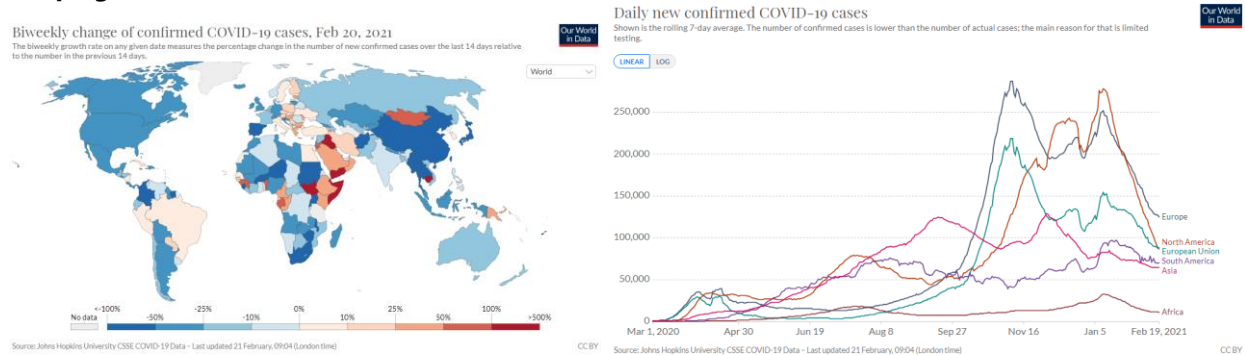


Weeks 6 &7: COVID-19 Update

February 7 – 20th 2021

Over **110.6 million cases confirmed** and reported, with **over 2.4 million deaths** reported to date ([unofficially](#) over 111.7 million cases and over 2.4 million deaths, over 22.3 million active cases (decreasing for several weeks) and over 86.9 million recovered). **The US, Brazil, Mexico, are reporting the highest daily incidences in death** in the last 24 hours. **The US, Brazil, France, Italy, India, Russia, the UK, Czechia, are reporting the highest daily increases**, all **reporting above 10,000 newly confirmed cases in the past 24 hours**.¹ Global trends show overall new cases and mortality are declining, with weekly mortality falling by 25% compared to the previous week, and the lowest new case count since October. MENA is the only region reporting an increase in COVID-19 case incidence (by 7.5%) compared following 3 weeks of declining incidence. **At least 92 countries are reporting the roll-out of vaccination campaigns.**



News / Context

- Countries with **highest reported new cases per 1 million daily increases** (Feb 20th)²:
 1. Saint Lucia: 1,307
 2. Czechia: 1,061
 3. San Marino: 943
 4. Montenegro: 766
 5. Estonia: 593
- Test positivity is highest in Oman (36%), Indonesia (34%), Tunisia (34%), Mexico (29%), Albania (29%), Mozambique (29%).
- New risk assessment by FAO, OIE, WHO, and ECDC, shows a **high risk of introduction of spread of COVID-19 through fur farming** due to disparities in measures adopted, high density of fur production (European region), and suggested using a **One Health approach** to strengthen control measures ([WHO ERO](#))
- Countries with **highest reported new deaths per 1 million** (Feb 20th)
 1. Czechia: 17.2
 2. Saint Lucia: 16.3
 3. Slovakia: 13.6
 4. Montenegro: 11.1
 5. Hungary: 11.1

New variants of SARS-CoV-2³

New variants are expected as virus mutations are common, but the detection of several variants of concern highlights the need to continue genetic sequencing of samples – noted that these detections are likely underestimates due to low genetic sequencing.⁴

- **(SARS-CoV-2 VUI 202012/01 or “B.1.1.7”)** first detected in the UK has now been detected in **94** countries. Local transmission has been found in at least 47 of these countries. The variant is associated with higher transmissibility (of potentially 36-75%), and potentially increased severity.
 - Recent studies have shown vaccines 85.6% effective against the new variant
 - Proportion of new cases with the variant continue to rise in Europe (even as total case numbers fall)

¹ Official numbers and WHO visualizations available [here](#)

² Our World in Data [Incidence](#)

³ Information primary used from [WHO Situation Reports](#) and updates on New Variants unless otherwise stated. Additional resources listed at the end of the update each week.

