



NATIONAL PUBLIC HEALTH EMERGENCY OPERATION CENTER (PHEOC), ETHIOPIA

COVID-19 PANDEMIC PREPAREDNESS AND RESPONSE IN ETHIOPIA

WEEKLY BULLETIN

Dates Covered by this Bulletin: June 22-28, 2020

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Issue Date: June 29, 2020

I. HIGHLIGHTS

- One-thousand-one-hundred-fifty-seven new confirmed COVID-19 cases and twenty-four COVID-19 related deaths were reported during the WHO Epi-Week-26.
- As of June 28, 2020, a total of 5,689 COVID-19 confirmed cases and 98 deaths have been reported in Ethiopia so far.
- Nine-hundred-nineteen, which contribute 43% of the total recovery, have newly recovered from COVID-19 during the WHO Epi-Week-26 bringing the total number of recovered cases to 2,132.
- A total of 38,076 contacts of confirmed cases have been identified as of June 28, 2020. Of these, 6,323 contacts are identified during the WHO Epi-week-26.
- Survey on serologic evidence of SARS-COV-2 infection in Ethiopia started.
- 114 years old man has recovered from COVID-19.
- Ethiopian Youth Sports Academy is modified as a COVID-19 treatment center.
- Arba Minch University, Salale University and Ambo University COVID-19 laboratories started testing.



BACKGROUND

The Ministry of health (MOH) and Ethiopian Public Health Institute (EPHI) in collaboration with partners have intensified response efforts to prevent the spread and severity of Corona Virus Disease 2019 (COVID-19) in Ethiopia. The central and the regional Public Health Emergency Operation Centers (PHEOC) have been activated and laboratory diagnosis capacity has been expanded to other national institutions, subnational and private laboratories.

The national and regional PHEOC are playing a pivotal role in coordinating resources from different responding agencies and coordinating COVID-19 related information through a regular EOC meetings and partners' coordination forums. The MOH and EPHI are providing information to the general public and stakeholders on a regular and uninterrupted manner using different means of communication modalities.

The 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.

II. EPIDEMIOLOGICAL SITUATION

Global Situation

- Between December 2019 to June 28, 2020, COVID-19 pandemic affected 216 countries/territories causing 9,851,287 cases and 500,882 deaths (CFR=5.08%) globally.
- Of the total cases and deaths reported since the beginning of the outbreak, 1,118,303 (11.35%) cases and 32,121 (6.41%) deaths were reported during the WHO Epi-Week-26.
- The United States of America (USA) reported the highest number of cases (2,452,048) and deaths (125,839) with CFR of 5.13% followed by Brazil (1,274,974 cases and 55,961 deaths with a CFR of 4.39%). Among the confirmed cases the highest proportion of death occurred in the United Kingdom with CFR of 13.98%.
- In Africa, 56 countries/territories have reported COVID-19 cases.
- As of June 28, 2020, a total of 374,061 cases and 9,505 deaths were reported across the continent (CFR=2.54%).
- During the WHO-Epi-Week-26, a total of 75,229 cases and 1,588 deaths were reported across the continent.
- More than half of the COVID-19 cases in Africa (52%) is reported from South Africa, 131,800 (35%) cases and Egypt, 63,923 (17%). See the summary dashboard below.

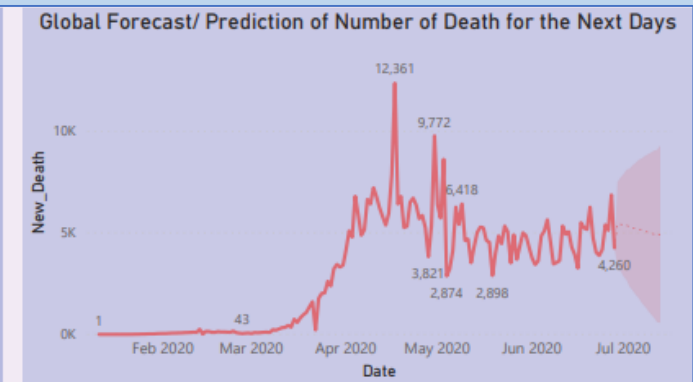
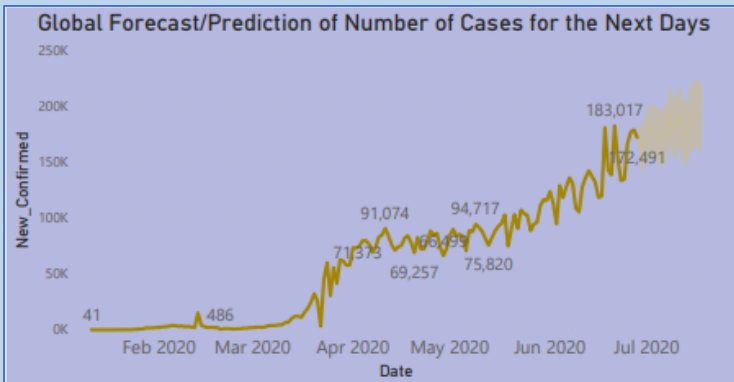
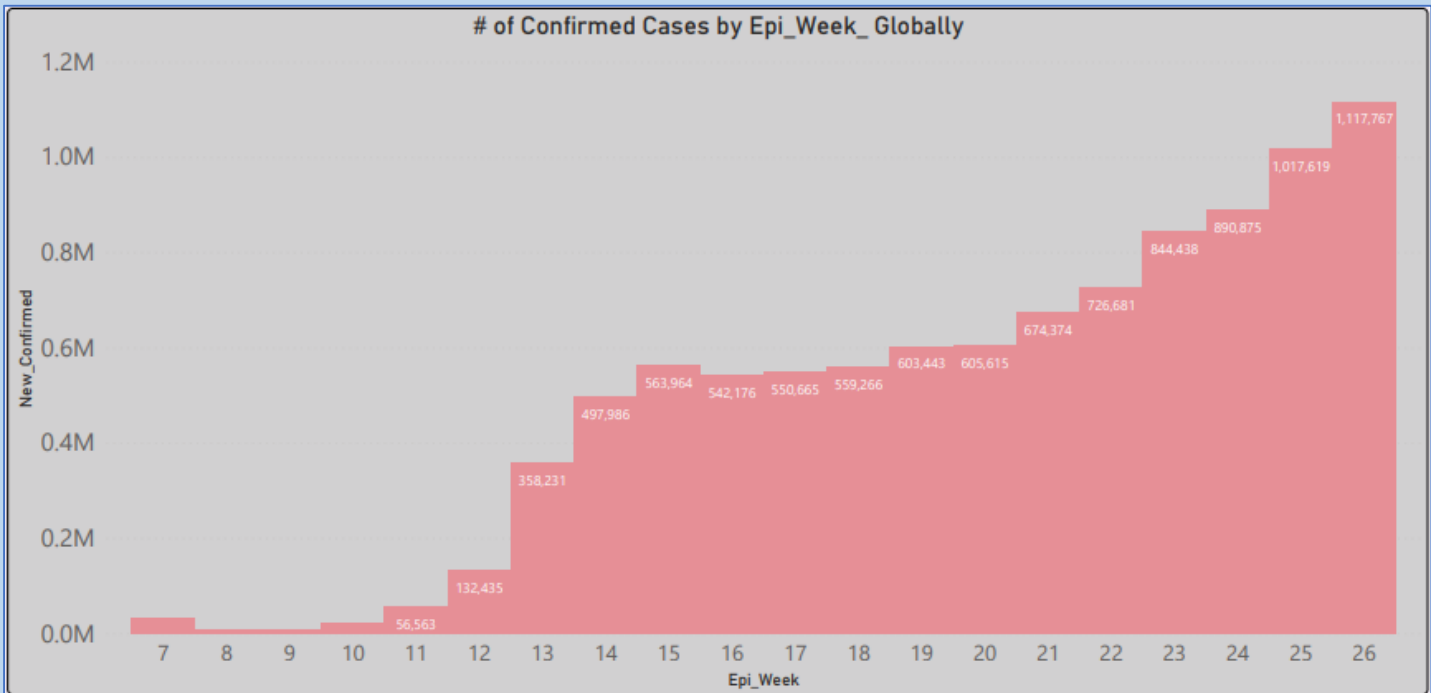
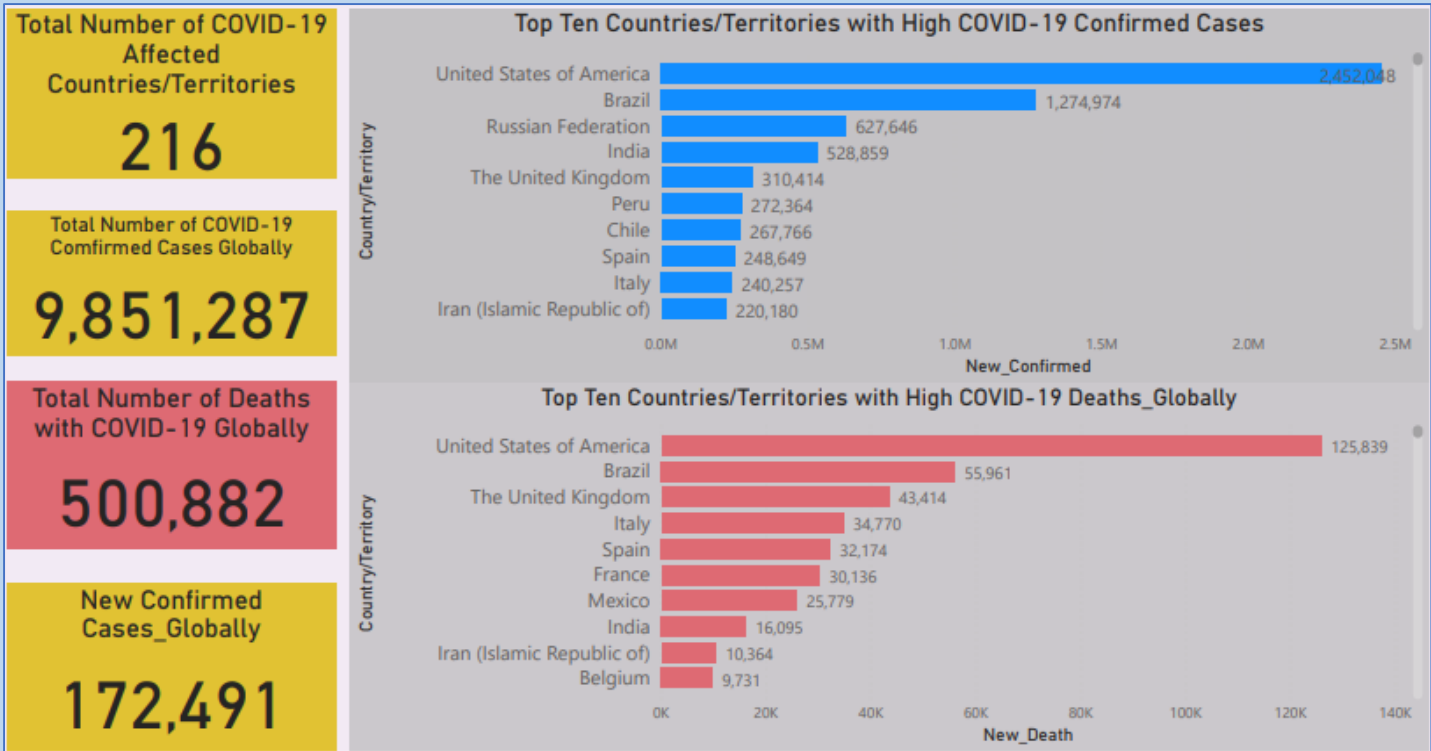


