COVID-19 Update: Epi Week May 31 – June 6th

Nearly 6.9 million cases confirmed and reported, with over 397,000 deaths reported to date (unofficially over 7 million cases and over 403,000 deaths, over 3.2 million active cases and over 3.4 million recovered). Brazil surpassed US with highest daily increase in new cases (over 27,000) with Brazil, India, the US, and Russia leading with the largest daily increases.¹

### Weekly update (official) based on locations with highest case increases – last updated: WHO SitRep #138

<table>
<thead>
<tr>
<th>Americas Region</th>
<th>Daily change in new reported cases (decreasing shown in blue, increasing in red)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sunday 31-May</td>
</tr>
<tr>
<td>United States</td>
<td>21 214</td>
</tr>
<tr>
<td>Brazil</td>
<td>26 928</td>
</tr>
<tr>
<td>Peru</td>
<td>6 506</td>
</tr>
<tr>
<td>Chile</td>
<td>4 220</td>
</tr>
<tr>
<td>Canada</td>
<td>885</td>
</tr>
<tr>
<td>Mexico</td>
<td>3 227</td>
</tr>
</tbody>
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Beginning to see increased number of cases again in Colombia.

While the larger islands in the Caribbean including Puerto Rico, Dominican Republic and Haiti have been battling larger COVID-19 outbreaks, many of the Caribbean countries have done a very good job containing the outbreak through CT and other means.

<table>
<thead>
<tr>
<th>European Region</th>
<th>Daily change in new reported cases (decreasing shown in blue, increasing in red)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sunday 31-May</td>
</tr>
<tr>
<td>Russia</td>
<td>9 268</td>
</tr>
<tr>
<td>UK</td>
<td>1 604</td>
</tr>
</tbody>
</table>

¹ Official numbers and WHO visualizations available [here](https://www.who.int), WHO Europe Epi Week of May 4th-10th ([WHO Weekly Epi Report](https://www.who.int)
Significantly large daily increases in new cases seen in Sweden

<table>
<thead>
<tr>
<th>MENA Region Country</th>
<th>Sunday 31-May</th>
<th>Monday 1-June</th>
<th>Tuesday 2-June</th>
<th>Wednesday 3-June</th>
<th>Thursday 4-June</th>
<th>Friday 5-June</th>
<th>Saturday 6-June</th>
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</thead>
<tbody>
<tr>
<td>Iran</td>
<td>2 282</td>
<td>2 516</td>
<td>2 979</td>
<td>3 117</td>
<td>3 134</td>
<td>3 574</td>
<td>2 886</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>1 618</td>
<td>1 877</td>
<td>1 881</td>
<td>1 869</td>
<td>2 171</td>
<td>1 975</td>
<td>2 591</td>
</tr>
<tr>
<td>Qatar</td>
<td>2 355</td>
<td>1 648</td>
<td>1 523</td>
<td>1 826</td>
<td>1 901</td>
<td>1 581</td>
<td>1 754</td>
</tr>
<tr>
<td>UAE</td>
<td>726</td>
<td>661</td>
<td>635</td>
<td>596</td>
<td>571</td>
<td>659</td>
<td>624</td>
</tr>
<tr>
<td>Kuwait</td>
<td>1 008</td>
<td>851</td>
<td>719</td>
<td>887</td>
<td>710</td>
<td>562</td>
<td>723</td>
</tr>
</tbody>
</table>

Seeing large increases in Egypt again.

<table>
<thead>
<tr>
<th>Asia Pacific Region Country</th>
<th>Sunday 31-May</th>
<th>Monday 1-June</th>
<th>Tuesday 2-June</th>
<th>Wednesday 3-June</th>
<th>Thursday 4-June</th>
<th>Friday 5-June</th>
<th>Saturday 6-June</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>8 380</td>
<td>8 392</td>
<td>8 171</td>
<td>8 909</td>
<td>9 304</td>
<td>9 851</td>
<td>9 887</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3 039</td>
<td>2 964</td>
<td>3 938</td>
<td>4 065</td>
<td>4 801</td>
<td>3 985</td>
<td>4 734</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1 764</td>
<td>2 545</td>
<td>2 381</td>
<td>2 911</td>
<td>2 695</td>
<td>2 423</td>
<td>2 828</td>
</tr>
<tr>
<td>Singapore</td>
<td>506</td>
<td>518</td>
<td>408</td>
<td>544</td>
<td>569</td>
<td>517</td>
<td>261</td>
</tr>
<tr>
<td>Indonesia</td>
<td>557</td>
<td>700</td>
<td>467</td>
<td>609</td>
<td>684</td>
<td>585</td>
<td>703</td>
</tr>
<tr>
<td>Philippines</td>
<td>590</td>
<td>862</td>
<td>552</td>
<td>544</td>
<td>751</td>
<td>634</td>
<td>244</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>651</td>
<td>656</td>
<td>742</td>
<td>775</td>
<td>624</td>
<td>1 078</td>
<td>582</td>
</tr>
</tbody>
</table>

Large increases noted in Nepal. Seeing persistent increases throughout the regions – some countries driven by specific groups or pockets.