⁴ Additional useful sources: [US CDC](#), [WHO](#), [Sit Rep 19 Jan \(WHO\)](#), [ECDC Risk Assessment related to SARS-CoV-2 VOC in the EU/EEA](#), [Public Health England investigation of novel SARS-CoV-2 variant](#). [Additional resources shared on the last page in the resource section](#), [GISAID variants tracking](#).

- Reports show that *cough, sore throat, fatigue, myalgia and fever are more common symptoms*, and loss of taste and smell are consistently less common ([BMJ](#)).
- **Recent detection of a mutation E484K** has shown up in 11 samples which developed from the B.1.1.7 lineage, but has the same mutation as B.1.351 which has shown reduction in neutralizing antibodies ([PHE statement](#))



- **(501Y.V2 or “B.1.351”) detected in South Africa** has been detected in 46 countries. With local transmission reported in at least 12 countries.
 - Preliminary investigations show the variant is more transmissible, although it does not cause more severe illness it has placed health systems under greater pressure. More details [here](#).
 - The variant has been found to be less susceptible to antibody neutralization than previously known variants



- Preliminary studies with the Moderna vaccine show a potential reduction in immune response with the identified variant (however, still higher immune response than found following natural infection). The company is investigating the potential of using a booster candidate component.
- Similar results have been found in the Johnson and Johnson trials

- Astra Zeneca also report lower effectiveness among those with the B.1.351 variant (potentially only 22%), SA Government have recalled use and roll out of the vaccine as it appears less effective against the emerging virus, *however studies so far have been small and have shown the vaccine is still effective against severe disease (the primary objective)*

- **B.1.1.28 (P.1) detected in Japan from 4 travellers coming from Brazil** has now been reported 21 countries. Local transmission has been reported in at least 2 countries.

- Transmission of the new variant has been detected in an increasing proportion of the population in Brazil, suggesting an increase in transmission, but research is still underway.
- Cases have increased from 52-85% in Manaus, Brazil from December- January.
- Given the mutations, the variant has the potential to reduce antibody neutralization, research still underway



- [Pre-print](#) study identified **7 distinct “sub-lineages”/ variants from the US** that have mutations on the amino acid 677 which may impact how the virus is transmitted and how effective antibodies are. The authors estimate that the sub-variants already make up a significant proportion of infections in the US, and have been circulating for many months, however location and timing for emergence still are not clear. However more detailed research is needed to understand the impact of these mutations.

