



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 at 16:30hrs EAT (GMT+3), 11 April 2020)

11 April 2020

ISSUE  
NO

79

## HIGHLIGHTS

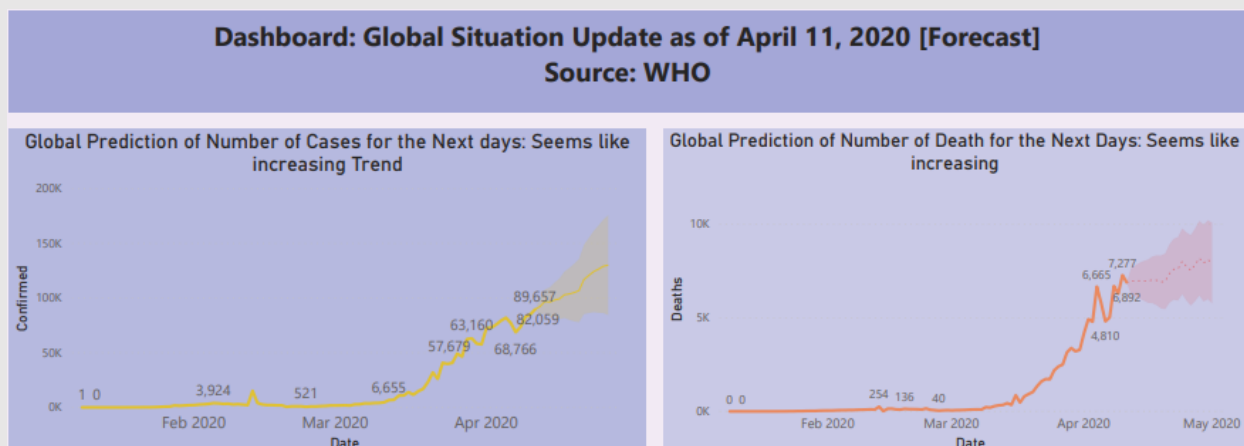
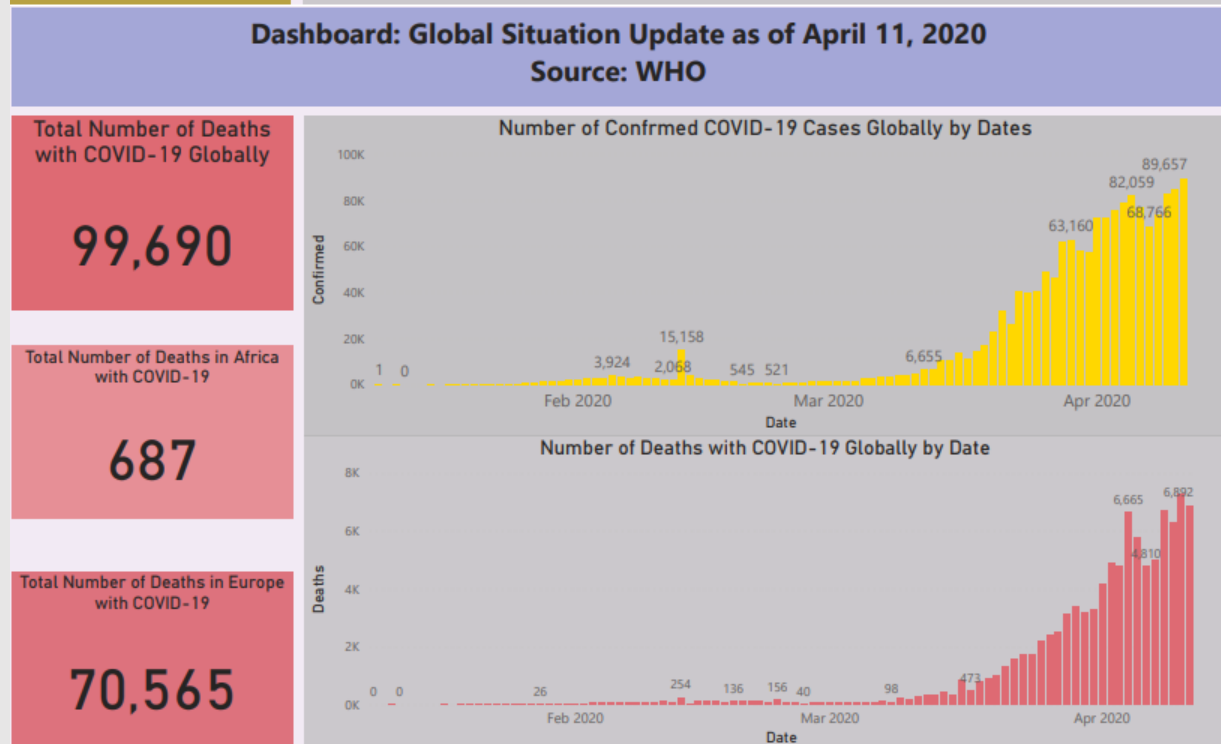
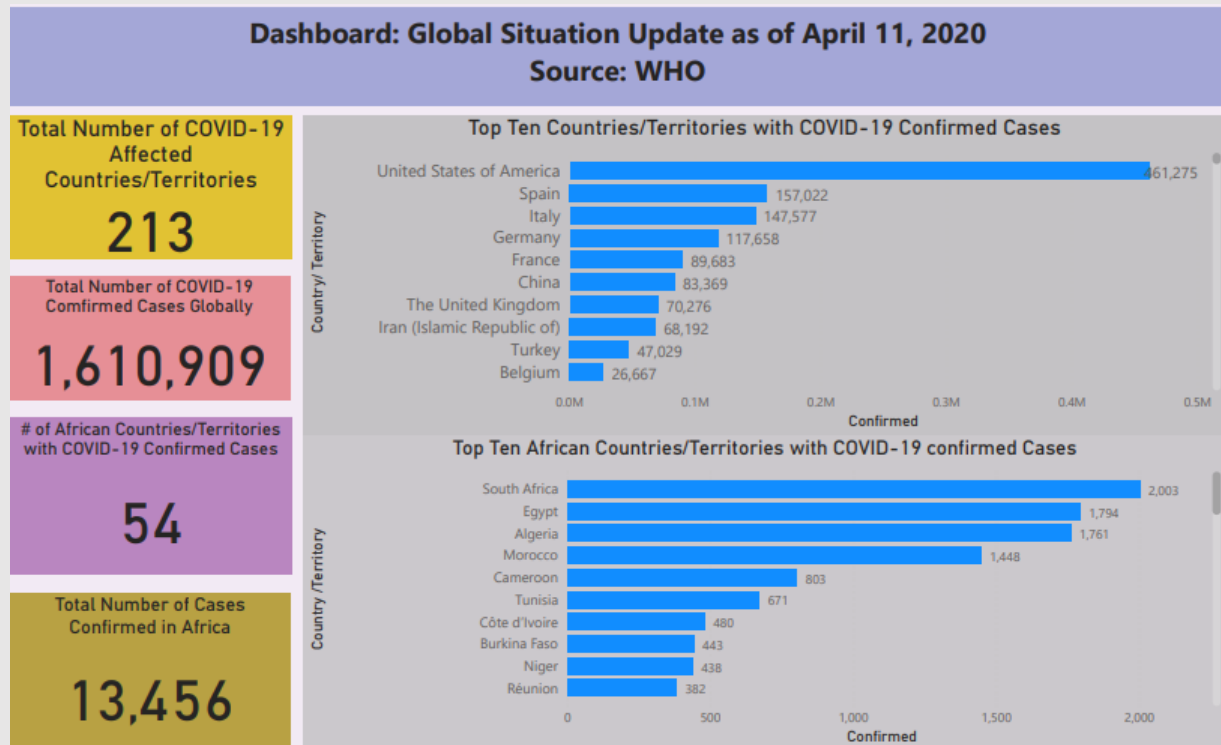
- National comprehensive COVID-19 management hand book has released on EPHI website for public access
- There are 4 newly detected COVID-19 cases bringing the total confirmed cases to 69 in the country.
- 10 COVID-19 confirmed cases have recovered so far.
- A total of 3 COVID-19 deaths has occurred so far.
- Of 12 new rumors /alerts were received today, 6 fulfilled the suspected case definition.
- 183 new contacts of confirmed cases have been identified today bringing the number of contacts identified so far to about 1217.
- 326 COVID-19 laboratory samples were analyzed within the last 24 hours (4 positives detected).
- COVID-19 training started for medical doctors and nurses to be deployed to COVID-19 treatment centers

