COVID-19 Update Epi Week 2-8 August 2020

Over 19.4 million cases confirmed and reported, with **over 721 thousand deaths** reported to date (<u>unofficially</u> over 19.8 million cases and over 730 thousand deaths, over 6.3 million active cases and over 12.7 million recovered). The US, India, Brazil and Mexico are reporting the highest daily increases in deaths. India, the United States, Brazil, Colombia are reporting the highest daily increases in new cases.¹ Global incidence may be reaching peak or plateau.

Weekly cases per 1 million population (WHO), IFRC Membership Operational updates available on the Go platform

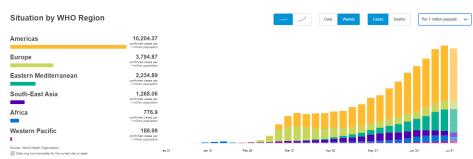
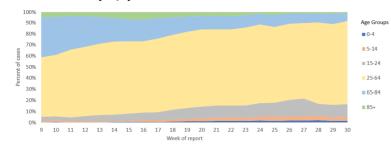


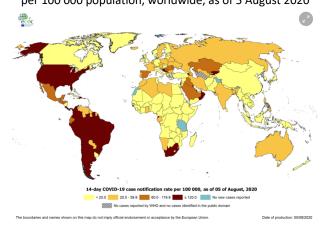
Figure 1: Distribution by age of confirmed COVID-19 cases per week, COVID-19 WHO surveillance, February to July 2020.



WHO Region	New cases in past 7 days: number (%)	% change in new cases in past 7 days*	New cases in past 7 days: number (%)	% change in new deaths in past 7 days*
Americas	1 016 718 (56.7%)	0.8%	25 456 (64.1%)	-7.5%
South-East Asia	398 917 (22.2%)	17.0%	6051 (15.2%)	-3.1%
Europe	152 613 (8.5%)	-2.1%	3004 (7.6%)	-6.3%
Africa	106 585 (5.9%)	-9.0%	2071 (5.2%)	-4.2%
Eastern Mediterranean	84 086 (4.7%)	-11.9%	2904 (7.3%)	-10.8%
Western Pacific	35 141 (2.0%)	45.5%	238 (0.6%)	38.4%
Global	1 794 060 (100.0%)	3.0%	39 724 (100.0%)	-6.7%

Source: COVID-19 global surveillance database

WHO SitRep #196 (above), ECDC Geographic distribution of 14-day cumulative number of reported COVID-19 cases per 100 000 population, worldwide, as of 5 August 2020



¹ Official numbers and WHO visualizations available here

prior

News/ Political Context

- 4th meeting of **IHR determined COVID-19 remains a public health emergency of international concern** (PHEIC), indicating a lengthy continuation of the pandemic.²
- Over the past seven days, the pandemic has continued to accelerate with almost 1.8 million new cases and 40 thousand new deaths reported a daily average of 256 294 cases and 5675 deaths per day. It took only 4 days for the number of cases to increase from 16 million to 17 million.
 The Americas contribute to over half of all newly confirmed cases (54%)
- Daily confirmed deaths increasing most rapidly in **Gambia**, Vietnam, Uganda, Zimbabwe, Namibia, Costa Rica, Lesotho.³
- Cases doubling rapidly in Aruba (3 days), Belize (4 days), Gambia (5 days), Papua New Guinea (7 days), The Bahamas (12 days).⁴
- Africa continent reaching nearly 1 million cases, with **South Africa** representing more than half of the cases
- United States daily deaths continue to be among the highest while incidence is not rapidly increasing, mortality has been increasing, but may be reaching its peak. Hotspots in the US continue to be in California, Florida, and Texas.
 - Call for reporting of COVID-19 cases to return to CDC (recently White House order to switch reporting directly to executive task force for COVID-19)
 - Increased vaccine hesitancy and recent poorly supported treatment recommendations have led to a call for increased transparency in the vaccine trials in the US to ensure the public would be interested in receiving the vaccine as a solution to COVID-19.
- Following several days of declining incidence in **India**, the country experienced 2 days of consecutive increases, and is likely continuing to rise (soon likely to pass the US)
- Incidence has been increasing in Western Pacific region over the past month, led by the Philippines, Japan and Australia. Additional cases have been increasing in Papua New Guinea.
- Maldives currently reporting the highest daily incidence of cases per 1 million population (250 per 1 million per day)
- After not reporting cases for 3 months, Vietnam has reported 200 cases since July 25th and established a field hospital
- Melbourne, Australia has seen a surge is cases and implemented a curfew from 8PM to 5AM
- PAHO Economic Commission report highlights the need to approach public health disparities along with the economy to address the COVID-19 pandemic.⁵
- Nearly 320k suffer from malnutrition, 10% of which may end up with severe complications WHO
 and partners working in Yemen to improve the treatment of malnutrition- malnutrition compromises
 the immune system and ability to fight off infection⁶
- **GOARN** Activities and resources available to partners:
 - Librarian Reserve Corps to respond to information needs in public health emergencies
 - <u>Go.data</u> for contact tracing
 - o <u>GOARN COVID-19 knowledge Hub</u>
 - <u>Global Information Management, Assessment & Analysis Center (GIMAC</u>) on COVID-19 provides technical support for field requests
 - WHO Health Cluster COVID-19 Task Team
- In EU & the UK countries⁷
 - Reporting COVID-19 through passive surveillance for influenza only a single case was identified