Fig. 1: Global Situation Update as of May June 28, 2020 (Source: WHO)

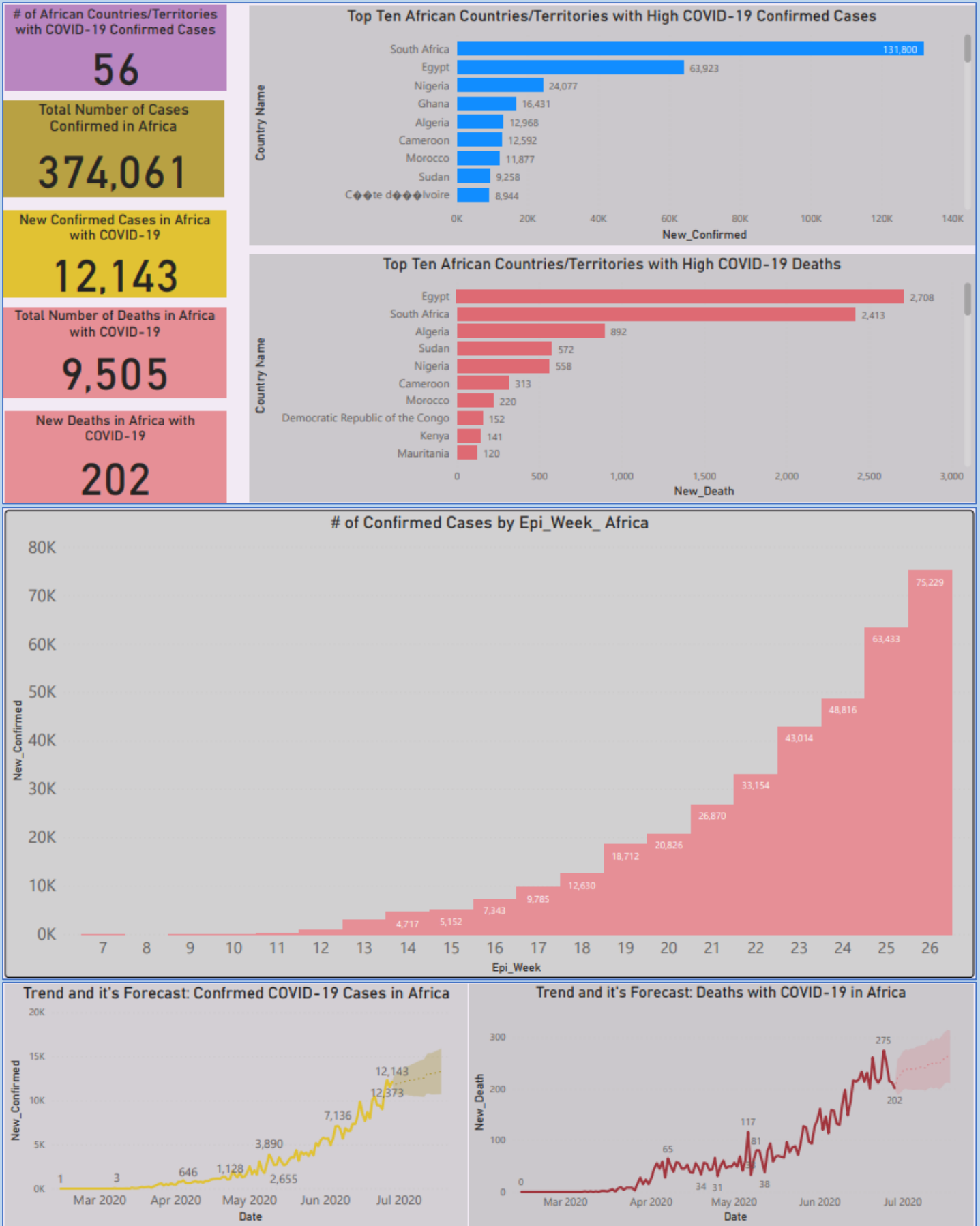


Fig. 2: Africa Situation Update as of June 28, 2020 (Source: WHO)

National COVID-19 situation

- One-thousand-one-hundred-fifty-seven new confirmed COVID-19 cases (20.34% of the total cases reported so far) and twenty-four COVID-19 related deaths (around quarter of the total deaths reported so far) were reported during the WHO Epi-Week-26.
- The number of cases are increasing alarmingly from contacts of confirmed cases and localized transmission.
- So far, a total of 5,689 confirmed COVID-19 cases and 98 deaths are recorded in the country.