## COVID-19 NATIONAL UPDATE

3,633 PASSENGERS UNDER MANDATORY QUARANTINE	119 TRAVELERS UNDER PHONE FOLLOW UP	921 RUMORS/ALERTS RECEIVED AND INVESTIGATED	1392 CONTACTS OF THE CONFIRMED CASES
506 SUSPECTED CASES DETECTED	69 TOTAL CONFIRMED CASE	10 TOTAL RECOVERED	3 TOTAL DEATH

# COVID-19 GLOBAL UPDATE

Access link for WHO COVID-19 monitoring dashboard: <https://who.sprinklr.com/>



# MAJOR COVID-19 PREPAREDNESS AND RESPONSE EFFORTS IN ETHIOPIA

## BACKGROUND

Ethiopia activated its IMS under the national PHEOC. WHO and its 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.

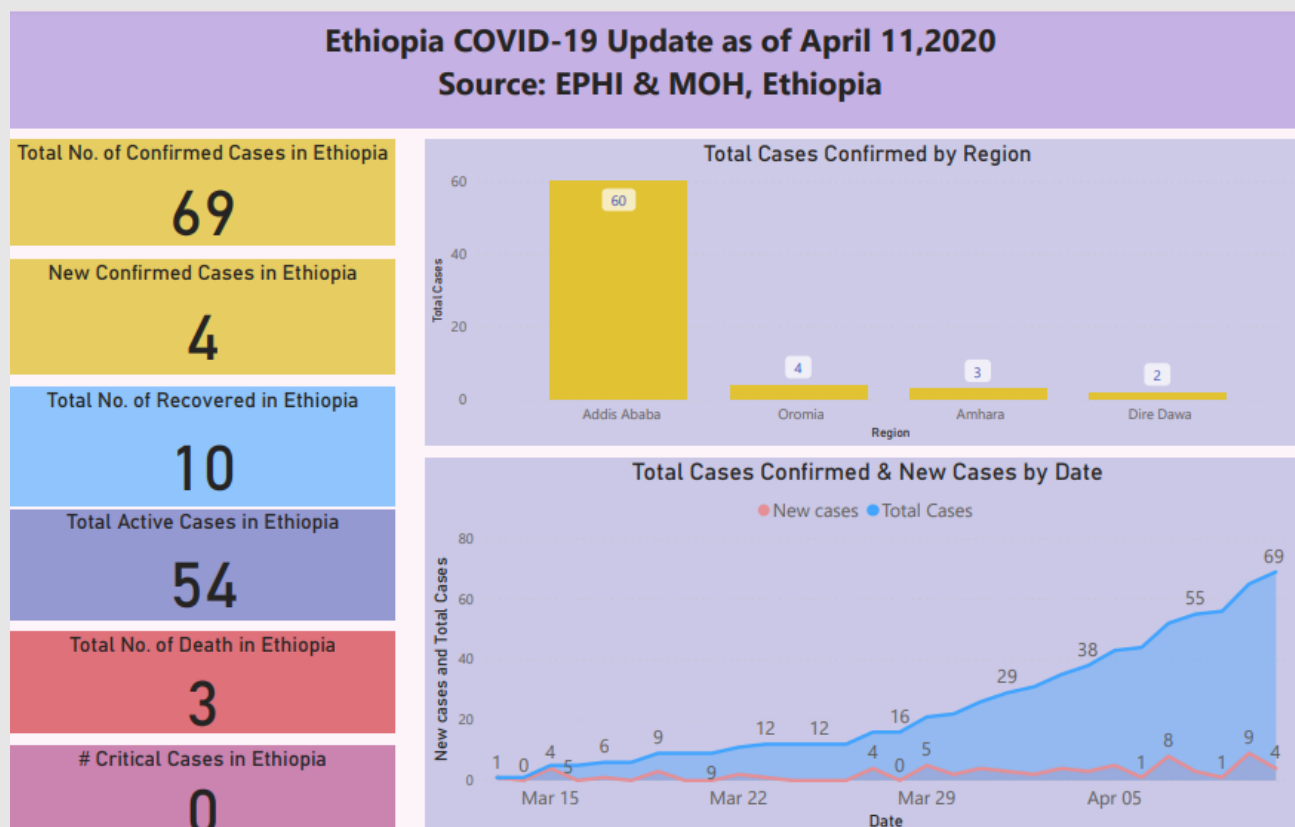
## COORDINATION and COLLABORATION:

- Daily morning and evening briefing of the IMS core staffs and agency representatives is being conducted on daily basis.
- Strategic leadership meeting led by the MOH Ministers conducted to evaluate the progress of COVID-19 preparedness and Response activities and provide guidance or the way forward

## EPIDEMIOLOGY and LABORATORY SURVEILLANCE

### Confirmed COVID-19 cases and death:

- There are 4 newly detected COVID-19 case bringing the total confirmed cases to 69 in the country.
- Ten of the COVID-19 confirmed cases have recovered.
- A total of 3 COVID-19 related deaths is recorded so far.