Regional Trends

- **Africa Region**
 - For a fourth week the region has experienced a decrease in new cases (20% decrease in the past week) with a decrease in deaths compared to the previous week (22%).
 - Countries reporting the highest new cases include: **South Africa, Nigeria, and Zambia**, with South Africa, Zambia, Nigeria and **Malawi** reporting the highest number of deaths.
- **Americas Region**
 - The region continued to see a decrease in both cases (by 16%) and deaths (by 2%). Most cases have been reported from the **US, Brazil, Mexico** (with all countries experiencing a decrease), with the highest number of new deaths reported in the US, Brazil, and Mexico (both Brazil and Mexico continued to see an increase in deaths).
 - COVID-19 cases in the US continue to decline, falling to its lowest reported level in 4 months
- **MENA Region**
 - After a decrease in new cases in previous week, the region saw a 7% increase in reported cases from the previous week while it continued to see a decrease in deaths by 9% compared to the previous week. The Islamic Republic of **Iran** (increase), **Lebanon**, and **UAE** reported the highest number of cases over the past week, with Lebanon, Iran, **Tunisia** (and Pakistan – part of the IFRC AP region) reporting the highest number of deaths.
- **European Region:**
 - While overall epidemiological trends are improving, overall numbers throughout the region remain high, suggesting there is still wide-spread transmission. The region continued to see a decrease for the third week in cases (18%) compared to the previous week, and a decrease in deaths (19%) compared to the previous week. The highest number of cases were reported in the **UK, Russia and France**, with the highest number of deaths reported by the UK, **Germany**, Russia (all seeing a reduction).
 - Mortality rate for EU/EEA & the UK was estimated at 100.3 per 1 million people across 30 countries (stable for 11 weeks). ICU new admissions were 2.4 per 100,000 (no change from previous week, but decrease from 2 weeks ago). An estimated 9.7 patients per 100,000 are in the hospital across 24 countries due to COVID-19.
 - **Czechia** continues to struggle with a prolonged high incidence
 - **Israel** continues to lead the world in it's vaccination campaign reporting an estimated 30% of the population having received both doses.
 - **Switzerland** ([14-day incidence available here](#)) has a 7-day incidence of 187.5 new cases per 100,000 population (decreasing), occupancy rate for ICU for COVID-19 estimated at 22.2% (total ICU occupancy at 71%). Positive test rate has been decreasing 5.2% (PCR) and 4.5% (Antigen). Reproductive number estimated at 0.88 (Geneva 0.97), above 1 in Neuchatel, Ticino, and Basel.
- **Asia Pacific Region:**
 - Following a decline for several weeks in the region, the WHO South East Asia region saw a decrease in both cases (13%) and deaths (9%). Countries with the highest number of new cases include **India, Indonesia and Sri Lanka**. New deaths were highest in Indonesia, India and **Bangladesh**.
 - New cases in the Western Pacific Region decreased for the third week (by 20%), with a decrease in new deaths (13%) was reported. Compared to the previous week **Japan, Malaysia & the Philippines** continue to report the highest number of new cases in the region, highest deaths reported by Japan, the Philippines and Malaysia.
 - **New Zealand** has reported 3 new COVID-19 cases linked to the B.1.1.7 variant without a known link for transmission. Therefore the city of Auckland has implemented a 72 hour lock-down measure to curb transmission. So far no new contacts have been identified.

Recent Research/ Evidence

- Renewed demonstration of **efficacy noted following release of analysis and data from proximity tracking applications**. In a study still undergoing peer-review in the UK, researchers estimate that proper use of the **NHS proximity tracking application may have contributed to the reduction of as much as 600,000 new infections** ([NHS release](#), [preprint](#), [data](#))
 - In a population-based controlled trial in the Canary islands of uptake and efficacy of contact tracing proximity applications, an estimated 33% of the population downloaded and utilized the application, with the application detecting 6.3 close contacts per primary

infection (mostly strangers). The authors note the promise of such technologies, but the challenges of follow-up faced during this study ([Nature](#))

