

This update summarizes:

- ETHIOPIA'S COVID-19 SITUATION UPDATE.
- GLOBAL AND REGIONAL BURDEN OF COVID-19.
- THE POTENTIAL HEALTH AND ECONOMIC VALUE OF SARS-COV-2 VACCINATION ALONGSIDE PHYSICAL DISTANCING IN THE UK.
- IMPACT OF THE COVID-19 PANDEMIC ON TUBERCULOSIS DETECTION AND MORTALITY IN 2020

ETHIOPIA'S COVID-19 SITUATION UPDATES

Case Management and Infection Prevention Control (Ipc):

- There are total of **39, 213** active cases in the country currently as of March 25, 2021
- This week, March 18-25, 2021, there are **5030** newly recovered cases bringing the total number of COVID-19 recovered cases to **150, 642**
- There are **752** patients in severe condition as of March 25, 2021 and all the other patients are on medical care in stable condition.

Home Based Isolation and Care (HBIC):

Since Home Based Isolation and Care (HBIC) is started in Ethiopia:

- A total **115, 563** COVID-19 confirmed cases are followed in the HBIC as of March 25, 2021
- **102,575** of them have recovered in the HBIC as of March 25, 2021 **14,186** cases are currently on HBIC
- **17** COVID-19 related deaths have occurred in the HBIC
- **1682** cases have been transferred from treatment centers to HBIC
- **540** cases have been transferred from HBIC to treatment centers

EPHI and FMOH COVID 19 response highlights of the week /trainings and supply

- Four Days COVID-19 Basic IPC and Home based isolation care training for 30 national Defence Health staff working in Addis Ababa and the surrounding city is completed on March 19/2021 at Dire international Hotel ,Adama city.
- Six Days COVID-19 Critical care training for 50 regional health staff working in treatment center of Oromia and Amhara Region is completed on March 19/2021 at Gonder and Adama city
- There is on-going distribution of PPE, Viral Transport Media (VTM), swabs, pharmaceuticals and other medical supplies to isolation and treatment centers.

References

1. Public Health Emergency Operations Centers (PHEOC), Ethiopia
2. https://twitter.com/lia_tadesse
3. <http://www.covid19.et/covid-19/>

GLOBAL AND REGIONAL BURDEN OF COVID-19

- Globally the total number of cases is extended to 125,424,480 as of March 25, 2021. A total of 101,281,536 cases recovered and 2,756,662 people died since the beginning of the outbreak. Globally, in a week time, from March 18 to March 25, 2021, COVID-19 cases increased by 3% and deaths by 2.4%. In the past week, Europe was the leading in terms of cases followed by North America and Asia. Europe continued to be became a lead in terms of the number of deaths followed by North and South America (Fig 2).