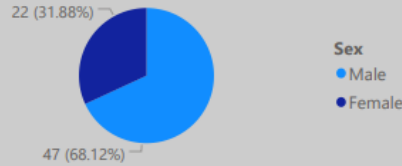


# COVID-19 Confirmed Cases Summary Dashboard as of April 11, 2020

## Total Confirmed Cases in Ethiopia

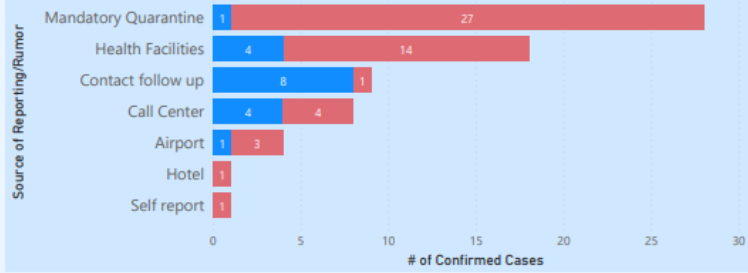
69

## COVID-19 Confirmed Cases by Gender

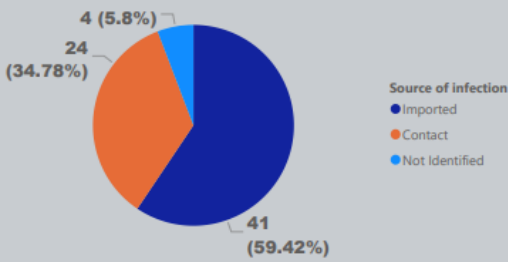


## # of Confirmed Cases by Source of Reporting/Rumor and Travel History in the last 14 days

Travel History in the last 14 days: No (Blue), Yes (Red)

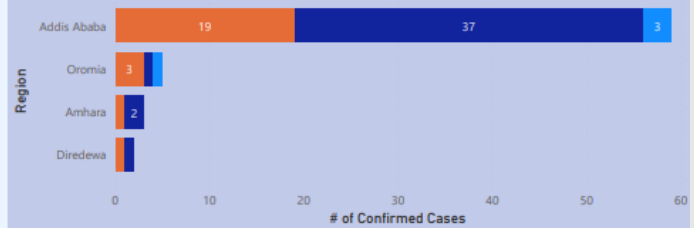


## Confirmed Cases by Source of Infection



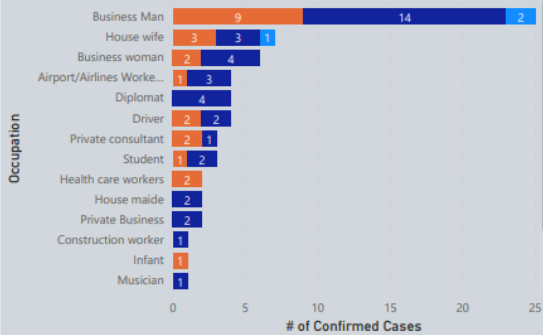
## # of Confirmed Cases by Region and Source of infection

Source of infection: Contact (Orange), Imported (Dark Blue), Not Identified (Light Blue)



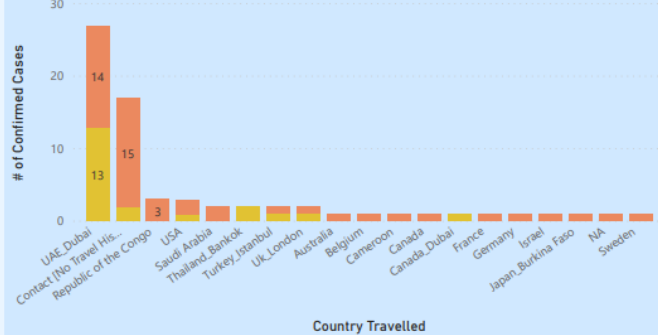
## # of Confirmed Cases by Occupation and Close contact with Cases

Source of infection: Contact (Orange), Imported (Dark Blue), Not Identified (Light Blue)



## # of Confirmed Cases by Country Travelled and Symptomatic

Symptomatic: No (Yellow), Yes (Orange)