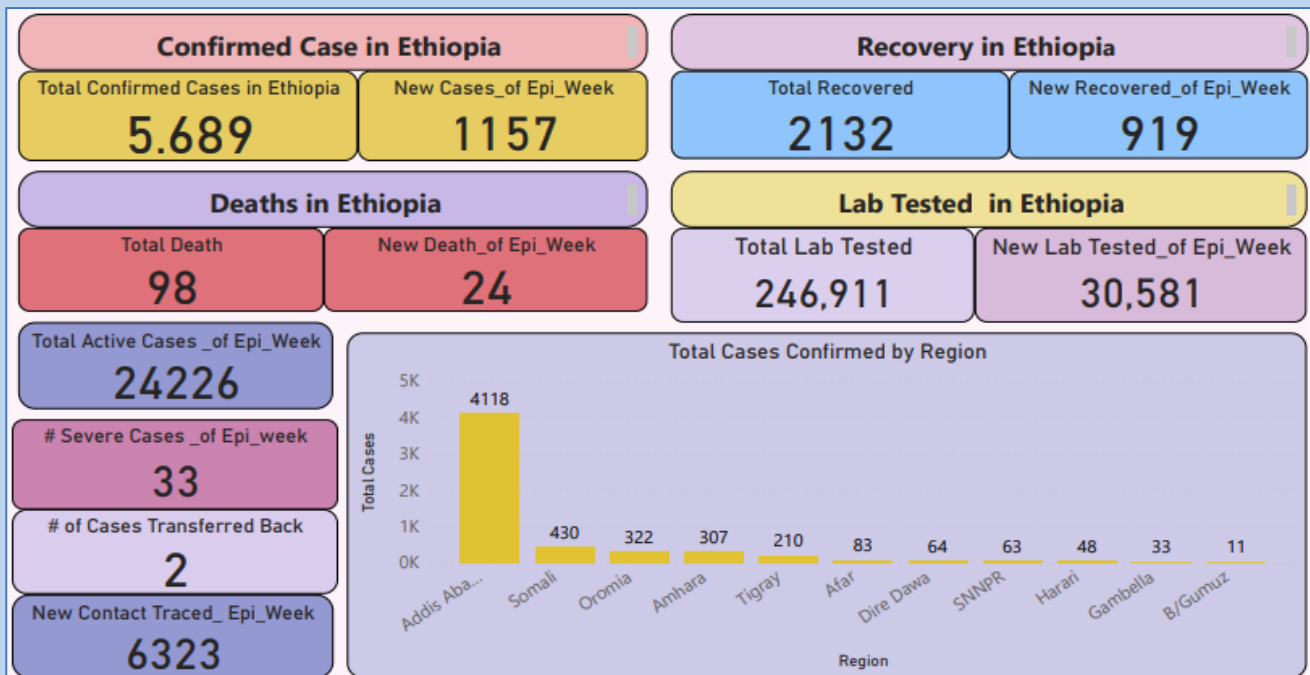


Fig. 3: Weekly Summary of the COVID-19 situation of in Ethiopia, June 28, 2020

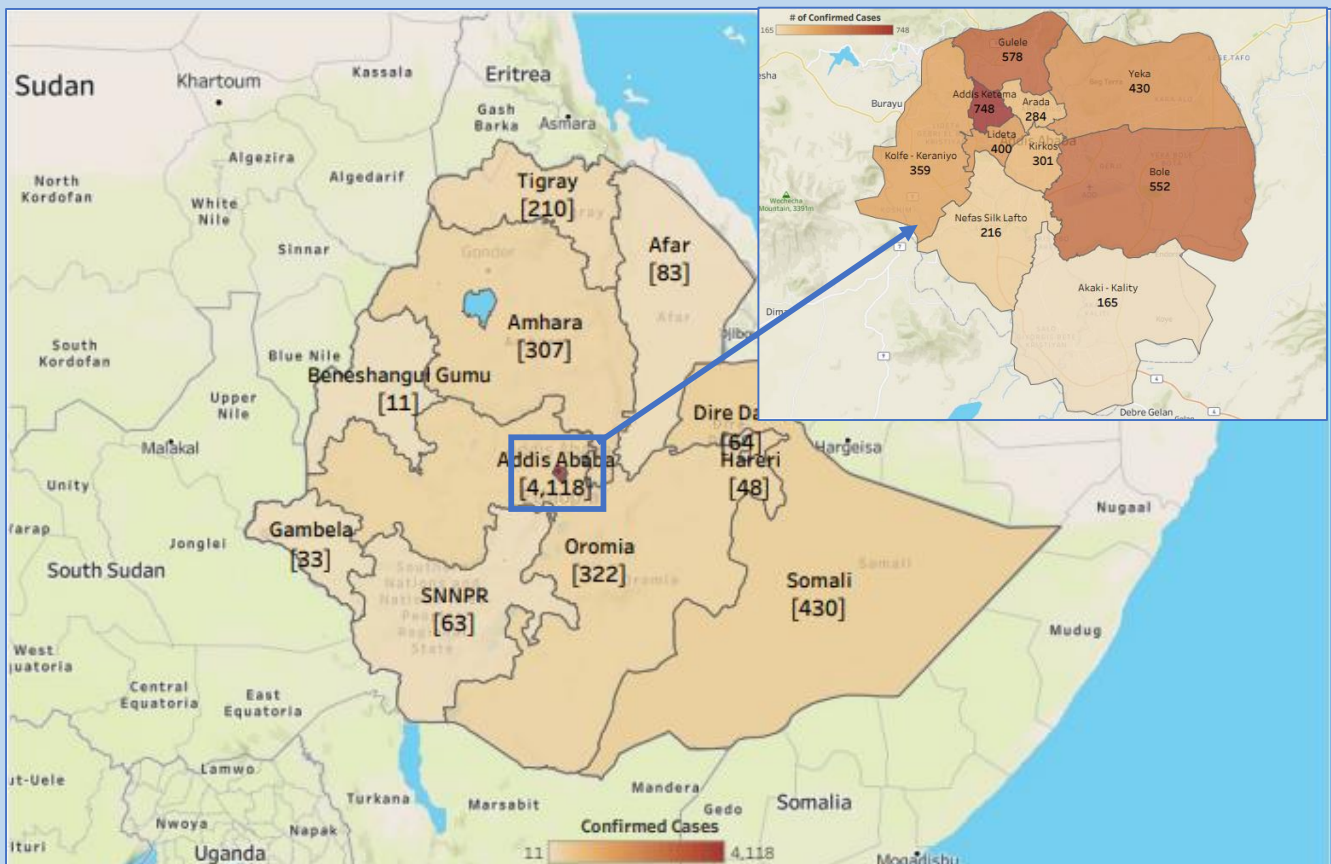


Fig. 4: Geographical distribution of COVID-19 confirmed cases in Ethiopia, as of June 28, 2020

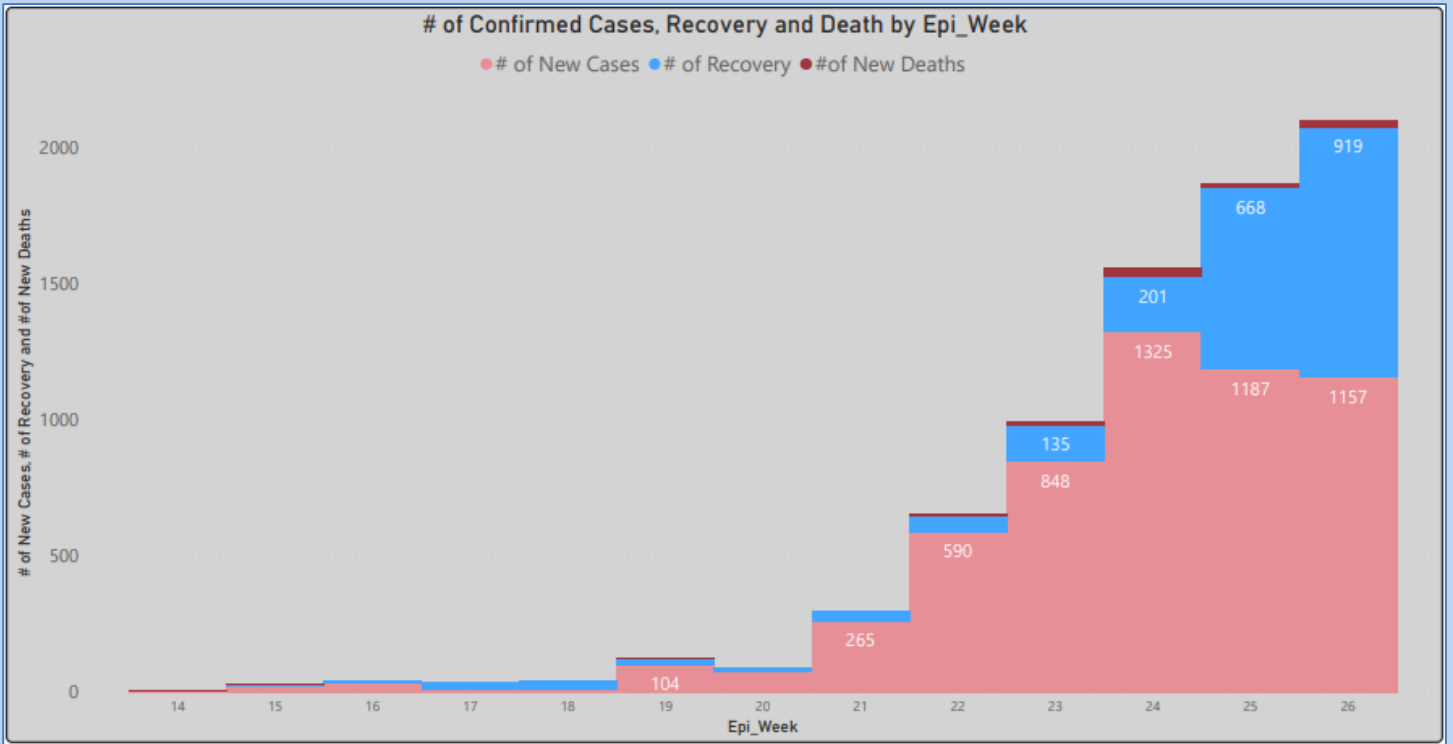
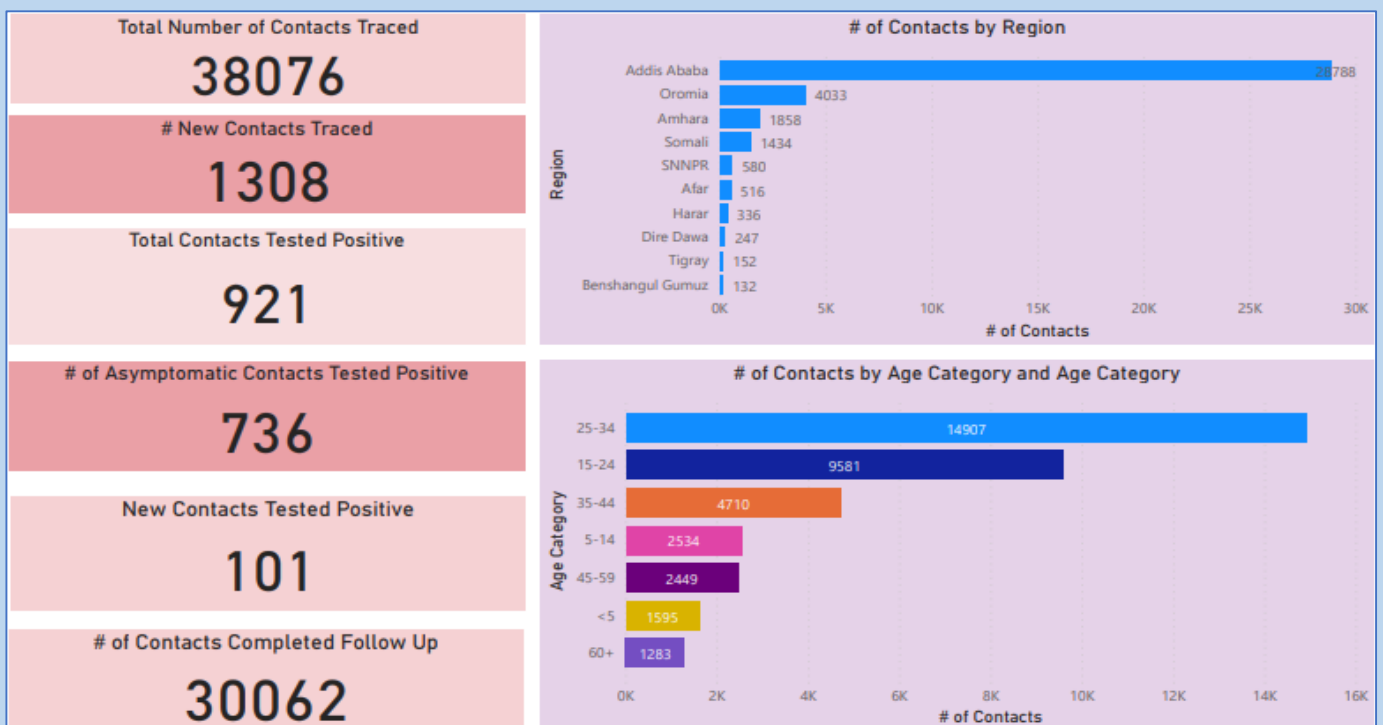


