



NATIONAL PUBLIC HEALTH EMERGENCY OPERATION CENTER (PHEOC), ETHIOPIA

COVID-19 PANDEMIC PREPAREDNESS AND RESPONSE IN ETHIOPIA

WEEKLY BULLETIN

WHO Epi-Week-40 (September 28-October 04, 2020)

BULLETIN No: 23

Issue Date: October 05, 2020

I. HIGHLIGHTS

- Total of 45,388 laboratory samples were tested in the WHO-Epi-Week-40, which is a 14.95% decrease compared to the WHO-Epi-Week-39.
- The laboratory test positivity rate for the WHO-Epi-Week-40 is 12.09%, which is slightly higher than the preceding week (11.82%).
- A total of 5,487 new confirmed COVID-19 cases and 52 COVID-19 related deaths were reported during the WHO Epi-Week-40 bringing the total cases and death toll to 78,819 and 1,222 respectively.
- The number of COVID-19 confirmed cases has increased by 21.61% while deaths due to COVID-19 in Ethiopia has decreased by 29.73% in the WHO-Epi-Week-40 compared to the reports in Epi-Week-39.
- There were total of 2,697 newly recovered COVID-19 cases during the WHO Epi-Week-40, bringing the total number of recovered cases to 33,060.
- A total of 19,714 COVID-19 confirmed cases have been on Home Based Isolation and Care.
- A total of 8,165 contacts were identified during the WHO Epi-week-40.
- A new directive issued for the prevention and control of COVID-19 pandemic is published: https://www.ephi.gov.et/images/Registerd-COVID-19-Directive-2013_Final_051020.pdf?fbclid=IwAR0e8giX65dD2s65YYy7Xb_dIGR7zF5ySBIWW7IXn5xAnX5G5I7pe1jk1Ys
- Globally, the number of deaths due to COVID-19 surpassed 1,000,000.

II. 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 national and the regional Public Health Emergency Operations Center (PHEOC) has 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 regular PHEOC meetings and partners' coordination forums. The MOH and EPHI are providing information to the 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.

III. EPIDEMIOLOGICAL SITUATION

Global Situation

- Between December 31, 2019 and October 04, 2020, COVID-19 pandemic affected 235 countries/territories causing 34,837,224 cases and 1,032,288 deaths (CFR=2.96%) globally.
- Of the total cases and deaths reported since the beginning of the outbreak, 2,049,895 cases and 39,112 deaths were reported during the WHO Epi-Week-40.
- The United States of America (USA) reported the highest number of cases (7,256,234) with CFR of 2.87% followed by India (6,549,373 cases) with a CFR of 1.55%.
- In Africa, 57 countries/territories have reported COVID-19 cases.
- As of October 04, 2020, a total of 1,513,620 cases and 36,377 deaths were reported across the continent (CFR=2.40%). Of these 52,752 cases and 1,277 deaths were reported during the WHO-Epi-Week-40.
- Ethiopia reported the highest number of COVID-19 confirmed cases in East Africa. See the summary dashboard below.

Total Number of COVID-19 Affected Countries/Territories

235

Total Number of COVID-19 Confirmed Cases Globally

34,837,224

Total Number of Deaths with COVID-19 Globally

1,032,288

New Confirmed Cases_of Epi_Week Globally

2,026,073

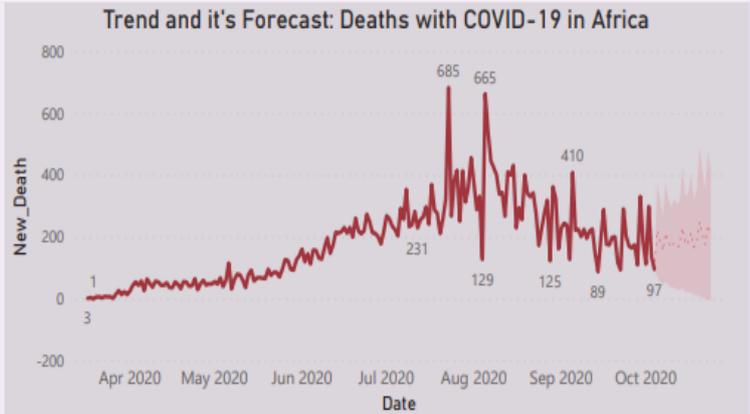
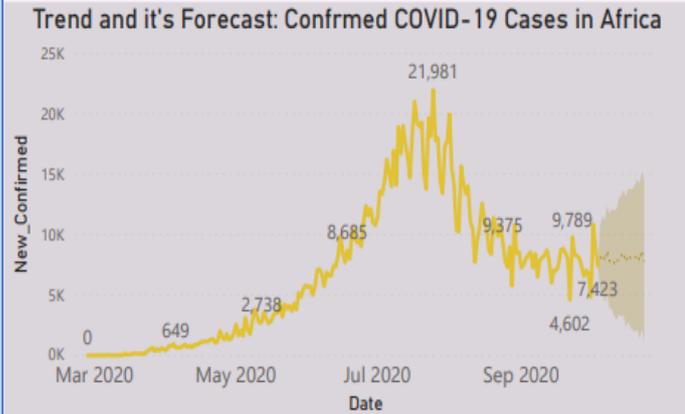
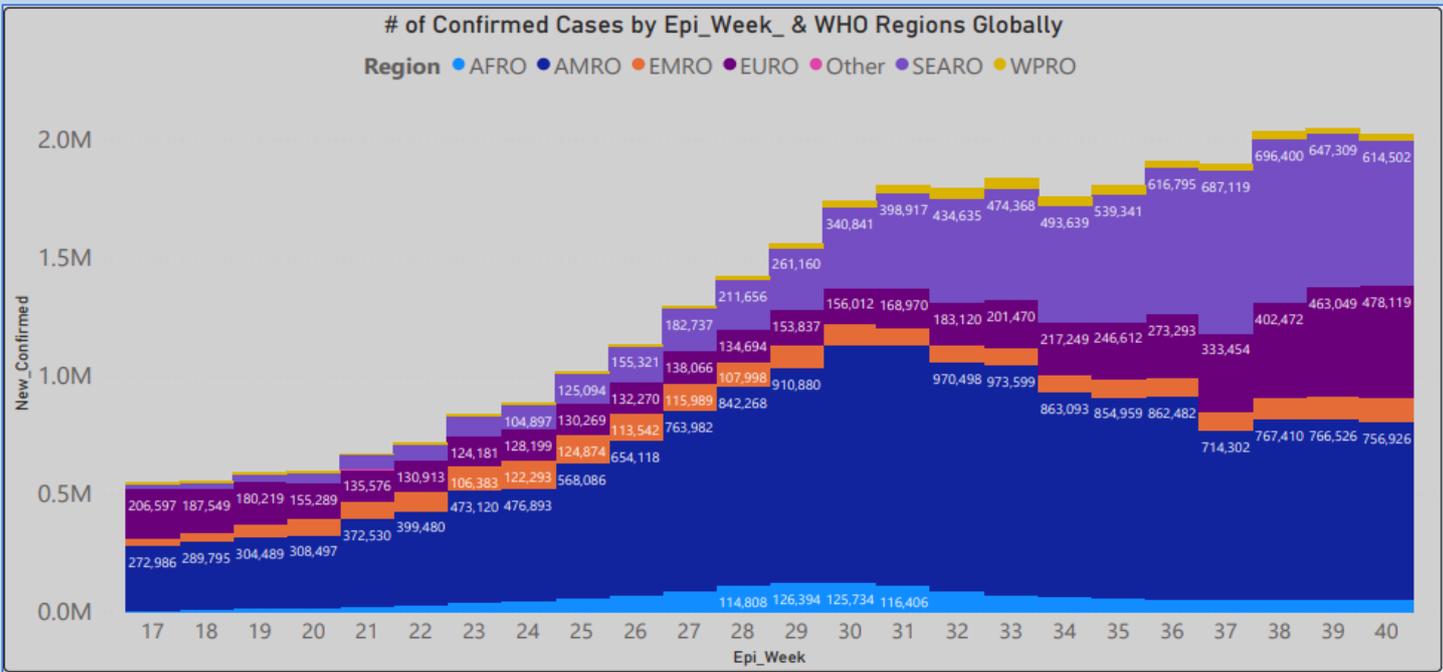
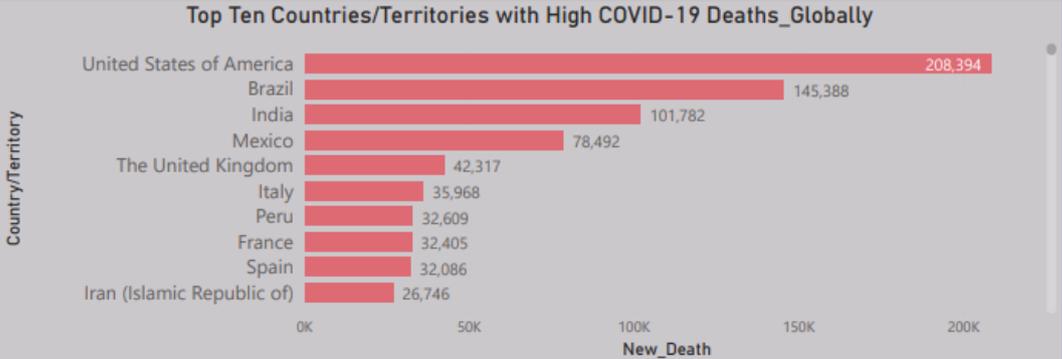
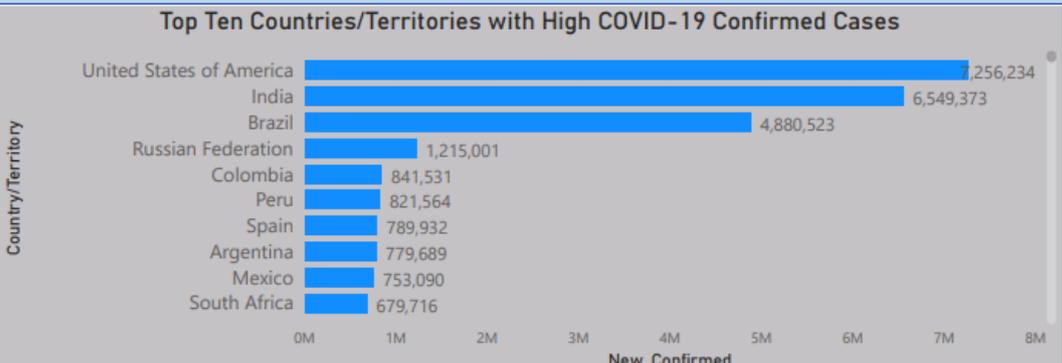


