COVID-19 Update: Epi Week 21 – 27 June 2020

Over 9.8 million cases confirmed and reported, with over 495,000 deaths reported to date (unofficially over 10.1 million cases and over 502,000 deaths, over 4.1 million active cases (increased) and over 5.5 million recovered). Brazil, Mexico, the US and India are reporting the highest daily increases in deaths, Brazil, US and India are reporting the highest daily increases in new cases. Record new daily high number of cases globally (189,000 cases) reported on Sunday, June 28th, with multiple countries reporting their highest daily increase thus far.¹

Estimates of the current effective reproductive number

¹ Official numbers and WHO visualizations available here
Weekly update (official) based on locations with highest case increases – last updated: WHO SitRep #160

Côte d'Ivoire, DRC, Kenya, and Ethiopia experiencing high daily increases
Nepal experiencing rapid daily increases
High daily increases in Iraq and Oman. Morocco also seeing a high daily increase to cases.
Sweden reporting second highest daily increase from Russia
Nepal experiencing rapid daily increases

<table>
<thead>
<tr>
<th>Americas Region Country</th>
<th>Daily change in new reported cases (decreasing shown in blue, increasing in red)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Sunday 21-June</td>
</tr>
<tr>
<td>United States</td>
<td>32 349</td>
</tr>
<tr>
<td>Brazil</td>
<td>34 666</td>
</tr>
<tr>
<td>Peru</td>
<td>3 413</td>
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<tr>
<td>Chile</td>
<td>5 607</td>
</tr>
<tr>
<td>Mexico</td>
<td>4 717</td>
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Nepal experiencing rapid daily increases

<table>
<thead>
<tr>
<th>European Region Country</th>
<th>Daily change in new reported cases (decreasing shown in blue, increasing in red)</th>
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<tbody>
<tr>
<td></td>
<td>Sunday 21-June</td>
</tr>
<tr>
<td>Russia</td>
<td>7 600</td>
</tr>
<tr>
<td>UK</td>
<td>1 221</td>
</tr>
<tr>
<td>Spain</td>
<td>334</td>
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<tr>
<td>Italy</td>
<td>224</td>
</tr>
<tr>
<td>Germany</td>
<td>537</td>
</tr>
<tr>
<td>Turkey</td>
<td>1 192</td>
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High daily increases in Iraq and Oman. Morocco also seeing a high daily increase to cases.

<table>
<thead>
<tr>
<th>MENA Region Country</th>
<th>Daily change in new reported cases (decreasing shown in blue, increasing in red)</th>
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<tbody>
<tr>
<td></td>
<td>Sunday 21-June</td>
</tr>
<tr>
<td>Iran</td>
<td>2 368</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>3 379</td>
</tr>
<tr>
<td>Qatar</td>
<td>881</td>
</tr>
<tr>
<td>Egypt</td>
<td>1 475</td>
</tr>
<tr>
<td>UAE</td>
<td>392</td>
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Nepal experiencing rapid daily increases

<table>
<thead>
<tr>
<th>Asia Pacific Region Country</th>
<th>Daily change in new reported cases (decreasing shown in blue, increasing in red)</th>
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<tbody>
<tr>
<td></td>
<td>Sunday 21-June</td>
</tr>
<tr>
<td>India</td>
<td>14 821</td>
</tr>
<tr>
<td>Pakistan</td>
<td>4 471</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>3 531</td>
</tr>
<tr>
<td>Singapore</td>
<td>262</td>
</tr>
<tr>
<td>Indonesia</td>
<td>862</td>
</tr>
<tr>
<td>Philippines</td>
<td>652</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>310</td>
</tr>
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Nepal experiencing rapid daily increases

<table>
<thead>
<tr>
<th>Africa Region Country</th>
<th>Daily change in new reported cases (decreasing shown in blue, increasing in red)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Sunday 21-June</td>
</tr>
<tr>
<td>South Africa</td>
<td>4 621</td>
</tr>
<tr>
<td>Nigeria</td>
<td>436</td>
</tr>
<tr>
<td>Ghana</td>
<td>437</td>
</tr>
<tr>
<td>Cameroon</td>
<td>643</td>
</tr>
<tr>
<td>Senegal</td>
<td>105</td>
</tr>
</tbody>
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Côte d’Ivoire, DRC, Kenya, and Ethiopia experiencing high daily increases

News/ Political Context
- Global cases reached 9 million in 6 days
- Zero cases to 1 million cases: ~100 days
- 1 million to 2 million cases: 12 days
- 2 million to 3 million cases: 13 days
- 3 million to 4 million cases: 12 days
- 4 million to 5 million cases: 11 days
- 5 million to 6 million cases: 10 days
- 6 million to 7 million cases: 8 days
- 7 million to 8 million cases: 8 days
- 8 million to 9 million cases: 6 days

- Daily confirmed deaths increasing most rapidly in CAR, Eswati, Equatorial Guinea, Comoros, Malawi, Iraq.