Fig. 5: COVID-19 confirmed cases, recovery and death by WHO Epi-Week as of June 28, 2020, Ethiopia

Epidemiological Surveillance and Laboratory Related Activities

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



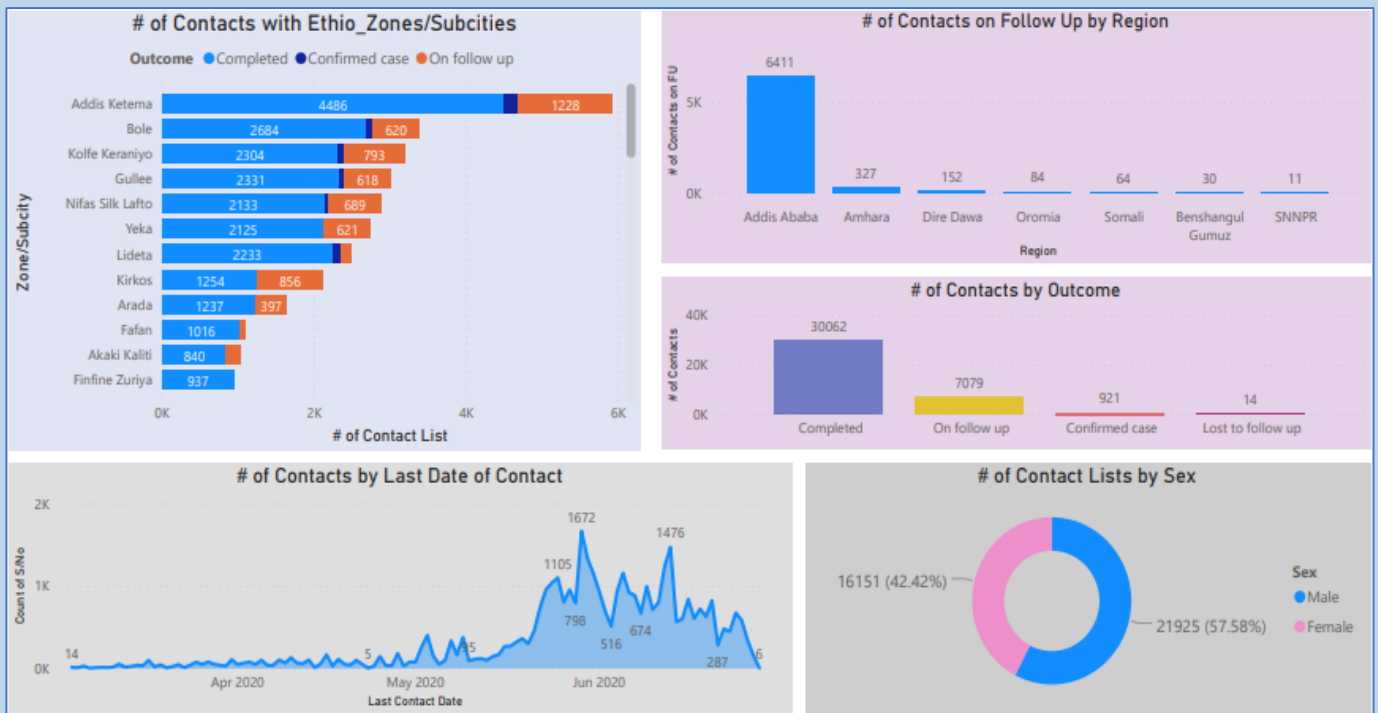


Fig. 6: Contact tracing summary dashboard as of June 28, 2020

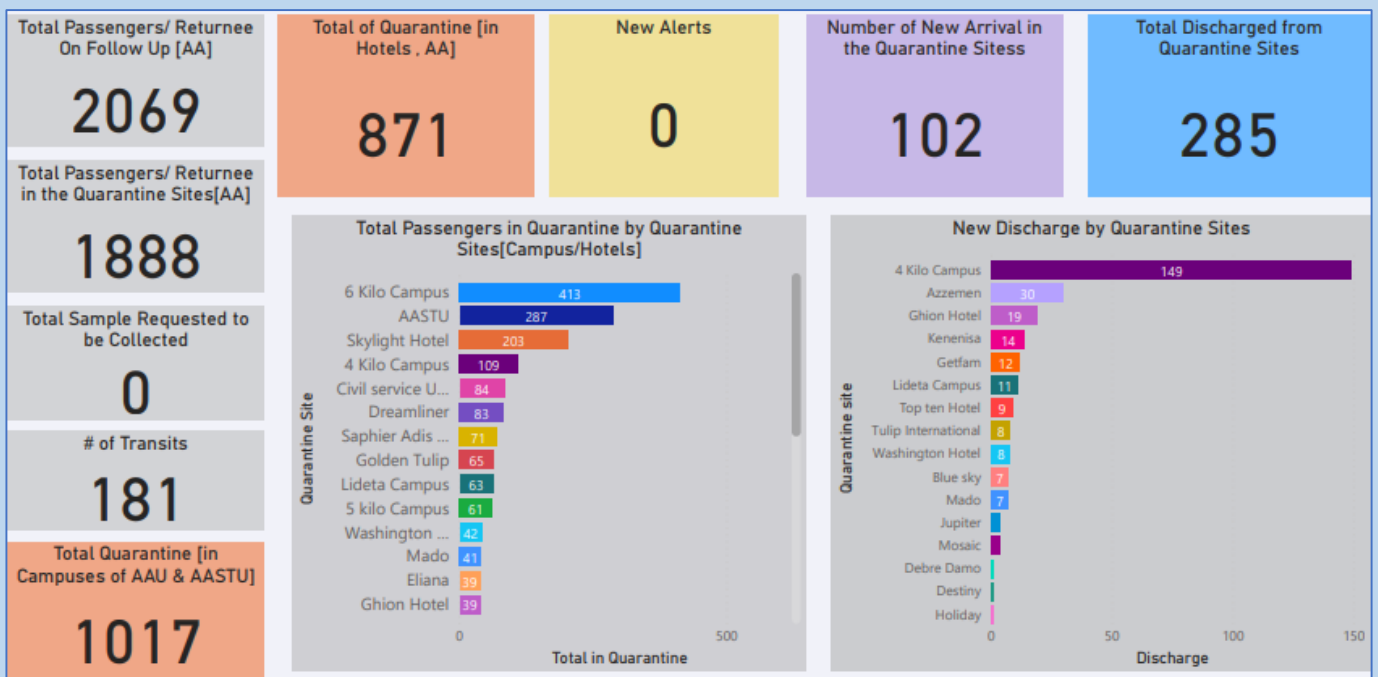


Fig. 7: Mandatory quarantine update as of June 28, 2020, Ethiopia

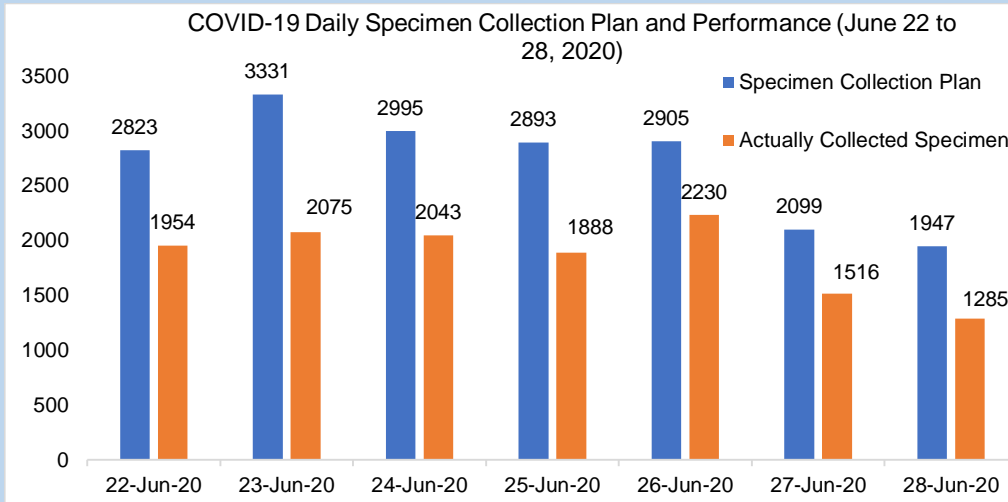
Laboratory related activities

- As of June 28, 2020, a total of 246,911 samples has been tested for COVID-19.
- A total of 30,583 (12.4%) of the total laboratory tests were done during the WHO Epi-Week-26.
- Laboratory Information System (LIS) -DHIS II Digitization piloting is ongoing.
- Survey on serologic evidence of SARS-COV-2 infection in Ethiopia is initiated. The survey is designed to measure the extent of SARS-CoV-2 infection in selected high-risk group and sampled population. The survey is based on the WHO generic