Fig. 1: COVID-19 Global Situation Update as of October 04, 2020 (Source: WHO)

of African Countries/Territories with COVID-19 Confirmed Cases

57

Total Number of Cases Confirmed in Africa

1,513,620

New Confirmed Cases in Africa with COVID-19_of Epi_Week

52,332

Total Number of Deaths in Africa with COVID-19

36,377

New Deaths in Africa with COVID-19_in Epi_Week

1,277

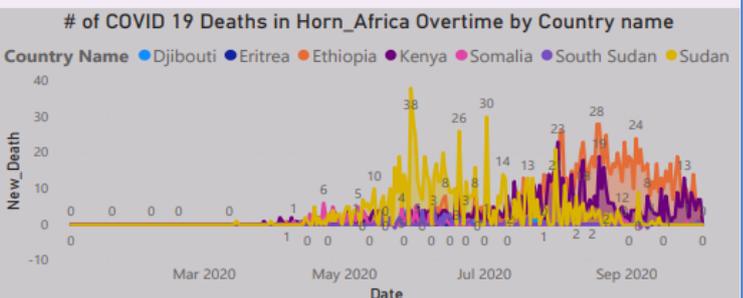
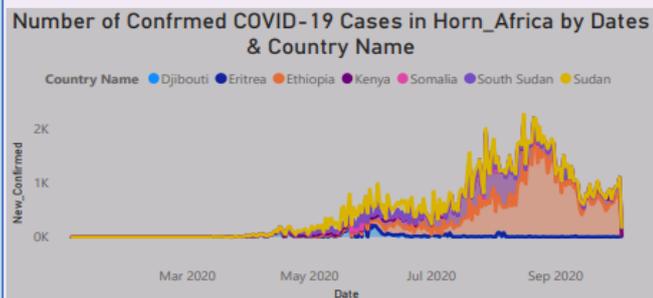
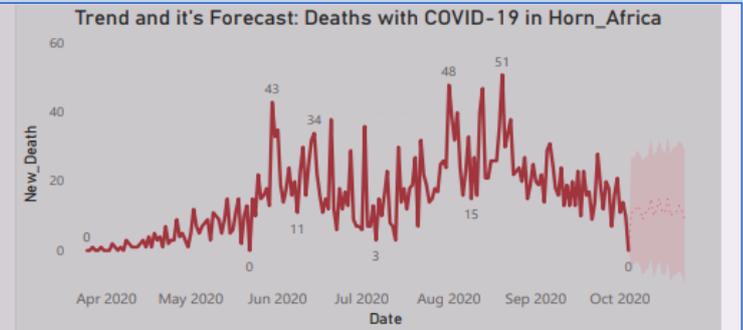
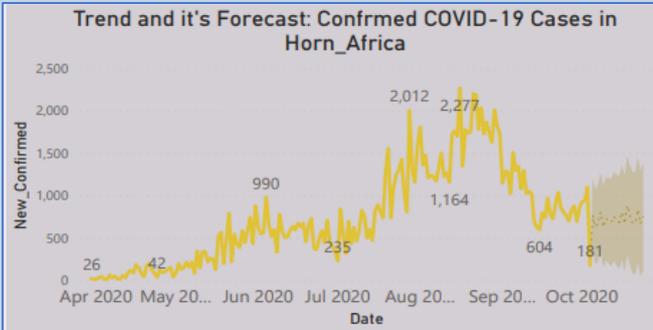
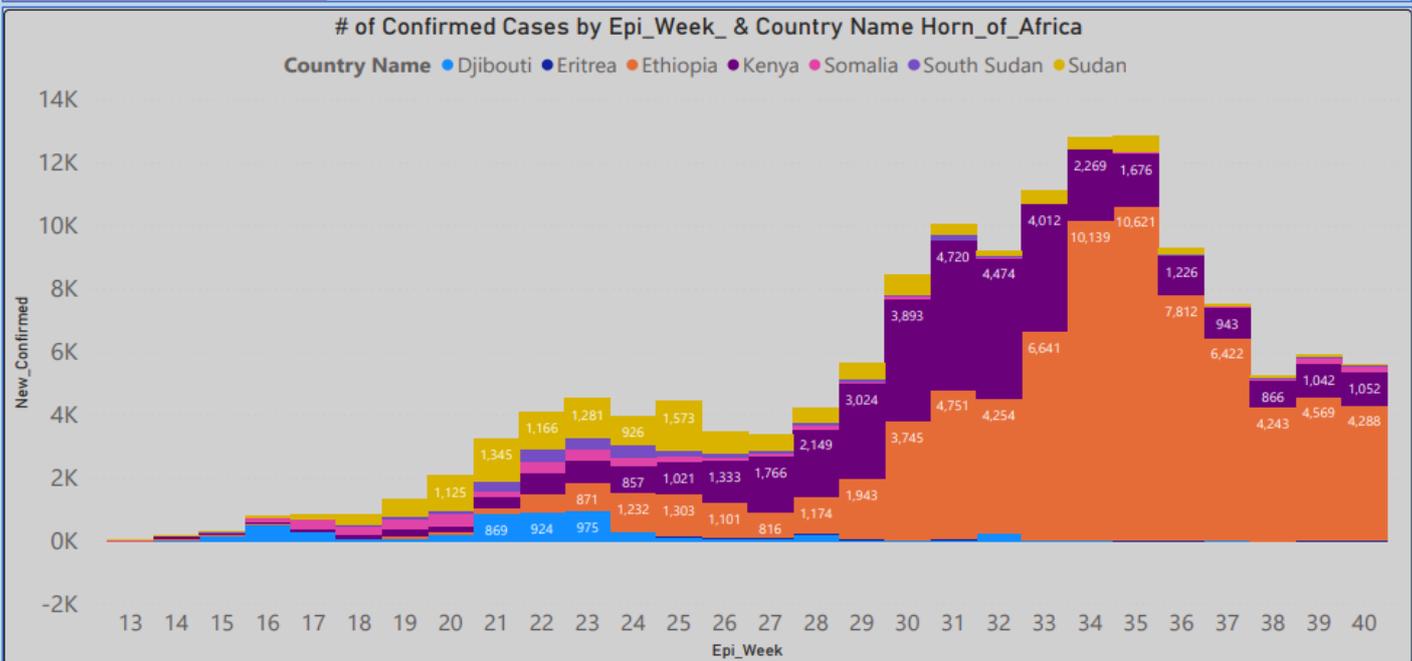
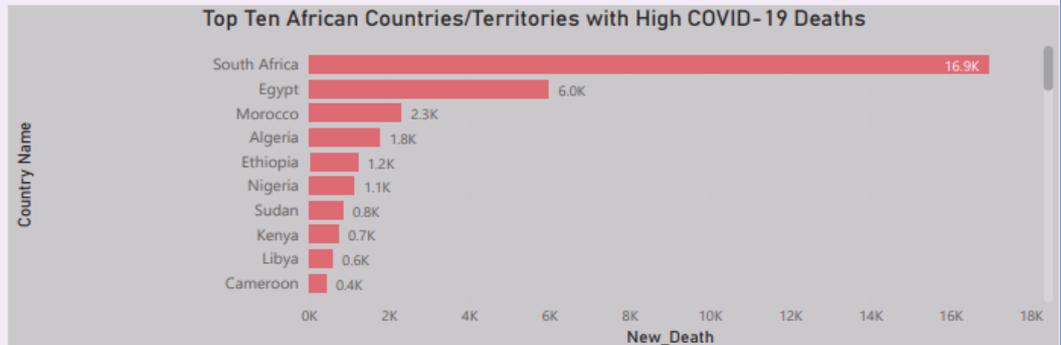
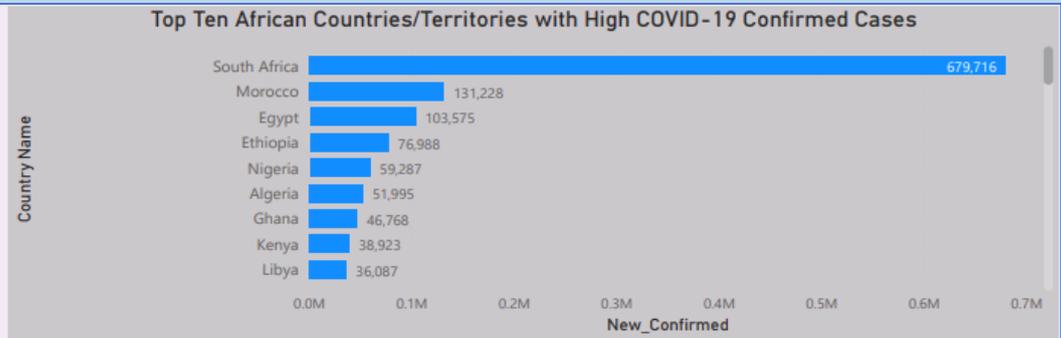