## Age Range of Confirmed Cases (Years)

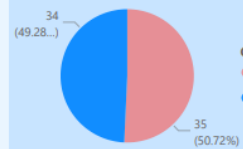
Min. Age

0.8

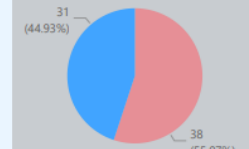
Max. Age

85.0

## # of Confirmed Cases by Cough

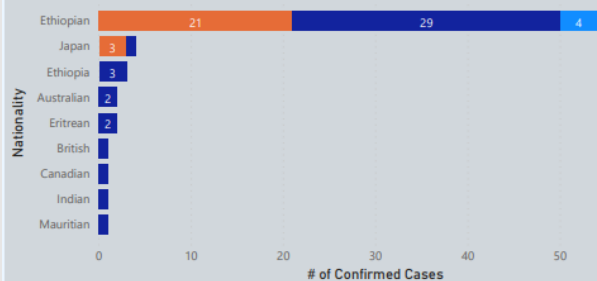


## # of Confirmed Cases by Fever



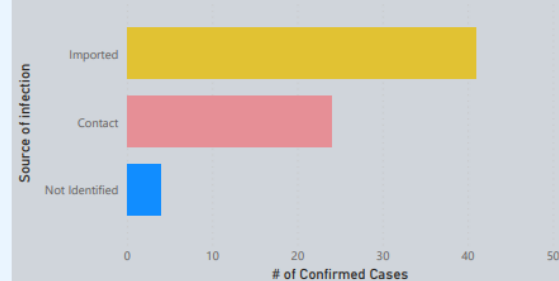
## # of Confirmed Cases by Nationality and Source of infection

Source of infection: Contact (Orange), Imported (Dark Blue), Not Identified (Light Blue)

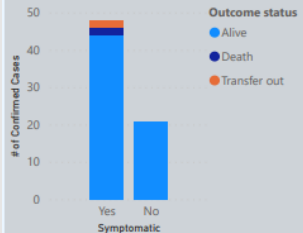


## # of Confirmed Cases by Source of infection

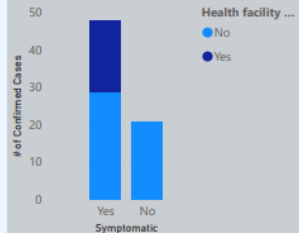
Source of infection: Imported (Yellow), Contact (Pink), Not Identified (Blue)



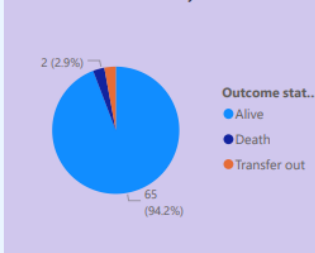
## # of Confirmed Cases by Symptomatic and Outcome status



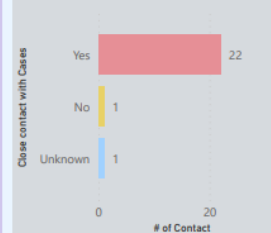
## # of Confirmed Cases by Symptomatic and Health facility visit before onset

