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TB

Tuberculosis (TB)

The world commemorates World TB Day on 24 March. This year's theme, "Invest to end TB. Save Lives", emphasises the urgent need to invest resources to strengthen the fight against TB. In the Tuberculosis World Report 2021, we can see the effects of the COVID-19 pandemic had on the fights against TB. The pandemic, especially the measures to control it (e.g. strict lockdown), has put End TB progress at risk.

For further information have a look in our **TB Toolbox** www.tbbox.org

World TB Day 2022: Invest to end TB. Save Lives.

The Global Tuberculosis Report 2021 (WHO, 2022) does not show a very positive picture of the current situation. None of the 2020 milestones of the "WHO END TB Strategy" were reached, neither the Treatment targets nor the funding targets. The only target that has been reached is the 6 million PLHIV to receive TB preventive therapy (7.2 million). The report states: "The COVID-19 pandemic has reversed years of progress in providing essential TB services and reducing TB disease burden. Global TB targets are mostly off-track, although there are some country and regional success stories.

The most obvious impact is a significant global drop in the number of newly diagnosed with TB and reported. This fell from 7.1 million in 2019 to 5.8 million in 2020, an 18% decline back to the level of 2012 and far short of the approximately 10 million people who developed TB in 2020. Sixteen countries accounted for 93% of this reduction, with India, Indonesia and the Philippines the worst affected. Provisional data up to June 2021 show ongoing shortfalls.

Approximately 1.1 million children develop TB every year. Two-thirds of these children have a non-severe disease, defined as extra-thoracic lymph node TB or non-severe respiratory TB (confirmed on chest x-ray). The outcome of the SHINE study is "TB programmes should consider moving from six months to four months of treatment for children with minimal TB".A shorter treatment period could make the treatment easier for children and caregivers and reduce costs to patients and the health care system.

Global TB Report & Epidemiology

Global Tuberculosis Report 2021
World Health Organization WHO (2021)

Each year, the WHO Global TB Report provides a comprehensive and up-to-date assessment of the TB epidemic, and of progress in prevention, diagnosis and treatment of the disease, at global, regional and country levels. This is done in the context of global TB commitments, strategies and targets.The 2021 edition of the report has been produced in a new and more web-centric format. This is designed to make the content available in smaller (more "bite-sized") chunks that are easier

to read, digest, navigate and use. There is a short and slim report PDF with 30 pages of main content plus six short annexes. This is accompanied by expanded and more detailed digital content on web pages. The total amount of content remains similar to that of previous years.

https://www.medbox.org/document/global-tuberculosis-report-2021

Tuberculosis (TB) Maps Dashboard
Stop TB Partnership; WHO (2022)

https://www.medbox.org/document/tuberculosis-tb-maps-dashboard
https://www.stoptb.org/static_pages/MappingTool_Main.html

Global, regional, and national sex differences in the global burden of tuberculosis by HIV status, 1990–2019: results from the Global Burden of Disease Study 2019
GBD 2019 Tuberculosis Collaborators (2022)

Lancet Infect Dis 2022;22: 222–4

https://www.medbox.org/document/global-regional-and-national-sex-differences-in-the-global-burden-of-tuberculosis-by-hiv-status-19902019-results-from-the-global-burden-of-disease-study-2019
https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(21)00449-7/fulltext

Childhood TB

Shorter Treatment for Nonsevere Tuberculosis in African and Indian Children
Turkova, A.; G.H. Wills, E. Wobudeya, et al. (2022)

N Engl J Med 2022; 386:911-922, DOI: 10.1056/NEJMoa2104535Four months of antituberculosis treatment was noninferior to 6 months of treatment in children with drug-susceptible, nonsevere, smear-negative tuberculosis (SHINE Study)

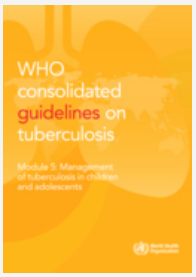
https://www.medbox.org/document/shorter-treatment-for-nonsevere-tuberculosis-in-african-and-indian-children
https://www.nejm.org/doi/full/10.1056/NEJMoa2104535

Shorter treatment for children with minimal TB
SHINE (2022); Medical Research Council Clinical Trials Unit (MRC CTU) at UCL

The results of the SHINE trial have been published in the NEJM today. SHINE looked at whether treatment for children with minimal TB could be reduced from 6 months to 4 months. It found that the four month treatment was as good as the standard six months treatment for children with minimal TB

https://www.medbox.org/document/shorter-treatment-for-children-with-minimal-tb

WHO consolidated guidelines on tuberculosis - Module 5: Management of tuberculosis in children and adolescents
World Health Organization WHO (2022)

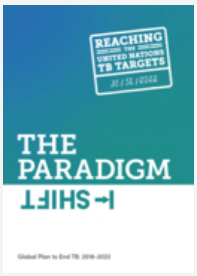


The Updated guidelines on Management of tuberculosis in children and adolescents include new recommendations that cover diagnostic approaches for TB, shorter treatment for children with non-severe drug-susceptible TB, a new option for the treatment of TB meningitis, the use of bedaquiline and delamanid in young children with multidrug- and rifampicin-resistant TB and decentralized and family-centred, integrated models of care for TB case detection and prevention in children and adolescents.

