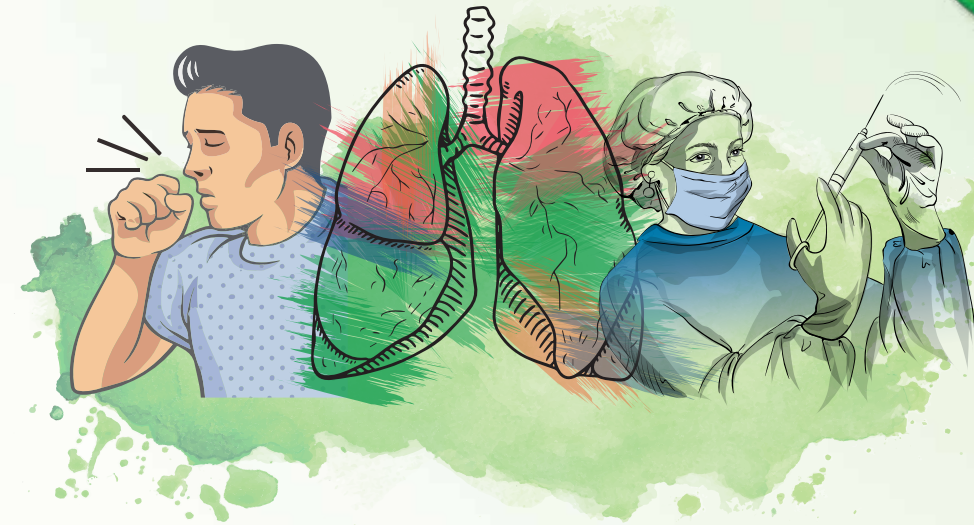
Project JEET

Joint Effort for Elimination of Tuberculosis (JEET) aims to build efficacious, efficient and sustainable structures that will help strengthen the existing systems, extending quality care to people with TB. JEET made significant strides from 2018 to 2021:



The TBI project is being implemented with the Central TB Division and the State Tuberculosis Offices. It is managed by William J Clinton Foundation (WJCF), Foundation for Innovative New Diagnostics (FIND) and The Union across the country. JEET works closely with the NTEP team and to support records of notifications (private sector), specimen collection, and care and treatment adherence support for TB patients. This intervention has the potential to guide the NTEP on TBI management for TB prevention and control in the country. This is only possible with the active involvement of doctors in identifying and urging patients for TBI detection tests, and therefore provide TPT to identified eligible patients.

Let's act now to beat TB infection before it threatens us



Tuberculosis infection (TBI) is a state of persistent immune response to stimulation by mycobacterium tuberculosis antigens with no evidence of clinically manifested active TB.

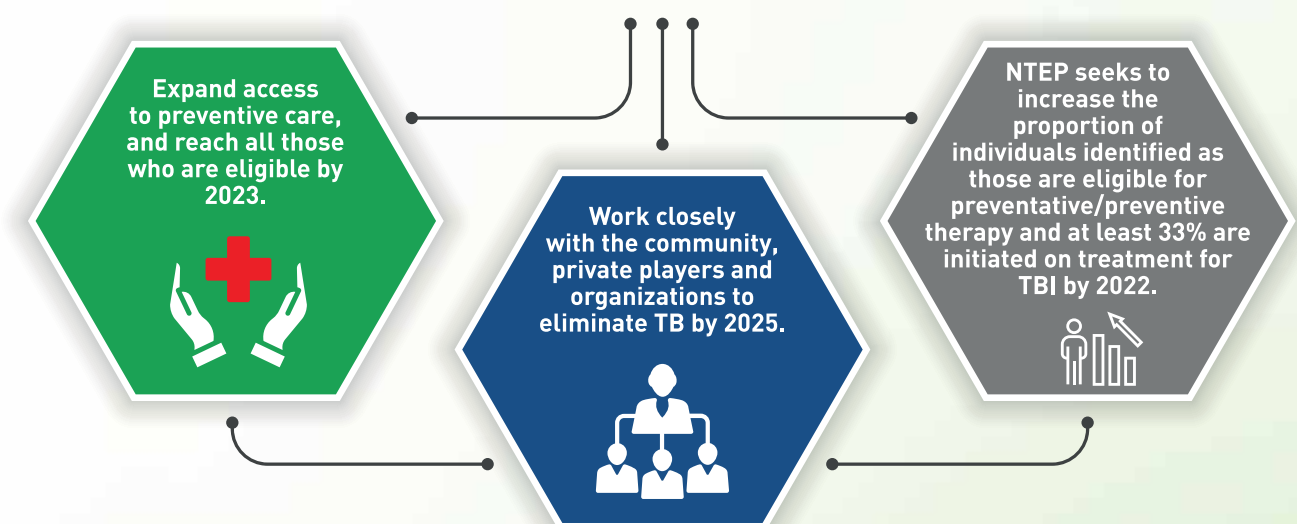
About half of those people who develop TB will do so within the first two years of infection.

India carries the highest burden of TB in the world, comprising a high proportion of people infected with TB infection. It is estimated that 40% of the country's population harbours this 'silent infection'

The National Plan for TBI Management:

Decades of unrestrained transmission has left millions of Indians with TB infection, which may activate at any time. Malnourishment, immune-suppressive conditions such as diabetes & risk factors such as smoking, alcoholism and air pollution may accelerate the infection to manifest into active TB disease.

The national plan is to:



As a healthcare provider you play a catalytic role in converting this plan to reality.

