

This update summarizes	Ethiopia's COVID-19 situation update.
	Global and regional burden of COVID 19.
	Towards COVID-19 mass vaccination global highlights.
	Safety and efficacy of the ChAdOx1 nCoV-19 vaccine (AZD1222) against SARS-CoV-2: an interim analysis of four randomised controlled trials in Brazil, South Africa, and the UK.
	Trends in suicide during the covid-19 pandemic.

ETHIOPIA'S COVID-19 SITUATION UPDATES

- As of December 10, 2020, there were a total of 114,834 COVID-19 cases and 1,769 deaths across the country. Compared to the cases and deaths reported a week ago, both the cumulative case and deaths respectively showed increment by 2%. So far 87,244 cases have recovered from COVID-19 which increased by 11% compared to the last week. Of the 26,145 active cases, 326 are critical (Fig 1). The total number of tests stands at 1 68,355 showing a 1% increase compared to last week.

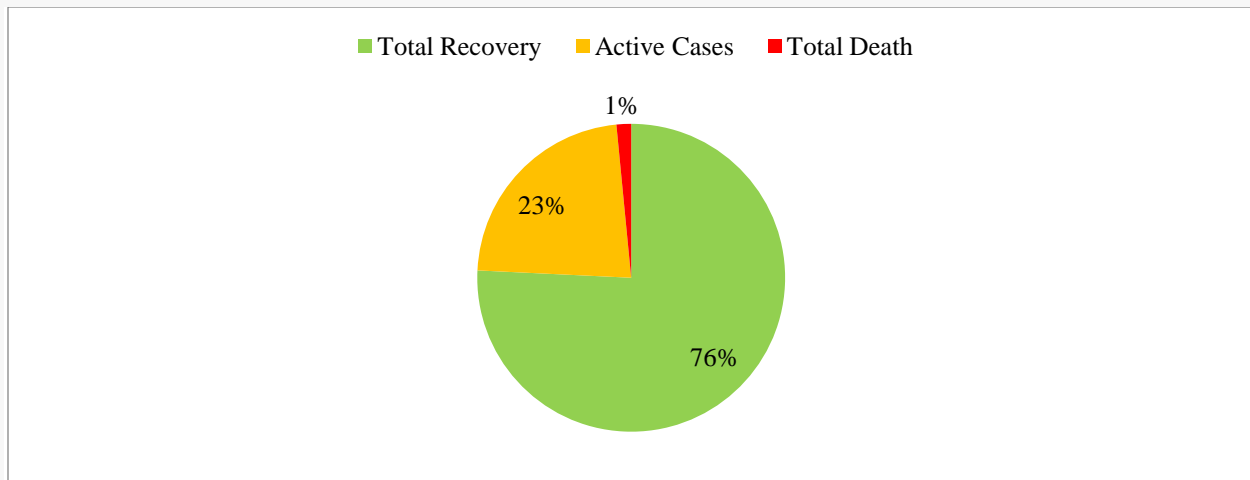


Fig. 1. Showing cumulative COVID-19 cases, recoveries and death as of Dec 10, 2020.

CASE MANAGEMENT AND INFECTION PREVENTION CONTROL (IPC):

- This week, Dec 3 – Dec 10, 2020, there are **11, 158** newly recovered cases bringing the total number of COVID-19 recovered cases to **87, 244**
- This week, Dec 3 – Dec 10, 2020, **204** suspected cases are admitted
- This week, **119** initially suspected cases are discharged after laboratory test became negative

Home Based Isolation and Care (HBIC):

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

- A total **51, 324** COVID-19 confirmed cases are followed in the HBIC as of December 10, 2020
- **45,777** of them have recovered in the HBIC as of December 10, 2020 **5,906** cases are currently on HBIC

- 6 COVID-19 related deaths have occurred in the HBIC
- 559 cases have been transferred from treatment centers to HBIC
- 305 cases have been transferred from HBIC to treatment centers