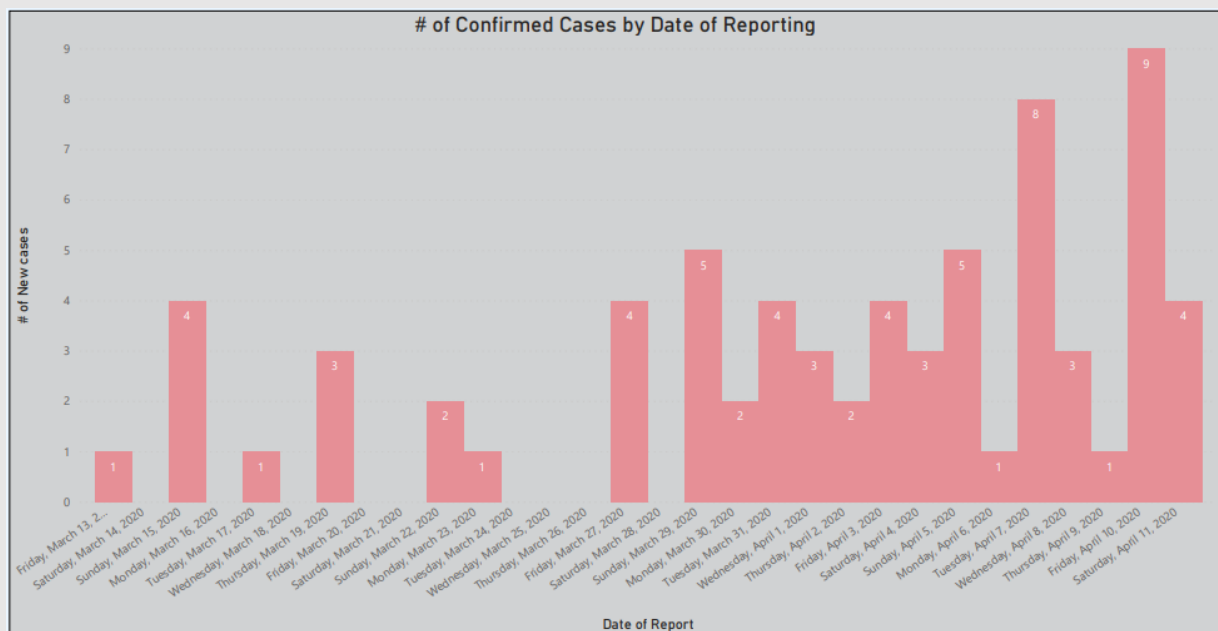


## # of Confirmed Cases by Outcome status



## # of Cases with Contact by Close Contact with Cases





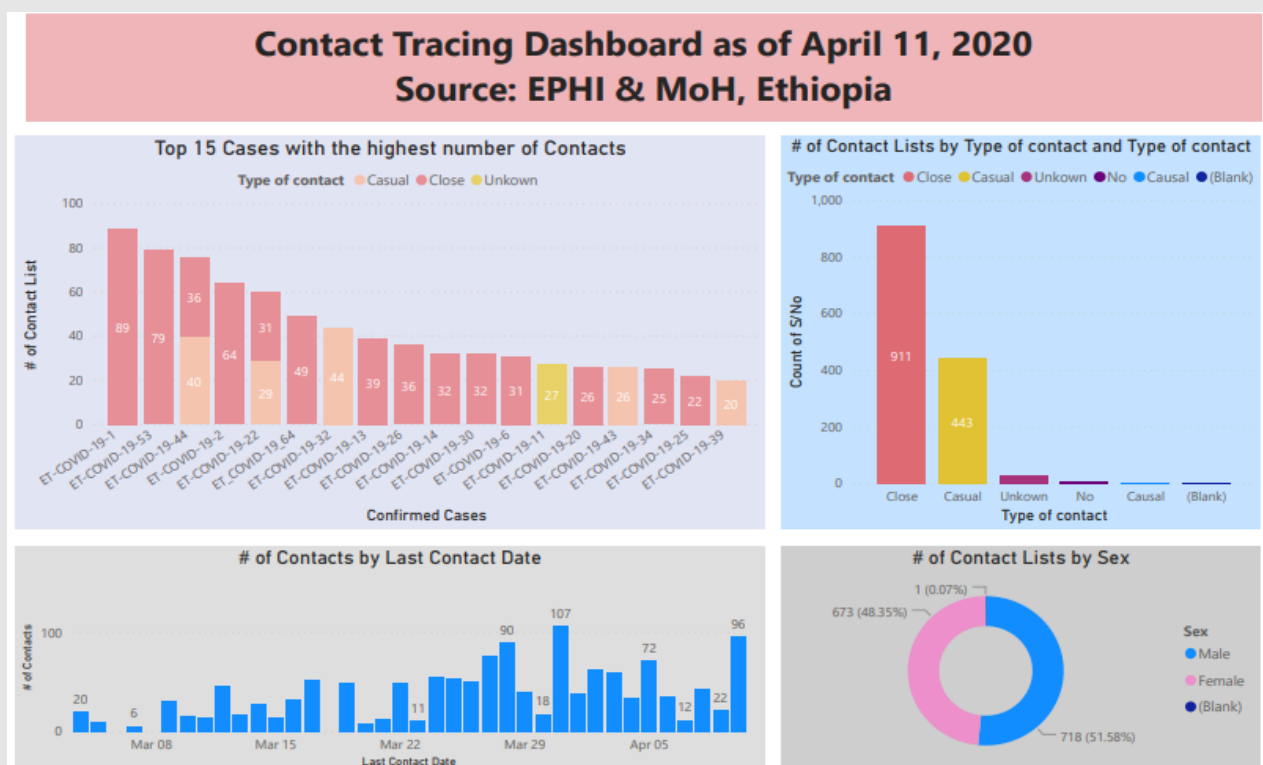
**Fig: Epi-curve of confirmed cases by date of confirmation**

### Laboratory test:

- 326 laboratory samples were tested for COVID-19 in the last 24 hours
- Of these samples tested 4 were found positive and 322 are negative
- 3558 COVID-19 laboratory samples have been tested so far.