Fig. 2: COVID-19 Situation Update in Africa as of October 04, 2020 (Source: WHO)

National COVID-19 situation

- Five-thousand-four-hundred-eighty-seven (5,487) newly confirmed COVID-19 cases (21.61% increase compared to that of Epi-Week-39) and 52 COVID-19 related deaths (29.73% decrease compared to that of Epi-Week-39) were reported during the WHO Epi-Week-40.
- As of October 04, a total of 78,819 confirmed COVID-19 cases and 1,222 deaths were recorded in the country.
- For detail, see the summary dashboard below.

Table 1: Summary of National COVID-19 situation in the WHO-Epi-Week-40

Regions	New_Tested	New_Case	New_Admission	New Death	Positivity Rate	Admssion_Rate	Recovery Rate
Addis Ababa	19836	1811	361	32	8.9	38.4	34.7
Oromia	5539	1415	186	7	28.1	29.8	25.0
SNNPR	5028	265	299	2	5.0	98.6	82.7
Amhara	4566	368	148	5	8.4	73.9	66.6
Tigray	3274	219	163	1	6.6	77.4	73.0
Harari	1694	419	0	0	26.0	42.5	37.7
Sidama	1459	164	95	2	15.4	90.8	78.6
Diredawa	1298	517	46	3	37.1	55.2	49.0
Benishangul G	1074	211	8	0	19.4	40.7	34.7
Somali	843	21	1	0	3.1	34.2	32.0
Afar	526	57	2	0	6.0	50.9	47.0
Gambella	251	20	18	0	5.1	63.4	59.3
Total	45388	5487	1327	52	14.1	58.0	51.7

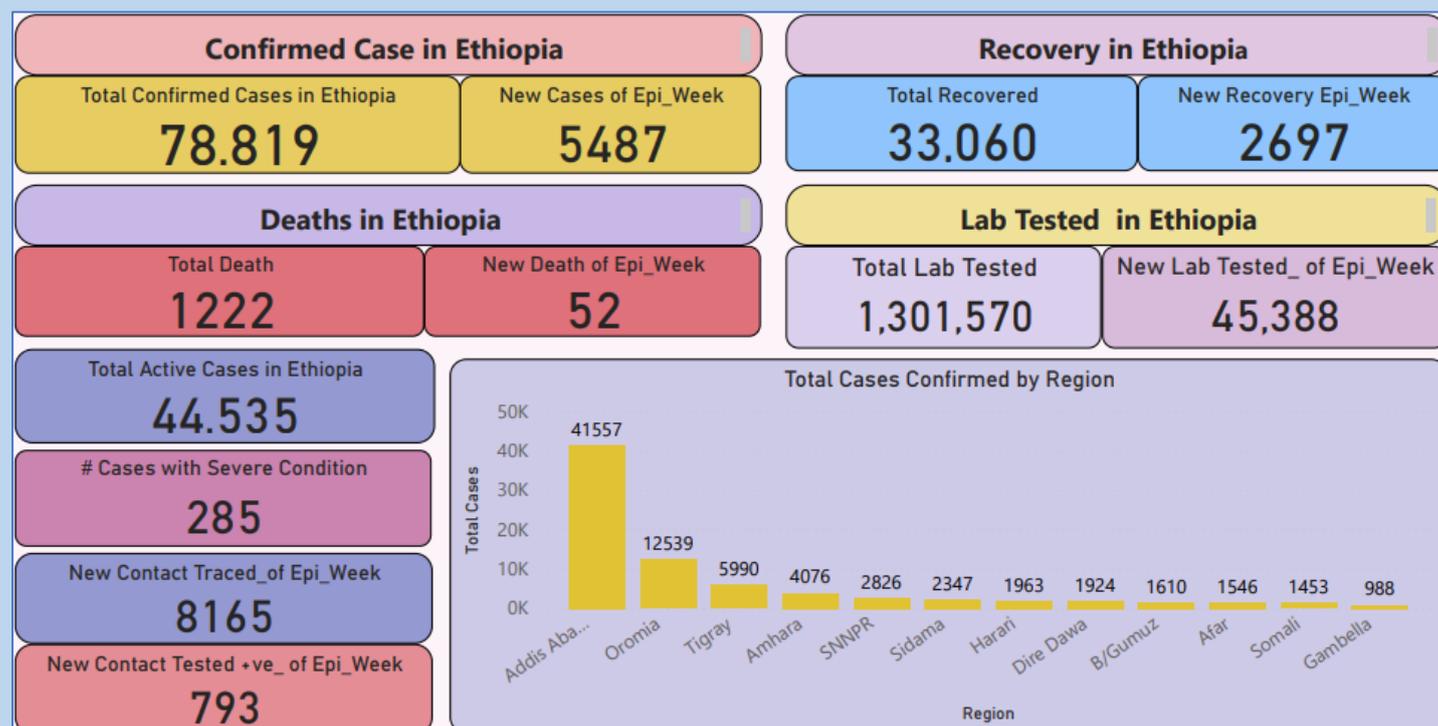


Fig. 3: Weekly summary of the COVID-19 situation in Ethiopia as of October 04, 2020, Ethiopia