population based sero-epidemiological investigation protocol, and expected to inform public health responses and policy decisions. Abbott SARS-CoV-2 IgG assay is being used for detection of anti-SARS-CoV-2 IgG antibodies which use the Abbott Architect platform.

Laboratory status of Testing capacity & Expansion

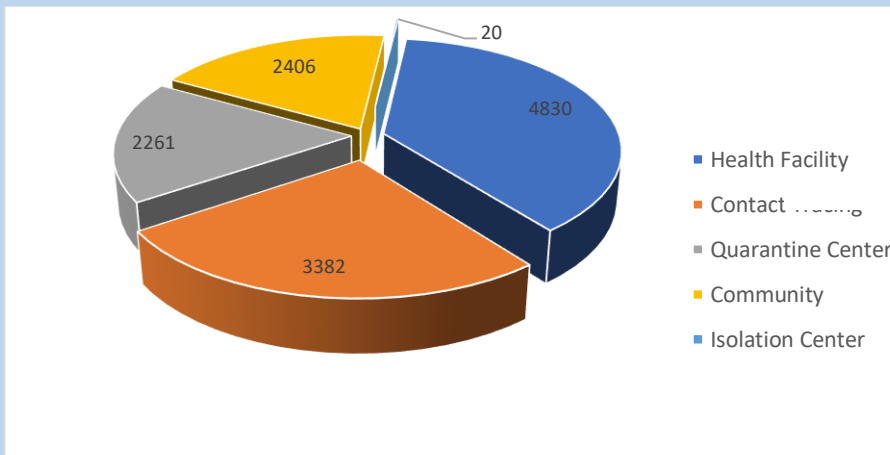
Status	Number of Labs	Number of Machine	Testing Capacity	Remark
Functional/Reporting Labs	42	53	10,189	At least one laboratory in each region (4 at EPHI)
Ready	6	6	692	
Under Verification Process	2	2	200	
Waiting for Verification	2	2	200	
Candidates	13	14	4,008	
Total	67	77	15,661	

Specimen Collection



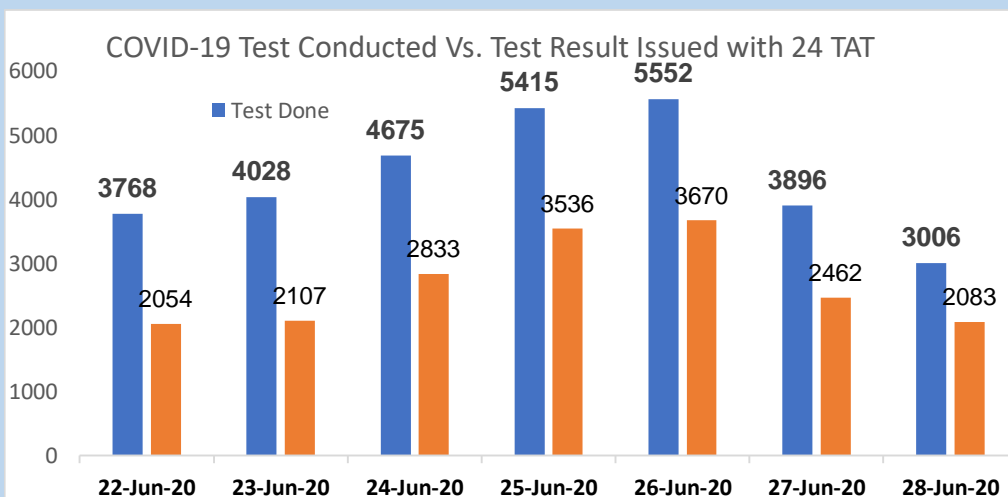
- Weekly Performance was 68.4%
- In average 1,856 Specimen were collected per day

Specimen Collection by site



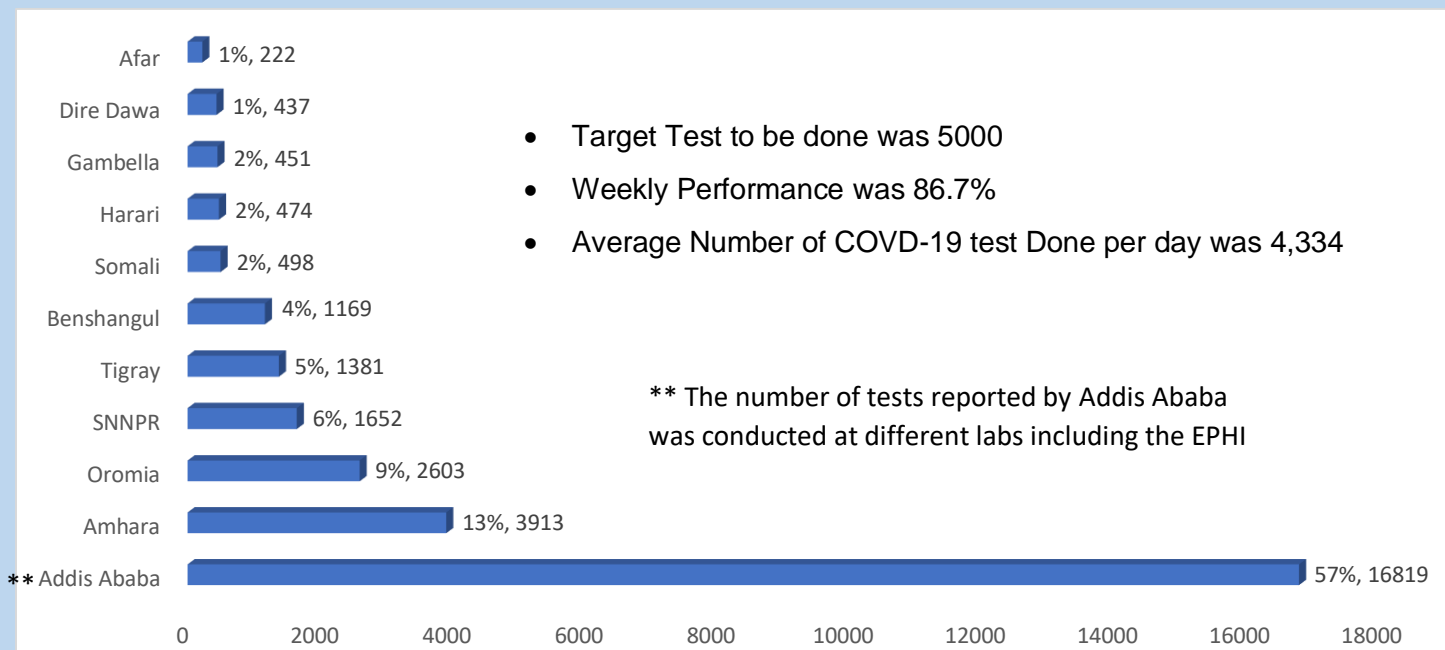
- Specimen collected among the individuals who have contact with confirmed COVID-19 cases show increment from 7.6% to 26.2% compared to last week.