### Contact tracing and follow-up:

- As of April 11, 2020:
  - A total of 1392 (183 new) contacts of confirmed cases have been identified.
  - 509 (73 new) have completed the 14 days follow-up, while 859 contacts are still on follow-up.
  - 56 contacts developed COVID-19 suggestive symptoms.
  - 17 of the symptomatic and 4 asymptomatic contacts were tested positive, which are among the currently existing confirmed positive cases.



## **Rumors collection and verification from all sources**

- As of April 11, 2020:
  - 921 rumors/alerts have been received and investigated. Of these, 12 rumors (3 via the call center) are reported today.
  - 506 rumors/alerts (6 new) have fulfilled the suspected case definition.
- On April 11, 2020, a total of 6,857 calls are received and responded via toll-free call centers.

## **Phone Follow-Up of Travelers**

- As of April 11, 2020:
  - 119 travelers and discharged suspects are under follow-up.
  - 3,361 travelers have completed 14 days of follow-up and graduated from follow-up.
  - There is no alert case detected during follow up as of today.

## **PASSENGERS SCREENING**

- A total of 3,153 passengers arrived into the country since March 23, 2020
- Follow up of the mandatory quarantine implementation for passengers coming from abroad via BIA is ongoing.
- Health screening for arriving international passengers is ongoing.

## **Quarantined passengers follow up**

- As of April 11, 2020; a total of 3,633 travelers and returnees are under mandatory quarantine in different sites.
- No alert case identified from passengers under quarantine.

## **CASE MANAGEMENT AND INFECTION PREVENTION AND CONTROL (IPC):**

- National comprehensive COVID-19 management hand book is prepared and shared online for public use. It can be found [here](#).
- There are 60 confirmed cases in the case treatment centers currently. Of these, three are under treatment in the designated treatment center in Bahir Dar, Amhara regional state and two are in Dire Dawa city administration
- There is no critical case and all are on medical care in stable condition.
- A total of ten people fully recovered.
- 22 suspected cases are admitted today.
- 58 initially suspected cases are discharged after laboratory test became negative.
- There are 32 suspected cases in the isolation centers waiting for laboratory results.

## **LOGISTICS, ADMINISTRATION AND RELATED ACTIVITIES:**

- Distribution plan of 700,000L Alcohol Based Hand Rub, 1100 pulse oximeter and 500 adult CPAP machine is prepared for regions.
- 1,109 (500ml each) Alcohol Based Hand Rubs are collected from St. Peter Specialized Hospital.



## RISK COMMUNICATION:

- Dangler messages for physical distancing developed.
- Media monitoring conducted
- Press release on newly confirmed COVID-19 cases shared for the public.

## TRAINING AND ORIENTATION:

- Three days training on COVID-19 is started for 81 medical doctors and nurses (in three rounds) to be deployed to Eka Kotebe and St. Peter Specialized Hospital COVID-19 treatment centers.



## MEDIA / WEB SCANNING:

### COVID-19 testing options under development:

#### - **Rapid diagnostic tests based on antigen detection**

- Detects the presence of viral proteins (antigens) expressed by the COVID-19 virus in a sample from the respiratory tract (1).
- It binds with specific antibodies and generate a visually detectable signal, typically within 30 minutes.
- Best used to identify acute or early infection.
- How well the tests work depends on several factors, including
  - Time from onset of illness,
  - concentration of virus in the specimen,
  - quality of the specimen collected, and
  - precise formulation of the reagents in the test kits.
- The sensitivity of these tests might be expected to vary from 34% to 80%, based on experience with antigen-based RDTs for other respiratory diseases such as influenza. (2).
- Accordingly, half or more of COVID-19 infected patients might be missed by such tests, depending on the group of patients tested (2).
- False-positive results could occur if the antibodies on the test strip also recognize antigens of viruses other than COVID-19.
- If these tests demonstrate adequate performance, they could potentially be used as triage tests to rapidly identify patients.

#### - **Rapid diagnostic tests based on host antibody detection**

- Another rapid diagnostic test marketed is a test that detects the presence of antibodies in the blood of people believed to have been infected with COVID-19 (3,4,5).
- The strength of antibody response depends on several factors, including
  - Age, nutritional status, severity of disease, and certain medications or infections like HIV that suppress the immune system (6).

- Studies suggest that the majority of patients develop antibody response only in the second week after onset of symptoms. This means that a diagnosis based on antibody response will often only be possible in the recovery phase, when many of the opportunities for clinical intervention or interruption of disease transmission have already passed (7,8).
- False-positive result is also an issue with this test due to cross-reaction with other pathogens (9).
- These types of tests will be critical to support the development of vaccines, to help surveillance efforts and understand the attack rate in the population, and the infection fatality rate.
- Such tests have limited clinical diagnosis utility.