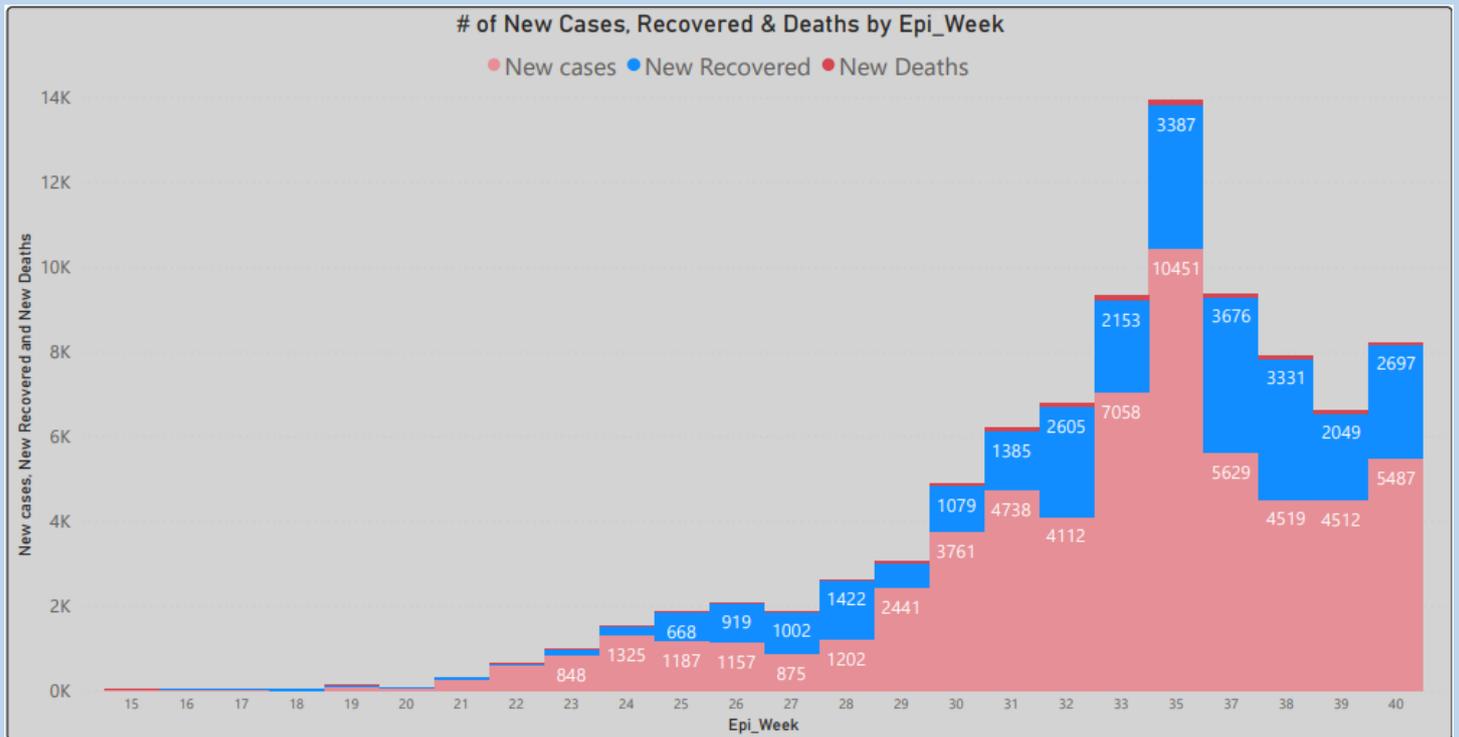


Fig. 4: COVID-19 confirmed cases, recovery and death by WHO Epi-Week as of October 04, 2020, Ethiopia

Epi-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, 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. There is also laboratory investigation of suspected cases, quarantined individuals, contacts of confirmed cases, SARI/pneumonia cases and community members.

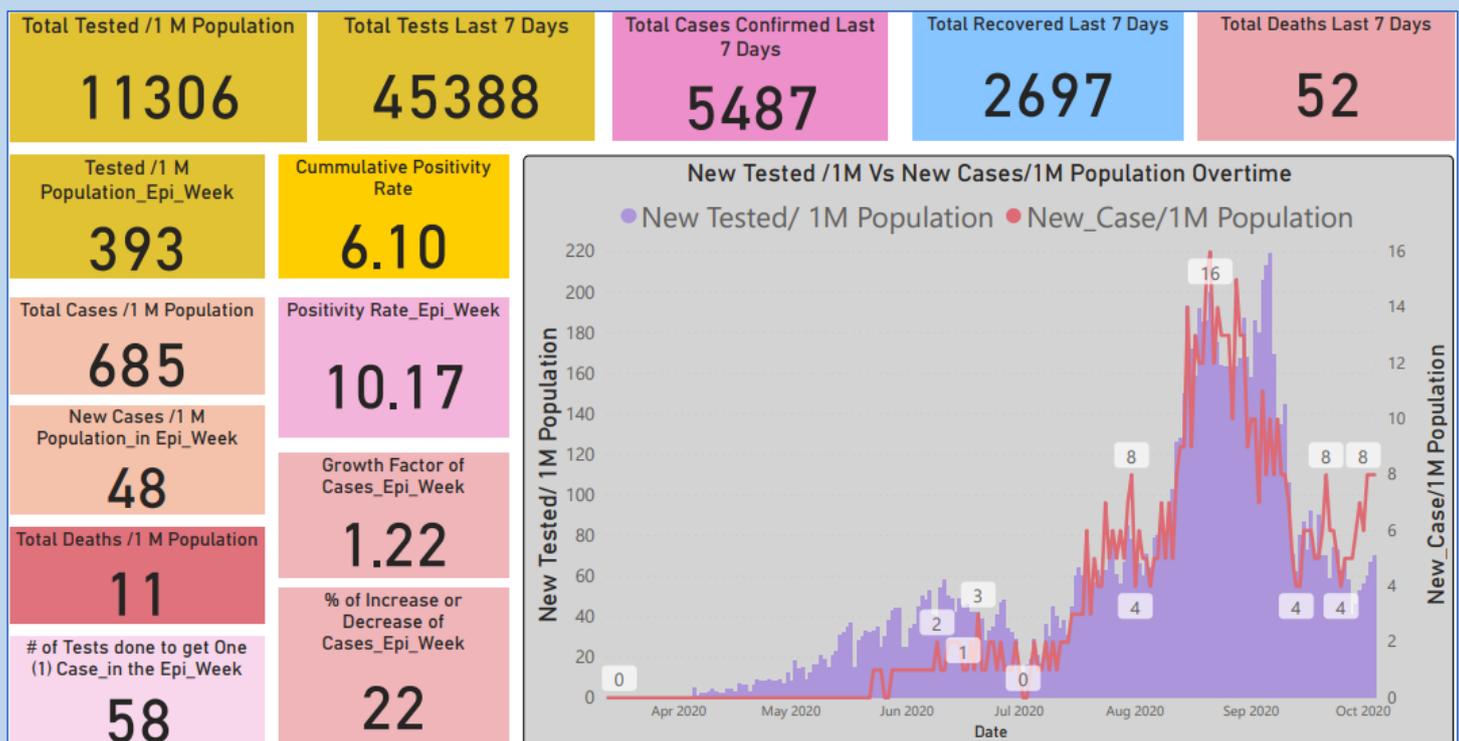


Fig. 5: Summary of COVID-19 confirmed cases in Ethiopia as of October 04, 2020.

