



ጤና ሚኒስቴር - ኢትዮጵያ
MINISTRY OF HEALTH-ETHIOPIA
የዜጎች ጤና ለሃገር ብልፅግና
HEALTHIER CITIZENS FOR PROSPEROUS NATION



የኢትዮጵያ የሕብረተሰብ ጤና ኢንስቲትዩት
ETHIOPIAN PUBLIC HEALTH INSTITUTE

PUBLIC HEALTH EMERGENCY OPERATIONS CENTER (PHEOC), ETHIOPIA

COVID-19 PANDEMIC PREPAREDNESS AND RESPONSE DAILY SITUATION REPORT ETHIOPIA

(Data reported as of 16 January 2021)

16 January 2021

ISSUE
NO

354

HIGHLIGHTS

- There were 6,111 samples tested for COVID-19 within the last 24 hours.
- Four-hundred-forty-six (446) COVID-19 cases detected among the tested people bringing the total confirmed cases to 130,772.
- Six-hundred-seventeen (617) cases recovered today which brings the total COVID-19 recovered cases to 116,026 in the country.
- Six (6) new COVID-19 related deaths occurred today bringing the total number of COVID-19 deaths to 2,029.
- There are 205 contacts of confirmed cases identified today.
- A total of 26,825 contacts of confirmed cases have been tested positive so far.
- There are 219 patients in severe condition in the treatment centers

COVID-19 NATIONAL UPDATE

1,576,502
PASSENGERS SCREENED
FOR COVID-19 AT POEs

334,914
RUMORS/ALERTS RECEIVED
AND INVESTIGATED

314,973
CONTACTS OF THE
CONFIRMED CASES

254,665
SUSPECTED CASES
DETECTED

1,882,151
TOTAL LABORATORY TESTS
DONE

130,772
TOTAL
CONFIRMED CASE

116,026
TOTAL RECOVERED

2,029
TOTAL DEATH

COVID-19 GLOBAL UPDATE

Access link for WHO COVID-19 monitoring dashboard:

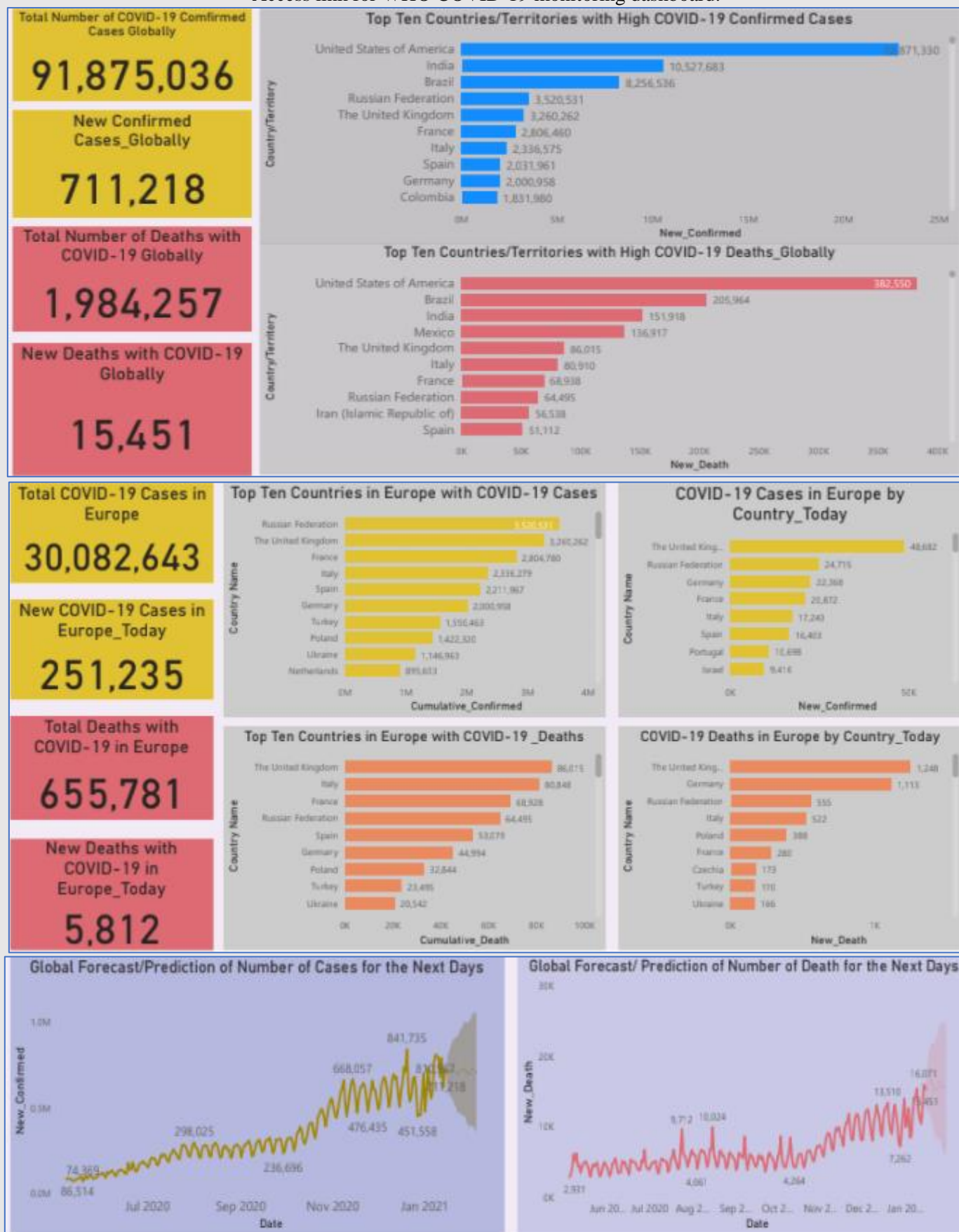


Fig. 1: Summary of global COVID-19 situation as of January 16, 2021

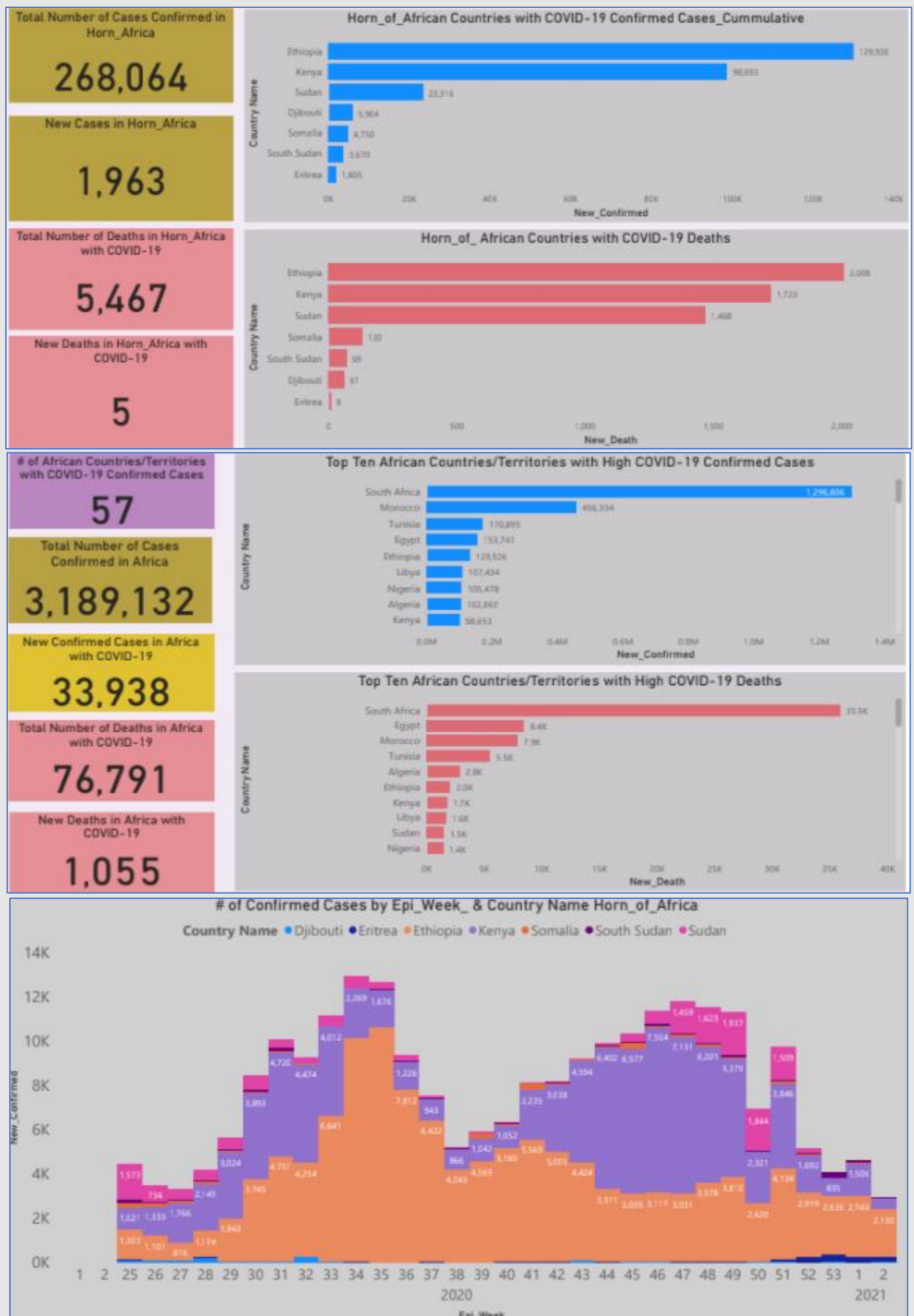


Fig. 2: Summary of COVID-19 situation in Africa as of January 16, 2021

MAJOR COVID-19 PREPAREDNESS AND RESPONSE EFFORTS IN ETHIOPIA

BACKGROUND

Ethiopia activated its IMS under the national PHEOC. The WHO and other partners are currently supporting in scaling up preparedness efforts and implementation of related recommendations suggested by the IHR Emergency Committee. Different layer so coordination platform revitalized and the PHEOC is working collaboratively with various agency representative, Partners, Embassies, hospitality sector, Industrial parks and others. There is strong communication and updating from other countries through IHR-NFPs. The sub-national level is well engaged in the preparedness and response efforts. Joint regular media briefing sessions are being conducted. The first confirmed case of COVID-19 was detected on 13th March 2020; this was a day after WHO declared COVID-19 as a pandemic.

COORDINATION and COLLABORATION:

- The national PHEOC is functioning 24/7 to coordinate the response efforts. During the night shift, the assigned night duty staffs maintain the critical functions.
- Daily morning briefing of the IMS core staff and agency representatives is being conducted on daily basis.

EPIDEMIOLOGY and LABORATORY SURVEILLANCE:

Confirmed COVID-19 cases, recovery and death

- Today, 446 cases are newly detected bringing the total number of COVID-19 confirmed cases to 130,772 in the country.
- Today there are 617 newly recovered cases bringing the total number of COVID-19 recovered cases to 116,026.

Table 1: Summary of laboratory tests, new cases and deaths nationally as of January 16, 2021

Regions/City Admin	# Tests conducted	# of New Cases	Test positivity rate	# of New deaths
Addis Ababa	5036	400	7.9%	6
Afar	170	2	1.2%	0
Amhara	38	2	5.3%	0
Benishangul Gumuz	18	1	5.6%	0
Dire Dawa	72	3	4.2%	0
Gambella	72	0	0%	0
Harari	48	1	2.1%	0
Oromia	251	35	13.9%	0
Sidama	218	1	0.5%	0
SNNPRS	188	1	0.5%	0
Somali	-	-	-	-
Tigray	-	-	-	-
Total	6111	446	7.3%	6