Note: (10)

- Before tests can be recommended, they must be validated in the appropriate populations and settings.
- Inadequate tests may miss patients with active infection or falsely categorize patients as having the disease when they do not, further hindering disease control efforts.

## References:

1. Viral diagnosis by antigen detection techniques. Monica Grandien. [https://doi.org/10.1016/0928-0197\(96\)00209-7](https://doi.org/10.1016/0928-0197(96)00209-7)
2. Andrea H L Bruning, Mariska M G Leeflang, Johanna M B W Vos, Rene Spijker, Menno D de Jong, Katja C Wolthers, Dasja Pajkrt, Rapid Tests for Influenza, Respiratory Syncytial Virus, and Other Respiratory Viruses: A Systematic Review and Meta-analysis, *Clinical Infectious Diseases*, Volume 65, Issue 6, 15 September 2017, Pages 1026–1032, <https://doi.org/10.1093/cid/cix461>
3. Zhang P, Gao Q, Wang T, Ke Y, et al. Evaluation of recombinant nucleocapsid and spike protein serological diagnosis of novel coronavirus disease 2019 (COVID-19). *medrxiv* [Internet]. 2020; <https://www.medrxiv.org/content/10.1101/2020.03.17.20036954v1>.
4. Li Z, Yi Y, Luo X, Xion N, et al. Development and clinical application of a rapid IgM-IgG combined antibody test for SARS-CoV-2 infection diagnosis. *Journal of medical virology*. <https://onlinelibrary.wiley.com/doi/abs/10.1002/jmv.25727>
5. CDC Tests for COVID-19. National Center for Immunization and Respiratory Diseases (NCIRD), Division of Viral Diseases. March 9, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/about/testing.html>
6. Gorse GJ, Donovan MM, Patel GB. Antibodies to coronaviruses are higher in older compared with younger adults and binding antibodies are more sensitive than neutralizing antibodies identifying coronavirus-associated illnesses. *Journal of medical virology*. <https://doi.org/10.1002/jmv.25715>
7. Lou B, Li T, Zheng S, Su Y, Li Z, Liu W, et al. Serology characteristics of SARS-CoV-2 infection since the exposure and post symptoms onset. *medrxiv* [Internet]. 2020; <https://www.medrxiv.org/content/10.1101/2020.03.23.20041707v1.full.pdf>
8. Wölfel R, Corman V, Guggemos W, Seilmaier M, Mueller M, Niemeyer D, et al. Virological assessment of hospitalized patients with COVID-2019. *Nature* [Internet]. 2020; <https://www.nature.com/articles/s41586-020-2196-x>
9. Che X, Qiu L, Liao Z, Wang Y, et al. Antigenic cross-reactivity between severe acute respiratory syndrome-associated coronavirus and human coronaviruses 229E and OC43. *The Journal of Infectious Diseases*, Volume 191, Issue 12, 15 June 2005, Pages 2033–2037, <https://doi.org/10.1086/430355>
10. Advice on the use of point-of-care immunodiagnostic tests for COVID-19. Scientific Brief. 8 April 2020.WHO. <https://www.who.int/news-room/commentaries/detail/advice-on-the-use-of-point-of-care-immunodiagnostic-tests-for-covid-19>



**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**

Fantu Lombamo (MD, MPH) and Negusse Yohannis (PhD)  
National PHEOC, Planning Section, Situation Unit

**CONTRIBUTORS**

Firmaye Bogale (Situation Unit, PHEOC)

**EDITED and REVIEWED BY**

Shambel Habebe (Planning Section Chief) and  
Zewdu Assefa (COVID-19 Deputy Incident Manager)

**FOR MORE INFORMATION and NOTIFICATION**

Web: [www.ephi.gov.et](http://www.ephi.gov.et)

Follow us on Twitter: @EPHIethiopia

Call: 8335 (TOLL FREE LINE) or 011 276 5340

Email: [ephieoc@gmail.com](mailto:ephieoc@gmail.com) or [pheodatacenter@gmail.com](mailto:pheodatacenter@gmail.com)

**ETHIOPIAN PUBLIC HEALTH INSTITUTE**

National Public Health Emergency Operation Center  
Center for Public Health Emergency Management

WITH A TECHNICAL ASSISTANCE FROM



**World Health  
Organization**

ETHIOPIA COUNTRY OFFICE