Contact tracing and follow-up:

- As of October 04, 2020:
 - A total of 257,087 contacts of confirmed cases have been identified. Of these 8,165 contacts were identified in the WHO-Epi-Week-40.
 - Of total contacts, 230,896 (89.81%) have completed 14 days follow-up, while 7,112 contacts are still on follow-up.
 - 399 (0.16%) contacts have developed COVID-19 suggestive symptoms. Of these symptomatic contacts, 363 (90.98%) have tested positive.
- Overall, 18,615 (7.24%) of the contacts (symptomatic plus asymptomatic) have tested positive.
- Contacts contributed for the 23.62% of the total cases.

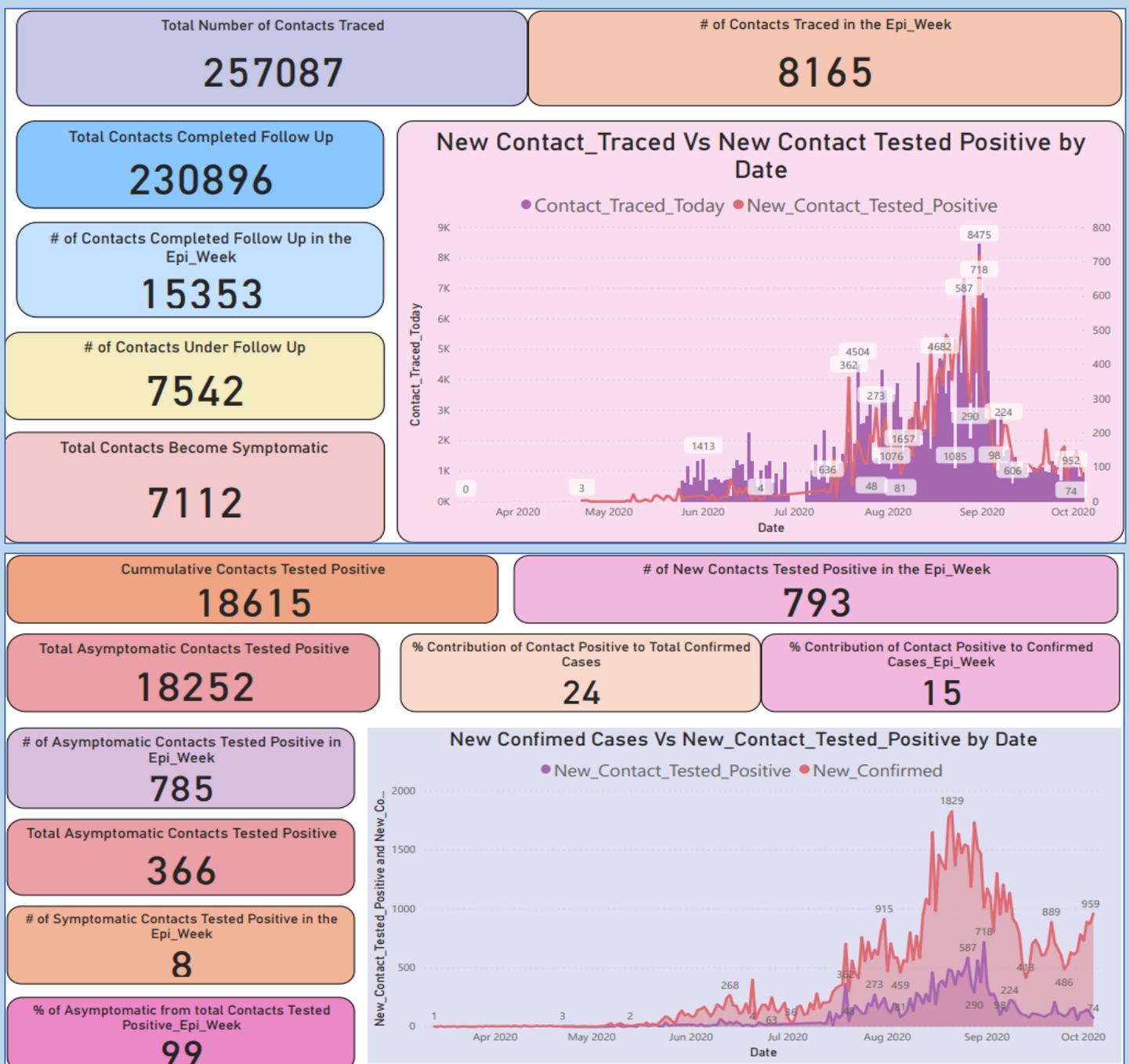


Fig. 6: Summary of COVID-19 contact tracing as of October 04, 2020, Ethiopia.

Rumors collection and verification from all sources

- As of October 04, 2020:
 - 284,012 rumors/alerts have been received and investigated. Of these, 7,484 rumors were reported in the WHO-Epi-Week-40.
 - 220,482 (77.63%) of the rumors/alerts have fulfilled the suspected case definition

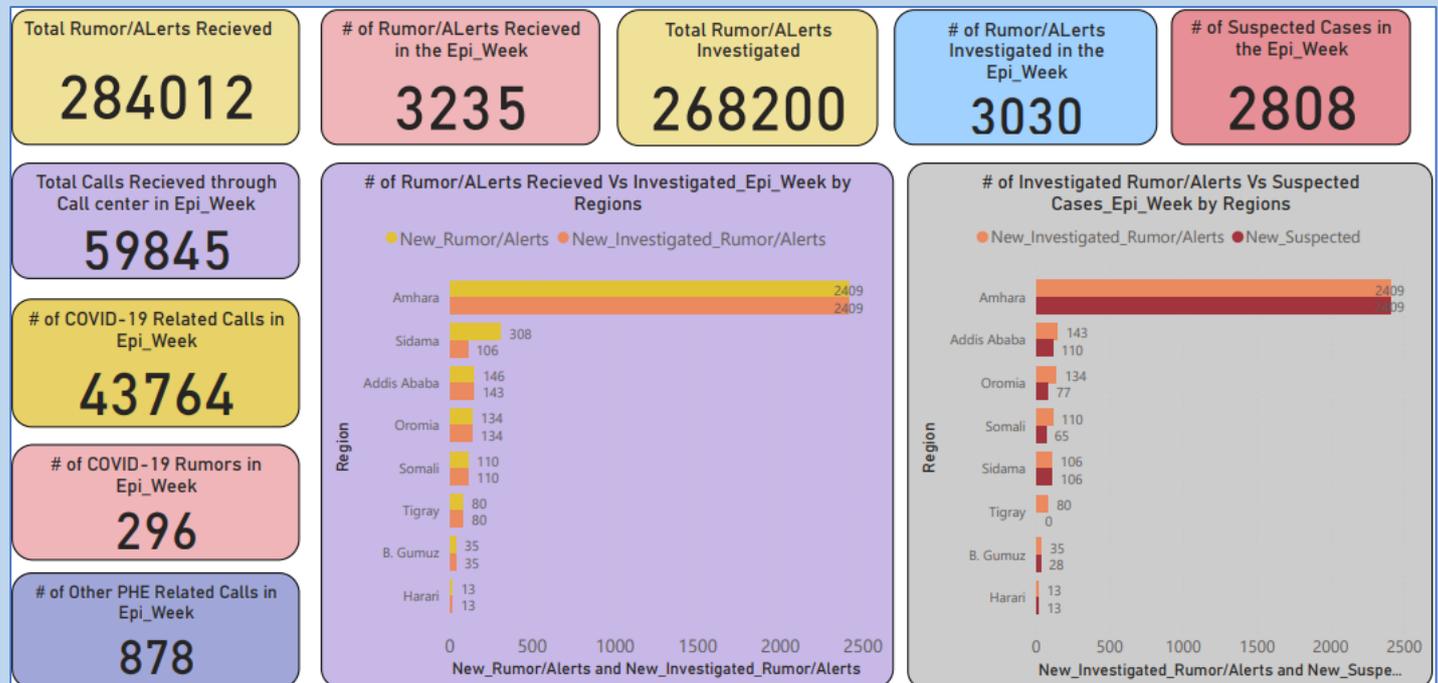


Fig. 7: Summary of COVID-19 rumor/alert investigation as of October 04, 2020, Ethiopia.