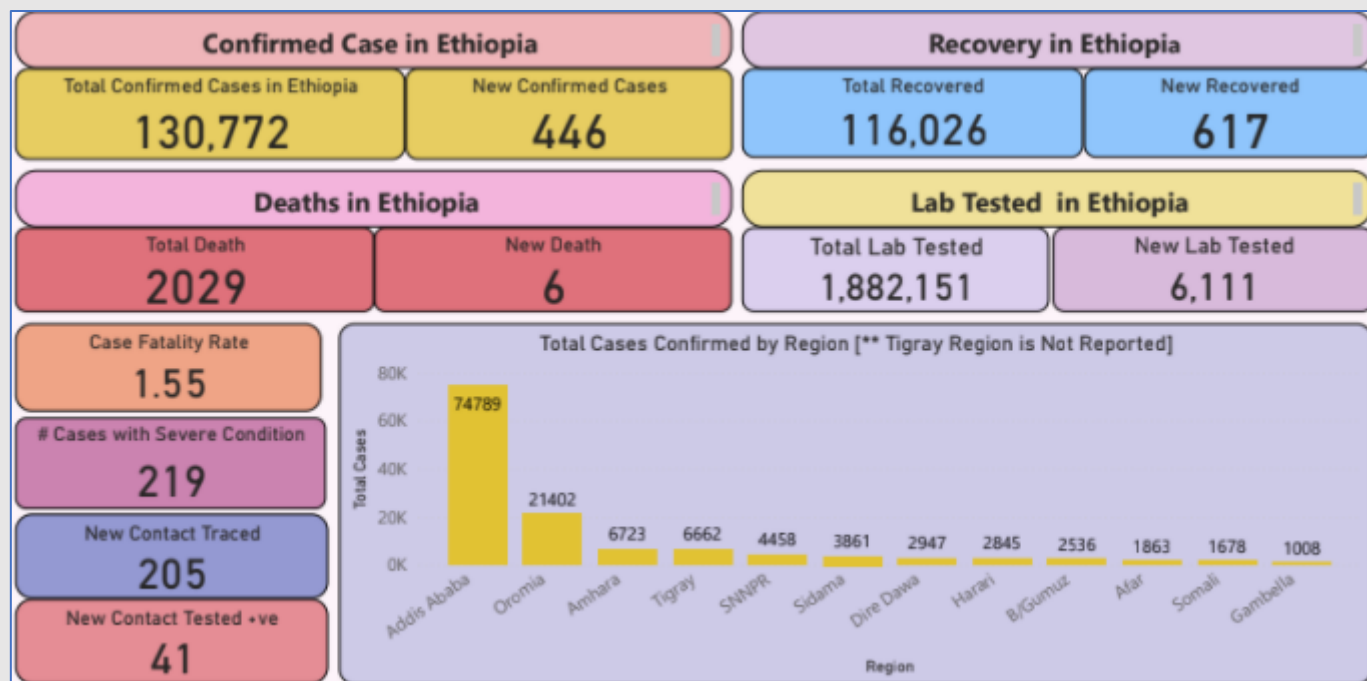


Fig. 3: Summary of COVID-19 situation in Ethiopia as of January 16, 2021

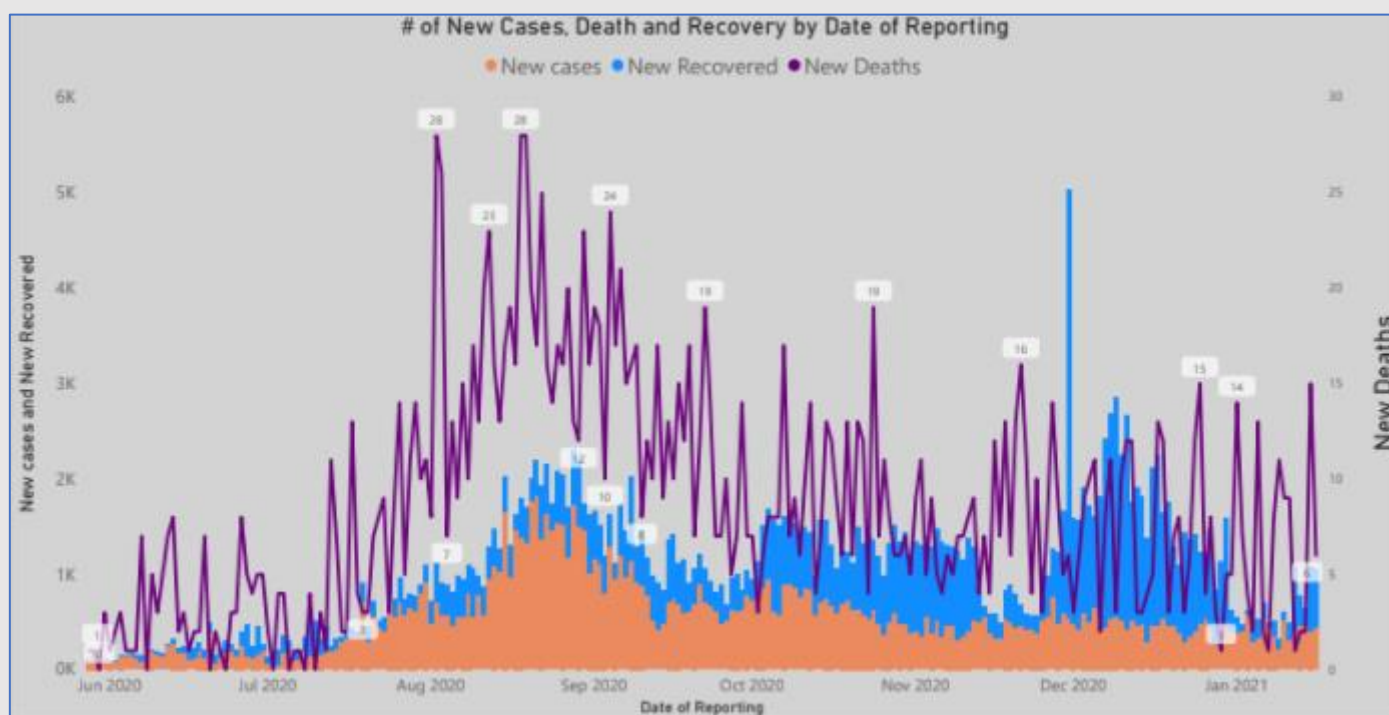


Fig. 4: Trend of COVID-19 confirmed cases, death and recovery by date of reporting till January 16, 2021

Laboratory test:

- 6,111 laboratory samples were tested for COVID-19 in the last 24 hours; 446 (7.62%) positives and 5,665 (92.70%) negatives were detected.
- As of January 16, 2021, 1,882,151 samples have been tested for COVID-19 by laboratories in the country.

