

# MANAGEMENT OF TUBERCULOSIS IN CHILDREN AND ADOLESCENTS

## BACKGROUND

- In 2020, approximately **1.1 million children and adolescents** under 15 years fell ill with TB globally.
- **226 000 children and adolescents lost their lives** from this preventable and curable disease in 2020.
- **21 000 (or 9%)** of the children and young adolescents under 15 years **who died of TB were living with HIV.**
- In 2020, an estimated **63 %** of children and young adolescents below 15 years with TB **were not reported or didn't get access** to life-saving **TB diagnosis and treatment services**; the proportion was even higher - **72% - for children under 5.**
- **Progress towards reaching the targets set at the UN High Level Meeting is lagging behind:**
  - ❖ Approximately 1.4 million children were diagnosed and notified between 2018 and 2020, which is only **41% of the 2022 target** of 3.5 million.
  - ❖ Only 12 200 children started treatment for MDR/RR TB in that period, which translates to less than **11% of the 2022 target.**
  - ❖ Only **29%** of eligible children under 5 years accessed **TB preventive treatment** between 2018 and 2020. Almost two thirds of eligible children under 5 years therefore remain at risk of getting sick with TB.

## IMPORTANCE OF ADDRESSING TB IN CHILDREN AND ADOLESCENTS

**Diagnosing** TB in children can be **challenging** due to many factors, including the non-specific nature of TB symptoms that are similar to other childhood illnesses and difficulties in collecting specimens for diagnostic testing.

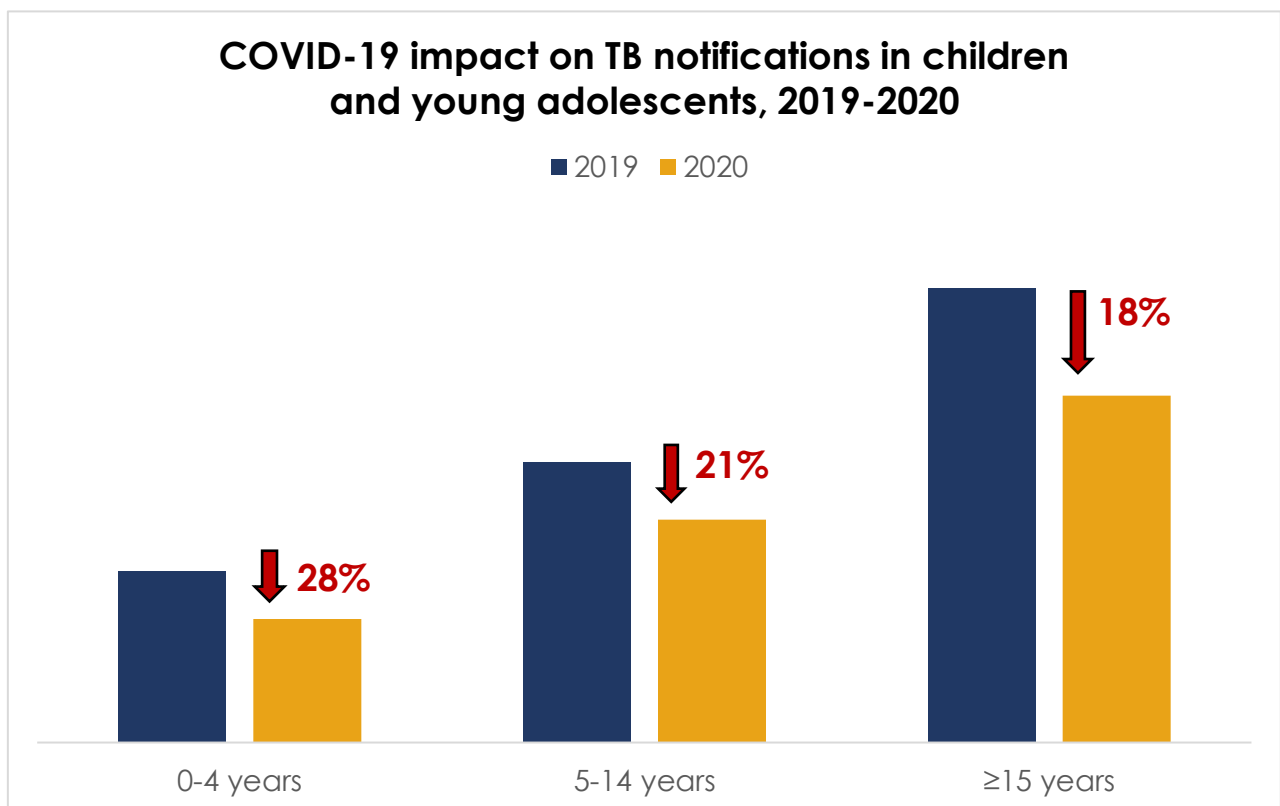
Infants and young children (especially those under two years) **are at higher risk** of developing **TB meningitis** and disseminated disease, which are associated with **high morbidity and mortality.**

**Adolescents** usually present with infectious TB disease, as typically seen in adults. However, adolescents also form a particularly vulnerable group who face psycho-social challenges, requiring careful consideration of their growing autonomy, **treatment support and assistance** with transitioning from paediatric to adult health service provision.