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

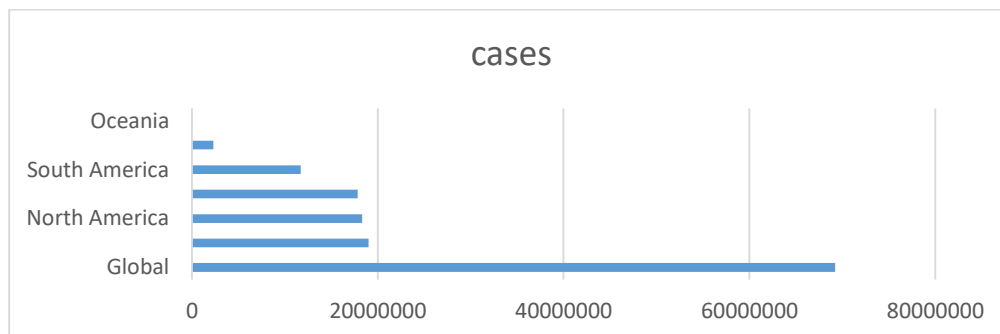
- On Dec 3, 2020, one day training provided for youth volunteers and community platforms on COVID-19 prevention at SNNPR.
- Orientation provided for recruited data collectors and supervisors for rapid assessment on community perception of COVID-19 on Dec 3, 2020 at Bishoftu town.
- Mental health and psychosocial support training completed on Dec 7, 2020 for 28 regional hospital psychiatrists, psychologists and social workers at Bishoftu town.
- On Dec, 8, 2020, work place orientation workshop in COVID-19 response was conducted for federal ministries on directives and action plan developed.
- School reopening training completed on Dec, 9, 2020 for 47 regional education bureaus special need focal persons at Bishoftu town.

References

1. Public Health Emergency Operations Centers (PHEOC), Ethiopia https://twitter.com/lia_tadesse

GLOBAL AND REGIONAL BURDEN OF COVID-19

- Globally the total number of cases is extended to 69,234,626 as of December 10, 2020. A total of 47,985,810 cases recovered and 1,575,773 people died since the beginning of the outbreak. Globally, in a week time, from December 3 to December 10, 2020, COVID-19 cases increased by 6.8% and deaths by 5.1%. Europe continued to become the leading in terms of cases followed by North America and Asia. Also in terms of the number of deaths Europe became a lead followed by North America and Asia (Fig 2).