Point of entry and Quarantine related activities

- Since the start of the outbreak, 1,134,653 passengers have been screened at the Point of Entries of Ethiopia and 436,818 (38.50%) of them were screened at Bole International Airport.
- Of the total passengers screened, 37,481 are screened for COVID-19 in the Epi-Week-40.
- Nationally, 68,974 passengers have been quarantined since March 23, 2020 (when mandatory quarantine started). Of these 34,666 (50.26%) passengers have been quarantined in Addis Ababa.
- On October 04, 2020, there were 349 passengers in the quarantine centers across the country.

Laboratory related activities

- As of October 04, 2020, a total of 1,301,570 samples have been tested for COVID-19 by laboratories across the country.
- 45,388 laboratory tests were processed during the WHO Epi-Week-40, which is a 14.95% decrease compared to that of Epi-Week-39.
- The laboratory test positivity rate for the WHO-Epi-Week-40 is 12.09%, which is a bit higher than the preceding week, which was 11.82%.
- The overall positivity rate for the laboratory test since the occurrence of the disease in the country is 6.06%.

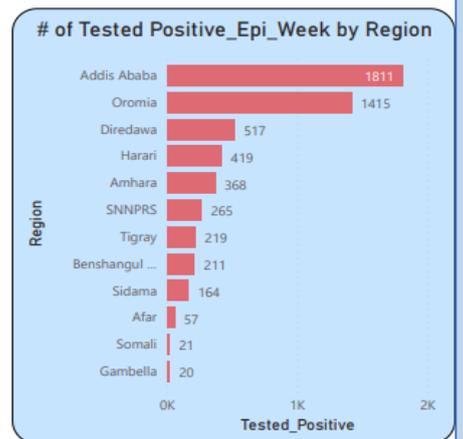
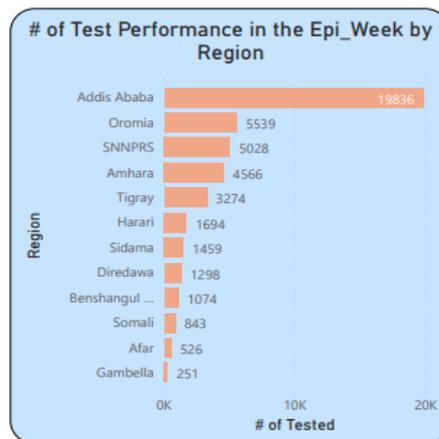
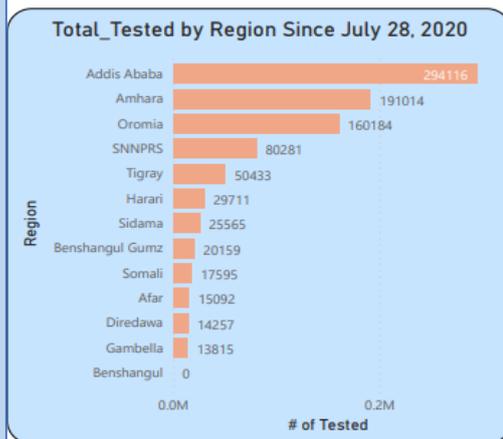
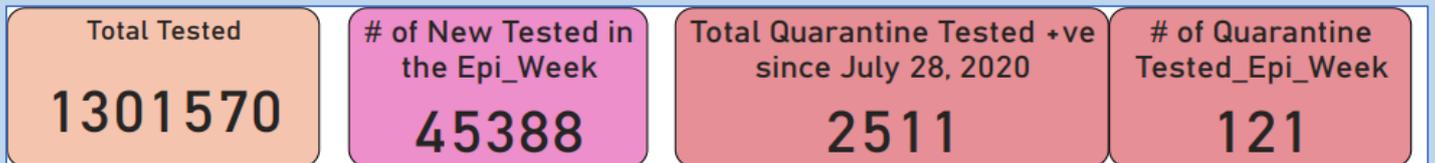
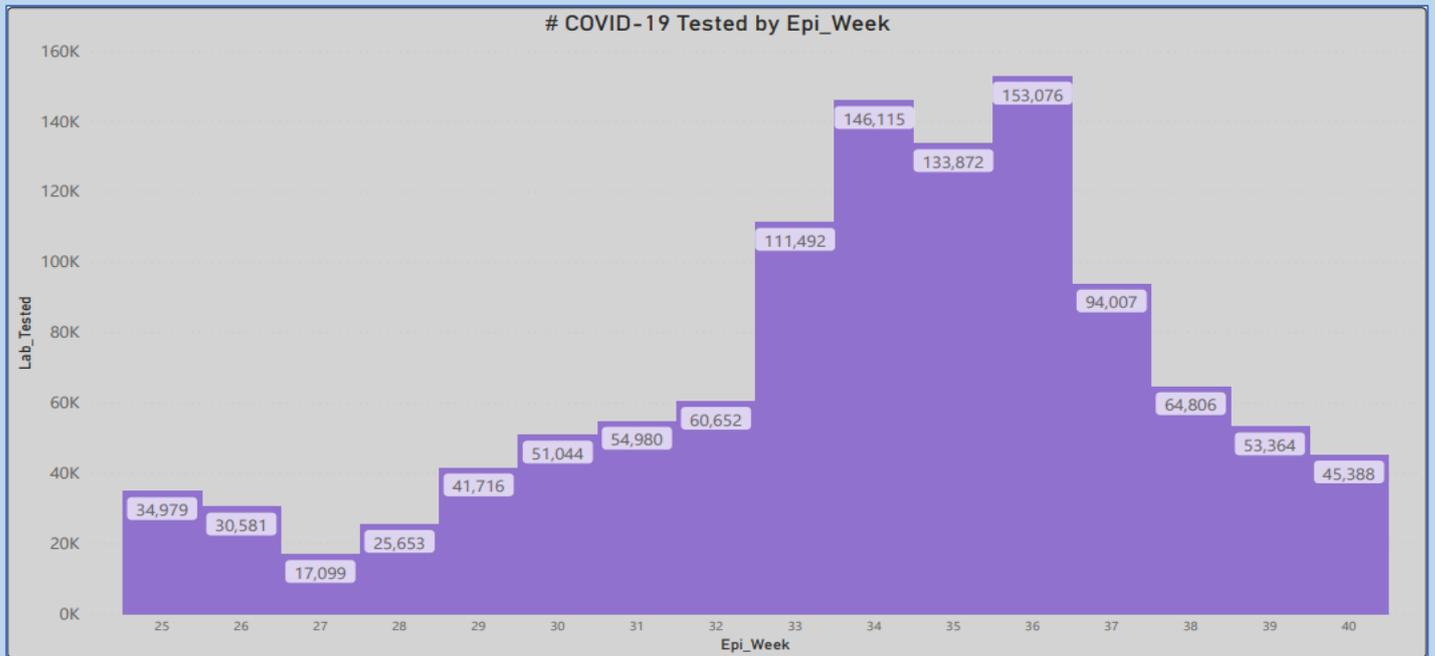


Fig. 8: Summary of COVID-19 laboratory testing as of October 04, 2020, Ethiopia.

IV. Case Management and IPC

- Of the active cases, 285 (0.64%) patients are in severe clinical condition.
- So far, total 19,714 18,069 COVID-19 confirmed cases have been on Home Based Isolation and Care (HBIC). Of them 13,490 12,005 (66.44%), have recovered and 5 died.
- Of these, 1645 cases are enrolled to HBIC and 1485 cases have recovered on the WHO-Epi-Week-40.
- As of October 04, 2020, there are 6,226 cases on HBIC.
- So far, 182 (14 of them in Epi-Week-40) of the cases have been transferred from treatment centers to HBIC after improvement.
- So far, 163 (17 of them in Epi-Week-40) of the cases have been transferred from HBIC to treatment centers for better care.

