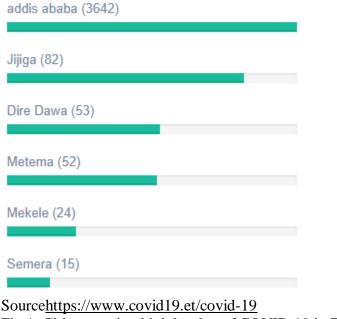
# EPHI, National Data Management Center for health (NDMC) Quick update on COVID 19, 012

This update summarizes	Ethiopia's COVID-19 situation update
	Global and regional buden of COVID 19
	Dexamethasone for COVID-19
	Estimating the Indirect Health Impact of COVID 19 in Ethiopia

### **Ethiopia's COVID 19 situation update**

Fast growth in the numbers of new cases and deaths has been reported across the country. In a week time, the cumulative cases have increased by 23% jumping from 3,954 on June 18 to 5,175 to on June 25, 2020. The deaths have increased by 19% from 65, on June 18 to 81 on June 25, 2020. The number of recoveries has shown a 39% increase. The total number of tests stands at 232, 050.

As shown in Fig 1, Addis Ababa has carried the highest number of cases compared to other cities and has reported a surge of community and cluster transmissions.



### EPHI and FMOH COVID 19 response highlights of the week

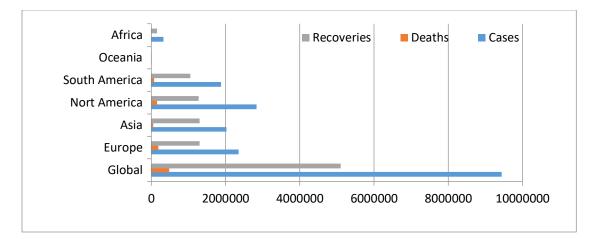
- Mobile-based training for Health Extension Workers (HEWs) and supervisors have been provided. Of the total 4,610 HEWs and supervisors enrolled in the training from Addis Ababa city administration, Amhara and Benishagul Gumuz region 3,262 have completed the training.
- On June 23 a three days comprehensive COVID-19 training started for 21 Military and 19 Federal Police health professionals from different places.
- June 22, 2020, Training of trainers on Emergency supply chain management conducted with a support from the Global Health Supply Chain Program Procurement Supply Management (GHSC-PSM).
- June 22, 2020; Interpersonal communication and Risk Communication and Community Engagement training provided for 39 volunteers working on psychological support.
- June 22, 2020; Pre-deployment orientation provided for sixty-six volunteer health professionals recruited by Ohio State University Global One Health Initiative.;
- June 19,2020; Comprehensive training on COVID-19 delivered for physicians and nurses to be deployed to Dawele, Somali regions and IPC orientation for people with hearing and visual impaired people..
- June 19,2020; Serologic testing orientation delivered for nurses and laboratory technicians working in health facility. Moreover, training on psychosocial support is completed for 22 contact tracers, 10 Ambulance drivers and 11 RRT members.
- The government has revised the quarantine period for persons entering the country from fourteen to seven days as of June 19,2020.
- June 19,2020; COVID-19 National Ministerial Committee passed a mandatory decision that those who come from abroad must have certificate which shows they tested negative for COVID-19 conducted 72 hours before arrival. A person who does not have the certificate will be put in quarantine for 7 days and additional 7 days at home.

### References

- 1. <u>https://www.covid19.et/covid-19/</u>
- 2. PUBLIC HEALTH EMERGENCY OPERATIONS CENTER (PHEOC), ETHIOPIA

### Global and regional burden of COVID-19

• Globally the total number of cases is extended to 9,437,685 as of June 25, 2020. A total of 5,099,364 cases recovered and 482, 002 people die since the beginning of the outbreak. In a week time, from June 18 to June 25, 2020, COVID19 cases increased by 11.0% and deaths by 7.0%. North America is the leading in terms of cases followed by Europe and Asia. However, number of death is higher in Europe than the rest of the world.



