



 $Address:\ Telephone: +251-112-765-340,\ Toll\ free:\ 8335,\ Fax: +251-112-758-634,\ Website:\ www.ephi.gov.et,\ P.O.\ Box\ 1242,\ Swaziland\ Street,\ Addis\ Ababa$

PUBLIC HEALTH EMERGENCY OPERATION CENTER (PHEOC), ETHIOPIA

COVID-19 PANDEMIC PREPAREDNESS AND RESPONSE IN ETHIOPIA

WEEKLY BULLETIN

Dates Covered by this Bulletin: May 04, 2020 to May 10, 2020

BULLETIN Nº: 2 Issue Date: May 11, 2020

I. HIGHLIGHTS

- A one hundred-two new confirmed COVID-19 cases are reported in the WHO Epi-week 19, which is more than one third of the total cases (239) reported in Ethiopia.
- Two COVID-19 deaths are newly reported in the last week bringing the total number of deaths to five.
- Ninety-nine COVID-19 cases have been recovered so far.
- One new additional region (Tigray) has reported COVID-19 cases in the WHO Epi-week 19 bringing the total
 affected regions to six and two city administrations.
- As of WHO week 19, a total of 4,001 contacts were identified
- Twenty-three laboratories across the country are conducting COVID-19 testing.
- MOH State minister and EPHI DDG/ IM have supervised COVID-19 preparedness and response activities and non COVID-19 essential health service provision in SNNPR and Oromia Regional States in Week 19
- Africa CDC has recruited 20 volunteer public health professionals to support efforts of COVID-19
 preparedness and response in Ethiopia and the team oriented and deployed to the regions and city
 administration.



II. BACKGROUND

The Ministry of health (MOH) and Ethiopian Public Health Institute (EPHI) have intensified and responding to the Corona Virus Disease 2019 (COVID-19) pandemic in collaboration with stakeholders and partners.

The Public Health Emergency Operation Center (PHEOC), which is located at the EPHI, was activated on January 27, 2020 to coordinate the preparedness and response efforts for the COVID-19 using an Incident Management System (IMS). WHO and other partners are currently supporting in scaling up preparedness and response efforts and implementation of related recommendations suggested by the IHR Emergency Committee.



Fig. 1: EPHI declaring Activation of PHEOC IMS to its partners and stakeholders, January, 2020.

