



**Update: 13-15 June, 2020**

**UPDATE ON GLOBAL, REGIONAL AND NATIONAL  
DEVELOPMENTS ON COVID-19**

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## Summary

- As of June 15, 10:00 GMT, globally, more than eight million (8,014,132) people are infected with coronavirus with 436,005 deaths and 4,137,754 recoveries.
- As of June 15th, 4:00 PM EAT, a total of 242,105 cases 6,464 deaths and 109,977 recoveries from COVID-19 were reported in Africa.
- More evidence is indicating of asymptomatic patients being potential source of infection for SARS-COV2.
- Positive preliminary results of phase I/II clinical trial was reported from a Chinese company called Sinovac Biotech Ltd. for a COVID-19 vaccine candidate (CoronaVac).
- As per one study, with airborne transmission suspected to be highly virulent, wearing of face masks in public corresponds to the most effective means to prevent inter-human transmission in fighting opportunity to stop the COVID-19 pandemic.
- Control interventions in China, which led to control, is organised in to three broad categories: Containment, Suppression and Mitigation.
- A study indicated that health workers face intense physical, mental as well as economic pressure having clear communication and moral support are some of proposed solutions.

## Recommendations

- **If not already in place, it is not too early to develop mitigation plans, particularly given the potential of delay in vaccine development and effective treatment:**  
Strengthening the national disease surveillance system and incorporating COVID-19 among level-2 reportable diseases, capacity building of health care providers, enhancing accessibility of testing centers, developing innovative approaches to early detect a surge in the number of new cases are believed to maintain a reasonable number of cases

## Update on pathogenesis

### *Disease Transmission*

- Few studies in Singapore and China indicated that asymptomatic patients are potential source of infection for SARS-COV2. A recent report also strengthens this evidence and stated that a 33 year old healthy German businessman was the main source of infection for three additional COVID-19 cases in a company located in Munich, Germany. Two nasopharyngeal swabs and one sputum sample were obtained from this case and were found to be positive for COVID-19. PCR assay revealed a high viral load of 108 follow-up

qRT-copies per millilitre in his sputum during the follow up period. This suggested that the virus was transmitted during the incubation period of the index patient and the study concluded that the detection of SARS-COV2 and a high sputum viral load in a convalescent patient arouse concern about prolonged shedding of COVID-19 after recovery [Rothe, C. et'al, 2020].

## Update on Epidemiology (Incidence, mortality, recovery & epidemiologic parameters)

### *Global*

- As of June 15, 10:00 GMT, worldwide, more than eight million (8,014,132) people are infected with coronavirus causing 436,005 deaths and 4,137,754 recoveries.
- Out of the total active cases, 3,385,902 (98%) of them are mild cases and only 54,471 (2%) are in critical or serious condition.
- On June 12th, additional 142, 113 cases were reported globally which is the highest number of new cases recorded since the pandemic started. But this number has slightly decreased: 133,716 (June 13<sup>th</sup>) and 123,118 (June 14<sup>th</sup>).
- Consistently, United States of America (USA) is the first leading country with both high number of cases and deaths in the world. As of June 15th, 10:00 GMT, more than 2.1 million (2,162,228) people were infected with the virus and 117,858 deaths were reported in the country which accounted for equal proportion (27.0 %) of total cases and deaths in the world.
- In the last three consecutive days, both the number of new cases and new deaths in USA were decreasing: with a total of 27,221 new cases & 791 deaths on June 12th and 20,004 new cases & 331 deaths on June 14th.
- New York (404,470 cases), New Jersey (169,441 cases) and California (152,882 cases) are the three most affected states in US which accounted for one third (33.6%) of total cases in the country.
- Brazil became the second most affected country with both high number of cases (867,882) and deaths (43,389) as of June 15th, 10:00 GMT.
- Other countries with high number of corona infections include Russia (537,210), India (333,255) and United Kingdom (287,399).
- UK is the third country with high number of deaths (41,698 deaths) while India (9,524 deaths) and Russia (7,091) reported relatively lower number of deaths so far.

### *Africa*

- As of June 15th, 4:00 PM EAT, a total of 242,105 cases 6,464 deaths and 109,977 recoveries from COVID-19 were reported in Africa.

- The number in South Africa exceed 70,000 (70,038 cases) and continues to account for more than one fourth of total cases reported in the continent. Based on Wordometer report, the number of new cases in the country is persistently increasing and in the past few days, this number is increased from 2,430 on June 10th to 4,302 on June 14th.
- Similarly, the number of new cases in Egypt is increasing continuously in the past three days; from 1,577 on June 12th to 1,618 on June 14th. Until now, a total of 44,598 cases are reported in the country contributing for 18.2 % of total cases in Africa.
- Egypt is also the leading country with high number of deaths in the continent and as of June 15th 5:00 EAT, 1,575 people have died in the country.
- Other African countries with high number of COVID-19 cases and deaths include; Nigeria (16,085 cases and 420 deaths), Ghana (11,964 cases and 54 deaths), Algeria (10,919 cases and 767 deaths), and Cameroon (9,864 cases and 276 deaths).

