



**Update: May 14 & 15, 2020**

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

THE KNOWLEDGE SYNTHESIS TEAM  
CDT-AFRICA, ADDIS ABABA UNIVERSITY

[www.cdt-africa.org](http://www.cdt-africa.org)

## Summary

- As of May 15, 12:00 GMT, there were more than 4.5 million (4,552,436) people infected with the novel coronavirus worldwide causing 304,186 deaths and 1,718,558 recoveries. US still accounting for the highest number of cases and deaths.
- Currently, Russia has the third largest number of COVID-19 cases (262,843). However, reported death is lower than most other countries. There are assumptions regarding low death rate like deaths due to COVID-19 may be reported as other causes of deaths and there is low reporting of real figures.
- In Africa, a total of 75,530 cases, 2,559 deaths and 27,227 recoveries were reported as of May 15, 4:00 PM EAT in Africa.
- Report has emerged from Italy that children under 1 year of age are at increased risk of hospitalisation
- Roche has been granted approval by Public Health England for a COVID-19 anti-body testing tool called Elecsys®. The test is reported to have 99.8% specificity and 100% sensitivity. This product has also been approved by EU and the US FDA.
- The Oxford vaccine study against COVID-19 passes through the first hurdle with good efficacy and safety profile in animal study
- A study in Israel found that there was no significant association between BCG vaccination and infection rates and proportions of patients with severe COVID-19.
- A modelling study published in Science highlights again the need for careful reopening
- UN has released a policy brief highlighting the mental health toll of the pandemic and the need for addressing the need and inclusion of mental health planning in the recovery service is urged.
  - The policy brief has included a study from Ethiopia as one of the few studies on mental health conducted in the world.

## Recommendations

- It is not too early to plan for safe reopening modelling different scenarios
  - However, a more uniform adaptation of the public health control measures is needed
- Children, particularly those under 1 are at increased risk of more severe illness and should be protected
- The report on BCG should remove any illusion that countries with high BCG coverage would be safer.

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

### *Global*

- As of May 15, 12:00 GMT, more than 4.5 million (4,552,436) people are infected with novel coronavirus worldwide causing 304,186 deaths and 1,718,558 recoveries.
  - The percentage of recoveries has increased slightly to 85% while it's was 84 % at the beginning of this week and 83% last week.
  - The number of new cases reported in the last 24 hours (96,334 new cases) is significantly higher than the previous day report (88,219 new cases) while similar number of new deaths were reported on May 14th (5,314) and May 13th (5,317). This is in line with pattern in the previous 2 days.
  - The highest number of cases (1,458,243) and deaths (86,942) were reported from United States of America (USA) which accounted for 32.0 % of total cases and 28.6% of total deaths in the world.
  - New York (353,096), New Jersey (144,024) and Illinois (87,937) are the three most affected states in USA with a total of 585,057 cases; i.e 40.1% of corona cases in the country.
  - Russia is now the country with the third largest number of COVID-19 cases (262,843) next to Spain (274,367) and USA. The number of new cases was persistently increasing in the last couple of days exceeding 10,000 cases each day. According to BMJ news, the main reasons for this rapid increment of new cases is due to;
    - The central government ended the official "month without working" that started on 28 March. However, the ultimate decision either to lift or continue the restrictions is given for local governments.
    - High false negative results and an initial lack of urgency in government warnings that contributed to unusually rapid spread.
    - Russia has reported far fewer deaths (2,418 total deaths) than most countries, raising suspicion that many deaths due to COVID-19 are counted under list of other causes of deaths. It's also reported that real mortality from COVID-19 in Moscow is almost three times higher than official figures [Dyer, O., 2020].
  - United Kingdom (233,151 cases & 33,614 deaths) and Italy (223,096 cases & 31,368 deaths) are the other most affected countries with high number of cases and deaths from COVID-19.
- ### *Africa*
- According to Africa CDC, a total of 75,530 cases, 2,559 deaths and 27,227 recoveries were reported as of May 15, 4:00 PM EAT.

- South Africa is consistently the first country with a total of 12,739 cases and 238 deaths according to Worldometer report. The number of new cases reported within 24 hours (665 new cases) is slightly reduced compared to the previous day report (724 new cases). In contrast, the number of new deaths is increased from 13 to 19 on May 14th which is the highest number of deaths recorded in a single day since the pandemic started.
- Egypt is the second most affected country with a total of 10,829 (14.3%) cases followed by Morocco 6,623 (8.8 %), Algeria 6,442 (8.5%) and Ghana 5,530 (7.3%).
- The two African countries with high number of deaths are Egypt (571) and Algeria (529) which in total contributed for 42.9% of deaths reported until now.

### *Ethiopia*

- In the last 48 hours, a total of 7,287 laboratory tests were carried out and 24 additional COVID-19 cases were identified in the country.
- All of the additional cases are Ethiopians, their age ranges from 17 to 66 years and majority 20 (83%) of them are males.
- Thirteen (13) of these cases were reported from Addis Ababa, 7 from Somali (Jijjiga), 2 from Benshangul Gumuz (Guba), 1 from Afar (Samara) and 1 from Ahmara region (Metema).
- Out of the 24 additional cases, 11 of them have travel history and 10 have contact history with confirmed COVID-19 case while the rest three are still under investigation.
- All of the additional cases have travel history and they were staying at Semera, Jijjiga, Mekele and Ataye quarantine centre before confirming the tests.
- The ministry of health also reported that additional four people from Addis Ababa are fully recovered from the disease raising the total number of recoveries to 112.
- Therefore, a total of 48,985 laboratory tests were conducted and 287 confirmed cases, 5 deaths and 112 recoveries were reported as of May 15, 2020 5:00 PM EAT.
- Currently, all of the active cases (168) are having mild form of the disease and receiving medical care in the designated treatment centre.