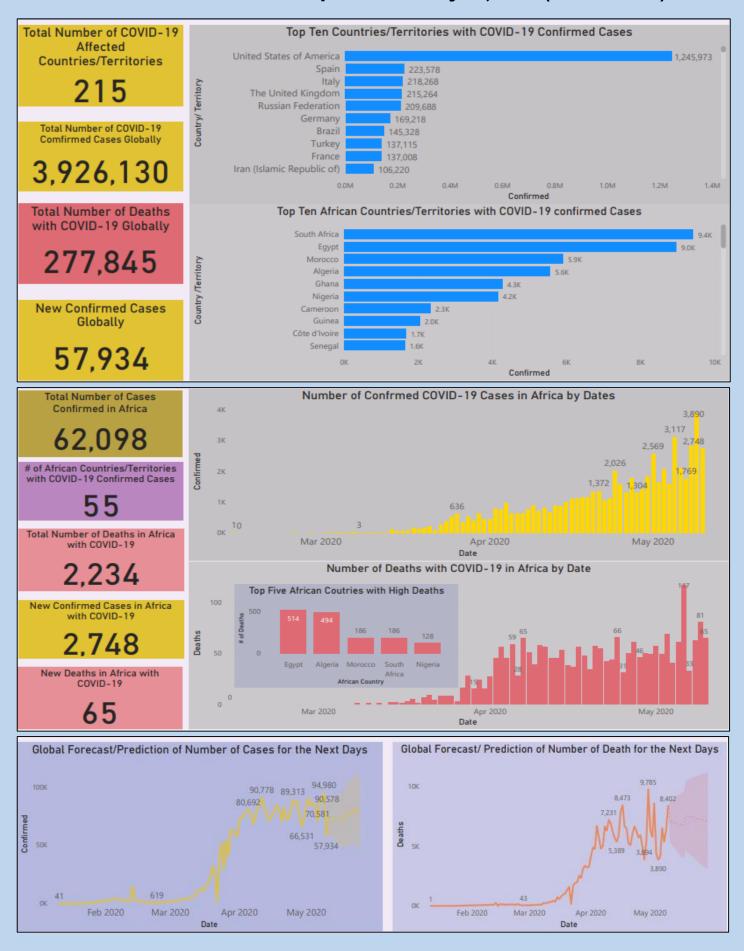
III. EPIDEMIOLOGICAL SITUATION

Global Situation

Between December 2019 and May 10, 2020, COVID-19 pandemic affected 215 countries/territories causing 3,917,366 cases and 274,361 deaths (CFR=7.04%) globally. The United States of America (USA) reported the highest number of cases (1,245,775) and deaths (75,364) with CFR of 6.05. The second highest number of death is reported in the United Kingdom with 31,587 death record and CFR=14.7%.

In Africa, 55 countries/territories have reported COVID-19 cases. As of May 10, 2020, a total of 62,098 cases and 2,234 deaths were reported across the continent. The highest number of cases were reported from South Africa, 9,420 (15.2%) cases followed by Egypt, 8.964 (14.4%) cases and Morocco, 5,910 (9.5%). See the summary dashboard below.

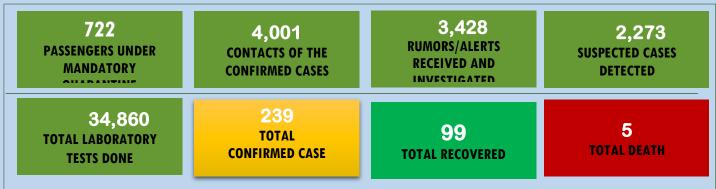
Dashboard: Global Situation Update as of May 10, 2020 (Source WHO)



National COVID-19 situation

In Ethiopia, the first COVID-19 case was reported on March 13, 2020. The number of cases then increased both from contacts of confirmed cases and newly imported cases. Among the 239 cases reported, 115 (48.12%) are imported, 77 (32.22%) are close contacts of confirmed cases, and the source of infection of the remaining 47 (19.67%) cases is not yet identified. Among the total confirmed cases 97 (40.59%) cases are detected from mandatory quarantine. In the last epi week (week 19), 102 confirmed cases were reported which is about one third of the total reported cases so far in the country.

National COVID-19 update



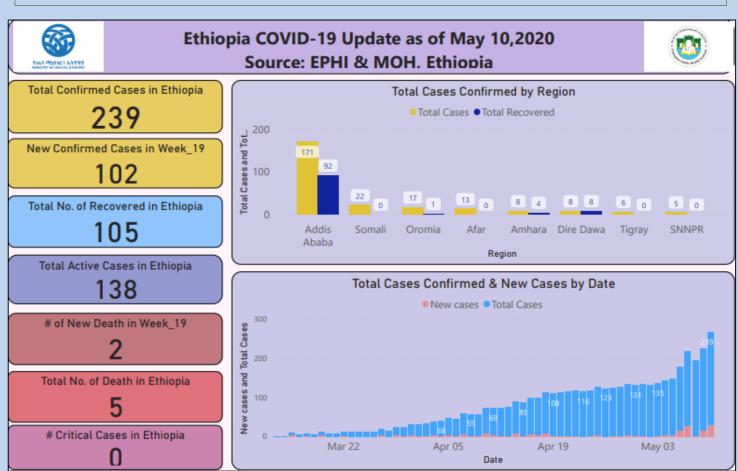


Fig. 2: Summary of the death, recovered and confirmed cases by location and date of confirmation, Ethiopia, May 10, 2020



Fig. 3: Geographical distribution of COVID-19 confirmed cases in Ethiopia, as of May 10, 2020