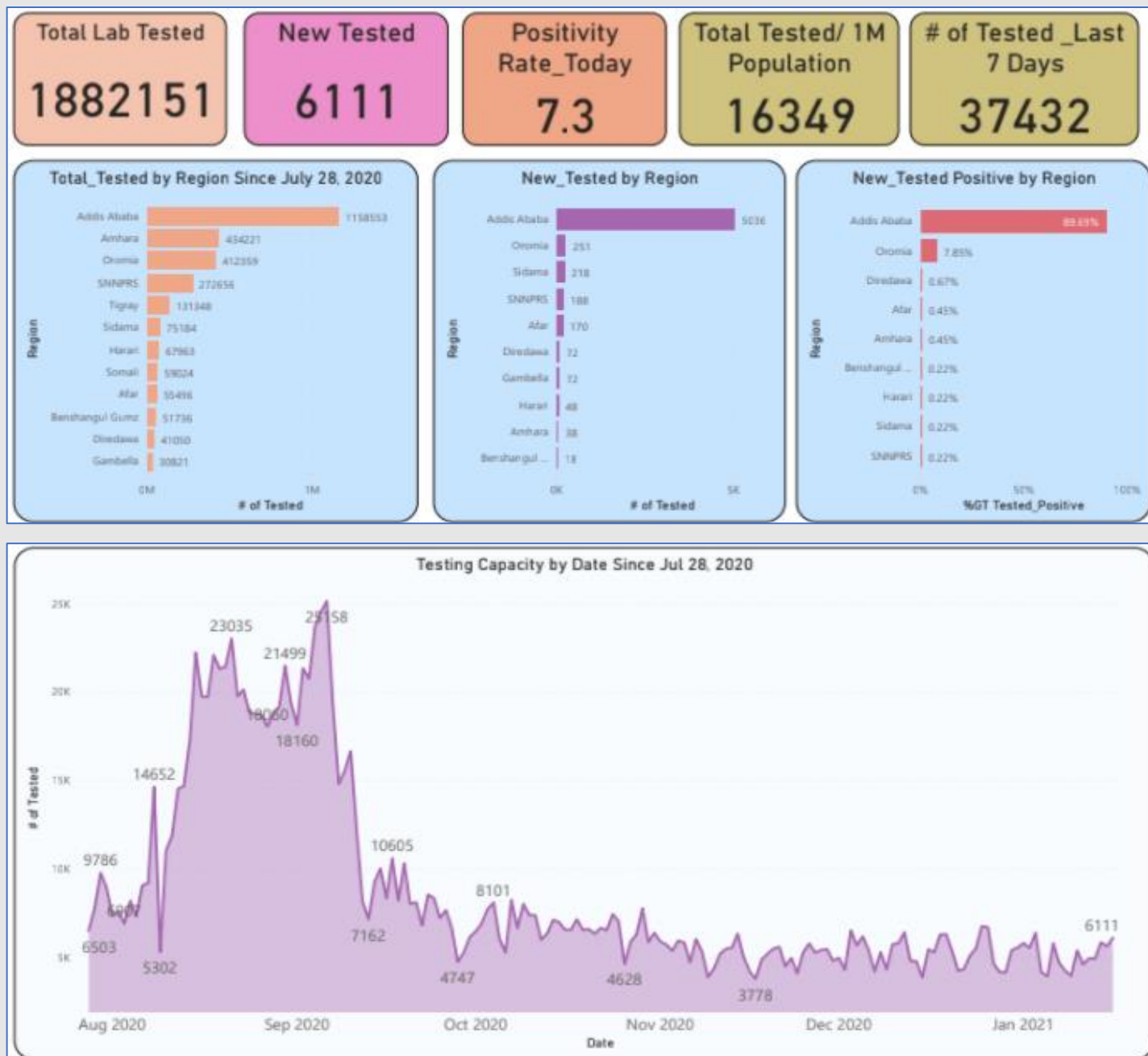


Fig. 5: Summary of Laboratory testing related activity as of January 16, 2021

Contact tracing and follow-up:

- As of January 16, 2021:
 - A total of 314,973 contacts of confirmed cases have been identified. Of these 205 contacts are identified today.
 - 287,243 (91.19%) have completed 14 days follow-up, while 1,303 contacts are still on follow-up.
 - Only 716 (0.23%) contacts developed COVID-19 suggestive symptoms. Of these, 566 (79.05%) were tested positive.
 - Overall, 26,825 (8.51%) of the contacts (symptomatic plus asymptomatic) were tested positive, which are among the currently existing confirmed positive cases.

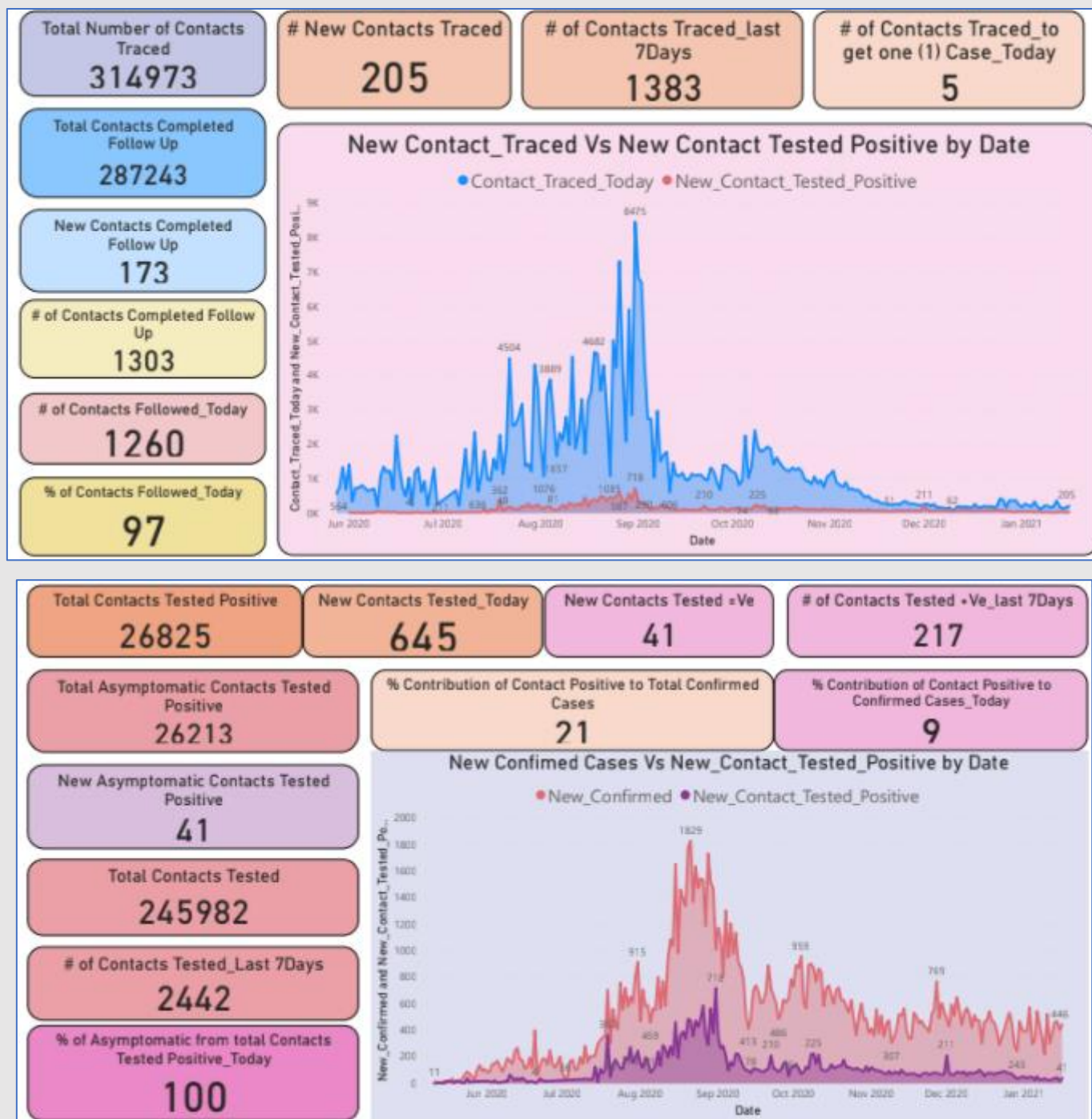


Fig. 6: Summary of COVID-19 cases contact tracing update in Ethiopia as of January 16, 2021

Rumors collection and verification from all sources

- As of January 16, 2021:
 - 334,914 rumors/alerts have been received and investigated. Of these, 618 rumors are reported today.
 - 254,665 (76.08%) of the rumors/alerts have fulfilled the suspected case definition. Of these, 327 are reported today.
 - 5,234 calls were received and responded via toll-free call centers on January 16, 2021. Of these, 2,583 (49.35 %) calls were COVID-19 related calls and 22 rumors were received.