- Cases doubling rapidly in Western Sahara (1 day), Antigua and Barbuda (4 days), Lesotho (5 days), Namibia (6 days), Palestine (6 days), Botswana (10 days), Benin (11 days).

- WHO deployed response team to Tajikistan and Uzbekistan to support response efforts

- Resurgent daily increase in cases in Iran likely due to both re-opening following confinement measures as well as a significant increase in testing capacity – highlighting many confirmed COVID-19 cases are community-based rather than always in the health facility.

- In Italy, the center of new cases once again is in Lombardy region

- Over 100 new coronavirus deaths reported in Iran on Sunday

- Increased outbreaks in prisons in multiple countries

- Oman released a mobile application using AI linked to updated statistics, and medical support. If diagnosed patients receive a bracelet linked to the application to further encourage quarantine measures.

- US incidence continues to increase, with a shift in age distribution to a younger group (20s & 30s), likely as a result of loosening restrictions. This is a similar trend that has been observed both in South Korea and Japan.

- Updated guidance developed by WHO on key actions to take based on the country transmission scenario:
  1. No cases: Countries/ territories/ areas with no cases; Can include both countries who never reported a case as well as countries with no active cases reported
  2. Sporadic cases: Countries/ territories/ areas with one or more cases, imported or locally detected;
  3. Clusters of cases: Countries/ territories/ areas experiencing cases, clustered in time, geographic location, and/or by common exposure;
  4. Community transmission: Countries/ territories/areas experiencing larger outbreaks of local transmission, defined through an assessment of factors including, but not limited to: • Large numbers of cases which cannot be linked to transmission chains • Large numbers of cases from sentinel lab surveillance or increasing positive tests through sentinel samples (routine systematic testing of respiratory samples from established laboratories) • Multiple unrelated clusters in several areas of the country/territory/area.

- Additional PPE support flown to Azerbaijan, Belarus and Ukraine from the EU (4.7 million items).

- “1st WHO Infodemiology Conference” to take place on June 29th

- While additional testing in the US is leading to additional case numbers, indication is that community transmission is outpacing the testing capacity. Arizona is reporting higher per capita incidence of COVID-19 than Brazil or any European country. States also beginning to report probable deaths attributable to COVID-19 based on retrospective analysis.

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2 [https://ourworldindata.org/coronavirus](https://ourworldindata.org/coronavirus)
3 Reference to ECDC data using [https://ourworldindata.org/coronavirus](https://ourworldindata.org/coronavirus)
4 [WHO Europe](https://ourworldindata.org/coronavirus)
5 [Lancet 20 June 2020](https://ourworldindata.org/coronavirus)
Recent Research/ Evidence

- **Symptom screening** in long-term care facilities showed low sensitivity and specificity in detecting COVID-19 among residents. Authors suggest the need to incorporate wide-scale testing in communal living scenarios to better detect for COVID-19.7

- **Fever and cough confirmed** in recent study of 148 articles as most common symptoms of COVID-19. However, 1 in 5 test-positive adults never had fever, and fewer than 3 in 5 developed a cough. Additional limitation of the study is the cases were all moderate to severe requiring hospitalization and therefore, only symptom-checking and reporting is likely to miss a large percentage of the actual infected individuals within the population.8

- In German Heinsberg study of prevalence of serum IgG antibodies against SARS-CoV-2, 2.7-2.9% of healthcare workers were found to have been infected, with only an estimated 36% of healthcare workers who tested positive having flu-like symptoms. Additionally, none of the healthcare workers who tested positive were nurses.9

- Evidence from Hong Kong shows that a **demographic approach to COVID-19 should be taken**. The concentration of COVID-19 among younger populations despite the age demographics show prevalence of imported case clusters in HK, as well as the low number of severe cases and deaths.10

- Retrospective study of HCWs undergoing both COVID-19 telephonic symptom screening and nasopharyngeal SARS-CoV-2 assays showed a **98.2% Negative predictive value**, with symptoms predictive of testing results shown below:11

- A study of 582 children and adolescents with COVID-19 in Europe show that COVID-19 appears to be a milder disease in children, but some may develop severe infection. Risk factors affiliated with higher infection include being younger than 1 month, male sex, pre-existing medical conditions and presence of lower respiratory tract infection symptoms12

- US CDC **updated COVID-19 severe risk factors** to include (in addition to people over 65) pregnant women are at higher risk of being admitted to the ICU or needing medical incubation with black and Hispanic women having worse outcomes than white.13 Useful table of risk factors based on the evidence to support is available [here](#).