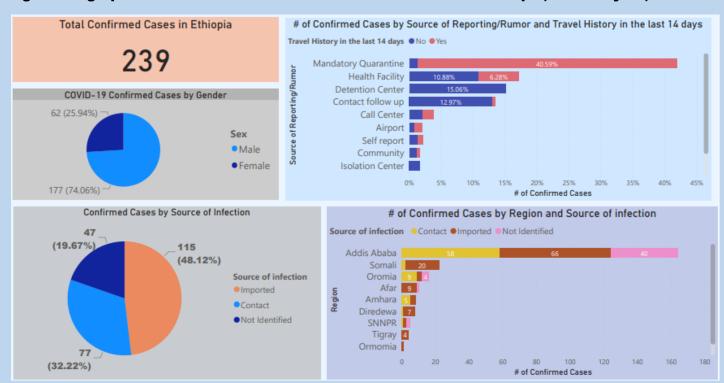


Fig. 4: COVID-19 confirmed cases summary dashboard as of May 10, 2020, Ethiopia

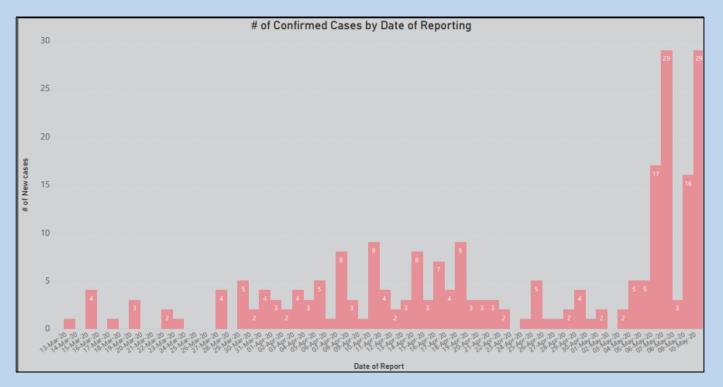


Fig. 5: Trend of confirmed cases by date of confirmation as of May 10, 2020, Ethiopia

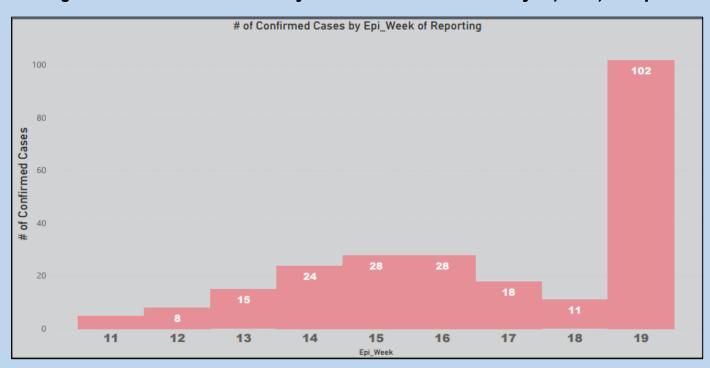


Fig. 6: COVID-19 confirmed cases by Epi-week as of May 10, 2020, Ethiopia

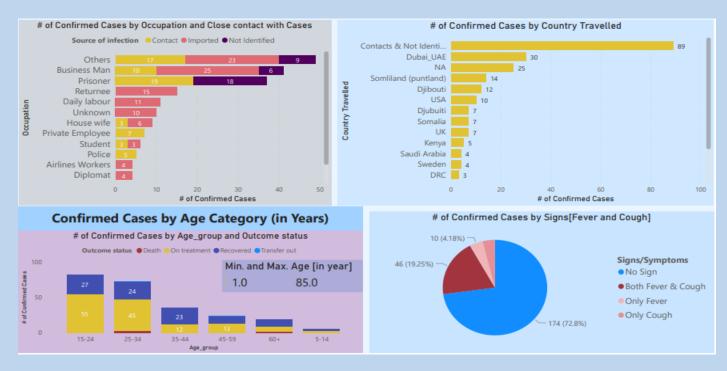


Fig. 7: COVID-19 confirmed cases summary dashboard as of May 10, 2020, Ethiopia

Epi Surveillance and Laboratory Related Activities

• There is ongoing travelers' health screening at point of entries (POEs), follow-up of international travelers and returnees and mandatory quarantine of passengers coming to Ethiopia, rumor collection and information provision via toll free call center, rumor verification and investigation, community screening and house to house search, contact tracing and follow-up of persons who had contact with confirmed cases and laboratory investigation of suspected cases, quarantined individuals, contacts of confirmed cases, random SARI/pneumonia cases and community members.