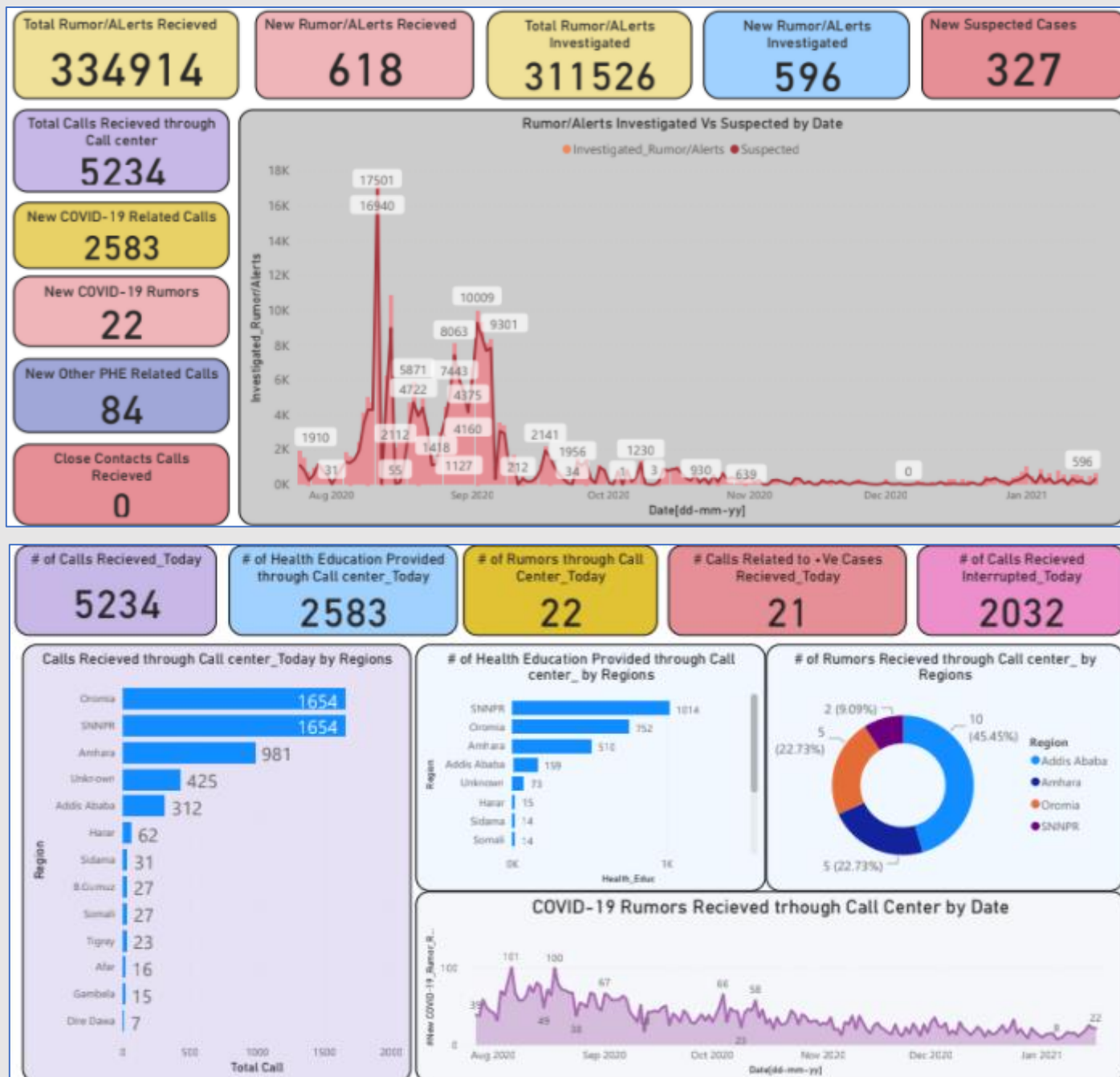


Fig. 7: Summary of rumors collection and verification as of January 16, 2021

PASSENGERS SCREENING:

- 1,576,502 travelers have arrived into the country and screened for COVID-19 since January 24, 2020. Among these 575,413 (36.49%) arrived via Bole International Airport while 1,000,089 (63.43%) entered through other port of entries.
- In the last 24 hours, 1,456 passengers have arrived via Bole International Airport and 2,800 people through other point of entries.
- A total of 72 alerts are detected during passengers screening so far.
- Follow-up of the quarantine implementation ongoing for passengers coming from abroad and returnees from different countries.
- Health screening for arriving international passengers and returnees are ongoing.

Quarantined Passengers and Returnees Related Activities:

- Based on Directive 30/2020 there is no Institutional Quarantine at the national level because all international passengers who pass through the point of entries should bring negative valid RT-PCR test result.
- The total number of population quarantined since March 23 to October 3, 2020 was 69,383.