<table>
<thead>
<tr>
<th>Africa Region Country</th>
<th>Sunday 31-May</th>
<th>Monday 1-June</th>
<th>Tuesday 2-June</th>
<th>Wednesday 3-June</th>
<th>Thursday 4-June</th>
<th>Friday 5-June</th>
<th>Saturday 6-June</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>1 727</td>
<td>1 716</td>
<td>1 674</td>
<td>1 455</td>
<td>1 713</td>
<td>3 267</td>
<td>2 642</td>
</tr>
<tr>
<td>Nigeria</td>
<td>553</td>
<td>307</td>
<td>416</td>
<td>241</td>
<td>347</td>
<td>350</td>
<td>328</td>
</tr>
<tr>
<td>Ghana</td>
<td>152</td>
<td>113</td>
<td>189</td>
<td>227</td>
<td>251</td>
<td>337</td>
<td>283</td>
</tr>
<tr>
<td>Cameroon</td>
<td>223</td>
<td>245</td>
<td>493</td>
<td>188</td>
<td>167</td>
<td>37</td>
<td>603</td>
</tr>
<tr>
<td>Guinea</td>
<td>50</td>
<td>65</td>
<td>73</td>
<td>42</td>
<td>47</td>
<td>58</td>
<td>69</td>
</tr>
</tbody>
</table>

Large clusters seen in specific groups in Africa region – including a cluster in miners in South Africa, and truck drivers in East Africa. Additional spikes seen in Ethiopia, Kenya, Cote d’Ivoire, DRC.
News/ Political Context

- Daily confirmed deaths increasing most rapidly in Central African Republic, Guatemala, Ethiopia, Mauritania, Madagascar, Nepal, Venezuela, Yemen.¹
- Cases doubling rapidly in Surinam (5 days), Nepal (7 days), Mauritania (8 days), Libya (8 days), Western Sahara (9 day), Ethiopia (9 days), Haiti (9 days), CAR (9 days), Malawi (9 days), Iraq (9 days).³
- Peru continues to have close to the highest per capita daily incidence of COVID-19 in PAHO, highlighting challenges in the country context to enforce/ maintain shut-down measures.
- Countries with the highest cases per capita in the last 24 hours (to 18:00 1/6/20): US, Chile, Spain, Belgium, Iceland, Kuwait and Qatar
- WHO has delivered over 55 tons of health supplies by road to Northern Syria over the last 2 weeks.⁴
- Currently, over 120 candidate vaccines have been mapped, raising the question of how to prioritize the ones that will go from early to later development (from phase I to phase 2b/3 clinical trials).
- All new cases in Singapore are among migrant workers, representing 10.23% of the total population across all migrant worker dormitories, compared to only 0.03% of the general public population infected.⁵
- Large clusters of new cases in South Korea have been linked to night clubs, warehouse distribution points and churches/ places of worship.
- Mass gatherings during summer holidays and racial injustice protests in the US have the potential to increase state-level transmission trends in the next few weeks.
- Sharp increases in cases reported in Israel linked to schools reopening
- US President Donald Trump announced his desire to begin the US’s withdrawal from WHO...
- Concerns over the use of antibiotics during the COVID-19 pandemic will only increase the trends in antibiotic resistance worldwide.⁶
- Updated guidance on the use of masks given emerging evidence

¹ https://ourworldindata.org/coronavirus
² Reference to ECDC data using https://ourworldindata.org/coronavirus
³ WHO Sit Rep #133
⁴ JHU Global health Security
⁵ Disturbing rates of antibiotic use worldwide (WHO)
Recent Research/ Evidence