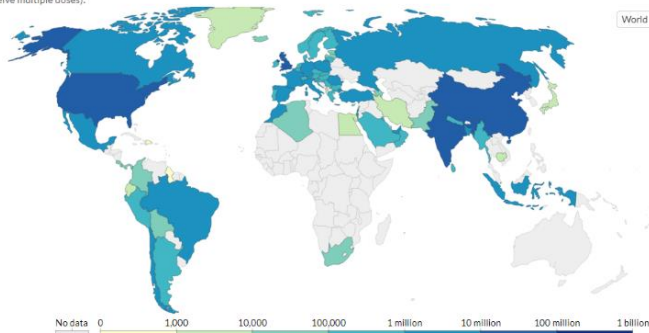
- Pre-print study from Israel has found a **significant decrease in viral load of those who tested positive for SARS-CoV-2 following vaccination** compared to those not vaccinated and infected. This is a preliminary study, but promising that vaccination (Pfizer BioTech) can reduce transmissibility given it's reduction in viral load. More studies will be needed ([pre-print](#))
- Recent **KAP study in Sudan** (majority of participants from Khartoum) showed that despite good knowledge and attitude towards COVID-19 best practices, most participants did not always translate knowledge into practice, emphasizing the need to improve education and legal structures aligned with best practices ([BMC Public Health](#)).
- Recent review of the evidence from ecological studies, contact tracing and large scale surveys support that **universal mask wearing** within the community greatly increases the overall protection within that community, specifically noting the act of wearing a mask was more important overall than the quality of the mask (see previous updates on different mask filtering capacities). [JAMA](#)
- Post-mortem surveillance study taking samples of diseased in the University Teaching Hospital, **Zambia found COVID-19 related deaths were much more common in community deaths than previously thought**. 19% of the 362 deaths tested positive for COVID-19 with, 73% were deaths in the community – none of which were tested for COVID-19 prior to death. Out of the 19 COVID-19 positive deaths in the hospital, only 6 were tested for COVID-19 prior to death ([BMJ](#)).
- Substantial **reductions in symptomatic infection were found after the first dose** of the Pfizer BioTech vaccine providing a potential opportunity for countries to achieve coverage of populations if facing vaccine shortages while additional studies are underway ([Lancet](#)).
- First **human trial study** has begun in the UK after receiving ethics approval. The study will include participants being deliberately exposed to COVID-19 to deduce the amount of virus required through exposure to become infected as well as efficacy of the vaccine ([UK Gov](#)).
- Researchers from Harvard found that **infection with the B.1.1.7 variant lasted significantly longer than for other variants**, with a mean duration of infection of 13.3 days for the B.1.1.7 variant, compared to 8.2 days for non-B.1.1.7 variants. While the duration of infection was longer for the B.1.1.7 variant, the peak viral concentration was similar between B.1.1.7 and non-B.1.1.7 variants ([preprint](#))

Vaccination Updates

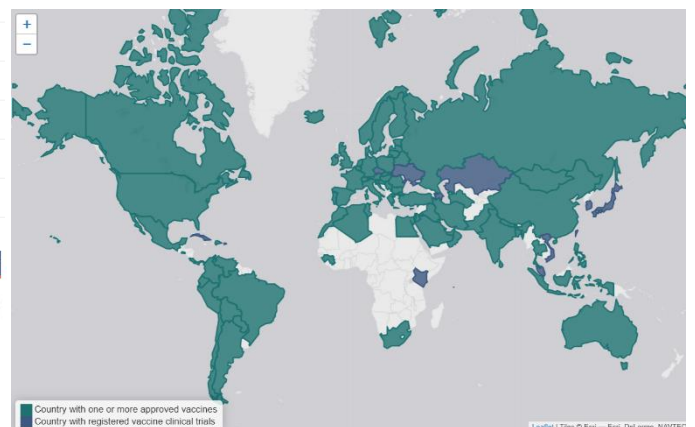
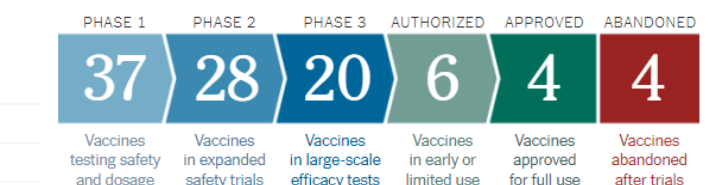
New additions and recent updates

- Feb. 18 China's **Shenzhen Kangtai** moves to Phase 2.
- Feb. 16 A nasal spray from India's **Bharat Biotech** enters Phase 1.
- Feb. 10 A vaccine from Italy's **Takis** and **Rottapharm** enters Phase 1.
- Feb. 8 South Korea's **SK Bioscience** moves to Phase 1/2.
- Feb. 7 South Africa halts plans for a rollout of **AstraZeneca's** vaccine.
- Feb. 7 A second vaccine from **Iran** enters Phase 1.
- Feb. 6 China gives conditional approval to the **Sinovac** vaccine.
- Feb. 6 New York-based **COVAXX** moves to Phase 2.