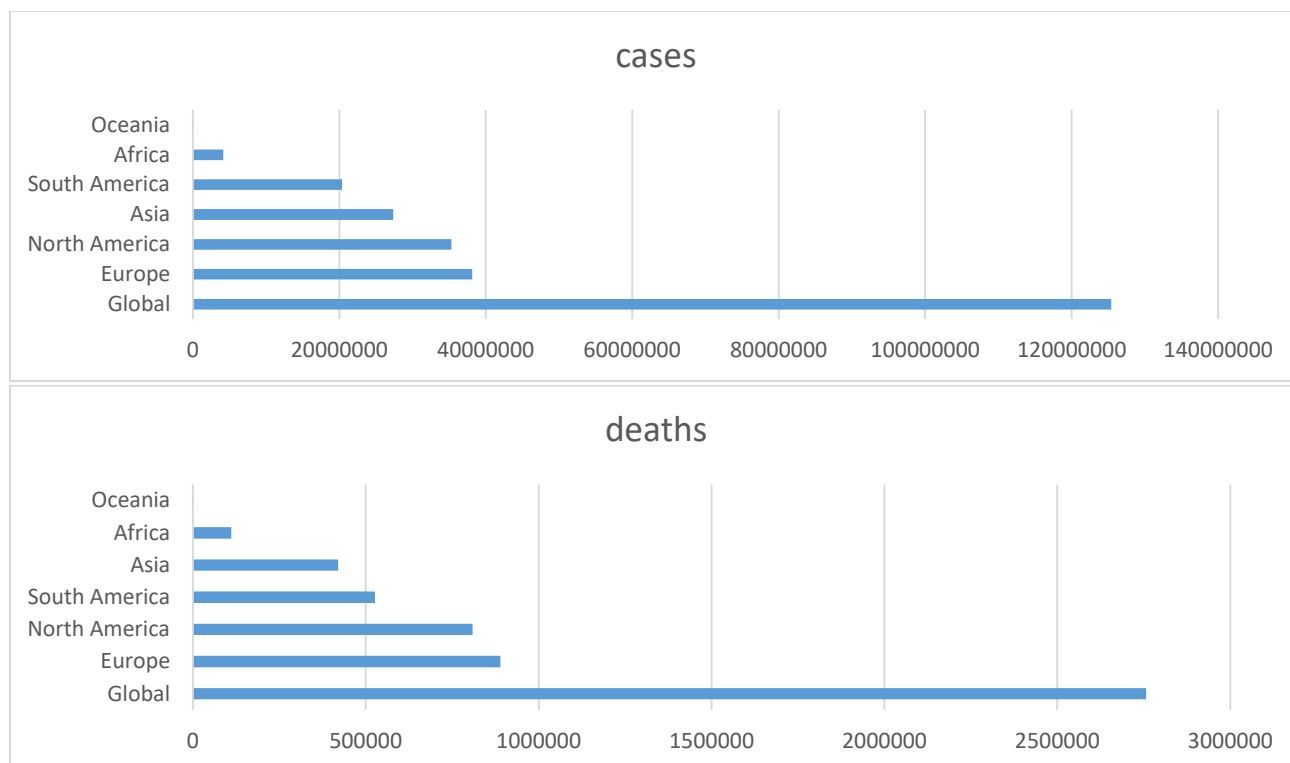
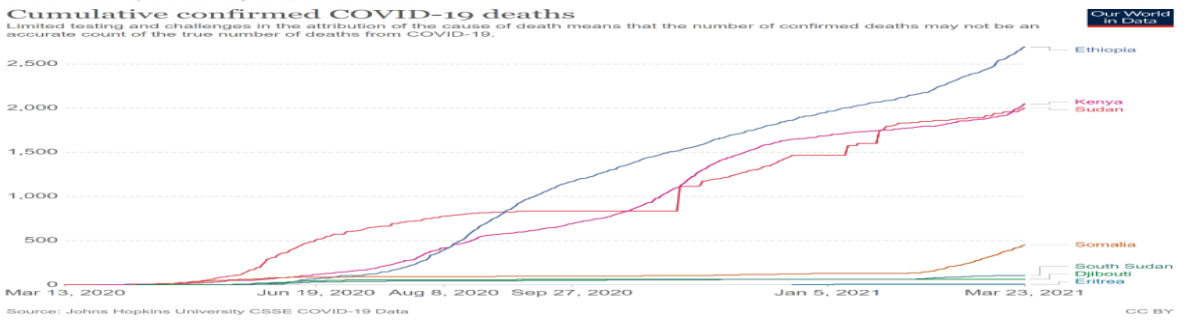
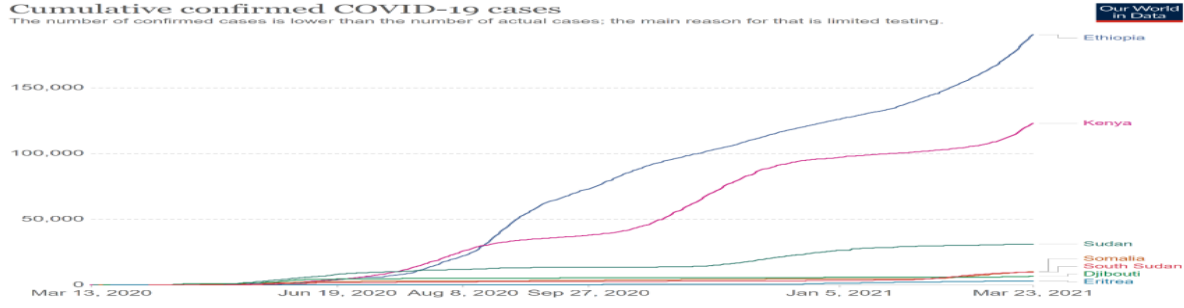


Fig 3. Global cases (top) and deaths (bottom) reported as of March, 2021.