Testing Performance



- 30,340 tests conducted during the week
- 18,744 (61.8%) result issued within 24hr after receiving the specimen

COVID-19 Laboratory test by region



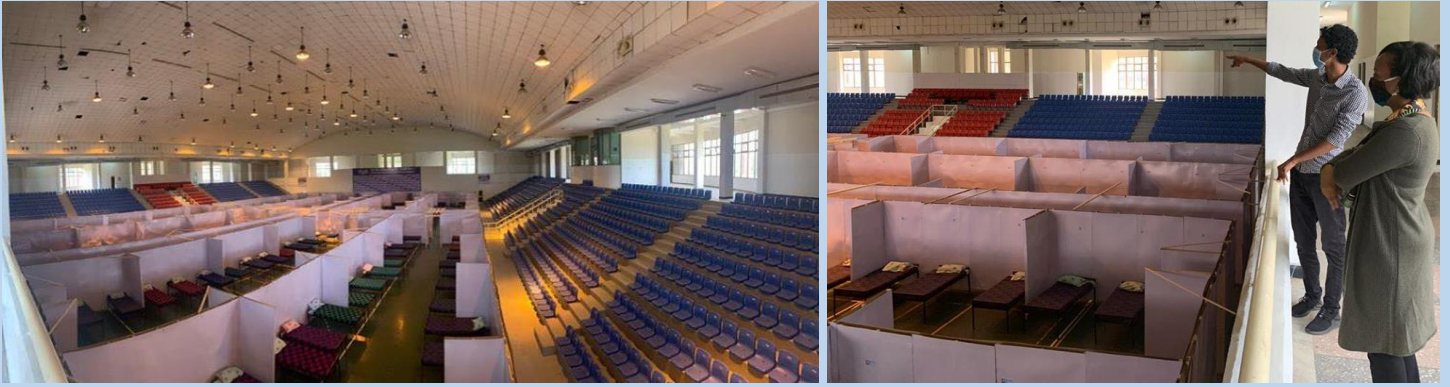
III. Coordination and Leadership

- Since its activation, the national PHEOC is collaboratively working with stakeholders: government agencies, partner organizations, UN agencies, embassies, hospitality sector, Industrial parks, NGOs and others.
- Morning briefing of IMS core staffs and key partners' representatives is being conducted on daily basis.
- Weekly virtual (zoom) meeting being conducted with technical working group members, which comprises members from subnational PHEM structures, key partners and stakeholders.
- Weekly leadership and strategic virtual (zoom) meeting, chaired by the H.E MOH Minister being conducted.
- Supports (financial, logistic and technical) are being received from partners, private institutions, individuals and donors.
- Arba Minch University, Salale University and Ambo University COVID-19 laboratories started testing.



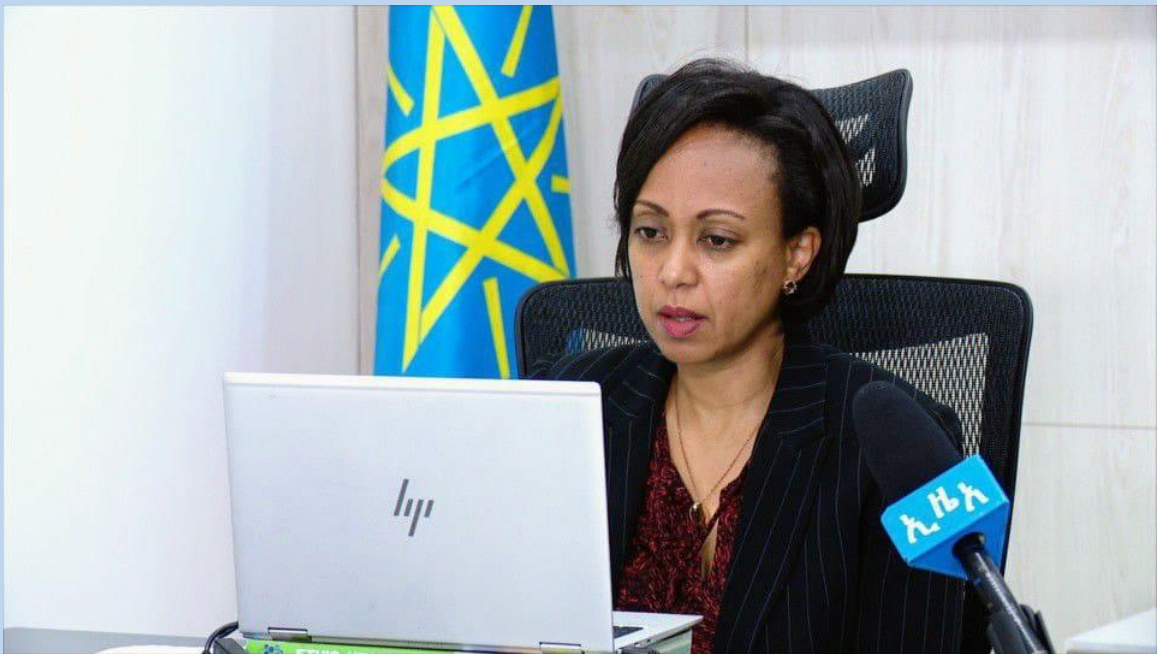
Inauguration of new COVID-19 testing laboratory

- Ethiopian Youth Sports Academy is modified as a COVID-19 treatment center. The center is now ready to receive 300 patients with mild symptoms or asymptomatic not illegible for home isolation.



The Ethiopian Youth Sports Academy after modification as COVID-19 treatment center.

- Ethiopia presented the national COVID-19 response activities update on the World Health organization experience sharing forum. On this virtual meeting HE Dr Lia Tadesse presented the activities being conducted, challenges and the way forward.



H.E. Dr Lia Tadesse presenting national COVID-19 response update on the WHO experience sharing forum.

IV. Case Management and IPC

- 114 years old man has recovered from COVID-19. He had been on admission to the severe coronavirus ward in Ekka-Kotebe hospital, his condition deteriorated as the virus took hold and he was put on oxygen. He also was given anti-biotics and the anti-inflammatory drug dexamethasone. He had spent 14 days at the hospital, and was treated with oxygen for more than a week.
- There are 3,457 cases in the case treatment centers currently.
- There are thirty-three patients in severe condition and all the other patients are on medical care in stable condition.

V. Risk Communication and Community Engagement (RCCE)

- Different poster, brochures, audio and video messages focusing on COVID-19 risk perception and practice developed.



- Daily press statement is being provided on COVID-19 situation on daily basis. A website domain name (covid19.et) is also created to share daily global and national COVID-19 update
- There is ongoing production of COVID-19 informative audio and video messages.



VI. Logistic and Supplies

- There are ongoing distribution of pharmaceuticals and medical supplies to quarantine, isolation and treatment centers.
- Number of governmental and Non-Governmental organizations, individuals and partners have donated different medical supplies and infrastructures for COVID-19 response.
- Customs clearance for donations' shipment is ongoing.

VII. Training and Orientation Activities

- There is ongoing virtual and in person training and orientation for the health professionals on COVID-19.
- Mobile based training for Health Extension Workers (HEWs) is ongoing different regions.
- WASH and IPC TOT is provided for health professionals in Oromia, Amhara, Afar and Somali regions. The training is ongoing during the week in Benishangul Gumuz, Tigray, Gambella and SNNP regions.

VIII. Challenges and Way Forward

Challenges

- Increasing number of community deaths and late confirmation of COVID-19 from dead body investigation.
- Low face mask stock and personal protective equipment for the health workers.
- Failure to adhere to physical distancing and other preventions advises among the public.
- Competing priorities due to superimposed disease outbreaks like cholera in some areas of the countries.

Way Forward

- Conduct intensive testing of high-risk areas for COVID-19.
- Enhance technical support, coordination and timely and accurate information sharing at all levels.
- Strengthened collaboration and coordination with key stakeholders and partners.
- Intensify risk communication and community engagement activities.
- Enhance active surveillance for COVID-19 by 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 and outbreak responses efforts.

IX. Public Health Policy Recommendation

Advice for the Public:

- The number of COVID-19 cases are increasing rapidly due to the presence of community transmission. Anyone of Can be the next person to acquire COVID-19, but we can prevent it if we act now. We need to practice all of the COVID-19 prevention methods in order to stay alive and healthy.
- 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
- 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.