### *Ethiopia*

- According to the Ministry of Health report, a total of 16,125 laboratory tests were carried out in the past three days and 623 additional COVID-19 cases were identified in the country.
- Six hundred eighteen (618) of these cases are Ethiopians while the rest 5 are citizen of other countries. The age of the additional cases ranges from 2 months to 90 years and almost two third 409 (65.7%) of them are males.
- More than two third 441 (70.8%) of these cases were reported from Addis Ababa, 68 from Amhara, 46 from Tigray, 26 from Oromia, 15 from Afar, 12 from Somali, 6 from Hareri, 4 from SNNPR, 4 from Dire Dawa and 1 from Benshangul Gumuz region.
- The ministry also reported that additional 169 people (100 from Addis Ababa, 28 from Somali, 15 from Amhara, 13 from Oromia, 8 from Afar, 3 from Hareri and 2 from Tigray) are fully recovered from the disease raising the total number of recoveries to 620.
- In addition, thirteen people (9 males and 4 females) have passed away in the last three days raising the total number of deaths in the country to 60.
- Therefore, a total of 186,985 laboratory tests were conducted and 3,521 confirmed cases, 60 deaths and 620 recoveries were reported as of June 15<sup>th</sup>, 5:00 PM EAT.
- Out of the total 2,839 active cases, 29 of them are in critical condition and receiving treatment in the intensive care unit, while the others are having mild form of the disease.

## Update on Vaccine

- Sinovac Biotech Ltd., a provider of biopharmaceutical products in China, today announced positive preliminary results of phase I/II clinical trial for the Company's COVID-19 vaccine candidate, named CoronaVac, which contains inactivated virus plus adjuvant, showed favourable immunogenicity and safety profiles. The phase I/II clinical trials were designed as randomized, double-blind and placebo-controlled studies. In total, 743 healthy volunteers, aged from 18 to 59 years old were enrolled in the trials. Of those, 143 volunteers are in phase I and 600 volunteers are in phase II. There have been no severe adverse event reported in either the phase I or phase II trials. The phase II clinical trial results show that the vaccine induces neutralizing antibodies 14 days after the vaccination with a 14 day interval schedule. The neutralizing antibody seroconversion rate was reported to be above 90%, with the conclusions drawn that the vaccine candidate can induce positive immune response. The Company expects to submit a phase II clinical study report and a phase III clinical study protocol to China's National Medical Products Administration (NMPA) in the near future and commence application of phase III clinical trials outside of China. Sinovac has stated that they are preparing to conduct a phase III clinical study in Brazil. The Company has expressed its plan to share the full data of the Phase I/II trial in academic publications (SINOVAC 2020).

## Public health control measures

The COVID-19 control interventions in China, which led to control, is organised in to three broad categories. Most of the interventions are not unique to a specific category, rather they are employed in all the three phases.

1. Containment- was employed at the onset of the outbreak. The earliest cases were identified, isolated, and treated. Close contacts of the cases were traced and centrally quarantined. Strict restriction on the movement of the people was also a cardinal component of the intervention.
2. Suppression- was intended to decrease or stop community transmission by localizing the outbreak to selected geographic areas. This was an extension of the containment efforts and applied when there were reports of multiple outbreaks from different localities. Suppression entails a more relaxed physical distancing measures, but it should be supported with a proactive case detection and contact tracing. People entering low risk areas or into

communities with no report of COVID-19 cases were kept in quarantine for 14 days. In communities with intermediate risk or with reports of sporadic outbreaks, extreme but localized measures were taken.

3. Mitigation – Mitigation is aimed at maintaining a manageable number of cases over a long period of time, in the unlikely event where vaccine discovery takes years. Strengthening the national disease surveillance system and incorporating COVID-19 among level-2 reportable diseases, capacity building of health care providers, enhancing accessibility of testing centers, developing innovative approaches to early detect a surge in the number of new cases are believed to maintain a reasonable number of cases (Li Z, et al, 2020).