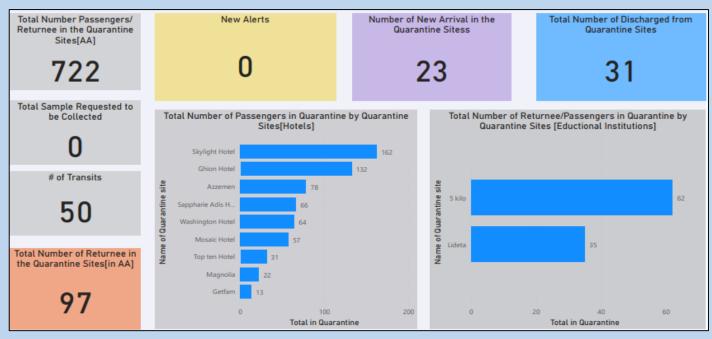
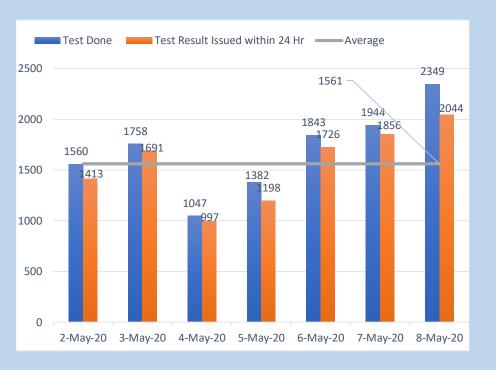


Fig. 9: Mandatory quarantine update as of May 10, 2020, Ethiopia



- Total Number of tests done in the Week 19 were 11,883.
- Results issued within 24 hours after receiving the specimen in Week 19 were 10,925 (91.9%).
- Of the total tests 4% were done in Week 19.

Fig. 10: COVID-19 Test Conducted Vs Test Result Issued with 24 TAT

- Specimen collection by EPHI team increased by 25% compared to last week.
- Number of COVID-19 test done increased by 33% compared to last Week

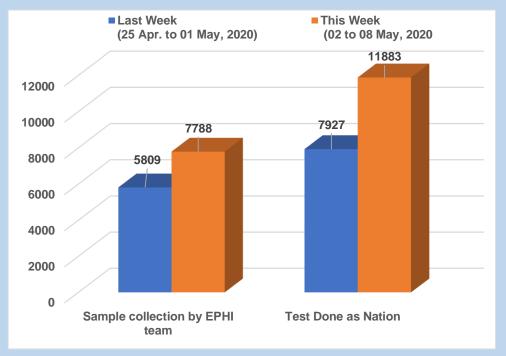


Table 1: Laboratory expansion summary

Status	Number	Testing Capacity
Functional Laboratories	23 (4 in EPHI)	6445
Ready	3	
Under Verification Process	3	952
Candidates(training and Verification planned)	31	7100
Total	61	14597

 Daily dissemination of appropriate and timely COVID-19 related messages and situation update to the public and governmental stakeholders is ongoing.



IV. COORDINATION, LEADERSHIP AND Partnerships

- Since its activation, the national PHEOC is collaboratively working with stakeholders: government agencies, partner organizations, UN agencies, embassies, hospitality sector, Industrial parks and others.
- Supports (financial, logistic and technical) are being received from partners, private institutions, individuals and others.
- Morning briefing of IMS core staffs and key partners representatives is being conducted on daily basis
- Weekly zoom meeting being conducted with partners and stakeholders to guide the partners area of collaboration.
- Leadership and strategic weekly zoom meeting conducted to oversee the response efforts.



Fig. 10: Weekly zoom meeting with partners and stakeholders, May 06, 2020.

 State Minister, Ministry of Health and EPHI DDG/ IM have visited and supervised COVID-19 preparedness and response activities and non COVID-19 essential health service provision in SNNPR and Oromia Regional







Night shift duty and coordination initiation improved some of the existing challenges:

- Timely arrival of RRT to investigate alerts/rumors and pick the suspects.
- Sample collection for the suspected cases is hastened
- Admin and logistics/supply related challenges is solved on the spot at night.
- Quarantine and isolation facility supervision is conducted.
- Non COVID-19 medical condition services are facilitated for the mandatory quarantine people.



