EPHI, National Data Management Center for health (NDMC):- Quick update on COVID-19, 053

 This update summarizes:

 • ETHIOPIA'S COVID-19 SITUATION UPDATE.

 • GLOBAL AND REGIONAL BURDEN OF COVID-19.

 • RAPID ANTIGEN SCREENING OF ASYMPTOMATIC PEOPLE AS A PUBLIC HEALTH TOOL TO COMBAT COVID-19.

ETHIOPIA'S COVID-19 SITUATION UPDATES

- Since the last brief (08 April 2021), 12,864 new confirmed corona virus disease 2019 (COVID-19) cases and 194 new deaths have been reported nationally. To date, a total of 234,405 COVID-19 cases and 3,252 related deaths (case fatality rate (CFR): 1.39) have been reported from 9 regions and 2 city administrations in the country. Compared to the cases and deaths reported a week ago, the national cumulative case and deaths showed increment by 4% and 5% respectively.
- The distribution of cumulative cases by region is top in Addis Ababa 152,701 followed by Oromia 32,663. Over the last seven days, top new case reporting regions were Addis Ababa and Oromia region, each reported more than 10k and 2k new cases respectively. Those two top reporting regions account for 78.1 % of new cases identified over the week (Fig 1).



Fig1: Total cases and new cases (over a week time) by region.

• There are 57,555 active cases currently, of which 995 (1.73%) of them are critical. So far 174,591 cases have recovered from COVID-19, out of which 8,456 recoveries were over the last one week period which increased by 4% compared to the last week (Fig 2).



Fig 2: Proportions of active cases, recoveries and death as of April 01, 2021.

• The total number of tests done to date is 2,469,593 showing a 1% increase compared to last week. Among 54,620 laboratory samples tested over the last one week duration, 12,864 of them tested positive for COVID-19, yielding a positivity rate of 23.6%.

Case Management and Infection Prevention Control (Ipc):

- This week, April 8- April 15, 2021, there are 8,692 newly recovered cases bringing the total number of COVID-19 recovered cases to 174, 591
- There are 995 patients in severe condition as of April 15, 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 145, 602 COVID-19 confirmed cases are followed in the HBIC as of April 15, 2021
- 124,605 of them have recovered in the HBIC as of April 15, 2021.
- 22,580 cases are currently on HBIC.
- 26 COVID-19 related deaths have occurred in the HBIC.
- 1869 cases have been transferred from treatment centers to HBIC.
- 647 cases have been transferred from HBIC to treatment centers.
- EPHI and FMOH COVID 19 response highlights of the week /trainings and supply
- Facilitation and estimating the proportion of COVID-19 reagents and supplies performed for distribution for Bole Chefe treatment center, Amhara Public Health Institute, Jimma University Laboratory medical center, Ethiotebib Hospital and St Amanuel Mental Specialized Hospital on April 7/ 2021.
- 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. <u>https://twitter.com/lia_tadesse</u>
- 3. <u>http://www.covid19.et/covid-19/</u>
- GLOBAL AND REGIONAL BURDEN OF COVID-19
- Globally the total number of cases is extended to 138843235 as of April 15, 2021. A total of 111,617,948 cases recovered and 2,985,676 people died since the beginning of the outbreak. Globally, in a week time, from April 8 to April 15, 2021, COVID-19 cases increased by 3.9% and deaths by 3.1%. 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 (Table 1).

	COVID cases	Weekly %	deaths	Weekly %
		change		change
Global	138,843,235	3.9	2,985,676	3.1
Europe	42,164,049	3.3	962,675	2.8
North America	37,093,854	1.8	841,940	1.7
Asia	32,226,540	7.2	455,961	3.6
South America	22,876,436	4.5	606,880	5.3
Africa	4,421,267	2.0	117,050	1.9
Oceania	60,368	2.6	1,155	0.4

Table 1. Global cases (top) and deaths (bottom) reported as of April, 2021.

• USA has recorded the highest number of cases 1.7% (31,624,899 to 32,149,223 cases) and 1.3% (570,870 to 578,092 deaths) that accounts 23.2% of the total global cases and carried 19.4% of global deaths as of April 15, 2021.

- India is the 2nd highest in terms of cases in a week time by 8.9% (12,926,061 to 14,070,890) and deaths by 3.8% (166,892 to 173,152).
- Brazil became the 3rd ranking worldwide with increased number of cases in a week time by 3.7% (13,193,205 to 13,677,564) and deaths by 6.3% (340,776 to 362,180).
- France ranked 4th globally with 5,149,834 cases and 99,777 deaths.
- Russia ranked 5th globally replaced France with 4,666,209 cases and 104,000 deaths.