Clinical Trails

- Updated Q&A by WHO on use of dexamethasone and COVID-19.14

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7 NEJM 21 May 2020  
8 PLOS ONE 23 June 2020. Systematic study of the prevalence of symptoms in adults  
9 PLOS ONE 25 June 2020  
10 PLOS ONE 26 June 2020  
11 PLOS ONE 26 June 2020  
12 Lancet Child and Adolescent Health. 25 June 2020  
13 CDC 25 June 2020  
14 WHO Q&A
• The European Medicines Agency (EMA) Human Medicines Committee (CHMP) recommended that the EMA give conditional approval for remdesivir as a COVID-19 treatment.

Modeling

• **Projections for the reproductive number and deaths** ([ICL weekly projections](#)). Assuming the underlying CFR 1.38% forecasting for the upcoming week are below:

![Graph A: Total number of deaths reported (above). Number of countries with active transmissions with at least 100 deaths and at least 10 deaths reported in the last two weeks (below)](image)

- **Europe**: Most countries remaining constant. Effective reproductive number expected to rise in Ukraine, Romania, Poland, North Macedonia, Moldova, Kazakhstan.
- **MENA**: Effective reproductive rate expected to increase in Iran, Iraq, Saudi Arabia, Algeria, Egypt, Expected to stabilize in Kuwait, UAE, and Oman.
- **Asia Pacific**: Effective reproductive rate expected to increase in Pakistan, Afghanistan, Bangladesh, Indonesia and India, with the Philippines evening out.
- **Africa**: Nigeria and Kenya expected to increase with South Africa remaining high but increasing more slowly.
- **Americas**: Effective reproductive predicted to increase in Guatemala, Honduras, Mexico, Panama, Argentina, Brazil, Colombia. Expected to decrease in Canada and Peru.
Forecasted weekly deaths shown below

- Commentary article suggests that if outbreaks begin to spike in localized contexts, Modelling suggests that **brief lockdowns** (eg, for 2 weeks) **followed by relaxations for between 2 and 6 weeks might be enough to cut lines of virus transmission**- however this is highly dependent on the trust within the community, government and epidemiological models. Emphasis needs to be made on a multi-public health methods approach **(not one solution will slow the effective reproductive number)**.\(^\text{15}\)

**Humanitarian Impacts**

- **Multi-epidemic response in DRC** highlighted in recent article, **highlighting potential resurgence in vaccine preventable diseases** (the ongoing measles outbreak shows poor coverage of vaccination campaigns- also likely disrupted even more during COVID-19). An emphasis on high prevalence of HIV and TB (both having increased morbidity with COVID-19). A broad health system approach to the response is essential to mitigating the effects of VPD outbreaks.\(^\text{16}\)
- Several factors suggesting **Bangladesh** may be one of the next COVID-19 hotspots due to high population density, poor public health infrastructure, poor adherence to social distancing measures, uncoordinated population movement between rural and urban areas, poor public health knowledge of COVID-19 and the use of at-home quarantine rather than facility level and over-crowding.\(^\text{17}\)
  - As of June 14\(^{th}\) 400 Rohingya refugees have been tested for COVID-19, with 38 testing positive and 2 deaths. Government is restricting movement to the camp to only essential services, and plans to send refugees to Bhasan Char island if the outbreak becomes large.

- **Mapping of COVID in Humanitarian settings available here**

**Guidance Launched or Highlighted This week**

- Guidance on maintaining essential services
- WHO Scientific briefing on breast feeding in COVID-19
- Interim Guidance on Critical Preparedness, readiness and response actions for COVID-19
- WHO developed Rapid Response Team capacity building package
- WHO Rapid hospital readiness checklist: Interim Guidance
  - Rapid hospital readiness checklist: tool
- Biomedical equipment for COVID-19 case management - inventory tool: Interim guidance
  - Inventory tool
- Johns Hopkins: *At Home Diagnostic Testing for Infectious Diseases: A Tool for Accelerating COVID Diagnosis and Building Pandemic Preparedness for the Future*

\(^{15}\) *Lancet. 27 June 2020. Second Wave*

\(^{16}\) *Lancet 23 June 2020*

\(^{17}\) *Lancet Global Health. 25 June 2020*
**Useful Sources**

Some additional sources – such as specific journal articles are shared as a foot note and saved to the “Evidence” folder in Teams.

- **ALNAP launched COVID-19 response portal**
- **BMJ COVID-19 resources**
- **European Centre for Disease Prevention and Control**
- **End Coronavirus Visualizations**
- **Global Health 5050 Sex desegregated data**
- **Health Map**
- **Imperial College of London**
- **ISARIC COVID-19 resources**
- **Johns Hopkins Center for Health Security** and **CSSE**
- **Humanitarian platform for COVID-19**
- **The Lancet**
- **LSHTM COVID-19 mapping tool**
- **New England Journal of Medicine**
- **Next Strain (Phylogeny of SARS-CoV-2)**
- **Our world in Data**
- **PLOS COVID-19**
- **ProMed**
- **WHO**
- **WHO Technical Guidance for COVID-19**
- **MobLabs**
- **MobLabs Domestic and international risk of importing a case**
- **World Meters**