- A metanalysis has found **increased protective qualities both of social distancing** (increasing with distance) as well as the **use of face coverings, respirators and eye protection** – with the most protective qualities with respirators such as N95 masks.\(^7\)
  - **“The use of face masks was protective for both healthcare workers and people in the community exposed to infection”**\(^6\)
- Recently released WHO rapid assessment of responding and treating NCDs shows that the **majority of country respondents share that around 50% of care for hypertension and diabetes management services have been partially or completely disrupted by COVID-19.** This may have major repercussions as NCDs are a risk factor for serious illness during COVID-19.
- MMWR in the US stated through recent findings that community **transmission of the virus may have been taking place weeks before it was identified** (likely starting in late January).
- New evidence strengthens argument on **spillover event for COVID-19**, highlighting likelihood or **recombination of bat coronavirus with pangolin** to develop the receptor that allows it to infect humans\(^8\)
- Strong links between emergency and elective surgery and COVID-19, **heightening risk of mortality**\(^9\)
- Evidence that **sunlight or simulated UV can be used to disinfect areas** with SARS-CoV-2 Contamination, and may highlight additional safety of outdoor spaces\(^10\)
- Evidence continues that the majority of **children** who suffer from severe COVID-19 may have different symptoms including gastro-intestinal and cardiac involvement. Children who become ill should continue to be monitored closely.\(^11\)
- Recent study in the Lancet shows the importance of examining the death ratios for all cause mortality for men and women prior to COVID-19 before highlighting the burden on men. In their study they found that **Women and men in Massachusetts experienced virtually identical relative increases in the rise in the total burden of mortality as deaths** as COVID-19 began their quick ascent, even though the absolute difference in mortality rates was larger for men.\(^12\)
- Need for additional research and evidence for airborne transmission and options for air disinfection highlighted through several examples including the case of the church choir infection cluster and others. Potential to use Upper-room GUV air disinfection in high-risk areas such as waiting rooms, but highlighted the need to technical guidance and research on the efficacy and safety.\(^13\)
- Article in Lancet emphasizes the strengths of the identification, management and isolation of infected people and close contacts works to stop community transmission (evidence taken from China, Singapore and South Korea)\(^14\)
- **Non-invasive oxygen** strategies were associated with lower mortality risk than traditional oxygen therapies.\(^15\)
- Cross-sectional study of N95 masks extended use and reuse fond **duckbill 95s masks had a high failure rate**, primarily related with a poor fit test.\(^16\)
- Emphasis on the impact of community treatment centers and community-centered health system approach to reducing the burden of disease on health facilities and medical workers in the South Korea response to COVID-19 in Daegu highlighted in NEJM article.\(^17\)

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\(^7\) [Lancet 1 June 2020](https://www.lancet.com/p/1d2c7f99582a)
\(^8\) [Science Advances, 29 May 2020](https://www.science.org/doi/10.1126/sciadv.abb9028)
\(^9\) [Lancet 29 May 2020](https://www.lancet.com/p/1d2c7f99582a)
\(^10\) [Journal of infectious Disease 20 May 2020](https://www.jidonline.com/article/S0022-1899(20)32128-3)
\(^11\) [The Lancet 1 June 2020](https://www.thelancet.com/p/1d2c7f99582a)
\(^12\) [Lancet 27 May 2020 Excess Mortality in men and women](https://www.thelancet.com/p/1d2c7f99582a)
\(^13\) [JAMA. Published online June 1, 2020. doi:10.1001/jama.2020.7603](https://jamanetwork.com/journals/jama/fullarticle/2769106)
\(^14\) [Lancet 4 June 2020](https://www.thelancet.com/p/1d2c7f99582a)
\(^15\) [JAMA. Published online June 4, 2020. doi:10.1001/jama.2020.9524](https://jamanetwork.com/journals/jama/fullarticle/2769106)
\(^16\) [JAMA. Published online June 4, 2020. doi:10.1001/jama.2020.9843](https://jamanetwork.com/journals/jama/fullarticle/2769106)
\(^17\) [NEJM 3 June 2020](https://www.nejm.org/doi/10.1056/NEJMc2012371)
Clinical Trails

- **Convalescent plasma** transfusion is a potentially efficacious treatment option for patients hospitalized with COVID-19, but may offer greater benefit to non-intubated patients than intubated.

- Ana-COVID study in Paris, France showed **Anakinra reduced both need for invasive mechanical ventilation in the ICU and mortality among patients with severe forms of COVID-19**, without serious side-effects. Additional clinical control studies needed.
  - Suggestions that treating COVID-19-associated cytokine storm syndrome may be the key in reducing general mortality in severe COVID-19 cases.

- Phase 1 clinical trial of LY-CoV555, an antibody treatment began in people through company Eli Lilly.

- **RETRACTION** of the Lancet article “**Hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19: a multinational registry analysis**” due to the authors unable to audit the primary data sources for the research.

- Among patients with severe or life-threatening COVID-19, **convalescent plasma therapy** added to standard treatment, compared with standard treatment alone, did not result in a statistically significant improvement in time to clinical improvement within 28 days. However the study may be limited due to being underpowered to highlight any significant change (cut short). More research is needed.