National/Regional official websites, social media pages and toll free hotline for COVID-19 information

MOH/EPHI/Region	Facebook page	Toll-free hotline
Ethiopian Public Health Institute Main Website	https://www.ephi.gov.et/	8335
Ethiopian Public Health Institute COVID-19 Website	https://covid19.ephi.gov.et/	
Ethiopian Public Health Institute Facebook Page	https://www.facebook.com/ephipage/	
Ethiopian Public Health Institute Twitter Page	https://twitter.com/EPHIethiopia	
Ministry of Health, Ethiopia Website	www.moh.gov.et	952
Ministry of Health, Ethiopia Facebook Page	https://www.facebook.com/EthiopiaFMoH/	
Afar Regional Health Bureau	https://www.facebook.com/afarrhb.org/	6220
Amhara Regional Health Bureau	https://www.facebook.com/Amhara-Healthbureau-682065755146948/	6981

Benishangul Gumuz Regional Health Bureau	https://www.facebook.com/Benishangul-Gumuz-Health-Bureau-1676282159265517/	6016
Gambela Regional Health Bureau	https://fb.me/gambellaregionhealthbureau	6184
Harari Regional Health Bureau	https://www.facebook.com/Harari-Regional-Health-Bureau-1464182130355007/	6864
Oromia Regional Health Bureau	https://www.facebook.com/OromiaHealth/	6955
Somali Regional Health Bureau	https://www.facebook.com/srhbdotcom/...	6599
SNNP Regional Health Bureau	https://www.facebook.com/snnprhealthbureau/?ref=br_rs	6929
Tigray Regional Health Bureau	https://www.facebook.com/tigrayrhb/	6244
Dire Dawa city Administration Health Bureau	https://www.facebook.com/Dire-Dawa-Administration-Health-Bureau-1371606266279524/	6407
Addis Ababa City Administration Health Bureau	https://www.facebook.com/aahb.gov.et/	6406

Health evidence summary:

Articles/Comment / Correspondence/ Editorials	Summary
<p>A New Pharmacological Approach Based on Remdesivir Aerosolized Administration on SARS-CoV-2 Pulmonary Inflammation: A Possible and Rational Therapeutic Application. https://doi.org/10.1016/j.mehy.2020.109876</p>	<ul style="list-style-type: none"> • The data available so far seem to indicate that SARS-CoV-2 is capable of producing an excessive immune reaction in the host. • The virus attacks type II pneumocytes through the binding of the Spike protein (S protein) to viral receptors, of which the angiotensin 2 conversion enzyme (ACE2) receptor is the most important. • ACE2 receptor is widely expressed in numerous tissues, including the oropharynx and conjunctiva, but mostly distributed in ciliated bronchial epithelial cells and type II pneumocytes in the lower bronchi. • The arrival of SARS-CoV-2 in the lungs causes severe primary interstitial viral pneumonia that can lead to the "cytokine storm syndrome" whose effect is extensive lung tissue damage and disseminated intravascular coagulation (DIC) that are life-threatening for patients with COVID-19. • Like most respiratory viruses can function and replicate at low temperatures and assuming viral thermolability of SARS-CoV-2, local instillation or aerosol of antiviral (i.e. remdesivir) in humid heat vaporization (40°-41 °C) in the first phase of infection (phenotype I, before admission), both in asymptomatic but nasopharyngeal swab positive patients, together with antiseptic-antiviral oral gargles and povidone-iodine eye drops for conjunctiva, would attack the virus directly through the receptors to which it binds, significantly decreasing viral replication, risk of evolution to phenotypes IV and V, reducing hospitalization and therefore death.
<p>Feasibility and physiological effects of prone positioning in non-intubated patients with acute respiratory failure due to COVID-19 (PRON-COVID): a prospective cohort study. https://doi.org/10.1016/S2213-2600(20)30268-X</p>	<ul style="list-style-type: none"> • In this prospective, feasibility, cohort study, patients aged 18–75 years with a confirmed diagnosis of COVID-19-related pneumonia receiving supplemental oxygen or non-invasive continuous positive airway pressure were recruited from San Gerardo Hospital, Monza, Italy. • Baseline data on demographics, anthropometrics, arterial blood gas, and ventilation parameters. After baseline data collection, patients were helped into the prone position was collected, which was maintained for a minimum duration of 3 h. Clinical data were re-collected 10 min after prone positioning and 1 h after returning to the supine position. • The main study outcome was the variation in oxygenation between baseline and resupination, as an index of pulmonary recruitment. • After resupination, improved oxygenation was maintained in 23 patients. However, this improvement was on average not significant compared with before prone positioning. • Patients who maintained increased oxygenation had increased levels of inflammatory markers and shorter time between admission to hospital and prone positioning than did those for whom improved oxygenation was not maintained. • Five patients died during follow-up due to underlying disease, unrelated to study procedure.

	<ul style="list-style-type: none"> • In conclusion, prone positioning was feasible and effective in rapidly ameliorating blood oxygenation in awake patients with COVID-19-related pneumonia requiring oxygen supplementation. • The effect was maintained after resupination in half of the patients.
<p>COVID-19 pandemic and mitigation strategies: implications for maternal and child health and nutrition. https://doi.org/10.1093/ajcn/nqaa171</p>	<ul style="list-style-type: none"> • This review highlights key areas of concern for maternal and child nutrition during and in the aftermath of COVID-19 while providing strategic guidance for countries in their efforts to reduce maternal and child undernutrition. • Rooted in learnings from the exemplars in Global Health's Stunting Reduction Exemplars project, we provide a set of recommendations that span investments in sectors that have sustained direct and indirect impact on nutrition. • These include interventions to strengthen the food-supply chain and reducing food insecurity to assist those at immediate risk of food shortages. • Other strategies could include targeted social safety net programs, payment deferrals, or tax breaks as well as suitable cash-support programs for the most vulnerable. • Targeting the most marginalized households in rural populations and urban slums could be achieved through deploying community health workers and supporting women and community members. Community-led sanitation programs could be key to ensuring healthy household environments and reducing undernutrition. • Additionally, several COVID-19 response measures such as contact tracing and self-isolation could also be exploited for nutrition protection. • Global health and improvements in undernutrition will require governments, donors, and development partners to re-strategize and reprioritize investments for the COVID-19 era, and will necessitate data-driven decision making, political will and commitment, and international unity.
<p>Treatment Options for COVID-19: The Reality and Challenges. https://doi.org/10.1016/j.jmii.2020.03.034</p>	<ul style="list-style-type: none"> • Despite the worsening trends of COVID-19, no drugs are validated to have significant efficacy in clinical treatment of COVID-19 patients in large-scale studies. • Remdesivir is considered the most promising antiviral agent; it works by inhibiting the activity of RNA-dependent RNA polymerase (RdRp). • The protease inhibitor lopinavir/ritonavir (LPV/RTV) alone is not shown to provide better antiviral efficacy than standard care. • However, the regimen of LPV/RTV plus ribavirin was shown to be effective against SARS-CoV in vitro. • Another promising alternative is hydroxychloroquine (200 mg thrice daily) plus azithromycin (500 mg on day 1, followed by 250 mg once daily on day 2-5), which showed excellent clinical efficacy on Chinese COVID-19 patients and anti-SARS-CoV-2 potency in vitro. • The roles of teicoplanin (which inhibits the viral genome exposure in cytoplasm) and monoclonal and polyclonal antibodies in the treatment of SARS-CoV-2 are under investigation. • Avoiding the prescription of non-steroidal anti-inflammatory drugs, angiotensin converting enzyme inhibitors, or angiotensin II type I receptor blockers is advised for COVID-19 patients.
<p>Placental pathology in COVID-19. https://doi.org/10.1101/2020.05.08.20093229</p>	<ul style="list-style-type: none"> • 16 placentas from patients with SARS-CoV-2 were examined (15 with live birth in the 3rd trimester 1 delivered in the 2nd trimester after intrauterine fetal demise). • Compared to controls, third trimester placentas were significantly more likely to show at least one feature of maternal vascular malperfusion (MVM), including abnormal or injured maternal vessels, as well as delayed villous maturation, chorangiosis, and intervillous thrombi. Rates of acute and chronic inflammation were not increased. • The placenta from the patient with intrauterine fetal demise showed villous edema and a retroplacental hematoma. • In conclusion, relative to controls, COVID-19 placentas show increased prevalence of features of maternal vascular malperfusion (MVM), a pattern of placental injury reflecting abnormalities in oxygenation within the intervillous space associated with adverse perinatal outcomes.