² WHO

³ <u>https://ourworldindata.org/coronavirus</u>

⁴ Reference to ECDC data using <u>https://ourworldindata.org/coronavirus</u>

⁵ <u>ECLAC and PAHO</u>: Controlling the pandemic requires convergence and coordination between health, economic, social and productive policies

⁶ <u>WHO</u>

⁷ ECDC Country over-view

- All countries that reported ILI and/or ARI syndromic surveillance data up to week 30 using the systems established for influenza, have observed consultation rates that remain similar to or lower than those reported during the same period in the last two years.
- 29% of reported cases in the region have been hospitalized and 14% required admission to the ICU, 24% of hospitalized cases in the hospital have died
- OIE: The first dog has tested positive for COVID-19 in Louisiana, USA. Cats have tested positive in the past, but appear not to show symptoms. Companion animals do not appear to be a source of transmission.⁸
- Health systems in the Americas reported to be strained with COVID-19 and doctors have been instructed to prioritize COVID-19 cases over additional
- WHO working with countries to improve surveillance data along with the release of the new guidance on estimating mortality from COVID-19 and how to calculate the case fatality ratio (CFR), and infection fatality ratio (IFR)
 - Surveillance by age groups from WHO COVID-19 weekly reporting⁹:
 - 0-4: 1.2%
 - 5-14: 2.5%
 - 15-24: 9.6%
 - 25-64: 64%
 - 65-84: 19.4%
 - **85+: 3.4%**
- Global Multidisciplinary Platform Discussion on SARSCoV-2 Modes of Transmission conference held on August 3rd to **review evidence on transmission pathways for COVID-19**, results to be published shortly
- WHO established Help Desks for countries seeking guidance on how to set up new screening, quarantine and treatment centers for COVID-19¹⁰

Recent Research/ Evidence

- Investigation of an outbreak at a **meat processing facility** between March and April in the US has shown 25.6% (929) employees and 8.7% (210) of their contacts tested positive for SARS-CoV-2 with highest attack rates among those who worked less than 1.8 meters apart, having major implications for the need to ensure physical distancing and other NPI when returning to production jobs.¹¹
- Recent study has shown a significant correlation between SARS-CoV-2 viral load and mortality¹²
- A review of evidence from 149 countries show the implementation of any physical distancing intervention was associated with 13% reduction in COVID-19 cases.¹³
- Continued research into the protection properties of antibodies for COVID-19. Several studies show
 antibodies decline rapidly following infection with those having mild to moderate symptoms are
 even less likely to have antibodies 2-3 months after infection.¹⁴
- Study looking at antibodies for SARS-CoV-2 among firefighters in South Florida department in the USA, found a positive predictive value for antibody testing around 33.2% and negative predictive values of the serological test around 99.3% showing caution needs to be used when considering serological tests when considering returning workforce strategies.¹⁵
- Masks found to provide some protection for the wearer as well as a reduce the likelihood and number of particulates in the air, highlighting the argument for universal mask wearing¹⁶

⁸ PubMed, <u>https://doi.org/10.1101/2020.08.04.235002</u>

⁹ WHO SitRep #198

¹⁰ WHO Sit Rep #<u>192</u>

¹¹ <u>CDC MMWR</u> 7 Aug 2020

¹² Lancet Respiratory Medicine 6 Aug 2020

¹³ <u>BMJ 15 July 2020</u>

¹⁴ Gavi, Nature Medicine, MedRx pre-print

¹⁵ BMJ 9 Aug 2020

¹⁶ Journal of General Internal Medicine

• Evidence compiled by Johns Hopkins (monthly) on evidence related to Maternal and Child Health and Nutrition in relation to COVID-19. Resources can be found <u>here</u>.

