

accessed 5/6/2020



Developed by Stop TB Partnership in collaboration with Imperial College, Avenir Health, Johns Hopkins University and USAID.

THE POTENTIAL IMPACT OF THE COVID-19 RESPONSE ON TUBERCULOSIS IN HIGH-BURDEN COUNTRIES: A MODELLING ANALYSIS

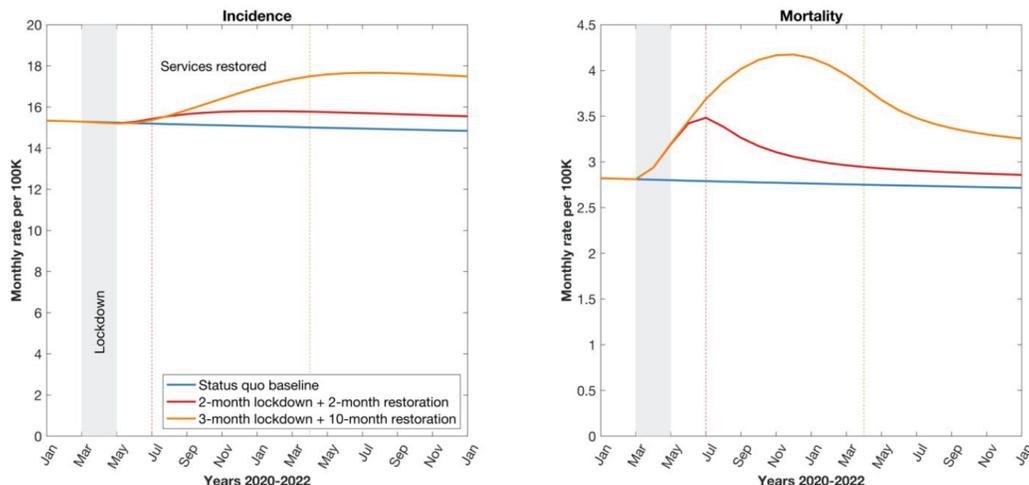


Figure 1. Dynamics of TB incidence and mortality following a COVID-19 lockdown, in the illustrative example of India. The grey shaded area shows the duration of the lockdown, while the vertical dashed line shows the point at which normal TB services are restored. Overall impacts in cumulative TB burden, from 2020 to 2025, are summarised in table 1 for each country

According to the new study, with a three-month lockdown and a protracted 10-month restoration of services, global TB incidence and deaths in 2021 would increase to levels last seen in between 2013 and 2016 respectively, implying a setback of at least five to eight years in the fight against TB.

May 6 2020, Geneva, Switzerland - A new report released today finds that the global response to the COVID-19 pandemic is having unintended yet drastic consequences on tuberculosis (TB) services, with lockdowns and limitations on diagnosis, treatment and prevention services expected to increase the annual number of TB cases and deaths over the next five years; at least five years of progress on TB response will be lost. The modeling

analysis released by the Stop TB Partnership shows that under a three-month lockdown and a protracted 10-month restoration of services, the world could see an additional 6.3 million cases of TB between 2020 and 2025 and an additional 1.4 million TB deaths during that same period.

“We never learn from mistakes. For the past five years, TB, a respiratory disease, has remained the biggest infectious disease killer because the ‘TB agenda’ consistently became less visible in front of other priorities,” said Dr Lucica Ditiu, Executive Director of the Stop TB Partnership. “Today, governments face a torturous path, navigating between the imminent disaster of COVID-19 and the long-running plague of TB. But choosing to ignore TB again would erase at least half a decade of hard-earned progress against the world’s most deadly infection and make millions more people sick.”

The new study was commissioned by the Stop TB Partnership in collaboration with the Imperial College, Avenir Health and Johns Hopkins University, and was supported by USAID. The modeling was constructed on assumptions drawn from a [rapid assessment](#) done by The Stop TB Partnership on the impact of the COVID-19 pandemic and related measures on the TB response in 20 high-burden TB countries—representing 54% of the global TB burden.

The modeling focused on three high burden countries—India, Kenya, and Ukraine—and extrapolated estimates from those countries to create global estimates of the impact of COVID-19 on TB. The authors note that the model can be replicated in any other country and that the findings can be used by countries for data-driven decisions and financial requests.