	<ul style="list-style-type: none"> • Only 1 COVID-19 patient was hypertensive despite the association of MVM with hypertensive disorders and preeclampsia. These changes may reflect a systemic inflammatory or hypercoagulable state influencing placental physiology
<p>Use of personal protective equipment against coronavirus disease 2019 by healthcare professionals in Wuhan, China: cross sectional study. https://doi.org/10.1136/bmj.m2195</p>	<ul style="list-style-type: none"> • 420 healthcare professionals were provided with appropriate personal protective equipment to deliver healthcare to patients admitted to hospital with covid-19 and were involved in aerosol generating procedures. • 77 healthcare professionals with no exposure history to covid-19 and 80 patients who had recovered from covid-19 were recruited to verify the accuracy of antibody testing. • The average age of study participants was 35.8 years and 68.1% (286/420) were women. • These study participants worked 4-6 hour shifts for an average of 5.4 days a week; they worked an average of 16.2 hours each week in intensive care units. • All 420 study participants had direct contact with patients with covid-19 and performed at least one aerosol generating procedure. • During the deployment period in Wuhan, none of the study participants reported covid-19 related symptoms. • When the participants returned home, they all tested negative for SARS-CoV-2 specific nucleic acids and IgM or IgG antibodies (95% confidence interval 0.0 to 0.7%).
<p>Characteristics of COVID-19 Infection in Beijing. https://doi.org/10.1016/j.jinf.2020.02.018</p>	<ul style="list-style-type: none"> • 262 patients were transferred from the hospitals across Beijing to the designated hospitals for special treatment of the COVID-19 infected by Beijing emergency medical service. Among of 262 patients, 46 (17.6%) were severe cases, 216 (82.4%) were common cases, which including 192 (73.3%) mild cases, 11(4.2%) non-pneumonia cases and 13 (5.0%) asymptomatic cases respectively. • The median age of patients was 47.5 years old and 48.5% were male. 192 (73.3%) patients were residents of Beijing, 50 (26.0%) of which had been to Wuhan, 116 (60.4%) had close contact with confirmed cases, 21 (10.9%) had no contact history. • The most common symptoms at the onset of illness were fever (82.1%), cough (45.8%), fatigue (26.3%), dyspnea (6.9%) and headache (6.5%). • The median incubation period was 6.7 days, the interval time from between illness onset and seeing a doctor was 4.5 days. As of Feb 10, 17.2% patients have discharged and 81.7% patients remain in hospital in our study, the fatality of COVID-19 infection in Beijing was 0.9%. • On the basis of this study, population was generally susceptible, and with a relatively low fatality rate.
<p>Tocilizumab in patients with severe COVID-19: a retrospective cohort study. https://doi.org/10.1016/S2665-9913(20)30173-9</p>	<ul style="list-style-type: none"> • This retrospective, observational cohort study included adults (≥ 18 years) with severe COVID-19 pneumonia who were admitted to tertiary care centres. • Of 1351 patients admitted, 544 (40%) had severe COVID-19 pneumonia and were included in the study. • 57 (16%) of 365 patients in the standard care group needed mechanical ventilation, compared with 33 (18%) of 179 patients treated with tocilizumab . • 73 (20%) patients in the standard care group died, compared with 13 patients treated with tocilizumab. • After adjustment for sex, age, recruiting centre, duration of symptoms, and SOFA score, tocilizumab treatment was associated with a reduced risk of invasive mechanical ventilation or death. • 24 (13%) of 179 patients treated with tocilizumab were diagnosed with new infections, versus 14 (4%) of 365 patients treated with standard of care alone. • Treatment with tocilizumab, whether administered intravenously or subcutaneously, might reduce the risk of invasive mechanical ventilation or death in patients with severe COVID-19 pneumonia.
<p>[Analysis of the Pregnancy Outcomes in Pregnant Women With COVID-19 in Hubei Province] https://doi.org/10.376</p>	<ul style="list-style-type: none"> • A retrospective comparison of the pregnancy outcomes was done between 16 women with COVID-19 and 45 women without COVID-19. • Also, the results of laboratory tests, imaging examinations, and the 2019 novel coronavirus (2019-nCoV) nucleic acid test were performed in 10 cases of neonatal delivered from women with COVID-19.

<p>0/cma.j.cn112141-20200218-00111</p>	<ul style="list-style-type: none"> • Of the 16 pregnant women with COVID-19, 15 cases were ordinary type and 1 case was severe type. No one has progressed to critical pneumonia. • The delivery method of the two groups was cesarean section, and the gestational age were (38.7±1.4) and (37.9±1.6) weeks, there was no significant difference between the two groups. • Also, there were no significant differences in the intraoperative blood loss and birth weight of the newborn between the two groups (all P>0.05). • Ten cases of neonates delivered from pregnant women with COVID-19 were collected. The 2019-nCoV nucleic acid test were all negative. • There were no significant differences in fetal distress, meconium-stained amniotic fluid, preterm birth, and neonatal asphyxia between the two groups. • In the treatment of uterine contraction fatigue, carbetocin or carboprost tromethamine was used more in cesarean section for pregnant women with COVID-19, compared with Non-COVID-19 group and the difference was statistically significant. • In conclusion, if there is an indication for obstetric surgery or critical illness of COVID-19 in pregnant women, timely termination of pregnancy will not increase the risk of premature birth and asphyxia of the newborn, but it is beneficial to the treatment and rehabilitation of maternal pneumonia. • Preventive use of long-acting uterotonic agents could reduce the incidence of postpartum hemorrhage during surgery.
<p>Chest CT of COVID-19 in Patients With a Negative First RT-PCR Test: Comparison With Patients With a Positive First RT-PCR Test. https://doi.org/10.1097/md.000000000000020837</p>	<ul style="list-style-type: none"> • To compare clinical and imaging features between patients with an initial negative reverse-transcription-polymerase chain-reaction (RT-PCR) test and patients with an initial positive RT-PCR test. • Thirty-three patients with SARS-CoV-2 infection confirmed by RT-PCR, with 216 lesions upon CT, were included. • Demographic information and chest CT imaging features were collected. • Patients in the positive RT-PCR test group were more likely to have a fever than patients in the negative RT-PCR test group. • Lesions in the positive group were more likely to be located in the peripheral area than lesions in the negative group. • Regarding the appearance of 216 lesions, ground-glass opacities (GGOs) with consolidation (43.2%) was the most common appearance in the negative group, followed by pure GGOs (31.8%), while in the positive group, pure GGOs (32%) and GGOs with interlobular septal thickening (32.8%) were both most frequent, and the difference between them was evident (P < .05). • For the follow-up analysis, the largest short-axis of a lesion was smaller upon follow-up (median size 13.6 mm vs 14 mm), albeit by a smaller margin. • Pure GGOs decreased in frequency, from 31.3% to 21.3%, while consolidation increased in frequency, from 7.5% to 12.5%. • The manifestations of COVID-19 in patients with a first negative RT-PCR test and patients with a positive first RT-PCR test are different to some extent. • The consolidation component may increase after follow-up.
<p>Successful Blood Glucose Management of a Severe COVID-19 Patient With Diabetes: A Case Report. https://doi.org/10.1097/md.000000000000020844</p>	<ul style="list-style-type: none"> • A 64-year-old female diabetes patient was admitted to the intensive care unit due to productive coughing for 8 days without any obvious cause. • The results of blood gas analysis indicated that the partial pressure of oxygen was 84 mm Hg with oxygen 8 L/min, and the oxygenation index was less than 200 mm Hg. In addition, postprandial blood glucose levels were abnormal (29.9 mmol/L). • The patient was diagnosed with COVID-19 (severe type) and type 2 diabetes. • Comprehensive interventions including establishing a multidisciplinary team, closely monitoring her blood glucose level, an individualized diabetes diet, early activities, psychological care, etc, were performed to control blood glucose while actively treating COVID-19 infection. • After the comprehensive measures, the patient's blood glucose level gradually became stable, and the patient was discharged after 20 days of hospitalization.

	<ul style="list-style-type: none"> • This case indicated that the comprehensive measures performed by a multidisciplinary team achieved good treatment effects on a COVID-19 patient with diabetes. • Targeted treatment and nursing methods should be performed based on patients' actual situations in clinical practice.
<p>Factors Associated With Post-Traumatic Stress Disorder of Nurses Exposed to Corona Virus Disease 2019 in China. https://doi.org/10.1097/md.00000000000020965</p>	<ul style="list-style-type: none"> • This study aimed to investigate the factors potentially involved in the level of PTSD of Nurses exposed to COVID-19 in China. • Multivariate stepwise linear regression analysis and spearman correlation test were performed to assess the association between various factors associated with PTSD. • The incidence of PTSD in Nurses exposed to COVID-19 was 16.83%, the PCL-C score was 27.00 (21.00-34.00), and the highest score in the three dimensions was avoidance dimension 9.50 (7.00-13.25); multivariable stepwise linear regression analysis showed that job satisfaction and gender were independently associated with lower PCL-C scores (both $P < .001$); PCL-C scores were correlated with positive coping ($r = -0.151$, $P = .032$), negative coping ($r = 0.154$, $P = .029$). • Nurses exposed to COVID-19 from HuBei China with job satisfaction, male and positive coping had low PCL-C scores which necessitate reducing the PTSD level by ways of improving job satisfaction, positive response, and strengthening the psychological counseling of female nurses in order to reduce the risk of psychological impairment.

COVID-19 updates and sources of evidence:

Source	Link
WHO Coronavirus (COVID-19) dashboard	https://covid19.who.int/
Africa CDC Dashboard, COVID-19 Surveillance Dashboard	https://au.int/en/covid19
WHO COVID-19 daily situation reports	https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports
WHO Academy mobile learning app for health workers, COVID-19 information	Android: https://play.google.com/store/apps/details?id=org.who.WHOA

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Call-Centers
FOR MORE INFO and
ALERT NOTIFICATION on
COVID-19



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 within the institute and FMOH, UN agencies and NGOs 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

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