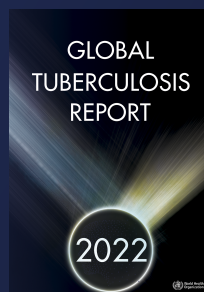


GLOBAL TUBERCULOSIS REPORT 2022



TB SITUATION AND RESPONSE

- Tuberculosis (TB) is contagious and airborne.
- TB is the second leading infectious killer after COVID-19 and the 13th leading cause of death worldwide. It is also the leading killer of people with HIV and a major cause of deaths related to antimicrobial resistance

TB BURDEN

- In 2021, an estimated 10.6 million (95% confidence interval 9.9-11 million) people fell ill with TB worldwide, of which 6.0 million were men, 3.4 million were women and 1.2 million were children. People living with HIV accounted for 6.7% of the total.
- The TB incidence rate (new cases per 100 000 population per year) rose by 3.6% between 2020 and 2021, reversing declines of about 2% per year for most of the past 2 decades.
- Globally, the estimated number of deaths from TB increased between 2019 and 2021, reversing years of decline between 2005 and 2019. In 2021, 1.6 million people died from TB, including 187 000 people with HIV.
- Eight countries accounted for more than two thirds of the global total: India, Indonesia, China, the Philippines, Pakistan, Nigeria, Bangladesh and the Democratic Republic of the Congo.

TB CARE AND PREVENTION

- TB treatment saved 74 million lives globally between 2000 and 2021.
- Globally, the number of people newly diagnosed with TB and those reported to national governments fell from 7.1 million in 2019 to 5.8 million in 2020. There was a partial recovery to 6.4 million in 2021.
- The cumulative number of people treated between 2018 and 2021 was 26.3 million, equivalent to 66% of the 5-year (2018-2022) UN High Level Meeting TB target of 40 million. This included 1.9 million children, 54% of the 5-year target of 3.5 million.
- There is still a large global gap between the estimated number of people who fell ill with TB and the number of people newly diagnosed, with 4.2 million people not diagnosed with the disease, or not officially reported to national authorities in 2021, up from 3.2 million in 2019.

DRUG-RESISTANT TB

- The burden of drug-resistant TB (DR-TB) is also estimated to have increased between 2020 and 2021, with 450 000 (95%CI: 399 000-501 000) new cases of rifampicin-resistant TB (RR-TB) in 2021.
- The number of people provided with treatment for RR-TB and multidrug-resistant TB (MDR-TB) declined between 2019 and 2020. The reported number of people started on treatment for RR-TB and MDR-TB in 2021 was 161 746, covering only about one in three of those in need.
- The treatment success rate for drug-resistant TB, at 60% globally, remains low.

ADDRESSING THE CO-EPIDEMICS OF TB AND HIV

- In 2021, 703 000 people living with HIV fell ill with TB, only 46% accessed life-saving antiretroviral therapy.
- Most of the gaps in access to antiretroviral therapy were in WHO's African Region, where the burden of HIV-associated TB is highest.

THE COVID-19 PANDEMIC HAS REVERSED YEARS OF PROGRESS MADE IN THE FIGHT TO END TB

It continues to have a damaging impact on access to TB services



1.6 MILLION TB DEATHS INCLUDING 187 000 TB DEATHS AMONG PEOPLE WITH HIV

TB is one of the top infectious killers worldwide.

TB is also the leading cause of deaths among people with HIV and a major cause of antimicrobial resistance related deaths

74 MILLION LIVES SAVED (2000 - 2021)

DRUG RESISTANT TB REMAINS A PUBLIC HEALTH CRISIS with gaps in detection and treatment

ONLY ABOUT 36% PEOPLE ACCESSED TREATMENT OF THOSE IN NEED



REQUIRED IN 2022 **US\$ 13 BILLION** FOR TB DIAGNOSIS AND CARE

US\$ 5.4 BILLION SPENT IN 2021

of which 79% domestic financing

and US\$ 1.1 billion international financing

US\$ 2 BILLION REQUIRED PER YEAR FOR TB RESEARCH

US\$ 1.1 BILLION FUNDING GAP



UPTAKE OF DIAGNOSTICS, NEW DRUGS AND REGIMENS

- Increasing access to early and accurate diagnosis using a molecular WHO-recommended rapid diagnostic test is one of the main components of TB laboratory-strengthening efforts under the End TB Strategy.
- The use of rapid tests remains far too limited. A WHO-recommended rapid molecular test was used as the initial diagnostic test for only 38% of the 6.4 million people newly diagnosed with TB in 2021, up from 33% in 2020 and 28% in 2019.
- 109 countries were using all-oral longer regimens (up from 92 in 2020) for the treatment of MDR/RR-TB, and 92 were using shorter regimens (up from 65 in 2020).
- By the end of 2021, 124 countries were using bedaquiline as part of treatment regimens for RR-TB (up from 110 in 2020).
- There was an increase in access to shorter (1–3 months) rifamycin-based regimens for TB preventive treatment. In 2021, 185 350 people in 52 countries were reported to have been treated with these shorter regimens, up from 25 657 in 37 countries in 2020.