Fig. 11: A stand by mobile clinic for COVID-19 response from SPHMMC





Fig. 12: Warehouse Constructed at EPHI in collaboration with WFP for the Emergency Stock Storage

V. CHALLENGES AND WAY FORWARD

Challenges

- Alarming increment in COVID-19 cases in the country.
- Spread of cases to the regions and rural areas.
- Incomplete and delayed reports from regions on COVID-19 cases and contacts and other regional COVID-19 related activities
- Quarantine related challenges
 - Poor hygiene and sanitation
 - Failure of the quarantined individuals to adhere to IPC and quarantine protocol
- Misuse or Irrational use of PPE such as face mask and glove by few individuals in the community
- Failure to adhere to physical distancing and other preventions advises among the public
- Competing priorities due to superimposed disease outbreaks in some areas such as cholera
 Way Forward
- Enhance technical support, coordination and timely and accurate information sharing at all level.
- Strengthened collaboration and coordination with key stakeholders and partners.
- Intensify risk communication and community engagement activities.
- Enhance active surveillance for COVID-19 such as house-to-house case search and detection in the community

- Intensification of a capacity building trainings and orientation including through virtual/online platforms.
- Identify and establish additional case treatment centers and quarantine sites, especially in regions.
- Strengthen and sustain essential health services other than COVID-19

COVID-19 Related Events and Activities Flow Timeline



PUBLIC HEALTH POLICY RECOMMENDATION

Advice for the Public:

- It is important to be informed of the situation and take appropriate measures to protect yourself and your family.
 - Stay at home
 - Wash hands frequently
 - Don't touch your mouth, nose or eye by unwashed hands
 - Keep physical distancing; avoid mass gathering, shaking hands and
- For most people, COVID-19 infection will cause mild illness however, it can make some people very ill and, in some people, it can be fatal.
- Older people, and those with pre-existing medical conditions (such as cardiovascular disease, chronic respiratory disease or diabetes) are at risk for severe disease.
- If anybody had contact with a COVID-19 confirmed patient, he/she should call 8335 or 952 or report to regional toll-free lines or to the nearby health facilities.

Health evidence summary:

Articles/Comment/	Summary
Correspondence/ Editorials	
COVID-19: a public health approach to manage domestic violence is needed. https://doi.org/10.1016/S2468-2667(20)30112-2	 An area of concern due to covid-19 is the impending crisis of domestic violence, gender based violence and child abuse and neglect. Principles of public health approach should be implemented to support survivors of gender-based violence. Potential approaches to improve the surveillance of domestic violence could include the routine inquiry and the urgent implementation of linked datasets between police and health records datasets to identify individuals at risk. Enhancing surveillance would also provide the opportunity to offer targeted support and interventions.
COVID-19 on the African continent. https://doi.org/10.1016/S1473-3099(20)30374-1	 To illustrate the potential burden of SARS-CoV-2 epidemics with in the most vulnerable countries in Africa, SARS-CoV-2 outbreak in DR Congo in the albescence of intervention was simulated. This study estimated that there would be 76,213,155 infection and 319,441 deaths in the absence of physical distancing. Given the dearth of health care facilities and equipment across Africa, the authors urge investing heavily in prevention, including lockdowns focused on densely populated areas and shelter-in-place orders for the most vulnerable
Hyperinflammatory shock in children during COVID-19 pandemic. https://doi.org/10.1016/S0140-6736(20)31094-1	 The eight children seen in this paper had hyperiflammatory shock with multiorgan failure showing symptoms of toxic shock syndrome. Authors of this paper showed a phenomenon they believed is new and affects previously asymptomatic children with SARS-COV-2 infection manifesting as hyperiflammation.

Triple combination of interferon beta-1b, lopinavir-ritonavir, and ribavirin in the treatment of patients admitted to hospital with COVID-19: an open-label, randomized, phase 2 trial. https://doi.org/10.1016/S0140-6736(20)31042-4

- This study assessed the efficacy and safety of combined interferon beta-1b, lopinavir-ritonavir, and ribavirin for treating patients with COVID-19.
- 86 were randomly assigned to the combination group and 41 were assigned to the combination group and 41 were assigned to the control group.
- This paper concluded that early triple antiviral therapy was safer and superior to lopinavir-ritonavir alone in alleviating symptoms and shortening the duration of viral shedding and hospital stay in patients with mild to moderate COVID-19.

