

Tuberculosis

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Why in news?

A report released by WHO proves that TB burden in India has reduced and improvement was seen.

Tuberculosis:

- It is a disease caused by bacteria that spreads from individual to individual by air (Mycobacterium tuberculosis).



Though TB usually affects the lungs, it can affect other parts of the body like the liver, renal or spinal cord as well.

- In most cases, tuberculosis is treatable and curable, but those with tuberculosis can die if not treated properly.
- Diabetes is easily introduced to this infectious disease by people with a weak immune system due to HIV.

Drug-resistant TB:

Multidrug resistant (MDR TB) is a particular type of drug resistant TB. It means that the TB bacteria that a person is infected with are resistant to two of the most important TB drugs, isoniazid (INH) and rifampicin (RMP). Other drugs then need to be taken by the person if they are to be cured of TB.

Rifampicin Resistant TB (RR TB) – People with RR TB are resistant to rifampicin. They may or may not have resistance to other drugs.

The **Genexpert test** detects resistance to rifampicin as well as resistance to isoniazid.

- MDR-TB that occurs in the host body has no therapeutic drug available and because of the delayed cycle of antibiotic pharmaceutical drugs, the bacteria are not completely eradicated from their body.
- The host is treated with second-line anti-TB drugs because the bacteria are resistant to first-line anti-TB drugs.
- There is an **Extremely-Resistant Drug TB (XDR-TB)** in the host body, which develops because of the high TB levels in an area that make it very hard to control. In the second-line antibiotics therapy, the strain of the XDR-TB bacteria refuses one or two drugs.
- Poor management in the state may lead to further mutations in bacteria leading to total drug resistance known as **Total Drug Resistance TB (TDR)**.
- **India and TB:** According to the latest report released by the World Health Organisation (WHO) **India accounted for 27 per cent of the total global TB cases** (followed by China with 9 per cent). As per the report 10 million people had TB in 2018. India also had maximum number of drug resistant TB which is 27 percent of a total 130,000 drug-resistant TB cases while China had 14 per cent such cases