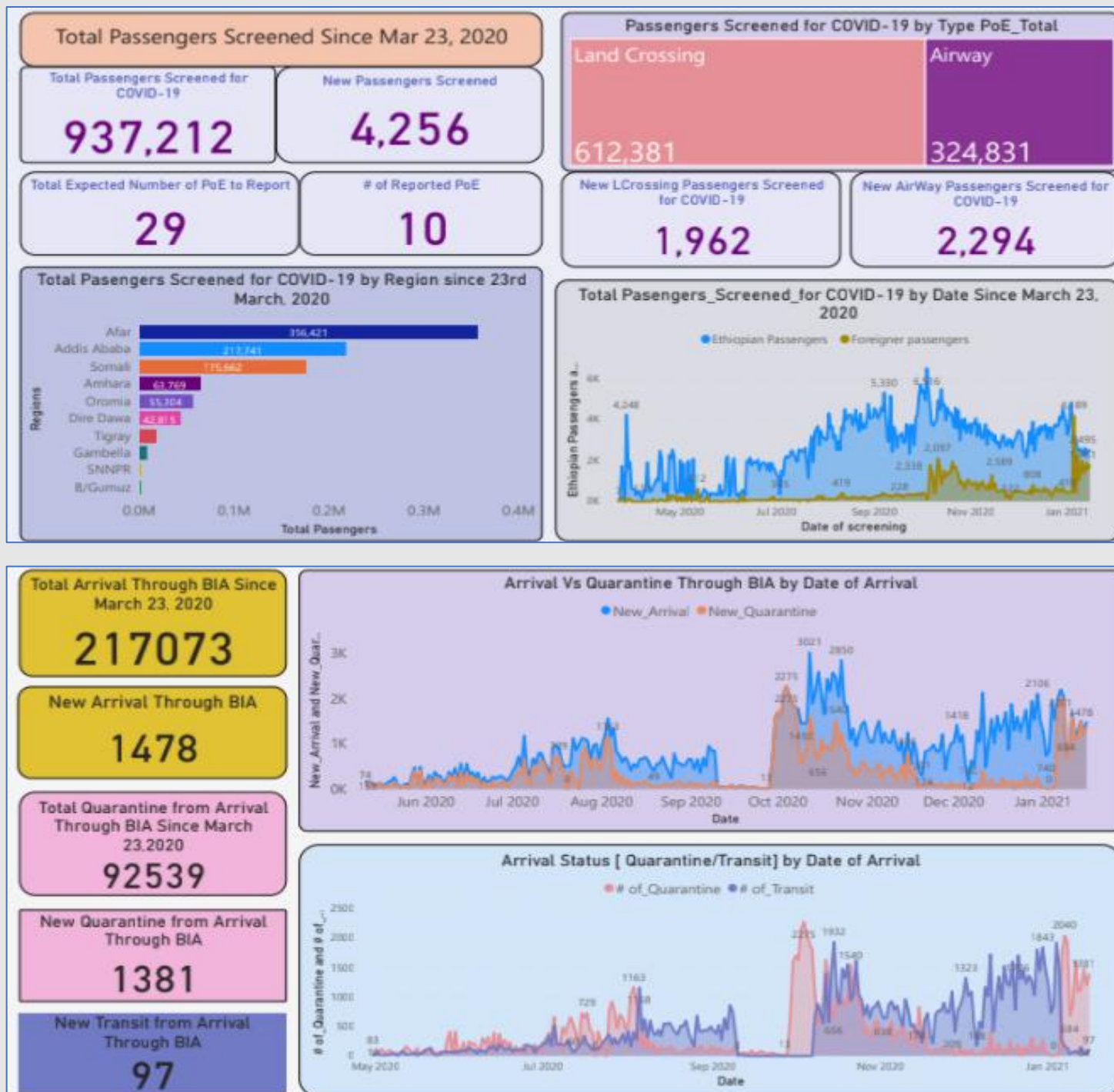


Fig. 8: Summary of Point of Entry screening update as of January 16, 2021

CASE MANAGEMENT AND INFECTION PREVENTION AND CONTROL (IPC):

- Today there are 617 newly recovered cases bringing the total number of COVID-19 recovered cases to 116,026.
- There are 219 patients in severe condition and all the other patients are on medical care in stable condition.
- Today 13 suspected cases are admitted.
- Six initially suspected cases were discharged after laboratory test became negative today.
- There are no suspected cases on admission waiting for laboratory test results.

Home Based Isolation and Care:

- Since Home Based Isolation and Care (HBIC) is started in Ethiopia:
 - A total 79,224 (424 new) COVID-19 confirmed cases are followed in the HBIC.
 - 72,848 (588 new) of them have recovered in the HBIC.
 - 6,673 cases are currently on HBIC.
 - 10 COVID-19 related deaths have occurred in the HBIC.
 - 653 (19 new) cases have been transferred from treatment centers to HBIC.
 - 408 (66 new) cases have been transferred from HBIC to treatment centers.

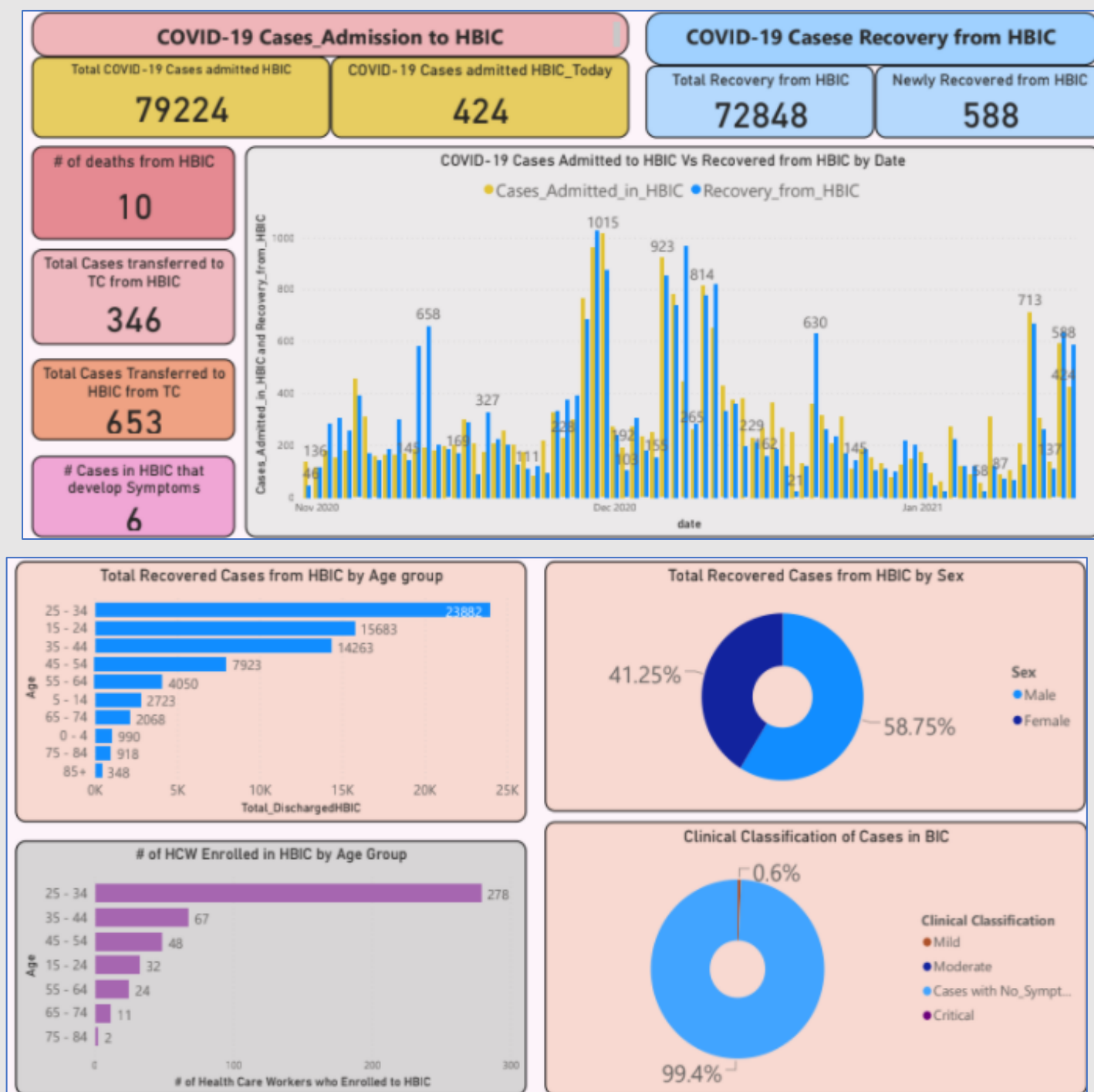


Fig. 9: Summary of update on Home Based Isolation and Care as of January 16, 2021

LOGISTICS, ADMINISTRATION AND RELATED ACTIVITIES:

- There is ongoing distribution of PPE, Viral Transport Media (VTM), swabs, pharmaceuticals and other medical supplies to isolation and treatment centers.

RISK COMMUNICATION AND COMMUNITY ENGAGEMENT (RCCE):

- Media monitoring and daily update on COVID -19 dashboard is done.
- Daily Press release through mass Media is done.
- Routine follow up and technical support provided for all regional RCC team
- Daily Key message on COVID-19 shared on social media.



Training and Orientation:

Training Unit Update of Jan 16, 2021

- Two days Revised COVID 19 HBIC integration guide with contact tracing, laboratory and National TB program workshop for 50 Regional health bureau focal is on its final day at Dire International Hotel, Adama City.