Remdesivir in adults with severe COVID-19: a randomized, double-blind, placebo-controlled, multicenter trial. April 29, 2020 DOI:

https://doi.org/10.1016/S0140-6736(20)31022-9

- A randomized, double-blind, placebo-controlled, multicentre trial at ten hospitals in Hubei, China was done.
- In this study of adult patients admitted to hospital for severe COVID-19, remdesivir was not associated with statistically significant clinical benefits. However, the numerical reduction in time to clinical improvement in those treated earlier requires confirmation in larger studies.

COVID-19-associated nephritis: early warning for disease severity and complications? https://doi.org/10.1016/S0140-6736(20)31041-2

- Three patients had coincidentally submitted urine samples in the few weeks before their infection with SARS-CoV-2. These urine samples had been normal. However, on March 21, 2020, since becoming infected with SARS-CoV-2, the urine sample of one of these three patients was also positive for SARS-CoV-2 RNA. The urine samples of the other two patients have not been tested because of safety concerns.
- Unlike patients in ICU, patients with COVID-19 receiving treatment for mild symptoms in the intermediate care unit had serum albumin concentrations above 2.0 mg/dL, and antithrombin concentrations were low but within normal limits.
- In summary, the respiratory tract is the gateway for SARS-CoV-2 infection, but we postulate that COVID-19-associated nephritis, which can be easily screened for through a simple and inexpensive urine sample analysis, might help predict complications.

Association of Blood Glucose Control and Outcomes in Patients with COVID-19 and Pre-existing Type 2 Diabetes. https://doi.org/10.1016/j.cmet.202 0.04.021

- The impact of blood glucose (BG) control on the degree of required medical interventions and on mortality in patients with COVID-19 and T2D remains uncertain.
- According to the study, subjects with T2D required more medical interventions and had a significantly higher mortality and multiple organ injury than the non-diabetic individuals.
- Notably, fewer individuals from the well-controlled group had SpO2 lower than 95% compared to the poorly controlled group (12.6% versus 22.7%).

What are the underlying transmission patterns of COVID-19 outbreak? An age-specific social contact characterization. DOI:https://doi.org/10.1016/j.eclin m.2020.100354

- A computational model was developed to reveal the interactions in terms of the social contact patterns among the population of different age-groups.
- The results show that the social contact-based analysis can readily explain the underlying disease transmission patterns as well as the associated risks (including both confirmed and unconfirmed cases).

Community participation is crucial in a pandemic. https://doi.org/10.1016/S0140-6736(20)31054-0	 Pandemic responses have largely involved governments telling communities what to do, seemingly with minimal community input. Community participation matters because unpopular measures risk low compliance. Institutional cultures that support coproduction must be created in political and health systems.
Hand cleaning with ash for reducing the spread of viral and bacterial infections: a rapid review. https://doi.org/10.1002/14651858 .CD013597	 The benefits and harms of hand cleaning with ash compared with hand cleaning using soap or other materials for reducing the spread of viral and bacterial infections is seen in this review. Based on the available evidence, the benefits and harms of hand cleaning with ash compared with soap or other materials for reducing the spread of viral or bacterial infections are uncertain.
Guide	Focus
COVID-19 Information - SMS Message Library. https://www.who.int/publications- detail/covid-19-message-library	- This message library, provided by WHO, is intended to be locally adapted and delivered to the general public in countries around the world via SMS or voice message.
WHO COVID-19 Essential Supplies Forecasting Tool (ESFT).	- Is designed to help governments, partners, and other stakeholders to estimate potential requirements for essential supplies to respond to the current pandemic of COVID-19.
https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/patient-management	- The focus of this tool is to forecast essential supplies: it includes estimation of PPE, diagnostic equipment, biomedical equipment for case management, essential drugs for supportive care, and consumable medical supplies.
Coronavirus (COVID-19): Guidance on vulnerable children and young people. The Alliance For Child Protection In Humanitarian Action	- This guidance answers some key questions regarding meeting the needs of vulnerable children during the COVID-19 crisis, including children in care and children with a child protection plan.
Covid-19 and the rights of persons with disabilities: guidance. United nations human rights office of the high commissioner	 COVID-19 impacts persons with disabilities disproportionately due to attitudinal, environmental and institutional barriers that are reproduced in the COVID-19 response. This guidance aims to bring awareness and draw attention to the matter, and provide resources for further learning.