Cumulative COVID-19 vaccination doses administered, Feb 20, 2021
This is counted as a single dose, and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses).



Source: Official data collated by Our World in Data - Last updated 21 February, 08:45 (London time)



Above: Vaccine trial & approval map (source: [McGill](#)) Left: Vaccination progress shown above (Source: [Our World in Data](#))

Resources:

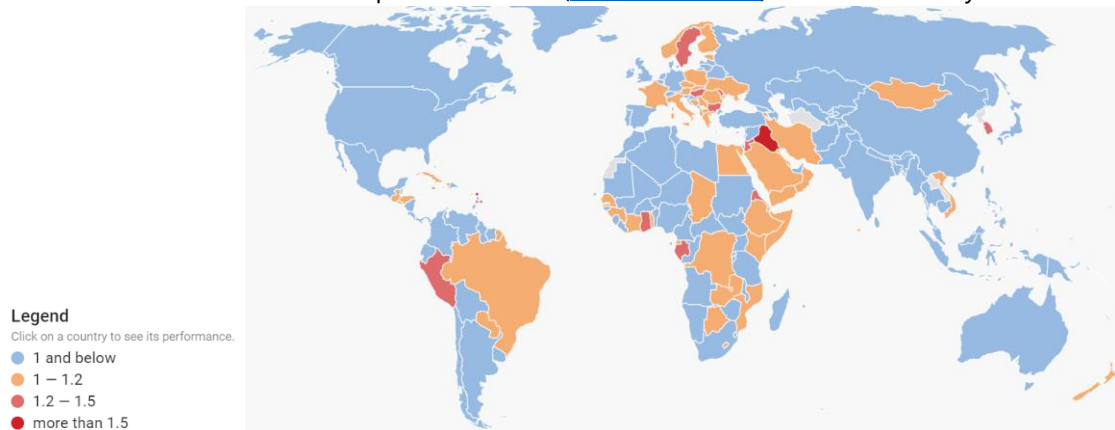
- Coronavirus Vaccine Tracker (above [NYT](#))
- COVID-19 vaccine tracker ([LSHTM](#))
- COVID-19 Vaccine Tracker ([McGill](#))
- COVID-19 vaccine tracker ([RAPS](#))

- Vaccine doses administered globally have increased by 68% compared to the previous week
- Countries following vastly different vaccination strategies – some working to complete both doses of the vaccination among selected populations before moving on to a new group (such as Chile, Spain, and Costa Rica), and others (such as the UK) have been working to achieve more coverage with the first dose before completing the second dose of the vaccination among targeted groups.