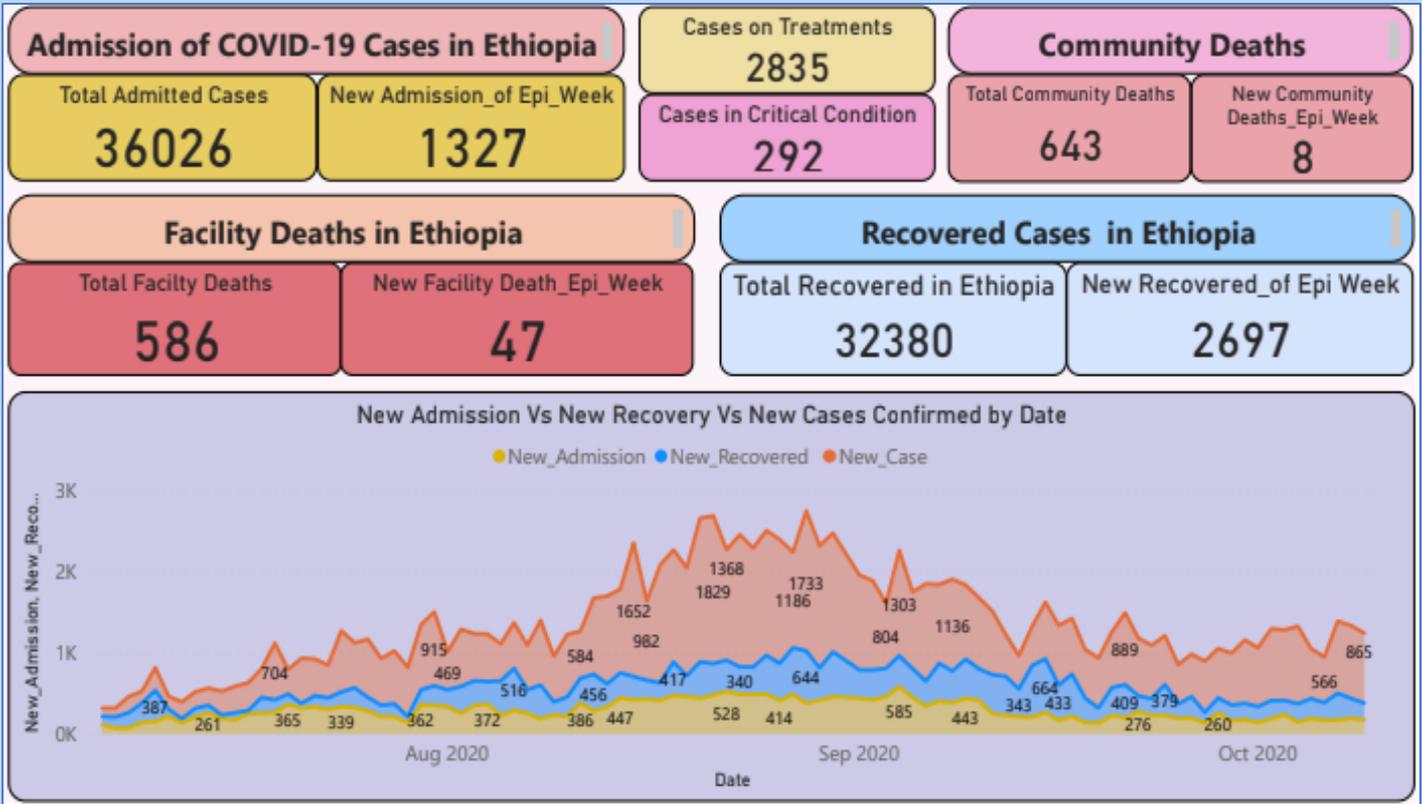


Fig. 10: Summary of case management update as of October 04, 2020.

V. Risk Communication and Community Engagement (RCCE)

- Daily press statement is being given on COVID-19 situation on daily basis through Mass Media.
- During the Epi-week-40:
 - Audio messages on Gishen Mariam pilgrimage finalized and shared to:
 - 20 transportation association leaders by creating telegram platform and for all regional RCCE team.
 - Gishen Mariam social media group with 2492 followers and Godoliyas pilgrimage having 100 followers.
 - COVID-19 prevention and control messages during ‘Irreechaa” celebration was shared
 - COVID-19 related key messages shared on social media.





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, private institutions, individuals and partners have been donating different medical supplies and infrastructures for COVID-19 response.
- On the WHO Epi-Week-40:
 - Zoscales Partners, in collaboration with funders and organizations, donated 1000 tablets worth of 102,500 USD to support the fight against COVID-19 pandemic in Ethiopia.



Donation of tablets by Zoscales Partners to support COVID-19 response in Ethiopia, September 28, 2020, Addis Ababa.

- 690 bottles of locally produced hand sanitizers received.
- 350 Infrared thermometers are calibrated and brought to Ethiopian Pharmaceuticals Supply Agency.
- Viral Transport Media are distributed for private hospitals
- Facilitated the pre-import of 30 X-ray machines donated from GE (General Electronics) company.

VII. Training and Orientation Activities

- There is ongoing training and orientation for the public and health professionals on COVID-19.
- During the Epi-week-40:
 - Four days Home-Based Isolation and Care (HBIC) TOT for health professionals provided in Mekelle city for 21 health professionals from Tigray region.
 - Training provided for Addis Ababa City Administration Health Bureau 12 sub-city RCCE coordinators on risk communication.
 - Training provided for 20 toll free staffs on Home based care interpersonal communication and phone call counseling skills
- As of October 01, 2020, a total of 12,705 Health Extension Workers and Health Extension Program supervisors are trained on mobile-based COVID-19 training.

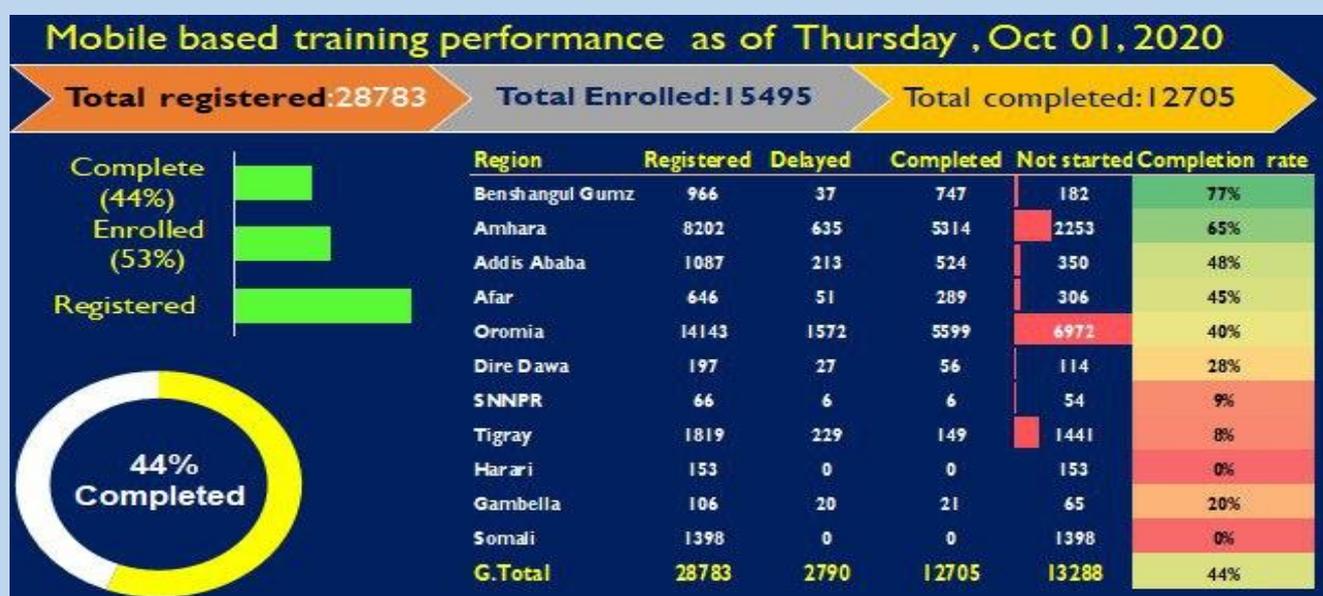


Fig. 13: Mobile based training performance as of October 01, 2020

VIII. Coordination and Leadership

- The national PHEOC is collaboratively working with stakeholders: government agencies, partner organizations, UN agencies, embassies, hospitals, Industrial parks and others.
- Morning briefing of IMS is being conducted every day by core IMS staffs and key partners' representatives.
- Weekly virtual (zoom) meeting is being conducted with technical working group members, which comprises members from subnational level focal, key partners and stakeholders.
- Weekly leadership and strategic virtual meeting, chaired by the H.E MOH Minister, is being conducted to oversee and guide the response efforts.

