

**Consolidated report of country
success stories in mitigating the
impact of the COVID-19 pandemic
on TB services**



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Impact of the COVID-19 pandemic on the TB response

The response to the COVID-19 pandemic continues to adversely affect essential tuberculosis (TB) services in many countries. Data reported to WHO by Member States show a sharp, unprecedented fall in the global number of TB case notifications between 2019 and 2020 (from 7.1 million to 5.8 million), with the largest reductions in the South-East Asia and the Western Pacific regions (1). Globally, deaths from TB increased from 1.4 million to 1.5 million in 2020. Other impacts include a downturn in the number of people initiated on TB preventive treatment (from 3.6 million to 2.8 million), a reduction in spending on TB services (from US\$ 5.8 billion to US\$ 5.3 billion), a 15% decrease in the number of people provided with treatment for drug-resistant TB and a reduction in coverage of the bacille Calmette-Guérin vaccine (5% or more in 31 countries). Provisional data show a sustained reduction in global TB notifications through 2021 when compared with 2019 levels in many countries (2).

WHO has undertaken model projections to forecast the further impact of the pandemic on TB services (1). Modelling of TB incidence and mortality in 16 countries with high TB burdens between 2021 and 2025 indicated a further increase in TB mortality in 2021 and an increase in TB incidence in 2022, consistent with earlier projections (3–6). Socioeconomic shocks and widening inequity as a result of the pandemic are also anticipated to drive the determinants of TB, such as poverty and undernutrition, resulting in further disease incidence among infected individuals.

WHO's response to improve TB prevention and care during the pandemic

WHO is working across all three levels of the Organization with partners and countries to mitigate the pandemic's impact on TB services. These include by

- monitoring the impact of the COVID-19 response on TB notification monthly in over 100 countries to provide country-specific guidance and technical assistance;
- issuing guidance on maintaining TB services in the context of the COVID-19 pandemic. The advice on this guidance includes maximizing remote care and support for people with TB through digital technologies; improving the use of WHO-recommended all-oral TB treatment regimens and community-based care to reduce health care facility visits; and providing simultaneous testing for TB and COVID-19 for individuals when indicated; and
- sharing case studies of programmatic innovations to address emerging challenges in TB prevention and care in the context of the pandemic.

Other sources of information about the impact of the COVID-19 pandemic on TB include a review of data published between January 2020 and March 2021 (7), a study of changes in TB services provided in 19 countries between 2019 and 2020 (8) and a compendium of research studies related to TB and COVID-19 (9). Content related to TB is also included in WHO guidance on maintaining essential health services and the role of community-based care during the COVID-19 pandemic (10, 11). An evidence review of the impact of COVID-19 on TB is under way (12), and WHO is promoting a standardized collection of data on dual testing for TB and SARS-CoV-2 ("bidirectional screening")(13).

WHO urges countries to try to restore access to and provision of essential TB services such that levels of TB case detection recover to at least pre-pandemic levels.

Country interventions to restore TB services

National TB programmes, with support from partners, have been innovating to rebound from temporary setbacks due to the pandemic. WHO has been compiling case studies of innovative responses that have succeeded in mitigating or reversing negative impacts of the pandemic to provide examples for affected countries. A first report comprising 23 case studies from all six WHO regions was published in May 2021(9). The report was disseminated widely with countries and partners, and a request to compile additional best practices was made by National TB Programmes from high-TB burden countries as well as funders. WHO subsequently issued a second call for case studies to collect additional lessons in August 2021–February 2022 (14) . This report summarizes the findings from both calls for case studies in order to disseminate best practices that have been successful in overcoming disruptions to TB service. The audience of this report are national TB programmes, partners, funders, civil society organizations, as well as the private sector engaged in TB response at country level.

Methods

In response to the two open calls for case studies between November 2020 and February 2022, 42 submissions from 21 countries were received. A panel of at least two experts reviewed each case study. The main criteria for selection were relevance to the topic of the call, interventions to address challenges to TB services due to the COVID-19 pandemic; evidence that the intervention has had a measurable impact on service provision and health outcomes or is projected to yield results soon; and evidence that the intervention could be duplicated in other geographical contexts or other population groups. According to these criteria, 29 case studies (70% of submissions) from 20 countries in the six regions of WHO were selected; 23 were published in the first report (9), and six are included in the present report. The implementers of the interventions worked in all sectors, from nongovernmental organizations (50%) to public agencies (39%) and universities (11%).

All the studies were reported directly by countries or institutions. For the present report, relevant national health authorities were invited to comment on the submissions. WHO was not involved in the design, financing or implementation of the initiatives, nor did it undertake independent validation of the reported findings. The studies are presented below in alphabetical order by country name; the person responsible for each case study is identified by name.

Findings

Six new case studies collected between August 2021 and February 2022 are included in this report (Annex). The scope of the new case studies is narrower than that of the first reports and focused more on operationalization of dual testing for TB and SARS-CoV-2 (“bidirectional screening”) or using COVID-19 vaccination programmes to screen for TB, sustaining real-time surveillance to improve TB detection and digital interventions to support treatment adherence and reduce health facility visits.

All the case studies in the current and the previous report are summarized in Table 1. Together, they demonstrate diverse interventions to address country-specific challenges, with some common themes. For example, half of the studies involve application of digital technology to

facilitate health-care provision; others report real-time surveillance to monitor and respond rapidly to the impacts of the pandemic (17%); and some address socioeconomic determinants or the consequences of TB (14%).

In the context of the cascade of care, more than half of the case studies reported on finding people with TB and improving treatment initiation and adherence. At least three studies showed that dual testing for TB and SARS-CoV-2 was feasible, with varying yields, depending on the target population, site and screening strategy. The prioritization of screening and diagnostic testing is not surprising, as many countries are experiencing significant decreases in the numbers of people with newly diagnosed with TB and reported, as a result of disruptions to TB services. Application of successful, feasible strategies to improve detection, initiation of care and reporting of cases of TB is imperative to reverse this impact.

Table 1. Consolidated list of case studies organized by theme

Country	Digital health	Prevention	Screening and diagnosis	Treatment	Socio-economic support	Monitoring and evaluation	Training of health-care staff	Other
Brazil (1)	X			X				
Brazil (2)	X			X				
Colombia							X	
Dominican Republic	X					X		
Ethiopia	X		X	X				
Guatemala	X							
India (1)	X		X	X				
India (2)	X		X	X	X			X
India (3)		X	X					
India (4)	X	X	X	X		X		X
Kenya, Malawi, Zimbabwe			X	X		X		
Mozambique	X	X	X					
Myanmar					X			

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