- USA has recorded the highest number of cases 1.4% (30,294,798 to 30,704,292 cases) and 1.4% (550,649 to 558,422 deaths) that accounts 24.5% of the total global cases and carried 20.3% of global deaths as of March 25, 2021.
- Brazil became the 2nd rank worldwide with increased number of cases in a week time by 4.5% (11,700,431 to 12,227,179) and deaths by 5.6% (285,136 to 301,087).
- India is the 3rd highest in terms of cases in a week time by 2.7% (11,474,302 to 11,787,013) and deaths by 0.9% (159,250 to 160,726).
- Russia ranked 4th globally with 4,483,471 cases and 96,219 deaths.
- France ranked 5th globally replaced UK with 4,378,446 cases and 93,180 deaths.
- The line share of Africa to the global COVID-19 pandemic was 3.3% and 4.0% of the global cases and deaths as of March 25). The cases in the continent have increased by 1.8% in a week time (4,095,103 to 4,168,757 cases). Similarly, the total number of deaths in Africa has increased from 108,885 to 111,064 showing 2%. Total recoveries stand at 3,725,900.
- South Africa is the leading in the continent with 1,540,009 cases and 52,372 deaths. Morocco (492,842 cases, 8,786 deaths), Tunisia (247,254 cases, 8,637 deaths), Egypt (197,350 cases, 11,720 deaths) and Ethiopia (192,575 cases, 2,718 deaths) are the most four leading countries next to South Africa in reporting COVID-19 cases in Africa. (See table below).

Africa	March 18		March 25	
	Cases	Deaths	Cases	Deaths
South Africa	1,532,497	51,634	1,540,009	52,372
Morocco	490,088	8,745	492,842	8,786
Tunisia	243,439	8,463	247,254	8,637
Egypt	192,840	11,431	197,350	11,720
Ethiopia	179,812	2,592	192,575	2,718

- In East African, COVID-19 cases and deaths have shown fast progress. As of March, Ethiopia and Kenya continued to be the major drivers of the COVID 19 burden in east African countries.



References

1. John Hopkins, Corona Virus Resources <https://coronavirus.jhu.edu/map.html>
2. Worldometer, Corona Virus <https://www.worldometers.info/coronavirus/>
3. Africa CDC: COVID 19 Surveillance; <https://au.int/covid19>
4. Our World: <https://ourworldindata.org/covid-cases>

THE POTENTIAL HEALTH AND ECONOMIC VALUE OF SARS-COV-2 VACCINATION ALONGSIDE PHYSICAL DISTANCING IN THE UK: A TRANSMISSION MODEL-BASED FUTURE SCENARIO ANALYSIS AND ECONOMIC EVALUATION.

- In response to the COVID-19 pandemic, the UK first adopted physical distancing measures in March, 2020. Vaccines against SARS-CoV-2 became available in December, 2020.
- This study explored the health and economic value of introducing SARS-CoV-2 immunisation alongside physical distancing in the UK to gain insights about possible future scenarios in a post-vaccination era.
- The study used an age-structured dynamic transmission and economic model to explore different scenarios of UK mass immunisation programmes over 10 years.
- The study compared vaccinating 75% of individuals aged 15 years or older (and annually revaccinating 50% of individuals aged 15–64 years and 75% of individuals aged 65 years or older) to no vaccination.
- The study assumed either 50% vaccine efficacy against disease and 45-week protection (worst-case scenario) or 95% vaccine efficacy against infection and 3-year protection (best-case scenario).
- Natural immunity was assumed to wane within 45 weeks and explored the additional impact of physical distancing on vaccination by assuming either an initial lockdown followed by voluntary physical distancing, or an initial lockdown followed by increased physical distancing mandated above a certain threshold of incident daily infections.
- Benefits were considered in terms of quality-adjusted life-years (QALYs) and costs, both to the health-care payer and the national economy.
- The study assumed a monetary value per QALY of £20 000 and a conservative long-run cost per vaccine dose of £15.
- Without the initial lockdown, vaccination, and increased physical distancing, the study estimated 148.0 million COVID-19 cases and 3.1 million deaths in the UK over 10 years. In the best-case scenario, vaccination

minimises community transmission without future periods of increased physical distancing, whereas SARS-CoV-2 becomes endemic with biannual epidemics in the worst-case scenario.

- Ongoing transmission is also expected in intermediate scenarios with vaccine efficacy similar to published clinical trial data. From a health-care perspective, introducing vaccination leads to incremental net monetary values ranging from £12.0 billion to £334.7 billion in the best-case scenario and from –£1.1 billion to £56.9 billion in the worst-case scenario.
- Incremental net monetary values of increased physical distancing might be negative from a societal perspective if national economy losses are persistent and large.

Conclusion

- These model findings highlight the substantial health and economic value of introducing SARS-CoV-2 vaccination.
- Smaller outbreaks could continue even with vaccines, but population-wide implementation of increased physical distancing might no longer be justifiable.
- The study provides early insights about possible future post-vaccination scenarios from an economic and epidemiological perspective.