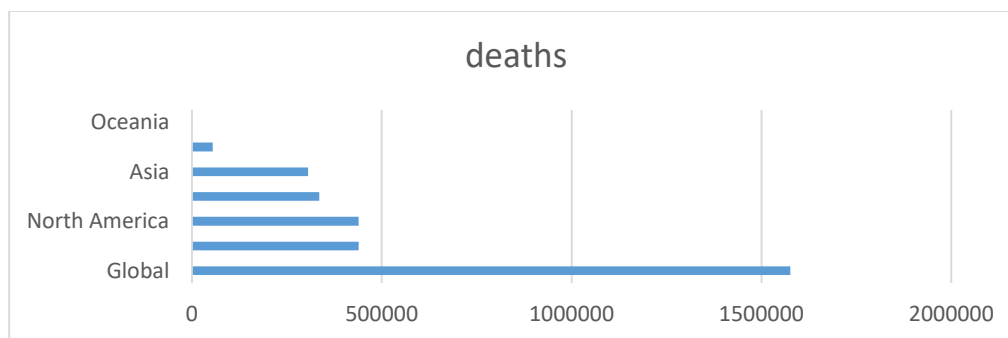


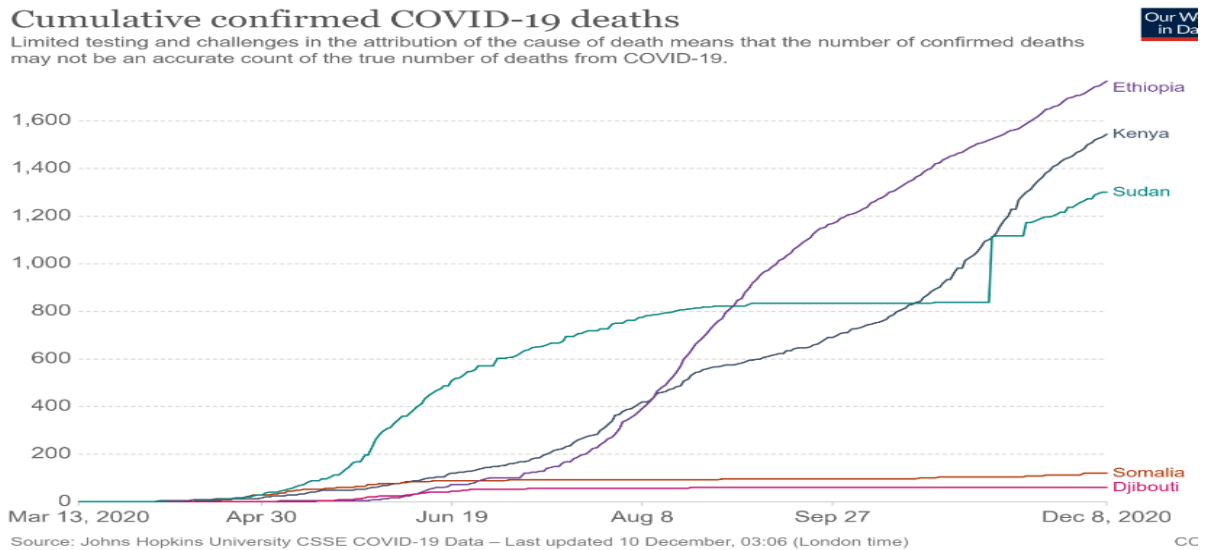
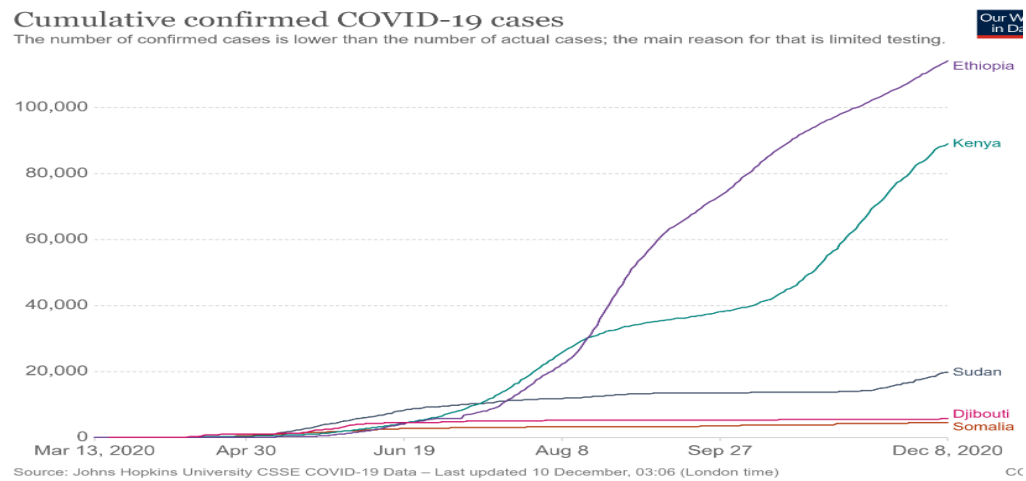
Fig 2. Global cases (top) and deaths (bottom) reported as of December 10, 2020.