- In the USA, the increasing trend has continued showing little improvement since June 25. However, the country has recorded the highest number of cases (2,440,941cases) that accounts 26% of the total global cases and carried 25.7% of global deaths as of June 25, 2020.
- Brazil has continued reporting the second COVID-19 case burden in the world following USA. The number of cases in Brazil has increased in a week time by 21% (960,309 to 1,157,451 cases) and by 13.5% (46,665 to 52,951 deaths).
- Russia has continued reporting the highest number of cases in Europe, with 606,881 cases. The European countries have shown a tendency to diminish COVID 19 case reports. For example, Spain (291,763 cases to 294,166), UK (299,251 cases to 306,862), Italy (237,828 cases to 239,410), France (158,174 to 161,348 cases) and Germany (189,504 cases to 193,125) showed a gradual increment from 18 to 25 June 2020. Russia continues to report less number of deaths, only 1% of its case.
- The line share of Africa to the global COVID 19 pandemic has still been low (only 3% of the global cases and 2% of deaths as of June 25). However, the number of cases has increased by 21.4% in a week time (from 271,145 to 329,271) within the continent. Similarly, the total number of deaths in Africa has increased from 7256 to 8,685, showing a 20% increase in a week time. Total recoveries stand at 157,757. South Africa is still leading with 106,108 cases, 2,102 deaths in the continent, Egypt (58,141cases, 2,365 deaths), Nigeria (21,371cases, 533 deaths), Ghana (14,568 cases, 95 deaths), Algeria (12,076 cases, 861 deaths), Cameroon (12,270 cases, 313 deaths), are still in the leading pack in reporting COVID 19 cases and deaths.

	June 18		June 25	
Africa	Cases	Death	Cases	Deaths
South Africa	80,412	1,674	106,108	2,102
Egypt	49,219	1,850	58,141	2,365
Nigeria	17,735	469	21,371	533
Ghana	12,590	66	14,568	95
Algeria	10,484	732	12,076	861
Cameroon	9,864	276	12,270	313

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• In East Africa, COVID 19 cases and deaths have been showing fast progress. In a week time, COVID19 cases and deaths increased respectively by 10.8% and 12.5% in Sudan, 28.7% and 21.5% in Kenya, 27.3% and 20.0% in Ethiopia and 1.9% and 20.9% in Djibouti, 5.2% and 2.3% in Somalia.

	June 18		June 25	
East Africa	Cases	Deaths	Cases	Deaths
Sudan	8,020	487	8,889	548
Kenya	4,044	107	5,206	130
Ethiopia	3,954	65	5,034	78
Djibouti	4,545	43	4,630	52
Somalia	2,696	88	2,835	90

### 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; <u>https://au.int/covid19</u>

# **Dexamethasone for COVID 19**

- World Health Organization Director-General, Tedros Adhanom, says the fight against COVID-19 has received a much-needed boost following "the recent finding that the steroid dexamethasone has life-saving potential for critically ill patients." (1)
- Dexamethasone is a corticosteroid used in a wide range of conditions for its antiinflammatory and immunosuppressant effects. It was tested in hospitalized patients with COVID-19 in the United Kingdom's national clinical trial RECOVERY and was found to have benefits for critically ill patients (3).
- According to preliminary findings shared with WHO, for patients on ventilators, the treatment was shown to reduce mortality by about one third, and for patients requiring only oxygen, mortality was cut by about one fifth (2)
- A randomized Evaluation of COVID-19 therapy (RECOVERY) trial platform for comparing a range of possible treatments with usual care in patients hospitalized with COVID-19. According to the study, coronavirus disease 2019 (COVID-19) is associated with diffuse lung damage. Corticosteroids may modulate immune-mediated lung injury and reducing progression to respiratory failure and death (3).
- The trail compared dexamethasone 6 mg given once daily for up to ten days vs. usual care alone on a 28-day mortality. There were 2,104 patients randomly allocated to receive dexamethasone compared with 4, 321 patients concurrently allocated to usual care. Overall, 454 (21.6%) patients allocated dexamethasone and 1,065 (24.6%) patients allocated usual care died within 28 days (age-adjusted rate ratio [RR] 0.83; 95% confidence interval [CI] 0.74 to 0.92; P<0.001) (3).
- The proportional and absolute mortality rate reductions varied significantly depending on level of respiratory support at randomization (test for trend p<0.001): Dexamethasone reduced deaths by one-third in patients receiving invasive mechanical ventilation (29.0% vs. 40.7%, RR 0.65 [95% CI 0.51 to 0.82]; p<0.001), by one-fifth in patients receiving oxygen

without invasive mechanical ventilation (21.5% vs. 25.0%, RR 0.80 [95% CI 0.70 to 0.92]; p=0.002), but did not reduce mortality in patients not receiving respiratory support at randomization (17.0% vs. 13.2%, RR 1.22 [95% CI 0.93 to 1.61]; p=0.14) (3).