COVID-19 updates and sources of evidence:

Source	Link
WHO Corornavirus (COVID-19) dashboard	https://covid19.who.int/
COVID-19 CORONAVIRUS PANDEMIC	https://www.worldometers.info/coronavirus/
Worldometer	
Johns Hopkins University, Coronavirus Resource	https://coronavirus.jhu.edu/map.html
Center	
Africa CDC Dashboard, COVID-19 Surveillance	https://au.int/en/covid19
Dashboard	
WHO COVID-19 daily situation reports	https://www.who.int/emergencies/diseases/novel-
	coronavirus-2019/situation-reports
BMJ's Coronavirus (covid-19) Hub	https://www.bmj.com/coronavirus
The Lancet COVID-19 Resource Centre	https://www.thelancet.com/coronavirus
Elsevier's Novel Coronavirus Information Center	https://www.elsevier.com/connect/coronavirus-
	information-center

Wiley Covid-19: Novel Coronavirus Content	https://novel-coronavirus.onlinelibrary.wiley.com/
The New England Journal Of Medicine	https://www.nejm.org/coronavirus
Cochrane library- special collection	https://www.cochranelibrary.com/collections/doi/SC000
	040/full
JBI COVID-19 Special Collection	https://joannabriggs.org/ebp/covid-19
PLOS	https://plos.org/blog/announcement/plos-one-publishes-
	additional-coronavirus-related-papers/
Cell press Coronavirus	https://www.cell.com/COVID-19

National COVID-19 documents (online): click the document name to get access to the material.

- National comprehensive COVID-19 management handbook
- Infection Prevention and Control Interim Protocol for COVID-19 In Health Care Settings in Ethiopia
- Health Care Waste Management SOP for COVID-19
- Case management protocol for Corona Virus Disease-19 (COVID-19) in Ethiopia
- Ethiopian health care facility COVID-19 Preparedness and response protocol
- Patient Flow Protocol for COVID -19 Patients
- Pre-triage format for COVID-19 infection
- Protocol for transporting COVID-19 patients
- Laboratory testing for 2019 novel coronavirus(2019-nCoV) in suspected human cases
- Home care for patients with suspected novel coronavirus (nCoV) infection presenting with mild symptoms and management of contacts Interim guidance
- Global Surveillance for human infection with novel coronavirus
- Household transmission investigation protocol for 2019-novel coronavirus infection
- Clinical management of severe acute respiratory infection when novel coronavirus (nCoV) infection is suspected
- National Capacities Review Tool for a novel coronavirus (nCoV)
- Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected
- Risk communication and community engagement readiness and initial response for novel coronaviruses





The above presented Quick Reader (QR) code takes you to a portal that you can access updates and all COVID-19 related information available (https://www.ephi.gov.et/index.php/public-health-emergency/novel-corona-virus-update)

DISCLAIMER

This weekly bulletin is produced based on figures pulled from official releases of the World Health Organization and activities and reports of all the sections under the Incident management System.

This Weekly Bulletin series of publications is published by the Ethiopian public health Institute (EPHI), public health emergency operation center (PHEOC). The aim of this bulletin is to inform decision makers key stakeholder and partners and public about COVID-19 preparedness and response activities. All interested health and other professionals can get this bulletin at the Institute website; www.ephi.gov.et

PREPARED BY

Fantu Lombamo (MD, MPH)

Negusse Yohannes (PhD)

National PHEOC, Planning Section, Situation Unit team

CONTRIBUTORS

Firmaye Bogale (MPH) Haftom Taame (MPH-Field Epi)

EDITED AND REVIEWED BY

Diriba Sufa (MPH-Field Epi)-Situation Unit Lead Shambel Habebe (MPH-Field Epi)-Planning Section Chief Zewdu Assefa (MPH- Field Epi)-Deputy Incident Manager Aschalew Abayneh (RN, BSc, MPH)-DDG, EPHI, Incident Manager

FOR MORE INFORMATION and NOTIFICATION

Web: www.ephi.gov.et
Follow us on Twitter: @EPHIEthiopia
Call: 8335/952 (TOLL FREE LINE) or 011 276 5340
Email: ephieoc@gmail.com or phemdatacenter@gmail.com