- USA has recorded the highest number of cases (15,820,042 cases, 296,698 deaths) that accounts 22.8% of the total global cases and carried 18.8% of global deaths as of December 10, 2020.
 - India is the 2nd highest in terms of cases in a week time by 2.4% (9,534,964 to 9,762,326) and deaths by 2.2% (138,657 to 141,735).
 - Brazil has increased the number of cases in a week time by 4.6% (6,436,650 to 6,730,118) and deaths by 2.6% (174,531 to 179,032).
 - Russia ranked 4th globally with 2,541,199 cases and 44,718 deaths.
 - France ranked 5th globally with 2,324,216 cases and 56,648 deaths.
- The line share of Africa to the global COVID-19 pandemic was 3.4% and 3.5% of the global cases and deaths respectively as of December 10. The number of cases in the continent has increased by 4.8% in a week time (2,214,586 to 2,320,174 cases). Similarly, the total number of deaths in Africa has increased from 52,670 to 54,963 showing a 4.4%. Total recoveries stand at 1,977,391.
- South Africa is the leading in the continent with 828,598 cases and 22,574 deaths. Morocco (388,184 cases, 6,427 deaths), Egypt (119,702 cases, 6,832 deaths), Ethiopia (114,834 cases, 1,769 deaths), and Tunisia (106,856 cases, 3,717 deaths) are the most four leading countries next to South Africa in reporting COVID-19 cases in Africa. (See table below).

Africa	December 3		December 10	
	Cases	Death	Cases	Deaths
South Africa	796,472	21,709	828,598	22,574
Morocco	364,190	5,985	388,184	6,427
Egypt	116,724	6,694	119,702	6,832
Ethiopia	110,984	1,715	114,834	1,769
Tunisia	99,280	3,359	106,856	3,717

- In East African, COVID-19 cases and deaths have shown fast progress. In a week time, COVID-19 cases and deaths were 3.5% and 3.1% respectively in Ethiopia and 5.3% and 4.6% respectively in Kenya. As of December, Ethiopia and Kenya continued to be the major drivers of the COVID 19 burden in east African countries. The epidemic appears increasing in Sudan with 10% cases and 3.3% deaths. However, in Somalia

1.2% cases and zero deaths reported in a week time. Similarly, in Djibouti 0.6% cases and zero deaths were reported which is low compared to others.



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>

TOWARDS COVID-19 MASS VACCINATION GLOBAL HIGHLIGHTS

- The United Kingdom (UK) becomes the first countries in the world to approve the Pfizer Inc and BioNTech SE COVID 19 vaccine for widespread use even though US FDA & European Medicines Agency assessed the vaccine.
- UK has ordered a total of 357 million dose of seven different vaccines including 40 million doses enough for 20 million people of the two shot Pfizer vaccine 100 million dose of AstraZeneca, 60 million dose of Sanofi/GSK vaccine.

- Across the UK, vaccine centres are beginning the careful process of delivering vaccinations on a tight schedule, as the vaccine must be used or discarded within five days of being defrosted. They claimed doing it with military precision, and in fact, they have had the military helping with their planning as well according to Fiona Kinghorn, who oversaw the vaccine rollout at single site in, Wales.
- According to the Joint Committee on Vaccination and Immunisation who has reviewed unpublished Phase I/II/III safety and efficacy data for the Pfizer BioNTech mRNA vaccine. The vaccine appears to be safe and well-tolerated, and there were no clinically concerning safety observations.
- The data indicate high efficacy in all age groups (16 years and over), including encouraging results in older adults. The Committee advises that this vaccine be used in the first phase of the programme, UK begins vaccination with care home staff hospital inpatients and outpatients aged over 80 the first immunized, a two-dose vaccine schedule is currently advised in accordance with regulatory approval.
- Furthermore, in US massive vaccination campaign ever attempted as soon as this with next few days later, Moderna vaccine that protect against COVID-19 is nearly 95% effective.
- The US President-elect Joe Biden, setting ambitious goals to change the course of the coronavirus pandemic, to get “at least 100 million COVID-19 vaccine shots into the arms of the American people” during his first 100 days in office. He also added he would make it a “national priority” to get children back to school during that time.μ
- In addition, Belgium Spanish and Italy will start vaccinating people against COVID-19 if EU gives green light.
- Russians begin mass voluntary vaccination against COVID 19 next week with producing 2 million vaccine doses of sputnik v jab with 92% effective at protecting people from COVID-19 from interim result. Sputink V vaccine developed by Gamaley research institute in Moscow approved by MOH Russian federation 11 Aug.
- This effort marks a turning point in the remarkable race to produce a vaccine and the global effort to end a pandemic that has killed 1.5 million people worldwide