https://www.medbox.org/document/who-consolidated-guidelines-on-tuberculosis-module-5-management-of-tuberculosis-in-children-and-adolescents

Policy & Strategies

The Paradigm shift - Global Plan to End TB 2018-2022
Stop TB Partnership; UNOPS; END TB (2018)



The updated Global Plan for 2018-2022 is deliberately aligned with the time frame of the UNHLM targets, making it a tool for advocacy, resource mobilization, civil society and community empowerment, and accountability on the UNHLM targets and commitments.It is centered on strong political leadership to achieve the UNHLM targets and commitments.It breaks down the global UNHLM targets into country shares to ensure that countries deliver on their commitments and, collectively, the world reaches the agreed targets.It provides an estimate of the resources needed to achieve the UNHLM targets and commitments, both for TB care and prevention and for research into new tools.It highlights the need for a rights-based, people-centered approach that is community-based and gender-responsive

https://www.medbox.org/document/the-paradigm-shift-global-plan-to-end-tb-2018-2022

Tuberculosis surveillance and monitoring in Europe 2021
WHO Regional Office for Europe (WHO/Europe) and the European Centre for Disease Prevention and Control (ECDC). (2022)

In 2019, 29 of 31 EU/EEA countries reported TB notification data. There was a further decline in the overall TB notification rate (9.6 per 100 000 population), continuing the trend observed since 2002. However, there is significant work ahead to achieve the United Nations Sustainable Development Goal 3 target notification rate at EU/EEA level of 2.4 per 100 000 population by 2030. Reassuringly, the number of reported MDR-TB and XDR-TB cases continued to decline in EU/EEA countries in 2019 and account for a very small proportion of all reported TB cases in 2019.

https://www.medbox.org/document/tuberculosis-surveillance-and-monitoring-in-europe-2021

Progress towards achieving global tuberculosis targets and implementation of the UN political declaration on tuberculosis: overview

World Health Organization WHO (2021)

https://www.medbox.org/document/progress-towards-achieving-global-tuberculosis-targets-and-implementation-of-the-un-political-declaration-on-tuberculosis-overview

Global roadmap for research and development of tuberculosis vaccines
European & Developing Countries Clinical Trials Partnership EDCTTP; Amsterdam Institute for Global health & Development aighd (2021)

The roadmap describes the actions needed toachieve the three development goals for TBvaccines set by the WHO:1. A safe, effective and affordable TB vaccinefor adolescents and adults.2. An affordable TB vaccine for neonates andinfants with improved safety and efficacy.3. A therapeutic vaccine to improve TBtreatment outcomes

https://www.medbox.org/document/global-roadmap-for-research-and-development-of-tuberculosis-vaccines

Tuberculosis and the fight against Antimicrobial Resistance
World Health Organization WHO, Regional Office of Europe (2022)

https://www.medbox.org/document/tuberculosis-and-the-fight-against-antimicrobial-resistance

Clinical & Diagnostic Updates

Use of alternative interferon-gamma release assays for the diagnosis of TB infection: WHO policy statement
World Health Organization WHO (2022)

Following review of evidence and advice from the Technical Advisory Group (TAG) on Tuberculosis (TB) Diagnostics and Laboratory Strengthening, the World Health Organization (WHO) announces that current WHO recommendations for the use of interferon-gamma release assays (IGRA) are also valid for Beijing Wantai's TB-IGRA and Qiagen QuantiFERON-TB Gold Plus products. This expands the range of tests available to detect TB infection. Full details are provided in this WHO policy statement.

https://www.medbox.org/document/use-of-alternative-interferon-gamma-release-assays-for-the-diagnosis-of-tb-infection-who-policy-statement

Digital Health Technologies, Virtual Care and Community-Based Monitoring Solutions for TB Programmes
Stop TB Partnership; WHO (2021)

Information note

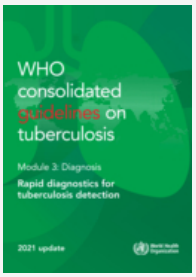
https://www.medbox.org/document/digital-health-technologies-virtual-care-and-community-based-monitoring-solutions-for-tb-programmes

Update on the use of nucleic acid amplification tests to detect TB and drug-resistant TB: rapid communication
WHO (2021)

In 2019, an estimated 10 million individuals fell ill with tuberculosis (TB) and 3 million of them were not reported to have beendiagnosed and notified. The gap is proportionately even wider for drug-resistant TB. Of the estimated 465 000 patients with rifampicin-resistant and multi-drug resistant TB (RR/MDR-TB), only 206 030 (44%) were diagnosed and notified.For the first time, the World Health Organization (WHO) has provided global estimates of the incidence of isoniazid resistance: in 2019, there were 1.4 million incident cases of isoniazid-resistant TB, of which 1.1 million were susceptible to rifampicin. Most of these people were not diagnosed with drug-resistant TB and did not receive appropriate treatment.

https://www.medbox.org/document/update-on-the-use-of-nucleic-acid-amplification-tests-to-detect-tb-and-drug-resistant-tb-rapid-communication