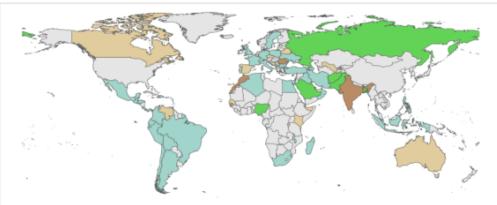
Clinical Trails

 A 2-dose candidate SARS-CoV-2 vaccine developed by Moderna, Inc. and the US National Institute of Allergy and Infectious Diseases (NIAID), mRNA-1273, will begin Phase 3 clinical trials this week.¹⁷

Modeling

- Simulation model to examine the effects of different **quarantine strategies to reduce onwards transmission of COVID-19 from travelers** (to UK based model):¹⁸
 - Quarantine period of 8 days on arrival with negative PCR on day 7 found to have a similar effect as 14 day quarantine period (reduction of introduction to community of COVID-19 by 94% compared to no actions).
 - All scenarios where people spent at least 5 days in quarantine with 1 negative PCR test show reduction in transmission potential (88%)
 - o On arrival, transmission risk is highest among asymptomatic infections
- Recent modeling from University of Granada estimates that with current transmission rates, having 20 children in a classroom would involve 808 contacts in 2 days¹⁹
- **Projections for the reproductive number and deaths** (ICL weekly projections) Assuming the underlying CFR 1.38% forecasting for the upcoming week (from 3rd August) based on 53 countries are below:

E Declining Stable/Growing Slowly Growing Unclear Trend



Current estimates for the **effective reproductive number (R_t)** shown above.

- Modeling of the potential second wave in MA, USA shows enhanced testing and contact tracing can contain COVID-19 to stay within the health system capacity²⁰
- Modeling by the London School of Economics and Political Science estimate that in reality around 35,500 people in Syria may be infected by COVID-19.²¹ Estimates from end of August range between 101,000 cases and 1.9 million. News reports and regional assessments of all-cause mortality by day show large increases, especially in Damascus and other urban centers. The writers suggest international Aide be a top priority (above traditional government interventions) given the political situation and that support should not be driven by the low official reports, but estimated much higher infection, and mortality rates.

¹⁷ Johns Hopkins Center for Global Health Security

¹⁸ BMJ 31 July 2020

¹⁹ <u>https://elpais.com/educacion/2020-06-17/expertos-de-la-universidad-de-granada-calculan-que-meter-a-20-ninos-en-un-aula-supone-808-contactos-cruzados-en-dos-dias.html</u>

²⁰ <u>Nature Human Behaviour</u> 5 Aug 2020

²¹ <u>4 Aug 2020</u> LSE

Humanitarian Impacts

- 3 health workers tested positive with COVID-19 in displaced persons camp in Northeastern Syria (Al-Hol camp, reports coming in that residents of the camp are beginning to test positive.²²
 - Worries that the situation will worsen given the likely large outbreak in Government controlled Syria where the majority of aid comes from
- Iraq Kurdistan region reporting high increases in COVID-19 cases and challenges to create public messaging and policies to reduce transmission. A large spike was observed following Eid celebrations²³
- Recent research suggest several approaches for the response to COVID-19 in resource-poor settings²⁴:
 - Avoiding treatment interruptions for NCDs, TB and HIV through CHWs and multi-month medication supply
 - Shielding high-risk populations including those above 70, living with NCDs, and other immune-suppressing conditions (in some contexts this should particularly consider those above 60 years, and living with TB (if additional dedicated isolation can be achieved), HIV and malnourished adults.
 - o Strong social mobilization, community engagement and coordination are essential
 - Suggests best approach would be a combination of self-isolation, moderate distancing and high uptake of shielding methods could mitigate bed demand and mortality to a considerable extent.
- Recent serological studies have estimated 10 million Afghans have been infected by COVID-19 (which is an estimated 31.5% of the population)²⁵
- Over half of the residents in slums of **Mumbai**, India have tested positive for antibodies to the coronavirus in a recent survey, with 16% of the surrounding population testing positive.²⁶
- Mapping of COVID in Humanitarian settings available here depicted below showing COVID-19 cases compared to where vaccination campaigns have been postponed



²² <u>Aljazeera</u>,

²³ <u>https://gov.krd/coronavirus-en/dashboard/</u>,

²⁴ Conflict and Health

²⁵ https://www.aa.com.tr/en/asia-pacific/over-10m-afghans-infected-with-covid-19/1932644

²⁶ <u>https://www.bbc.com/news/world-asia-india-53576653</u>

Guidance Launched or Highlighted This week

Weekly update (official) based on locations with highest case increases – last updated: WHO SitRep #201

- WHO Progress Report available for the Preparedness and Response Progress Report 1 Feb 30 June 2020
- <u>Estimating Mortality from COVID-19 (WHO)</u>
- <u>Breastfeeding and COVID-19 guidance</u> has been developed and being disseminated during breastfeeding awareness week
- Brief on the use of <u>environmental surveillance</u> testing waste water for detection of COVID-19 hotspots
- <u>The COVAX facility</u> Global Procurement for COVID-19 vaccines
- <u>COVAX, the ACT-Accelerator vaccines pillar</u>: Insuring accelerated vaccine development and manufacture
- New Guidance released for the surveillance of COVID-19 highlighting IFRC's role in CBS: <u>Public health</u> surveillance for COVID-19: interim guidance
- WHO: <u>Global surveillance of COVID-19: WHO process for reporting aggregated data</u>

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

<u>WHO</u>

WHO Technical Guidance for COVID-19

MobLabs
MobLabs Domestic and international risk of importing a case

World Meters