Reference

1. Priority groups for coronavirus (COVID-19) vaccination: advice from the JCVI, 25 September 2020
<https://www.gov.uk/government/publications/priority-groups-forcoronavirus-covid-19-vaccination-advice-from-the-jcvi-25-september-2020>
2. Public Heath England report - Beyond the data: Understanding the impact of COVID-19 on BAME groups
3. NIH Clinical Trial of Investigational Vaccine for COVID-19 Begins | NIH: National Institute of Allergy and Infectious Diseases. Available from: <https://www.niaid.nih.gov/news-events/nih-clinical-trial-investigational-vaccine-covid-19-begins>.,
4. GAVI. The Gavi COVAX AMC: an investment opportunity. <https://www.gavi.org/covax-facility>
5. US Department of Health and Human Services: Food and Drug Administration. Development and licensure of vaccines to prevent COVID-19: guidance for industry.

SAFETY AND EFFICACY OF THE CHADOX1 NCOV-19 VACCINE (AZD1222) AGAINST SARS-COV-2: AN INTERIM ANALYSIS OF FOUR RANDOMISED CONTROLLED TRIALS IN BRAZIL, SOUTH AFRICA, AND THE UK

- A safe and efficacious vaccine against SARS-CoV-2, if deployed with high coverage, could contribute to the control of the COVID-19 pandemic. This study evaluated the safety and efficacy of the ChAdOx1 nCoV-19 vaccine in a pooled interim analysis of four trials.
- This analysis includes data from four ongoing blinded, randomised, controlled trials done across the UK, Brazil, and South Africa. Participants aged 18 years and older were randomly assigned (1:1) to ChAdOx1 nCoV-19 vaccine or control (meningococcal group A, C, W, and Y conjugate vaccine or saline).
- Participants in the ChAdOx1 nCoV-19 group received two doses containing 5×10^{10} viral particles (standard dose; SD/SD cohort); a subset in the UK trial received a half dose as their first dose (low dose) and a standard dose as their second dose (LD/SD cohort).
- The primary efficacy analysis included symptomatic COVID-19 in seronegative participants with a nucleic acid amplification test-positive swab more than 14 days after a second dose of vaccine. Vaccine efficacy was calculated as $1 - \text{relative risk}$ derived from a robust Poisson regression model adjusted for age.
- Between April 23 and Nov 4, 2020, 23 848 participants were enrolled and 11 636 participants (7548 in the UK, 4088 in Brazil) were included in the interim primary efficacy analysis.
- In participants who received two standard doses, vaccine efficacy was 62.1% (95% CI 41.0–75.7; 27 [0.6%] of 4440 in the ChAdOx1 nCoV-19 group vs 71 [1.6%] of 4455 in the control group) and in participants who received a low dose followed by a standard dose, efficacy was 90.0% (67.4–97.0; three [0.2%] of 1367 vs 30 [2.2%] of 1374; $p_{\text{interaction}}=0.010$).
- Overall vaccine efficacy across both groups was 70.4% (95.8% CI 54.8–80.6; 30 [0.5%] of 5807 vs 101 [1.7%] of 5829).
- From 21 days after the first dose, there were ten cases hospitalised for COVID-19, all in the control arm; two were classified as severe COVID-19, including one death. There were 74 341 person-months of safety follow-up (median 3.4 months, IQR 1.3–4.8): 175 severe adverse events occurred in 168 participants, 84 events in the ChAdOx1 nCoV-19 group and 91 in the control group.
- Three events were classified as possibly related to a vaccine: one in the ChAdOx1 nCoV-19 group, one in the control group, and one in a participant who remains masked to group allocation.
- ChAdOx1 nCoV-19 has an acceptable safety profile and has been found to be efficacious against symptomatic COVID-19 in this interim analysis of ongoing clinical trials.