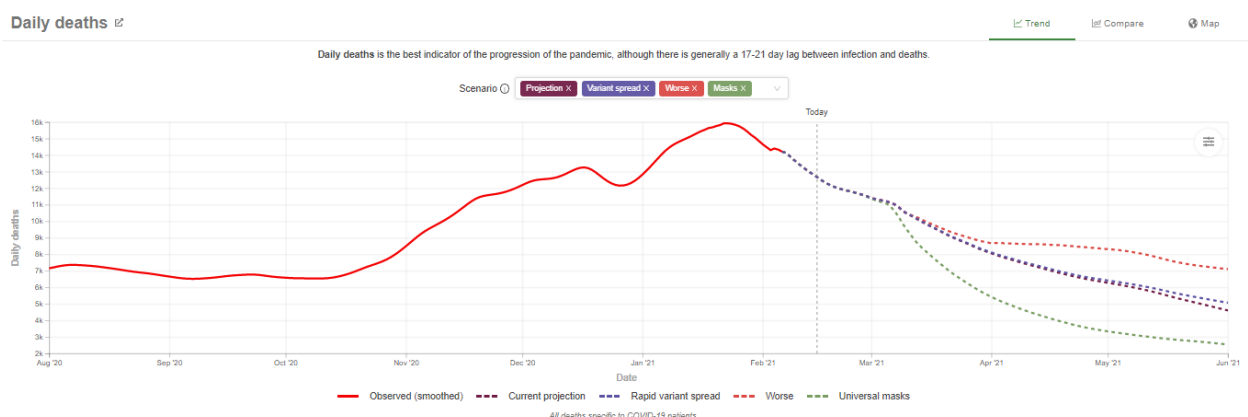
- WHO issued [Emergency Use Listing](#) of the two versions of the Astra Zenica vaccine (those produced directly, and those produced through the Serum Institute in India), allowing it to be used in the COVAX initiative.
- The first roll-out line of the **COVAX** initiative **target to reach at least 3% population coverage in all countries, territories and areas in the first half of the year**, enough to protect the most vulnerable groups such as health care workers. COVAX is aiming to have 2 billion doses distributed, including at least 1.3 billion doses to 92 lower income economies, by the end of 2021, protecting at least 20% of each participating population
- In the US, the **Cherokee and Navajo Nations** (both hit hard by COVID-19) are reporting more efficient roll-out of vaccinations than many other communities. **Both Nations credit culturally appropriate outreach** and education efforts in the community as critical to the success of their vaccination efforts (JHU CGHS, [CNN](#), [Navajo times](#))
- Considerations by US FDA and **Moderna** on increasing the number of doses per vial, with significant shifts in availability throughout the supply chain ([NYT](#))
- Ongoing studies of the effectiveness of vaccines on new variants of concern continue. Recent studies on efficacy of Moderna have shown efficacy against the B.1.1.7 and inconclusive thus far on B.1.351 ([NEJM](#)). Preliminary studies on Pfizer vaccine have found reduced immune response for the B.1.351 variant by 2/3 but ongoing larger studies continue ([NEJM](#)).
- Phase 2 clinical trials to start with [AstraZenica](#) and [Moderna](#) in the for children

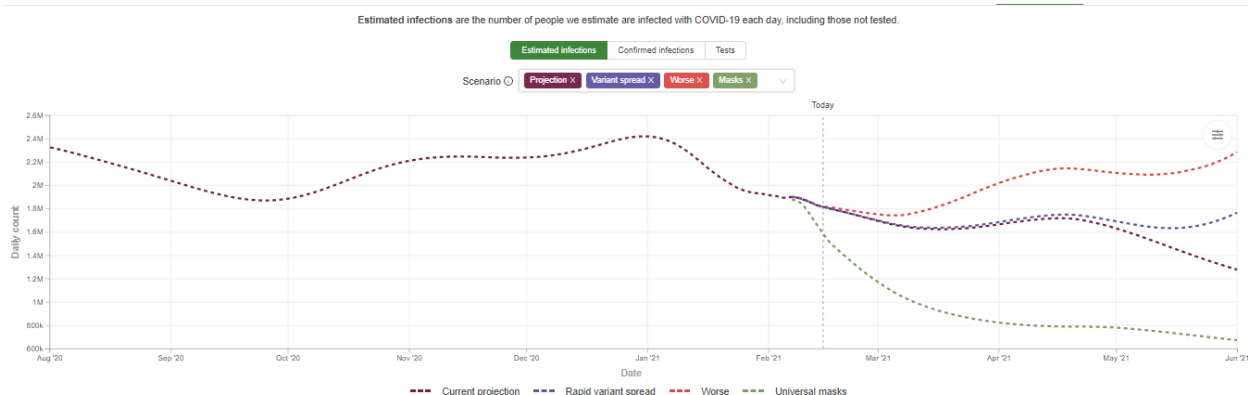
Modeling & Forecasting

- Estimated current effective reproductive rate ([Lancet database](#)) as of 18 February 2020