RESEARCH AND INNOVATION



- The diagnostic pipeline has expanded considerably in terms of the number of tests, products or methods in development. These include molecular tests for the detection of TB disease and drug resistance, interferon-gamma release assays (IGRAs) for the detection of TB infection, biomarker-based assays for detection of TB disease, computer-aided detection (CAD) for TB screening using digital chest radiography, and a new class of aerosol-capture technologies for detection of TB disease.
- Three new antigen-based skin tests for TB infection that perform better than tuberculin skin tests (particularly in terms of specificity) were evaluated and recommended by WHO in 2022.
- There were 16 vaccine candidates in clinical trials by September 2022: four in Phase I, eight in Phase II and four in Phase III. They included candidates to prevent TB infection and TB disease, and to help improve the outcomes of treatment for TB disease.
- In September 2022, there were 26 drugs for the treatment of TB disease in Phase I, Phase II or Phase III trials. These drugs comprise 17 new chemical entities, two drugs that have received accelerated regulatory approval, one drug that was recently approved by the United States (US) Food and Drug Administration under the limited population pathway for antibacterial and antifungal drugs, and six repurposed drugs. There are at least 22 clinical trials to evaluate drugs and drug regimens for treatment of TB infection.

UNIVERSAL HEALTH COVERAGE, SOCIAL DETERMINANTS AND MULTISECTORAL ACTION



- Progress towards universal health coverage (UHC), better levels of social protection and multisectoral action on broader TB determinants are all essential to reduce the burden of TB disease.
- Additional efforts are required to achieve the End TB target on catastrophic costs due to TB. 48% (95% CI: 36–61%) of people with TB and their households face catastrophic costs according to latest survey evidence.
- Globally in 2021, an estimated 2.2 million incident cases of TB were attributable to undernourishment, 0.86 million to HIV infection, 0.74 million to alcohol use disorders, 0.63 million to smoking and 0.37 million to diabetes.
- From 2019 to 2021, WHO worked with high TB burden countries to ensure the inclusion of accountability mechanisms in national budget planning and pursuing assessment during high-level missions and joint TB programme reviews with engagement of civil society representatives, in line with WHO's multisectoral accountability framework on TB.
- The Global TB Report features a TB-SDG monitoring framework that focuses attention on 14 indicators that are associated with TB incidence. Monitoring of these indicators can be used to identify key influences on the TB epidemic at national level and inform the multisectoral actions required to end it.

TB FINANCING

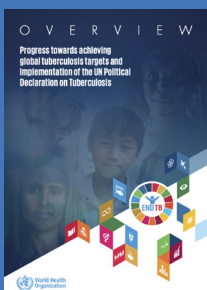


- By 2022, US\$ 13 billion is needed annually for TB prevention, diagnosis, treatment and care to achieve the global target agreed at the UN high level-meeting on TB in 2018.
- There was a decline in global spending on essential TB services from US\$ 6.0 billion in 2019 to US\$ 5.4 billion in 2021, which is less than half of the global target.
- As in the previous 10 years, most of the spending on TB services in 2021 (79%) was from domestic sources.
- In low- and middle-income countries, international donor funding remains crucial. The main source is the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund). The United States Government is the largest contributor of funding to the Global Fund and is also the largest bilateral donor; overall, it contributes close to 50% of international donor funding for TB.
- Financing for TB research at US\$ 0.9 billion in 2020 also continues to fall far short of the global target of US\$ 2 billion per year, constrained by the overall level of investment.

TB PREVENTIVE TREATMENT



- WHO recommends TB preventive treatment for people living with HIV, household contacts of those with bacteriologically confirmed pulmonary TB, and clinical risk groups (e.g. those receiving dialysis).
- Globally in 2021, TB preventive treatment was provided to 3.5 million people, – still slightly below the level of 3.6 million that was reached in 2019 but a good recovery from 3.2 million in 2020.
- From 2018–2021, 12.5 million people were treated with TB preventive treatment. This is only 42% of the UN High Level Meeting TB target of 30 million for the 5-year period 2018–2022
- Most of those provided with TB preventive treatment were people living with HIV. The global sub-target of providing TB preventive treatment to 6 million people living with HIV between 2018 and 2022 was achieved well ahead of schedule.
- The cumulative number of household contacts initiated on TB preventive treatment in the 4-year period 2018–2021, at 2.2 million. This is only 9.2% of the 5-year target of 24 million for the period 2018–2022.



In 2020, a progress report of the UN Secretary-General on TB (developed with WHO support) outlined 10 priority recommendations to get the world back on track to reach End TB targets.

WHO's GLOBAL TB PROGRAMME together with WHO regional and country offices: develops policies, strategies and standards; supports the efforts of WHO Member States; measures progress towards TB targets and assesses national programme performance, financing and impact; promotes research; and facilitates partnerships, advocacy and communication. **More information:** www.who.int/tb