• The study concluded that in patients hospitalized with COVID-19, dexamethasone reduced 28-day mortality among those receiving invasive mechanical ventilation or oxygen at randomization, but not among patients not receiving respiratory support (3).

### References

- 1. Jerry Omondi. COVID-19 fight boosted by dexamethasone findings: WHO chief. June 22, 2020. <u>https://africa.cgtn.com/2020/06/22/covid-19-fight-boosted-by-dexamethasone-findings-who-chief/</u>
- 2. WHO. Dexamethasone and COVID-19.25 June 2020 | Q&A. https://www.who.int/newsroom/q-a-detail/q-a-dexamethasone-and-covid-19
- RECOVERY Collaborative Group. Effect of Dexamethasone in Hospitalized Patients with COVID-19 – Preliminary Report Running title: Dexamethasone for COVID-19 – Preliminary Report, June, 22, 2020 <u>https://www.medrxiv.org/content/10.1101/2020.06.22.20137273v1.full.pdf</u>

# **Estimating the Indirect Health Impact of COVID 19 in Ethiopia**

- The potential excess deaths due to disruption in services from COVID-19 over 18 months are estimated using the 2017 global burden of diseases by centre for global development on 24, June, 2020.
- Previous models have estimated how many COVID-19 deaths would have occurred in Ethiopia without any response. In a 12-18 month unmitigated scenario the number of deaths estimated were 281,678 by Imperial College London, 200,000-490,000 by London School of Hygiene and Tropical Medicine (95% interval), and 2,713 by WHO Afro (failed containment scenario). In contrast, since 13 March, when Ethiopia confirmed its first case of COVID-19, there have been roughly 5,034 confirmed cases and 78 deaths.
- The relatively "low" death toll could be attributed to the early introduction of preventive measures that the government is implementing.
- Ethiopia's stringency Index, a composite measure of nine response metrics: school closures, workplace closures, cancellation of public events, restrictions on public gatherings, closures of public transport, stay-at-home requirements, public information campaigns, restrictions on internal movements, and international travel controls, which indicate the number and strictness of government's policies is shown in figure below.
- As of 8 April 2020 until June 22, Ethiopia's stringency response is 73.15 out of 100.

# Timeline for COVID-19 in Ethiopia

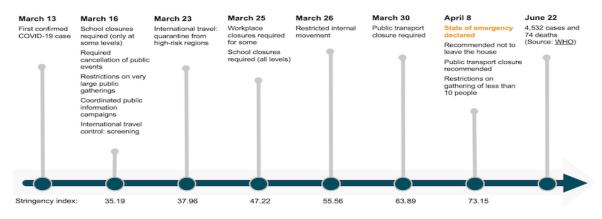


Figure: Ethiopia's stringency response index

### Non-COVID-19 deaths

- Excess death due to communicable, maternal, neonatal, and nutritional diseases ranges from 22,386 to 89,546.
- Excess death due to non-communicable diseases ranges from 3,688 to 8,850 and self-harm and interpersonal violence increase by 337.
- Decrease in death by 642 for transport injuries and by 642 for unintentional injuries is estimated, which amounts to a total of 1,172 reductions in the number of deaths.

### Conclusion

- Despite what appears to be robust response to control the spread of COVID-19, the excess non-COVID 19 deaths in Ethiopia is significant, ranging between 25,000 and 97,000 additional deaths over 18 months.
- More than 90% of these deaths would be due to communicable, maternal, neonatal, and nutritional diseases.
- It is unclear whether these avoidable non-COVID-19 deaths will be entirely due to lockdowns and other policy measures. Health care avoidance due to fear of the virus could have contribute to these deaths. Evidence is missing to explain what's causing these deaths: fear of the virus or the measures implemented to suppress it.
- More work will be required to disentangle the damage that is caused by the virus from the damage caused by the response.

### Reference

Damian Walker, Y-Ling Chi, Mahlet Kifle Habtemariam, Ole Norheim and Kalipso Chalkidou. Estimating the Indirect Health Impacts of COVID-19 in Ethiopia. Accessed 25, July, 2020, Available from:

### https://www.cgdev.org/blog/estimating-indirect-health-impacts-covid-19-ethiopia

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