- After high-risk or moderate-risk exposure to Covid-19, hydroxychloroquine did not prevent illness compatible with Covid-19 or confirmed infection when used as postexposure prophylaxis within 4 days after exposure.

Modeling

- **IHME estimates deaths to reach 135,109 in the US by August.** The majority of states have also returned to baseline mobility except for NY which currently remains at 50% limited mobility. Of special concern are California and Arizona where mobility is increasing rapidly.

- The high volume of testing and low number of deaths suggests that **South Korea** experienced a small epidemic of infections relative to other countries. Therefore, caution is needed in attempting to duplicate the South Korean response in settings with larger more generalized epidemics, where this strategy may be more difficult (ICL).

- **Projections for the reproductive number and deaths** (ICL weekly projections)
  - **In Europe** show it is likely to remain stable in the coming week with the major exception of Russia where it remains high as well as increasing. Projected increases also for Armenia and Sweden.
  - **In Asia**, India and Pakistan predicted to have the highest increase, with other rapid increases predicted in the Philippines.
  - **In MENA**, countries expected to see the most rapid increase are in Egypt and Iraq (out of countries for which models were produced).
  - **In Africa**, South Africa is expected to continue seeing an increase in reproductive number as well as Sudan.
  - **In the Americas**, Brazil is predicted to see the most dramatic increase, along with steep increases in Chile, and Colombia, with Peru reaching a stabilized point in estimated

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18 Pre-print: Convalescent plasma treatment of severe COVID-19: A matched control study. 22 May 2020
19 Lancet 29 May 2020
20 Comment in Lancet 29 May 2020
21 Eli Lilly
22 Lancet 4 June 2020
23 JAMA. Published online June 3, 2020. doi:10.1001/jama.2020.10044
24 NEJM 3 June 2020
25 COVID-19 updated estimates IHME 26 May 2020
26 ICL Report #25
reproductive number. Brazil likely to see the highest number of deaths along with the greatest increase.

Humanitarian Impacts

- Pressure builds on South Sudan POCs as COVID-19 spreads – UN peacekeepers reportedly have left their post to avoid infection. Meanwhile, a return to violence in parts of the country – over 200 dead in Jonglei last month make it challenging to “return”27
  - The first 3 cases of COVID-19 were linked to UN international workers, thus strengthening the already unease around foreigners – and by proxy those in the camps who are near them. The majority of COVID-19 cases since have been found at the borders, seemingly connected with trade. Many new cases in Uganda are also linked to truck-drivers and movement from South Sudan border.
- 3 first cases in Dadaab refugee camp (1 an aid worker)
- Concerns highlighted again over Yemen under-reporting and suppression of case reporting
- Food crises likely to double with COVID-19 from 135 million to 265 million people- with gaps to respond in many of the countries with food insecurity trying to respond to COVID-19, including Yemen, DRC, Afghanistan, Venezuela, Ethiopia, South Sudan, Syria, Sudan, Haiti and Nigeria.28
- Economic impact: global remittances, which support many families throughout the world are likely to plummet $110 billion this year29
- COVID-19 estimated to have increased humanitarian needs by over 6 billion USD

COVID-19 adds to humanitarian needs

The UN is appealing for over $6 billion in extra funds to deal with coronavirus. These are the 20 situations with greatest additional needs.

- Worries about COVID-19 response to indigenous communities being ignored due to a combination of invisibility/ under-reporting and systematic inequalities and distrust. To prevent large-scale outbreaks governments urged to consider indigenous communities as a vulnerable group require a specified response and funding mechanisms.30
- Mapping of COVID in Humanitarian settings available here

Guidance Launched or Highlighted This week

- COVID-19 technology access pool
- Case Report Form for suspected cases of multisystem inflammatory syndrome (MIS) in children and adolescents temporally related to COVID-19
- Maintaining essential health services: operational guidance for the COVID-19 context
- WHO Guidance on basic psychological support
- WHO Manifesto for a healthy recovery from COVID-19

27 New Humanitarian 1 June 2020
28 WFP & New Humanitarian
29 World Bank and New Humanitarian
30 Lancet 6 June 2020
• Updated Guidance on the use of masks with information for the public
• Interim guidance on digital tools for contact tracing
• Interim guidance on polio surveillance during COVID-19
• Guidance to reduce risk of infection among staff and passengers in air travel
• Recommended guidance on mass gatherings has been updated

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
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
ProMed
WHO
MobLabs
MobLabs Domestic and international risk of importing a case
World Meters