HEALTH EVIDENCE SUMMARY AND COVID-19 UPDATES:

Public Health Advice:

- 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.
- The numbers of COVID-19 cases are increasing rapidly due to the presence of community transmission. Anyone of us can be the next person to acquire COVID-19, but we can prevent it if we act now. Therefore, let us support one another in this pandemic reminding others of the recommended preventions could save their lives.

- Considering the increase in transmission of COVID-19, the EPHI would like to advise the public to strictly adhere to all precautionary measures. Accordingly, we should:
 - Maintain physical distancing.
 - Wash our hands with water and soap frequently.
 - Avoid mass gatherings.
 - Cover our mouth and nose with face/cloth mask when going outdoors.



COVID 19 Sample collection site and Sample collectors

S.No	COVID 19 Sample collection site	Sample collector team leader	Remark
1	Kirkos Sub City, Kasanchis Health Center	T1 (Dawit: 0911739640)	
2	Kirkos Sub City, Hiwot Amba Health Center	T15 (Achenef: 0948803472)	
3	Kirkos subcity, Meshualekia health center	T7 (Henok: 0928503308)	
4	Yeka Sub City, Yeka Health Center	T14 (Dr. Yotor: 0929480120)	
5	Yeka Sub City, Entoto Num2 Health Center	T20 (Worku: 0910199986)	
6	Yeka Sub City, Hidase Health Center	T2 (Tofik: 0910700220)	
7	Kolfe Sub City, Alem Bank Health Center	T6 (Kifle: 0939176982)	
8	Kolfe Sub City, Woreda 3 Health Center	T9 (Aminat: 0913926385)	
9	Bole Sub City, Dillfre Health Center	T8 (Dr. Newal: 0944166985)	
10	Bole Sub City, Amoraw Health Center	T18 (Tsegaye: 09155300030)	
11	Bole Sub City, Bulbula Health Center	T10 (Yisak: 0912421414)	
12	Gulele Sub City, Shegole Health Center	T13 (Tagay: 0917950772)	
13	Gulele Sub City, Addisu Gebeya Health Center	T4 (Dr. Tsion: 0912863892)	
14	Arada Sub City, Arada Health Center	T12 (Yimiserach: 0922857156)	
15	Arada Sub City, Afenchober Health Center	T21 (Dawit B: 0912069506)	
16	Addis Ketema Sub City, Ginbot 20 Health Center	T16 (Sultan: 0913335940)	
17	Addiss Ketma Subcity, Mesalemiya Health Center	T19 (Habtamu: 0920500792)	
18	Lideta Sub City, Teklehayimnot Health Center	T17 (Dr. Ashenafi: 0913669296)	
19	Akaki Kality Sub City, Akaki Health Center	T22 (Dr. Liya: 0924143875)	
20	Nifassilk Sub City, Woreda 11 Health Center	T23 (Beza: 0912992576)	
21	Federal organization/institution Requisite from EOC order	T3 (Dr. Molawork: 0912906933)	
22	ABET Hospital	Hana (0912128745)	
23	Minilik Hospital	Dr. Alef (0910820385)	
24	Entoto Fana Health Center	Mihretu (0922115484)	
25	Hidassie Health Center	Dr. Eden (0911048627)	
26	St Paul Hospital	Ayana (0913281164)	
27	EPHI (Ethiopian public health institute)	Alfiya (0924908932)	
28	Yekatit 12 Hospital	Meti (0938936024)	

29	Ras Desta Hospital	Dr Liwam(0912642887)	
30	Zewditu Hospital	Dr Meron(0921300452)	
31	Tirunesh Beljing Hospital	Miressa(0929954537)	
32	Ghandi Hospital	Dr.Feven(0920221706)	
33	Special Population:	Dejene(0921103354)	
34	Special Population:	Endalkachew(0913186148)	
NB: If there is any COVID19 suspected individuals or anyone who want to know his COVID19 status it is better to link him in these selected health facilities			
Prepared by: Gebeyaw Molla: +251913130591		Approved By: Yimam Getanhe: +251912002053	

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

MOH/EPHI/Region	Facebook page or Twitter/telegram/YouTube Channel	Toll-free hotline	Email address
Ethiopian Public Health Institute Main Website	https://www.ephi.gov.et/	8335	ephieoc@gmail.com
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	afarpheoc@gmail.com
Amhara Regional Health Bureau	https://www.facebook.com/Amhara-Healthbureau-682065755146948/	6981	aphieoc@gmail.com
Benishangul Gumuz Regional Health Bureau	https://www.facebook.com/Benishangul-Gumuz-Health-Bureau-1676282159265517/	6016	bgpheoc@gmail.com
Gambela Regional Health Bureau	https://fb.me/gambellaregionhealthbureau	6184	gambellapheoc@gmail.com
Harari Regional Health Bureau	https://www.facebook.com/Harari-Regional-Health-Bureau-1464182130355007/	6864	hrhbpheoc@gmail.com
Oromia Regional Health Bureau	https://www.facebook.com/OromiaHealth/	6955	oromiapheoc@gmail.com
Somali Regional Health Bureau	https://www.facebook.com/srhbdotcom/...	6599	somalipheoc@gmail.com
SNNP Regional Health Bureau	https://www.facebook.com/snnprhealthbureau/?ref=br_rs	6929	snnppheoc@gmail.com
Tigray Regional Health Bureau	https://www.facebook.com/tigrayrhb/	6244	tigraypheoc@gmail.com
Sidama PHEM			sidamapheoc@gmail.com
Dire Dawa city Administration Health Bureau	https://www.facebook.com/Dire-Dawa-Administration-Health-Bureau-1371606266279524/	6407	ddpheoc@gmail.com
Addis Ababa City Administration Health Bureau	https://www.facebook.com/aahb.gov.et/	6406	aapheoc@gmail.com
Ethiopian COVID-19 monitoring platform	https://www.covid19.et/		

Global Official Sources of COVID-19 Updates and 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	https://play.google.com/store/apps/details?id=org.who.WHOA
Ongoing and completed COVID-19 studies listed on the World Health Organization's International Clinical Trials Registry Platform (WHO ICTRP)	https://clinicaltrials.gov/ct2/who_table

Web-Search Summary: COVID-19 Related Health Evidence:

Articles/Comment/Correspondence/ Editorials	Summary
<p>Estimated Number of N95 Respirators Needed for Healthcare Workers in Acute Care Hospitals During the COVID-19 Coronavirus Pandemic https://doi.org/10.1017/ice.2020.1418</p>	<ul style="list-style-type: none"> • Due to shortages of N95 respirators during the COVID-19 pandemic, it is necessary to estimate the number of N95s required for healthcare workers (HCW) to inform manufacturing targets and resource allocation. • We developed a model to determine the number of N95 respirators needed for HCWs both in a single acute care hospital and the United States. • For an acute care hospital with 400 all-cause monthly admissions, the number of N95 respirators needed to manage COVID-19 patients admitted during a month ranges from 113 (95% IPR: 50-229) if 0.5% of admissions are COVID-19 patients to 22,101 (95% IPR: 5,904-25,881) if 100% of admissions are COVID-19 patients (assuming single use per respirator, and 10 encounters between HCWs and each COVID-19 patient per day). The number of N95s needed decreases (22 [95% IPR: 10-43]-4,445 [95% IPR: 1,975-8,684]) if each N95 is used for five patient encounters. Varying monthly all-cause admissions to 2,000 requires 6,645-13,404 respirators with a 60% COVID-19 admission prevalence, 10 HCW-patient encounters, and reusing N95s 5-10 times. Nationally, the number of N95 respirators needed over the course of the pandemic ranges from 86 million (95% IPR: 37.1-200.6 million) to 1.6 billion (95% IPR: 0.7-3.6 billion) as 5-90% of the population is exposed (single-use), and 17.4 million (95% IPR: 7.3-41 million) to 312.3 million (95% IPR: 131.5-737.3 million) using each respirator for five encounters. • Our study quantifies the number of N95 respirators needed for a given acute care hospital and nationally during the COVID-19 pandemic under varying conditions.
<p>Routine saliva testing for the identification of silent COVID-19 infections in healthcare workers https://doi.org/10.1017/ice.2020.1413</p>	<ul style="list-style-type: none"> • Current COVID-19 guidelines recommend symptom-based screening and regular nasopharyngeal (NP) testing for healthcare personnel in high-risk settings. We sought to estimate case detection percentages with various routine NP and saliva testing frequencies. • We constructed a sensitivity function based on the average infectiousness profile of symptomatic COVID-19 cases to determine the probability of being identified at the time of testing. This function was fitted to reported data on the percent positivity of symptomatic COVID-19 patients using NP testing. We then simulated a routine testing program with different NP and saliva testing frequencies to determine case detection percentages during the infectious period, as well as the pre-symptomatic stage. • Routine bi-weekly NP testing, once every two weeks, identified an average of 90.7% (SD: 0.18) of cases during the infectious period and 19.7% (SD: 0.98) during the pre-symptomatic stage. With a weekly NP testing frequency, the corresponding case detection percentages were 95.9% (SD: 0.18) and 32.9% (SD: 1.23), respectively. A 5-day saliva testing schedule had a similar case detection percentage as weekly NP testing during the infectious period, but identified about 10% more cases (mean: 42.5%; SD: 1.10) during the pre-symptomatic stage. • Our findings highlight the utility of routine non-invasive saliva testing for frontline healthcare workers to protect vulnerable patient populations. A 5-day saliva testing schedule should be considered to help identify silent infections and prevent outbreaks in nursing homes and healthcare facilities.

<p>Risk of adverse outcome of COVID-19 among patients in secure psychiatric services: observational cohort study</p> <p>https://doi.org/10.1192/bjo.2020.169</p>	<ul style="list-style-type: none"> Secure forensic mental health services treat patients with high rates of treatment-resistant psychoses. High rates of obesity and medical comorbidities are common. Population-based studies have identified high-risk groups in the event of SARS-CoV-2 infection, including those with problems such as obesity, lung disease and immune-compromising conditions. Structured assessment tools exist to ascertain the risk of adverse outcome in the event of SARS-CoV-2 infection. We found high rates of relevant physical comorbidities. Mean chronological age was 45.5 years (s.d. = 11.4, median 44.1), mean score on the COVID-Age tool was 59.1 years (s.d. = 19.4, median 58.0), mean difference was 13.6 years (s.d. = 15.6), paired $t = 10.9$, d.f. = 140, $P < 0.001$. Three patients (2.1%) were chronologically over 70 years of age, compared with 43 (30.5%) with a COVID-Age over 70 ($\chi^2 = 6.99$, d.f. = 1, $P = 0.008$, Fisher's exact test $P = 0.027$). Patients in secure forensic psychiatric services represent a high-risk group for adverse outcomes in the event of SARS-COV-2 infection. Population-based guidance on self-isolation and other precautions based on chronological age may not be sufficient. There is an urgent need for better physical health research and treatment in this group.
Guide	Link
Considerations for quarantine of individuals in the context of containment for coronavirus disease (COVID-19)	https://www.who.int/publications/i/item/considerations-for-quarantine-of-individuals-in-the-context-of-containment-for-coronavirus-disease-(covid-19)
Home care for patients with suspected or confirmed COVID-19 and management of their contacts	https://www.who.int/publications/i/item/home-care-for-patients-with-suspected-novel-coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts
Global COVID-19 Clinical Platform: Rapid core case report form (CRF)	https://www.who.int/publications/i/item/WHO-2019-nCoV-Clinical_CRF-2020.4
Global COVID-19 Clinical Platform: Pregnancy Case Report Form (CRF)	https://www.who.int/publications/i/item/WHO-2019-nCoV-Pregnancy_CRF-2020.5
Interim Considerations for Health Departments for SARS-CoV-2 Testing in Homeless Shelters and Encampments	https://www.cdc.gov/coronavirus/2019-ncov/community/homeless-shelters/testing.html
WHO COVID-19 Preparedness and Response Progress Report – 1 February to 30 June 2020	https://www.who.int/publications/m/item/who-covid-19-preparedness-and-response-progress-report---1-february-to-30-june-2020
Reagent calculator for portal	https://www.who.int/publications/m/item/reagent-calculator-for-portal
Water, sanitation, hygiene, and waste management for SARS-CoV-2, the virus that causes COVID-19 (Interim guidance)	https://www.who.int/publications/i/item/water-sanitation-hygiene-and-waste-management-for-the-covid-19-virus-interim-guidance
Considerations for implementing mass treatment, active case-finding and population-based surveys for neglected tropical diseases in the context of the COVID-19 pandemic	https://www.who.int/publications/i/item/WHO-2019-nCoV-neglected-tropical-diseases-2020-1
Safe Eid al Adha practices in the context of COVID-19: Interim guidance	https://www.who.int/publications/i/item/safe-eid-al-adha-practices-in-the-context-of-covid-19-interim-guidance
Detention Center COVID19 Prevention and Management Interim Guide (Volume 1)	FmoH, july-2020

NATIONAL COMPREHENSIVE COVID-19 MANAGEMENT HANDBOOK (EFMoH)	http://www.moh.gov.et/ejcc/sites/default/files/2020-04/COVID%2019%20Handbook%20for%20health%20professionals%20FMOH%202020.pdf
<i>Resources and Guidance (CDC)</i>	https://www.cdc.gov/coronavirus/2019-ncov/php/open-america/contact-tracing-resources.html

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

Figures presented in this situation report are pulled from official releases of the World Health Organization,
Other sources from the web, as well as report compiled by the National Incidence Response Team

PREPARED BY

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

EDITED and REVIEWED BY

Shambel Habebe (Planning Section Chief)
Zewdu Assefa (COVID-19 Response Deputy Incident Manager)
Aschalew Abayneh (EPHI DDG and 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

ETHIOPIAN PUBLIC HEALTH INSTITUTE

National Public Health Emergency Operation Center
Center for Public Health Emergency Management
Swaziland Street
P.O Box 1242
Addis Ababa, ETHIOPIA