WHO consolidated guidelines on tuberculosis. Module 3: Diagnosis - Rapid diagnostics for tuberculosis detection 2021 update
World Health Organization WHO (2021)



6 July 2021. The “WHO consolidated guidelines on tuberculosis. Module 3: Diagnosis - Rapid diagnostics for tuberculosis detection 2021 update” is the latest document replacing the one issued in 2020. Three new nucleic acid amplification test (NAAT) classes are endorsed by WHO and included in the latest consolidated guideline

https://www.medbox.org/document/who-consolidated-guidelines-on-tuberculosis-module-3-diagnosis-rapid-diagnostics-for-tuberculosis-detection-2021-update

TB/COVID-19

Implementation of simultaneous diagnostic testing for COVID-19 and TB in high TB burden countries
Stop TB Partnership; WHO (2022)

Tuberculosis (TB) is the deadliest infectious disease in most low- and middle-income countries, claiming more than 4,000 lives each day. The unprecedented COVID-19 pandemic has seriously impacted people with pre-existing health conditions. People with TB are usually more vulnerable to other infections, including the novel coronavirus, due to pre-existing lung damage. They are also at higher risk of developing complications from COVID-19.

https://www.medbox.org/document/implementation-of-simultaneous-diagnostic-testing-for-covid-19-and-tb-in-high-tb-burden-countries

Considerations for selection of SARS-CoV-2 diagnostics and potential multiplexing: A perspective to ensure continuity of care for people with TB
Stop TB Partnership; WHO (2020)

https://www.medbox.org/document/considerations-for-selection-of-sars-cov-2-diagnostics-and-potential-multiplexing-a-perspective-to-ensure-continuity-of-care-for-people-with-tb

New data shows COVID-19 combined with funding shortfalls are devastating efforts to end Tuberculosis (TB) by 2030
Stop TB Partnership; WHO (2021)

28 September 2021Less than half of required funding has been provided globally with dramatic consequences ashundreds of thousands more die from TB

https://www.medbox.org/document/new-data-shows-covid-19-combined-with-funding-shortfalls-are-devastating-efforts-to-end-tuberculosis-tb-by-2030

The impact of Covid-19 on HIV, TB and Malaria Services and Systems for Health: a Snapshot from 502 health facilities across Africa and Asia
The Global Fund (2021)

In 2020, the COVID-19 pandemic impacted the world beyond imagination. To date, it has infected more than 135 million people, killed over 2.9 million people, and is projected to plunge up to 115 million people into extreme poverty.1 As countries have gone into lockdown, gender-based violence has increased, unemployment has soared, and access to health care for the poorest and most vulnerable has been cut. COVID-19 has made people less likely to seek health care because they are afraid of getting infected with the virus. Fear and uncertainty surrounding COVID-19 have also increased stigma and discrimination. As frontline workers without enough access to personal protective equipment (PPE) risk their lives to treat patients, the virus pushes already fragile health systems to the brink.

https://www.medbox.org/document/the-impact-of-covid-19-on-hiv-tb-and-malaria-services-and-systems-for-health-a-snapshot-from-502-health-facilities-across-africa-and-asia

Training & Online Courses

Interactive Core Curriculum on Tuberculosis
Center for Disease Control and Prevention (2019)

Accessed 3rd February 2019

https://www.medbox.org/document/interactive-core-curriculum-on-tuberculosis
https://www.cdc.gov/tb/webcourses/Course/main_menu/index.html

Tuberculosis preventive treatment
Open WHO; World Health Organization WHO (2021)

This e-learning course will provide the knowledge and skills necessary to support staffin countriesin scaling-up targetedTB preventive treatment in their national TB strategy or supportingstaff who seekguidance on implementation.The main focus of this e-course is programmatic; clinical aspects

are only discussed when relevant to specific topics.

https://www.medbox.org/document/tuberculosis-preventive-treatment
https://openwho.org/courses/PMTPT-EN

Rapid diagnostics for tuberculosis detection
Open WHO; World Health Organization WHO (2021)

This course will provide you with the knowledge and skills needed to implement WHO-recommended TB tests and algorithms. It includes the latest recommendations for novel tests for TB diagnosis and detection of drug resistance, as well as the most recent WHO policy guidance for the use of those tests. The course also describes the processes and steps for implementing a new diagnostic test for routine use within the TB diagnostic network

https://www.medbox.org/document/rapid-diagnostics-for-tuberculosis-detection
https://openwho.org/courses/DXTB-EN

Drug-resistant TB Treatment
World Health Organization WHO (2021)

This e-course will guide you through the essentials of latest existing WHO guidelines and policy recommendations on drug-resistant TB. You will also learn more about the rationale behind the WHO recommendations for the management of DR-TB, implementation considerations for different regimens for eligible patient groups, adjunctive treatment, the active TB drug safety monitoring and management framework, and the analysis and interpretation of performance indicators.The main focus of the e-course is programmatic; clinical aspects are only discussed when relevant to specific topics.

https://www.medbox.org/document/drug-resistant-tb-treatment
https://openwho.org/courses/DRTB-EN