### **Update on Diagnosis**

- Public Health England has approved an antibody test called Elecsys® Anti-Sars-CoV-2 antibody test, made by the pharmaceutical company Roche. This was approved at the start of May by the EU and by the US FDA as being 99.8% specific for Covid-19 and 100% sensitive. The test is reported to work on blood samples taken by a healthcare professional at least 14 days after the person developed COVID-19. The test is processed in laboratories using Roche analysers and its fully automated systems can provide results in approximately 18 minutes for

one single test, with a capability to do 300 tests an hour, depending on the analyser. The national coordinator of the UK coronavirus testing programme reportedly said the test was evaluated and confirmed to have 100% accuracy (Boseley, 2020).

### Update on public control measures

Careful and controlled easing of public control measures during reopening needed: Scientists at the Pasteur Institute in Paris modelled France's coronavirus outbreak. (H. Salje et al. Science, <http://doi.org/dvt3>; 2020). They found that France's lockdown, which began 17 March, reduced viral spread by 77%. The team projected that by the time the lockdown was relaxed on 11 May, an estimated 4.4% of the population would have been infected.

Some two-thirds of the population would need to be immune for immunity alone to control the epidemic. As a result, herd immunity cannot prevent "a second wave at the end of the lockdown".

### Update on Vaccine

A vaccine with evidence of promise (van Doremalen, 2020): An adenovirus-vectored ChAdOx1 nCoV-19 vaccine being developed at the University of Oxford has been tested on six rhesus macaques (*Macaca mulatta*), which were injected with the vaccine and were then exposed to high doses of SARS CoV-2 virus. The vaccinated monkeys all developed neutralising antibodies and had low levels of the virus in their lungs. Two of the three unvaccinated monkeys developed pneumonia. None of the vaccinated monkeys did. No evidence of immune-enhanced disease following viral challenge in vaccinated animals.

Negative association between BCG and COVID-19 infection: A study in Israel set out to compare the infection rates and proportions of patients with severe COVID-19 disease in 2 similar populations with differing BCG vaccination status: individuals born during the 3 years before and 3 years after cessation of Israel's universal BCG vaccine program. The BCG vaccine was routinely administered to all new-borns in Israel as part of the national immunization program between 1955 and 1982. Overall, the vaccine acceptance rate in Israel is high, with greater than 90% coverage. Since 1982, the vaccine has been administered only to immigrants from countries with high prevalence of tuberculosis. The study indicated that of

72,060 test results reviewed from March 1, 2020 up to April 5, 2020, 3064 were from patients born in the period of universal BCG vaccination while 2,869 were among likely unvaccinated people born between (1983 and 1985). According to the study, there was no statistically significant difference in the proportion of positive test results in the BCG vaccinated group (361 [11.7%]) as compared to the unvaccinated group (299[10.4%]; difference, 1.3%;95%CI, -0.3%to2.9%; P=.09). it should be noted that the study made assumptions on the vaccination status of the study participant by only taking into account their year of birth. This is in line with the scientific briefing by WHO reiterating that there is no evidence that BCG vaccine protects people against infection with COVID-19 virus.

Ecological studies suggesting benefit are not good enough to support benefit of BCG: WHO updated its ongoing evidence review of the major scientific databases and clinical trial repositories on 11<sup>th</sup> April, using English, French and Chinese search terms for COVID-19, coronavirus, SARS-CoV-2 and BCG. The review yielded three preprints (manuscripts posted online before peer-review), in which the authors compared the incidence of COVID-19 cases in countries where the BCG vaccine is used with countries where it is not used and observed that countries that routinely used the vaccine in neonates had less reported cases of COVID-19 to date. Such ecological studies are prone to significant bias from many confounders, including differences in national demographics and disease burden, testing rates for COVID-19 virus infections, and the stage of the pandemic in each country. The review also yielded two registered protocols for clinical trials, both of which aim to study the effects of BCG vaccination given to health care workers directly involved in the care of patients with COVID-19 (Hamiel et al., 2020, WHO, 2020).

### **Psychosocial wellbeing updates**

- The UN/WHO has released a policy brief on 14 of May 2020 on the need for action on mental health during the COVID 19 pandemic (UN Policy Brief 2020).
- The policy brief highlights the profound impact of the pandemic and the public health control measures.

- Effective intervention should prioritise those at most risk, particularly front line healthcare workers, children, people with pre-existing mental health issues, senior citizens and those with pre-existing health conditions.
- To minimise the consequences urgent actions are required.
  - Protect, promote and care for mental health by including the mental and psychosocial consideration in the national response to the outbreak, protecting people from pandemic related difficulties that can affect mental health, and carefully communicating the updates on the pandemic.
  - Avail emergency mental health and psychosocial support. Consider ways to strengthen social cohesion, solidarity and healthy coping in a way to promote psychosocial wellbeing.
  - Mental health services need to be part of the recovery service for patients with COVID-19. This could be through organising affordable community-based services, focus on community mental health care instead of institutional care.
- A recent systematic review and meta-analysis has reported a relatively high levels of depression, anxiety and insomnia among healthcare workers (Pappa et al, 2020). The pooled prevalence of depression (10 studies) was 22.8%; anxiety (12 studies) 23.2%; and insomnia (4 studies) 38.9%. This review also reported that females exhibit higher affective symptoms. Generally, because of the nature of their job, health workers tend to be higher among health workers. Nevertheless, this review along with the pre-existing risk, indicates the urgent need to monitor and address this huge mental health risk.

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