## Update on personal protective equipment

### *Face mask use*

- One study showed that airborne transmission is highly virulent and represents the dominant route for the transmission of COVID-19. In this article, the trend and mitigation measures taken in Wuhan, China, Italy, and New York City from January 23 to May 9, 2020 were also analysed. The analysis revealed that the difference with and without mandated face covering represents the determinant in shaping the pandemic trends in the three epicenters. Mandated face covering alone significantly reduced the number of infections, that is, by over 78,000 in Italy from April 6 to May 9 and over 66,000 in New York City from April 17 to May 9. It was also indicated that the other mitigation measures, such as social distancing implemented in the United States, are insufficient by themselves in protecting the public. The authors concluded that wearing of face masks in public corresponds to the most effective means to prevent inter-human transmission, and this inexpensive practice, in conjunction with simultaneous social distancing, quarantine, and contact tracing, represents the most likely fighting opportunity to stop the COVID-19 pandemic (Zhang et al., 2020).

### Psychosocial wellbeing updates

- Health workers are risking their psychical and mental health to serve their community. The experience of quarantine health workers who were exposed to COVID 19 was shared from Lebanon. The study uncovered the lived experience of front line workers who were exposed to the virus when they provide professional service. The major findings of the study were presented under the following themes; fear of acquiring the disease and spreading it to others

especially their families, dilemma between family and professional responsibilities, stigma from both health workers and other community members and the uncertainty in the information about the disease. In addition to this some the quarantined health workers were also supposed to rent a place for their isolation which has resulted in some economic pressure on them. This study showed that health workers face intense physical, mental as well as economic pressure. To address these problems they recommended; (a) having clear communication about the disease--misconception is one of the main stressor, (b) moral support so that they can feel understood by their employer and the government (c) reducing quarantine related costs (d) improving public awareness about the disease so that stigma might not have an impact on them (Fawaz and Samaha, 2020).

## Reference list

- African Union; COVID -19 updates. <https://au.int/en/covid19>
- Center of Disease Control and Prevention Africa <https://africacdc.org/covid-19-update/>
- Ethiopian Public Health Institute CoronaVirus Update; <https://www.ephi.gov.et/index.php/public-health-emergency/novel-corona-virus-update>
- FAWAZ, M. & SAMAHA, A. 2020. The psychosocial effects of being quarantined following exposure to COVID-19: A qualitative study of Lebanese health care workers. *The International Journal of Social Psychiatry*.
- John Hopkins, Corona Virus Resources <https://coronavirus.jhu.edu/map.html>
- Li Z, Chen Q, Feng L, Rodewald L, Xia Y. Active case finding with case management: the key to tackling the COVID-19 pandemic. *The lancet*. 2020;20:31278-2.
- Rothe, C., Schunk, M., Sothmann, P., Bretzel, G., Froeschl, G., Wallrauch, C., Hoelscher, M. (2020). Transmission of 2019-nCoV Infection from an Asymptomatic Contact in Germany. [Case Reports Letter]. *N Engl J Med*, 382(10), 970-971. doi: 10.1056/NEJMc2001468
- SINOVAR. (2020, 13 June 2020). "Sinovac Announces Positive Preliminary Results of Phase I/II Clinical Trials for Inactivated Vaccine Candidate Against COVID-19." Retrieved 14 June 2020, from [https://mp.weixin.qq.com/s?\\_\\_biz=MjM5OTQyNjY2OA==&mid=2652318059&idx=1&sn=f680f6c2a1fe3c2539d86ad7f633b6dc&chksm=bcd826688bafaf7ebc653b3742d845672bd597b4f4fea02e1c74458c65cb7a3a1fca910407f5&mpshare=1&scene=1&srcid=&s](https://mp.weixin.qq.com/s?__biz=MjM5OTQyNjY2OA==&mid=2652318059&idx=1&sn=f680f6c2a1fe3c2539d86ad7f633b6dc&chksm=bcd826688bafaf7ebc653b3742d845672bd597b4f4fea02e1c74458c65cb7a3a1fca910407f5&mpshare=1&scene=1&srcid=&s)

[harer\\_sharetime=1592091945974&sharer\\_shareid=43bf103a1eed26107a95ebb1c7d24e37&exportkey=AVlh3IXh%2FeRAPkxU4EMlbmo%3D&pass\\_ticket=9u75XPVj8LEBrgmx83Ym08KaxBoaKMMppQihkD9p4WoJ2vZOuZnFze41%2Fqb%2BXYM%2F#rd.](https://www.who.int/images/default-source/health-topics/coronavirus)

- World Health Organization: <https://www.who.int/images/default-source/health-topics/coronavirus>
- Worldometer, Corona Virus <https://www.worldometers.info/coronavirus/>
- ZHANG, R., LI, Y., ZHANG, A. L., WANG, Y. & MOLINA, M. J. 2020. Identifying airborne transmission as the dominant route for the spread of COVID-19. Proceedings of the National Academy of Sciences, 202009637.