

## Drug-Resistant TB in Children

### Why in news?

\n\n

Foundation for Innovative New Diagnostics (FIND) conducted TB diagnostic tests in collaboration with the Central TB Division under the Revised National TB Control Programme (RNTCP).

\n\n

### What are the highlights of the FIND study?

\n\n

\n

- Of over 76000 children tested in nine cities 5,500 have TB.

\n

- 9 percentage children have Multi-Drug TB.

\n

- 6 percentage are the proportion of children among new TB patients in 2016.

\n

- MDR TB in children is common in settings where it is common in adults.

\n

\n\n

### What is MDR-TB?

\n\n

\n

- Multi-drug-resistant tuberculosis (MDR-TB) is a form of tuberculosis (TB) infection caused by bacteria

\n

- It is resistant to treatment with at least two of the most powerful first-line anti-TB medications (drugs), **isoniazid** and **rifampin**.

\n

\n\n

### How MDR-TB diagnosis is done in children?

\n\n

- \n
- Clinical examination
- \n
- Tuberculin skin test
- \n
- Bacteriological confirmation
- \n
- HIV testing
- \n

\n\n

### **What challenges were faced?**

\n\n

- \n
- Absence of appropriate samples coupled with decentralised capacity to get good samples from children to test for TB remains a challenge in paediatric TB case detection.
- \n
- The paediatric MDR-TB cases had not been documented so far.
- \n
- TB diagnosis in children is complicated due to challenges associated with sample collection and poor sensitivity of tests like the Acid fast bacilli (AFB) smear.
- \n
- FIND, through this project, has collaborated with the Central TB Division to improve access to more sensitive diagnostic tools like the GeneXpert in the paediatric population.
- \n

\n\n

### **What is GeneXpert?**

\n\n

- \n
- GeneXpert is a diagnostic tool to diagnose TB.
- \n
- The test is used with an automated molecular diagnostic platform that enables the diagnosis of TB and some drug-resistant TB (DR-TB) in less than two hours.
- \n
- GeneXpert testing was performed free of cost for all presumptive

paediatric TB and drug-resistant TB patients (aged under 15 years).

\n

\n\n

## Quick fact

\n\n

## Revised National TB control programme

\n\n

\n

- Revised National Tuberculosis Control Program (RNTCP) is the state-run tuberculosis (TB) control initiative of the Government of India.

\n

- As per the **National Strategic Plan 2012-17**, the program has a vision of achieving a "TB free India", and aims to achieve Universal Access to TB control services.

\n

\n\n

\n\n

**Source: The Hindu**

\n