Project JEET Officer : _____

Mobile : _____

Individuals considered to be at high risk of TB disease:

Increased likelihood of exposure to persons with TB disease

- Close contact with a person with infectious TB
- Residents and employees of high-risk settings (e.g., facilities, homeless shelters, health care facilities)

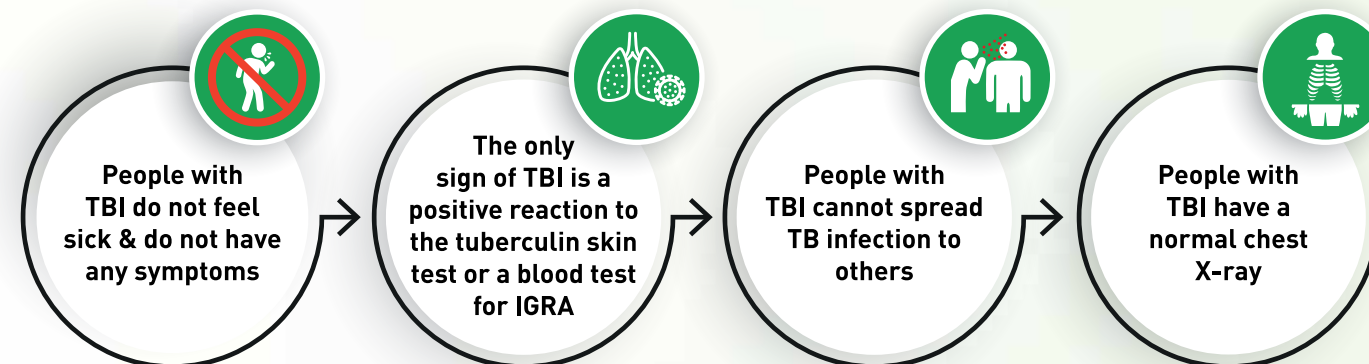
Clinical conditions that increase their risk of progressing from TBI to TB disease

- Children ≤ 5 years with a positive tuberculin skin test (TST)
- Underweight or malnourished persons
- Substance abusers (such as smoking, alcohol users, or injection drug use)
- Those receiving TNF- α antagonists & PLHIV

Those with certain medical conditions such as:

- Silicosis
- Chronic renal failure or on hemodialysis
- Solid organ transplantation (e.g., heart, kidney)
- Diabetes mellitus
- Carcinoma of head or neck
- Gastrectomy or Jejunioileal bypass

Understanding TBI:



For those whose immune systems are weak, especially those with HIV infection, the risk of developing TB disease is considerably higher than for persons with normal immune systems.

TB Preventive Treatment (TPT):

Six months of daily INH, or 6H	<ul style="list-style-type: none"> Strongly recommended for adults and children of all ages in close contact with a person with TB. A preferred treatment option for HIV-positive adults. Although efficacious, 6H has higher liver toxicity risk and lower treatment completion rates than shorter rifamycin-based regimens.
Shorter rifamycin-based regimens (3HP)	<ul style="list-style-type: none"> Preferred regimen for children up to 6 years of age.

Wherever possible, test for TBI through IGRA or skin test (tuberculin skin sensitivity to PPD RT 23 with Tween 80) before initiating TPT. In absence of test, TPT should be initiated after ruling out active TB.

TBI Simplified



Q1. What is the benefit of TPT?

The risk of developing TB disease after TPT decreases by approximately 60% and the reduction can be up to 90% among people living with HIV (PLHIV). While TB treatment regimens continue to innovate, but they are all reactive actions. TPT is currently the only active way to beat TB. **TPT is expected to accelerate the rate of decline of TB incidence.** Epidemiological modelling studies show that effective implementation of TPT alone in Southeast Asia region would result in an annual TB incidence decline of 8.3%, independent of other background interventions.

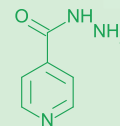










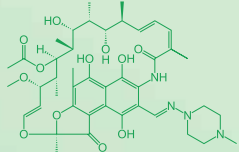










Q2. Can TPT lead to drug resistance?

There is **no evidence of significant association between development of resistance to H or R with use of these drugs for TPT.** However, TB disease must be ruled out before TPT is initiated, along with regular follow-up to rule out development of active TB disease. Rapid molecular Drug Sensitivity Test (DST) must be offered to all patients if TB disease is detected before, during or any time post TPT.

Q3. What are the potential Adverse Drug Reactions (ADRs) associated with TPT?

Most adverse drug events associated with HP regimens are mild, self-resolving and without sequelae. Possible adverse events associated with TPT drugs are:

Drug	Known adverse events	Rare adverse events
Isoniazid 	<ul style="list-style-type: none"> Asymptomatic elevation of serum liver enzyme concentrations  Hepatitis  Peripheral neuropathy (paraesthesia, numbness and limb pain)  Skin rash  Sleepiness and lethargy  	<ul style="list-style-type: none"> Convulsions  Pellagra  Arthralgia  Anaemia  Lupoid reactions 
Rifapentine 	<ul style="list-style-type: none"> Gastrointestinal reactions (abdominal pain, nausea, vomiting)  Hypersensitivity reactions (flu-like symptoms)  Hepatitis  Discoloration of body fluids  	<ul style="list-style-type: none"> Hypotension/syncope  Decrease in white blood cell and red blood cell count  Decreased appetite  Hyperbilirubinemia 

Q4. What are the contradictions to TPT?

- Active TB disease 
- Regular and heavy alcohol consumption 
- Acute hepatitis (including acute viral hepatitis) 
- Signs and symptoms of peripheral neuropathy like persistent tingling, numbness and burning sensation in the limbs 
- Concurrent use of other hepatotoxic medications (such as nevirapine) 
- Allergy or known hypersensitivity to any drugs being considered for TPT 