We need to manage TB in children and adolescents recognising **the unique characteristics** and needs of these groups, as well as those of their **parents, caregivers and families.**

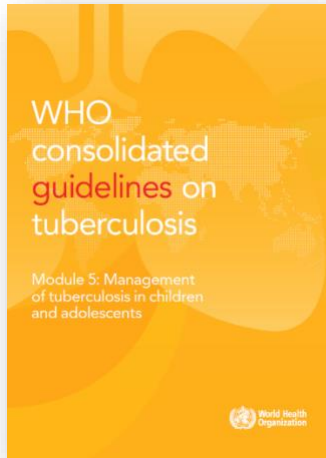
## IMPACT OF THE COVID-19 PANDEMIC

- **COVID-19** has had an additional **negative and disproportionate impact** on children and adolescents with TB and at risk of TB.
- There has been a steady increase in notifications of children with TB from just over 340,000 in 2011/2012 to **over 520,000 in 2019**, with a **substantial drop in 2020**, as a result of the impact of the **COVID-19 pandemic**.
- A detailed analysis shows that **TB notifications** in children aged below 5 years **dropped by 28%** between 2019 and 2020 due to **COVID-19 disruptions**, these figures for children aged 5-14 years and for those aged 15 years and above were 21% and 18%.
- Overall **deaths increased for the first time in a decade** to 1.5 million up from 1.4 million in 2019, as a result of the impact of the **COVID-19 pandemic**.
- The **2022 WHO Consolidated Guidelines and Operational Handbook on the management of tuberculosis in children and adolescents** include recommendations that span the TB cascade of care, from screening, prevention and diagnostic approaches to treatment of both drug susceptible and drug resistant TB, to models of care to optimize TB prevention and case detection efforts. The new recommendations recognize the impact of COVID-19 on TB services and the need to find more children and adolescents with TB.



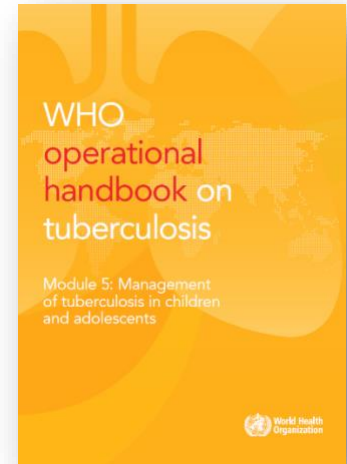


# WHO CONSOLIDATED GUIDELINES ON THE MANAGEMENT OF TUBERCULOSIS IN CHILDREN AND ADOLESCENTS



[DOWNLOAD](#)

The **2022 WHO consolidated guidelines on tuberculosis. Module 5: Management of tuberculosis in children and adolescents**, contain a set of new and updated recommendations that span the TB cascade of care from diagnostic approaches to treatment of both drug susceptible and drug resistant TB, to models of care to optimise TB prevention and case detection. The new recommendations provide an opportunity to significantly improve the care provided to children, adolescents and families affected by TB. The operational handbook provides practical guidance to countries on the implementation of all the new and existing recommendations relevant to TB care in children and adolescents.



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## Overview of new recommendations

### Diagnosis:

- Diagnostic testing has expanded to include non-invasive specimens, such as stool.
- Xpert Ultra can now also be used on stool and gastric aspirate specimens to diagnose TB and detect rifampicin resistance.
- The use of evidence-based treatment decision algorithms (which include bacteriological testing, chest radiography findings, clinical signs and symptoms) which has the potential to address underdiagnosis and reduce delays in treatment initiation.
- Rapid molecular diagnostics are recommended as the initial test for TB diagnosis for children and adolescents.

### Treatment:

- Children and adolescents who have non-severe forms of drug-susceptible TB should now receive a shortened treatment regimen of four months. This promotes a patient-centred approach that will reduce the costs of TB care for children, adolescents and their families as well as for the health system.
- Two of the newest TB medicines to treat drug resistant TB (bedaquiline and delamanid) are now recommended for use in children of all ages, making it possible for all children with drug-resistant TB to receive all-oral treatment regimens regardless of their age.
- TB meningitis (TBM) is a serious and often deadly form of TB to which young children are particularly vulnerable. A 6-month intensive treatment regimen is now recommended as an alternative to the standard 12-month regimen.

### Models of care:

- Decentralized and family-centered integrated models of TB care are also recommended, which will allow more children and adolescents to access TB care or preventive treatment, closer to where they live.

## ROLL OUT OF NEW WHO RECOMMENDATIONS

WHO will continue to **support countries to adopt and implement the recommendations**, in collaboration with partners and civil society by:

- Providing support to countries to update national TB strategic plans, national TB guidelines, child health policies and to prepare funding applications.
- Promoting the use of the One Health Tool and Pediatric TB Operational and Sustainability Expertise Exchange (POSEE) budgeting tool for household contact investigation, sample collection, provision of TB preventive treatment and nationwide training to prepare budgets to manage TB in children and adolescents.
- Developing training materials for health care workers and programmatic experts who support countries to develop policies and plans
- Widely disseminating the guidelines through various fora such as, webinars, WHO regional and national meetings, and TB programme reviews.

**Full implementation** of the new recommendations on the management of TB in children and adolescents **will require additional investments**, but in the long term these **investments are expected to reduce case detection and prevention gaps**, therefore reducing mortality and morbidity and avoiding catastrophic costs for patients and their families.

## ROADMAP TOWARDS ENDING TB IN CHILDREN AND ADOLESCENTS

WHO, UNICEF, Stop TB Partnership and other partners released an action plan in 2018 outlining measures to prevent and treat TB in children and adolescents.

The roadmap highlights key actions to end TB in children and adolescents, such as high level leadership & accountability, functional partnerships, increased funding, advocacy, integrated family- and community-centred strategies, improved monitoring, and more child and adolescent TB research.