- A new directive (Directive No 30/2020) issued for the prevention and control of COVID-19 pandemic is published:
 - https://www.ephi.gov.et/images/Registerd-COVID-19-Directive-2013_Final_051020.pdf?fbclid=IwAR0e8giX65dD2s65YYy7Xb_dIGR7zF5ySBIWW7IXn5xAnX5G5I7pe1jk1Ys
 - The directive has directions on the following issues:
 - Prohibited Activities and Duties Imposed
 - Precautionary Measures for Home Isolation and Care
 - Quarantine and Border Health Control
 - Funeral, Corpse Transporting and Consolation programs
 - Precautionary Measures that Shall Be Taken During Meetings
 - Cautionary Measures During Religious Ceremony, In-house Social Ceremonies, and Holidays Held on Public Squares
 - Cautionary Measures to Be Complied with By Recreations, Hospitality Services, and Sport Tournaments
 - Restrictions and Cautionary Measures to be Applicable by Institutions for High-Risk Section of the Society
- Consultative meeting conducted with the Ministry of Education on the risk communication and community engagement intervention for school reopening program on September 29, 2020.
 - The development of a joint action plan on risk communication and community engagement activities started.
 - The communication focal persons at the regional level education bureau communicated through the Ministry of Education to start the establishment of a regional platform for risk communication and community engagement activities.
 - Two experts are assigned from the Ministry of Education to work with the national risk communication and community engagement section on the school reopening activities.

IX. Challenges and Way Forward

Challenges

- Happening of super spreading events and mass gatherings with poor physical distancing and facemask use which exacerbates the spread of COVID-19.
- Increasing number of COVID-19 cases in congregated settings.
- Inadequate number of facilities for treatment and isolation of cases.
- Increasing number of cases being detected in the community.
- Low stock status of personal protective equipment is still a problem.

Way Forward

- Establishing additional treatment and isolation facilities as schools and universities which were being used as COVID-19 response staff dormitory, quarantine for passengers and isolation and treatment centers to be evacuated for school reopening.
- Advocate and strengthen Home Based Isolation and Care (HBIC).
- 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 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.

X. Public Health Policy Recommendation

Advice for the Public:

- For any individual confirmed to have COVID-19 and who is candidate for Home Based Isolation and Care:
 - Properly isolate from other family members.
 - Take full responsibility in prevention of transmission
 - Strictly adhere to the National Directive of Home-Based Isolation& Care.
 - Provide reliable information during regular follow up either by phone or home visit.
 - Report to nearest health facilities/follow up team in case of any emergency, appearance of new symptoms or worsening of existing symptoms.
- It is important to be informed of the situation and act appropriately to protect yourself and your family.
 - Wash hands frequently
 - Don't touch your mouth, nose or eye by unwashed hands
 - Keep physical distancing; avoid mass gathering and 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/	8335/952
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	
Ethiopian Public Health Institute Telegram Channel	https://t.me/EthPHI	
Ethiopian Public Health Institute YouTube Channel	https://www.youtube.com/channel/UCvvTzeY-IJiQfEFBULH9Mkw	
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>Immune Thrombocytopenia Secondary to COVID-19: a Systematic Review https://dx.doi.org/10.1007%2Fs42399-020-00521-8</p>	<ul style="list-style-type: none"> • Immune thrombocytopenia, often known as immune thrombocytopenic purpura (ITP), has emerged as an important complication of COVID-19. • Majority of ITP cases (71%) were found to be elderly (> 50 years) and 75% cases had moderate-to-severe COVID-19. • Three patients (7%) were in the pediatric age group. Reports of ITP in asymptomatic COVID-19 patients (7%) underscore the need for COVID-19 testing in newly diagnosed patients with ITP irrespective of COVID-19 symptoms amid this pandemic. • ITP onset occurred in 20% cases 3 weeks after onset of COVID-19 symptoms, with many reports after clinical recovery.

<p>Current evidence of SARS-CoV-2 vertical transmission: an integrative review https://doi.org/10.1590/1806-9282.66.s2.130</p>	<ul style="list-style-type: none"> • The findings seem to demonstrate that vertical transmission is possible but quite unusual. • Further studies with a great number of cases are warranted to elucidate whether the virus may be vertically transmitted to the fetus and if any maternal conditions can influence that.
<p>Reducing false negatives in COVID-19 testing by using microneedle-based oropharyngeal swabs https://doi.org/10.1016/j.matt.2020.09.021</p>	<ul style="list-style-type: none"> • Regular swabs were engineered by using a microneedle (MN) patch to significantly improve the quality and quantity of virus collection. • The combination of MNs with different crosslinking levels endows the patches with dual capability of mucus penetration and virus extraction. • Moreover, the antibody (Ab) against viral spike protein was integrated into the patch, conferring MNs with an active virus capture potential. • By taking advantage of the biological and engineered species, it is believed the designed MN/Ab swabs could serve as a promising tool to improve current sampling efficiency with less "false negatives", contributing to the containment of COVID-19 pandemic.
<p>Clinical features and outcomes of adults with COVID-19: A systematic review and pooled analysis of the literature https://doi.org/10.1111/ijcp.13725</p>	<ul style="list-style-type: none"> • COVID-19 most commonly presents with fever, cough, fatigue and anorexia among patients with existing hypertension and cardiovascular disease. • It is important as serious adverse outcomes can develop such as acute respiratory distress syndrome, acute cardiac injury, acute kidney injury and death.
<p>Decreased mortality in COVID-19 patients treated with Tocilizumab: a rapid systematic review and meta-analysis of observational studies https://doi.org/10.1093/cid/ciaa1445</p>	<ul style="list-style-type: none"> • The results showed that mortality was 12% lower for COVID-19 patients treated with tocilizumab compared to COVID-19 patients who were not treated with tocilizumab. • The number needed to treat was 11, suggesting that for every 11 (severe) COVID-19 patients treated with tocilizumab 1 death is prevented. • These results require confirmation by randomized controlled trials.
<p>Does Asthma Increase the Mortality of Patients with COVID-19?: A Systematic Review and Meta-Analysis https://doi.org/10.1159/000510953</p>	<ul style="list-style-type: none"> • A meta-analysis of data from 744 asthmatic patients and 8,151 nonasthmatic patients indicated that the presence of asthma had no significant effect on mortality (OR = 0.96; 95% CI 0.70–1.30; I² = 0%; p = 0.79). • Results were stable in a sensitivity analysis. • A descriptive analysis of other clinical outcomes indicated no difference in the duration of hospitalization and the risk of intensive care unit (ICU) transfer between asthmatic and nonasthmatic patients. • To conclude, preliminary data indicates that asthma as a comorbidity may not increase the mortality of COVID-19.
<p>Favipiravir versus other antiviral or standard of care for COVID-19 treatment: a rapid systematic review and meta-analysis https://virologyj.biomedcentral.com/articles/10.1186/s12985-020-01412-z</p>	<ul style="list-style-type: none"> • There is a significant clinical and radiological improvement following treatment with FVP in comparison to the standard of care with no significant differences on viral clearance, oxygen support requirement and side effect profiles.

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 Apple- https://apps.apple.com/us/app/who-academy/id1506019873

8335 / 952



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

PREPARED BY

Fantu Lombamo (MD, MPH) – Planning Section, Situation Unit Lead
Negusse Yohannes (PhD in Statistics) – Planning Section, Situation Unit Member

CONTRIBUTORS

Zelalem Kebede (MPH) – Planning Section, Situation Unit Member
Haftom Taame (MPH-Field Epi) - Africa CDC

EDITED AND REVIEWED BY

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