- The line share of Africa to the global COVID-19 pandemic was 3.2% and 3.9% of the global cases and deaths as of April 15). The cases in the continent have increased by 2% in a week time (4,334,878 to 4,421,267 cases). Similarly, the total number of deaths in Africa has increased from 114,833 to 117,050 showing 1.9%. Total recoveries stand at 3,954,224.
- South Africa is the leading in the continent with 1,561,559 cases and 53,498 deaths. Morocco (503,664 cases, 8,920 deaths), Tunisia (276,727 cases, 9,480 deaths), Ethiopia (234,405 cases, 3,252 deaths) and Egypt (212,961cases, 12,570 deaths) are the most four leading countries next to South Africa in reporting COVID-19 cases in Africa. (See table below).

	April 8		April 15	
Africa	Cases	Deaths	Cases	Deaths
South Africa	1,553,609	53,111	1,561,559	53,498
Morocco	499,688	8,867	503,664	8,920
Tunisia	264,994	9,087	276,727	9,480
Ethiopia	221,544	3,058	234,405	3,252
Egypt	206,510	12,253	212,961	12,570

• 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: <u>https://ourworldindata.org/covid-cases</u>

RAPID ANTIGEN SCREENING OF ASYMPTOMATIC PEOPLE AS A PUBLIC HEALTH TOOL TO COMBAT COVID-19.

- People who are presymptomatic and asymptomatic are important contributors to the transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).
- The approach of identifying cases of infection by testing people who are predominately symptomatic and their contacts is slow and not sufficiently effective in preventing onward community transmission of SARS-CoV-2.
- Rapid antigen tests have shown adequate sensitivity in identifying cases of infection with higher viral loads and can be used to good effect in screening programs in regions of high prevalence and in settings where physical distancing cannot be maintained (i.e., occupational and school settings) to regularly identify people with SARS-CoV-2 infection who are asymptomatic.

- Rapid antigen testing programs should be government funded, with recognition of the substantial logistical challenges, and be supported by adequate funding to remove disincentives to testing (e.g., adequate sick pay and cost of hotels for isolation).
- Clear public health messaging should help people to understand the meaning of a positive or negative result for a rapid screening test and the need to continue other public health measures in conjunction with such screening.
- Accumulating evidence has shown that people who are infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) who are either presymptomatic (but subsequently develop symptoms) or asymptomatic (have mild symptoms that do not prompt a medical visit) are major contributors to transmission.
- However, current approaches of testing predominately symptomatic patients and relying on the results of expensive and slow laboratory-based testing for contact tracing have proven inadequate to control the spread of the disease, with associated economic and societal impacts. Frequent rapid antigen testing is a scalable public health tool that can effectively identify asymptomatic and asymptomatic people with SARS-CoV-2 infection and improves contact tracing and control of outbreaks.
- Until sufficient vaccine is available to reduce community transmission, the implementation of screening using rapid antigen testing represents an opportunity to reap substantial benefits at the population level in terms of reduced SARS-CoV-2 transmission.
- Such screening programs will not end the COVID-19 pandemic but, if carefully implemented, could provide an additional layer of safety to current public health strategies by allowing the identification of asymptomatic, presymptomatic and asymptomatic infectious individuals, and empowering people to make informed decisions about their own behavior to reduce the spread of COVID-19.
- Clear guidance and messaging can mitigate the potential harms of false-negative test results and the impact of false-positive results.

References

- Sun K, Wang W, Gao L, Wang Y, Luo K, Ren L, et al. Transmission heterogeneities, kinetics, and controllability of SARS-CoV-2. Science (80-) [Internet]. 2021 Jan 15 [cited 2021 Apr 15];371(6526). Available from: https://doi.org/10.1126/science.abe2424
- Johansson MA, Quandelacy TM, Kada S, Prasad PV, Steele M, Brooks JT, et al. SARS-CoV-2 Transmission From People Without COVID-19 Symptoms. JAMA Netw open [Internet]. 2021 Jan 1 [cited 2021 Apr 15];4(1):e2035057. Available from: <u>https://jamanetwork.com/</u>
- 3. Schwartz KL, McGeer AJ, Bogoch II. Rapid antigen screening of asymptomatic people as a public health tool to combat COVID-19. Can Med Assoc J [Internet]. 2021 Mar 29 [cited 2021 Apr 15];193(13):cmaj.210100. Available from: www.who.int/diagnostics laboratory/eual/eul 0564 032 00 panbi