TB is a forgotten respiratory disease that still kills 1.5 million people each year, more than any other infectious disease. Incidence and deaths due to TB have been declining steadily over the last several years as a result of intensified activities by high burden countries to find people with TB early and provide appropriate treatment.

In the 2018, during the UN General Assembly (UNGA) High-Level Meeting on TB, Heads of States and governments committed to significantly scale up the TB response. In 2018, this resulted in identifying an additional 600,000 people who could access TB care. In 2019, we also saw very promising progress. The COVID-19 pandemic, especially considering the mitigation measures put in place, has proven to be a major setback in achieving the [UNGA targets](#), as TB case detection has dramatically fallen, treatments have often been delayed and the risk of interruption of treatment and potential increase of people with drug-resistant TB has

increased.

According to the new study, with a three-month lockdown and a protracted 10-month restoration of services, global TB incidence and deaths in 2021 would increase to levels last seen in between 2013 and 2016 respectively, implying a setback of at least five to eight years in the fight against TB.

To minimize the impact of the COVID-19 pandemic on TB, save millions of lives and get the world back on track in achieving the UNGA targets, national governments need to take immediate measures that ensure the continuity of TB diagnostic, treatment and prevention services during the lockdown period and undertake a massive catch-up effort to actively diagnose, trace, treat and prevent TB.

Stop TB Partnership and partners call upon the leadership of all countries—particularly those with high TB burdens—to ensure the continuity of the TB response in the time of COVID-19, to take proactive measures that include those who are most vulnerable and to provide protection against economic hardship, isolation, stigma and discrimination. We urge governments to secure the human and financial resources needed for seamless continuation of TB services amid the COVID-19 response.

Recognizing that this is an unprecedented situation, the Stop TB Partnership is continuing support for national TB Programmes and partners through its multiple technical, innovative and people-centered platforms. To ensure access to TB and COVID-19 resources, the Stop TB Partnership is sharing actions, experiences and recommendations from countries and partners through a dedicated [TB and COVID-19 webpage](#) and has recently published [interactive maps](#) with TB and COVID-19 situations in countries.

Country	Excess TB cases from 2020 - 2025		Excess TB deaths from 2020 - 2025	
	For every month of lockdown	For every month of restoration	For every month of lockdown	For every month of restoration
India	232,665	144,795	71,290	40,685
Kenya	3,980	3,133	1,747	1,157
Ukraine	1,058	625	270	137
Global	608,400	420,400	126,100	83,200

Table 2. Estimates for incremental impact on TB burden by each additional month of lockdown or restoration

Country	Excess cases between 2020-2025 (% increase)		Excess deaths between 2020-2025 (% increase)	
	2-month lockdown + 2-month recovery	3-month lockdown + 10-month recovery	2-month lockdown + 2-month recovery	3-month lockdown + 10-month recovery
India	514,370 (3.55%)	1,788,100 (12.32%)	151,120 (5.70%)	511,930 (19.31%)
Kenya	12,154 (1.51%)	40,992 (5.08%)	4,873 (2.15%)	15,800 (6.99%)
Ukraine	2,348 (1.19%)	7,589 (3.86%)	455 (2.40%)	1,578 (8.31%)
Global	1,826,400 (3.1%)	6,331,100 (10.7%)	342,500 (4.0%)	1,367,300 (16.0%)

Table 1. Model-estimated impact for the excess TB cases and deaths that would occur in each country, as a result of the COVID-19 response. As noted in the text, estimates are relative to a 'status quo' comparator, assuming that TB services continue indefinitely at pre-lockdown levels. Note that even though the global impact estimates fall within the range of country estimates, they are based on country-specific and different status quo trends than the ones used in the modelled countries (i.e. statistical projections of status quo as opposed to projections via a dynamic compartmental model).

Moreover, the pace of restoration has important consequences for TB burden in the medium term (i.e. between 2020 and 2025). Table 2 provides estimates for the medium-term implications of each month of lockdown, and for each month of restoration. The table emphasises the point that any excess TB burden that is allowed to accumulate during the COVID-19 response can hinder TB control over at least the next five years: rapid restoration of TB services is critical for minimising these adverse impacts.