Reference

1. Voysey, Merryn, Aban, Marites et al. Safety and efficacy of the ChAdOx1 nCoV-19 vaccine (AZD1222) against SARS-CoV-2: an interim analysis of four randomised controlled trials in Brazil, South Africa, and the UK. *The Lancet*, Volume 0, Issue 0.

TRENDS IN SUICIDE DURING THE COVID-19 PANDEMI

- As many countries face new stay-at-home restrictions to curb the spread of covid-19, there are concerns that rates of suicide may increase—or have already increased during the COVID pandemic. Several factors underpin these concerns, including deterioration in population mental health, a higher prevalence of reported thoughts and behaviors of self-harm among people with covid-19, problems accessing mental health services, and evidence suggesting that previous epidemics such as SARS (2003) were associated with a rise in deaths by suicide. Therefore, Suicides and attempted suicides are an important public health concern in the current COVID-19 pandemic
- Widely reported studies modelling the effect of the covid-19 pandemic on suicide rates predicted increases ranging from 1% to 145%, largely reflecting variation in underlying assumptions. Particular emphasis has been given to the effect of the pandemic on children and young people. Numerous surveys have highlighted that their mental health has been disproportionately affected, relative to older adults, and some suggest an increase in suicidal thoughts and self-harm.
- Supposition, however, is no replacement for evidence. Timely data on rates of suicide are vital, and for some months we have been tracking and reviewing relevant studies for a living systematic review. The first version in June found no robust epidemiological studies with suicide as an outcome, but several studies reporting suicide trends have emerged more recently. Overall, the literature on the effect of covid-19 on suicide should be interpreted with caution. Most of the available publications are preprints, letters (neither is peer reviewed), or commentaries using news reports of deaths by suicide as the data source.
- Any change in the risk of suicide associated with covid-19 is likely to be dynamic. The 20% decrease in Japan early in the pandemic seemed to reverse in August, when a 7.7% rise was reported. Evidence from previous epidemics suggests a short term decrease in suicide can occur initially—possibly linked to a “honeymoon period” or “pulling together” phenomenon.

Preventive action

- We must remain alert to emerging risk factors for suicide but also recognize how known risk factors may be exacerbated—and existing trends and inequalities entrenched—by the pandemic.
- Tackling known risk factors that are likely to be exacerbated by the pandemic is crucial. These include depression, post-traumatic stress disorder, hopelessness, feelings of entrapment and burdensomeness, substance misuse, loneliness, domestic violence, child neglect or abuse, unemployment, and other financial insecurity.
- Appropriate services must be made available for people in crisis and those with new or existing mental health problems. Of greatest concern, is the effect of economic damage from the pandemic.
- Appropriate safety nets must be put in place or strengthened for people facing financial hardship; along with active labor market policies to help people who are unemployed obtain work. Responsible media reporting also has a role: promoting the importance of mental health support, signposting sources of help, reporting stories of hope and recovery, and avoiding alarmist and speculative headlines that may heighten risk of suicide.

- It is still too early to say what the ultimate effect of the pandemic will be on suicide rates. Data so far provide some reassurance, but the overall picture is complex. The pandemic has had variable effects globally, within countries and across communities, so a universal effect on suicide rates is unlikely. The impact on suicide will vary over time and differ according to national gross domestic product and individual characteristics such as socioeconomic position, ethnicity, and mental health.
- One guiding principle, however, is that suicide is preventable, and action should be taken now to protect people's mental health. We must remain vigilant and responsive, sharing evidence early and internationally in these evolving uncertain times.

Reference

1. John, A. et al. (2020) 'Trends in suicide during the covid-19 pandemic', *BMJ*, 371, p. m4352. doi: 10.1136/bmj.m4352.