Reference

1. Sandmann, F. G., et al. (2021). "The potential health and economic value of SARS-CoV-2 vaccination alongside physical distancing in the UK: a transmission model-based future scenario analysis and economic evaluation." The Lancet Infectious Diseases.

IMPACT OF THE COVID-19 PANDEMIC ON TUBERCULOSIS DETECTION AND MORTALITY IN 2020.

- TB remains one of the world's deadliest infectious killers. Each day, nearly 4000 lose their lives to TB and close to 28,000 people fall ill with this preventable and curable disease. Global efforts to combat TB have saved an estimated 63 million lives since the year 2000.
- Provisional data compiled by the World Health Organization (WHO) from 84 countries indicates that an estimated 1.4 million fewer people received care for tuberculosis (TB) in 2020 than in 2019 - a reduction of 21% from 2019. In the group of 10 high-burden countries with the largest reported shortfalls compared with 2019, the overall shortfall was 28%. With many people with TB unable to access care, WHO estimates that half a million more people may have died from TB in 2020 alone. TB remains one of the world's top infectious killers.
- Building up health systems so everyone can get the services they need is key. Some countries have already taken steps to mitigate the impact of COVID-19 on service delivery, by strengthening infection control; expanding use of digital technologies to provide remote advice and support, and providing home-based TB prevention and care. But many people who have TB are unable to access the care they need.
- This is not a new problem: before COVID-19 struck, the gap between the estimated number of people developing TB each year and the annual number of people officially reported as diagnosed with TB was about 3 million. The pandemic has greatly exacerbated the situation.
- The COVID-19 pandemic is in its second year and is unfortunately taking increasing medical resources and attention away from providing necessary life-saving diagnosis, medicine and care to people suffering from tuberculosis (TB). Alarmingly, in low and lower-middle-income countries, TB remains the biggest infectious disease killer.
- One of the key strategic areas to control and prevent Tuberculosis is to ensure access to essential TB services in the COVID-19 context and to build back better to ensure no one is left behind. As a result, the WHO has identified the following action areas to combat the pandemic's impacts on tuberculosis.

- ✓ Ensure effective infection prevention and control measures, to protect the health and safety of health workers, staff, and patients. Personal protective equipment should be provided for all health staff involved in care delivery for both TB and COVID-19.
- ✓ Scale up simultaneous testing for TB and COVID-19, taking into consideration similarity of symptoms (cough, fever and difficulty breathing), and based on exposure or presence of risk factors. As countries prepare to share existing molecular platforms for COVID-19 testing, it will be essential to maintain current molecular diagnostic services for TB patients.
- ✓ Promote access to people-centered prevention and care services. Home-based and community-based prevention and care should be strongly preferred over hospital treatment for TB patients (unless serious conditions require hospitalization) to reduce opportunities for transmission. This includes WHO recommended, all-oral TB treatments for multidrug-resistant TB and extensively drug-resistant TB. Digital adherence technologies can help bridge the gap in communication. TB preventive treatment should be ensured for household contacts, especially given increased risk of exposure.
- ✓ Stand against stigma and discrimination and promote the human rights of the most vulnerable. Stigma and fear around communicable diseases like TB and COVID-19 hamper the public health response. Governments, citizens, media and communities have an important role to play in preventing and stopping stigma.
- ✓ Build and strengthen community, youth and civil society engagement to close gaps in care. Community health workers, youth volunteers and civil society can be engaged in reaching those at risk or those affected by TB and/or COVID-19 with care. We need to harness the potential of these groups while ensuring effective infection control and protective measures for them.
- But this will not be enough alone. In 2020, in his report to the United Nations General Assembly, the UN Secretary General issued a set of 10 priority recommendations that countries need to follow. These include activating high-level leadership and action across multiple sectors to urgently reduce TB deaths; increasing funding; advancing universal health coverage for TB prevention and care; addressing drug resistance, promoting human rights and intensifying TB research.

References

1. Impact of the COVID-19 pandemic on TB detection and mortality in 2020 [Internet]. [cited 2021 Mar 25]. Available from: <https://www.who.int/publications/m/item/impact-of-the-covid-19-pandemic-on-tb-detection-and-mortality-in-2020>
2. COVID-19 highlights urgent need to reboot global effort to end tuberculosis [Internet]. [cited 2021 Mar 25]. Available from: <https://www.who.int/news/item/22-03-2021-covid-19-highlights-urgent-need-to-reboot-global-effort-to-end-tuberculosis>