- Various scenario modeling available through [IHME](#) for considerations including population masking, spread of various variants, adjusting movement patterns based on vaccinations records, and current trends. These trends are consistent region per region globally, but the estimated effect of each scenario varies regionally
 - With potential spread of the South Africa variant globally, and the spread of the UK variant in different locations, we are likely to see rising case numbers again starting around June of 2021
 - Masks at population level continue to show the ability to decrease projected daily deaths and cases globally
 - Resuming “regular” travel to pre-covid levels for those vaccinated is also likely to significantly increase global incidence of cases and deaths





Humanitarian Impacts

- Recent research and modelling to understand the spread and burden of COVID-19 across Sub-Saharan Africa have found that the real toll of COVID-19 may be hidden due to a combination of surveillance inconsistencies as well as variable (and often undiagnosed) risk factors within and across countries. The results were published in [Nature](#), and the tool can be found [here](#).
- [Mapping of COVID in Humanitarian settings available here depicted below showing COVID-19 cases compared to where vaccination campaigns have been postponed](#)
- [Updated repository of Maternal and Child health and Nutrition relating to COVID-19 can be found here.](#)

Guidance Launched or Highlighted This week

Weekly update [from WHO available here \(last updated Feb 9 & 16\)](#)

- US CDC [published updated guidance on opening Schools](#)
- Updated IFRC Guidance available on the [Health Help Desk](#)
- WHO: [Definition and categorization of the timing of mother to child transmission of SARS-CoV-2](#)
- WHO: [Interim recommendations for use of the AZD1222 \(ChAdOx1-S \(recombinant\)\) vaccine against COVID-19 developed by Oxford University and AstraZeneca](#)
- WHO: [AZD1222 vaccine against COVID-19 developed by Oxford University and AstraZeneca: Background paper \(draft\)](#)
- [WHO: COVAX Statement on New Variants of SARS-CoV-2](#)
- [10 steps to community readiness: What countries should do to prepare communities for a COVID-19 vaccine, treatment or new test](#)
- [Data for action: achieving high uptake of COVID-19 vaccines: Interim Guidance](#)
- [Community needs, perceptions and demand: community assessment tool](#)
- [Conducting community engagement for COVID-19 vaccines: interim guidance, 31 January 2021](#)
- [Publications Background document on the mRNA-1273 vaccine \(Moderna\) against COVID-19](#)
- [COVID-19: Occupational health and safety for health workers](#)
- [Interim position paper: Considerations regarding proof of COVID-19 vaccination for international travellers](#)
- [WHO publishes public health research agenda for managing infodemics](#)
- [Course 6: Clinical management of patients with COVID-19 - Rehabilitation of patients with COVID-19](#)
- [WHO Updated guidance in the context of Contact Tracing](#)
 - Community engagement key principles were developed collaboratively through a working group in the Collective Service including IFRC.

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](#)

[Atlantic COVID-19 Tracker \(US focus\)](#)

[BMJ COVID-19 resources](#)

[BMJ living Guidance on clinical treatment for COVID-19 \(from WHO, including visuals\)](#)

[European Centre for Disease Prevention and Control](#)

[End Coronavirus Visualizations](#)

[Evidence Aid COVID-19 Evidence](#)

[Center for Humanitarian Health: COVID-19 Maternal and Child Health, Nutrition Literature Reviews](#)

[The COVID tracking project \(US focus\)](#)

[COVID-19 Vaccine Tracker](#)

[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](#)

[Switzerland Specific data and charts](#)

[Transdisciplinary Insights e-journal: Living Paper: COVID-19](#)

[WHO](#)

[WHO Technical Guidance for COVID-19](#)

[MobLabs](#)

[MobLabs Domestic and international risk of importing a case](#)

[UNICEF COVID-19 vaccine dashboard](#)

[World Meters](#)

