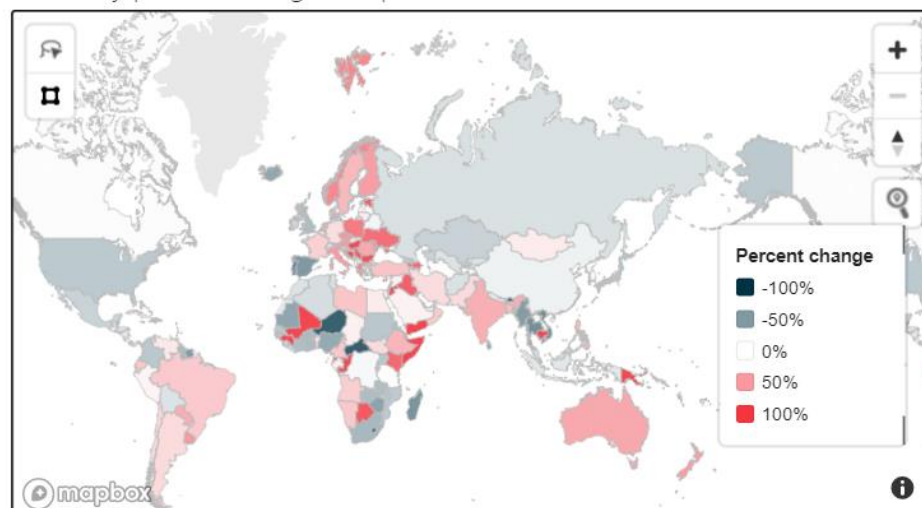


# Weeks 8&9: COVID-19 Update

## February 21 – March 6<sup>th</sup> 2021

Over **116.1 million cases confirmed** and reported, with **over 2.5 million deaths** reported to date ([unofficially](#) over 117.2 million cases and over 2.6 million deaths, over 21.8 million active cases (small increase) and over 92.7 million recovered). **The US, Brazil, Mexico, are reporting the highest daily incidences in death** in the last 24 hours. **The US, Brazil, Poland, Italy, France, Turkey, Russia, Ukraine, are reporting the highest daily increases**, all **reporting above 10,000 newly confirmed cases in the past 24 hours**.<sup>1</sup> Following six weeks of declining cases, global reported COVID-19 cases increased due to increases in the MENA region, Asia, Europe, and Americas. Even as countries begin vaccinations, this increase shows the importance of other public health measures. Deaths continued to decline in most regions except for WHO's South East Asia region and MENA region. **At least 119 countries are reporting the roll-out of vaccination campaigns.**

Bi-weekly percent change in reported new cases



Top 5 countries with biggest bi-weekly percent increase  
Daily new cases per 100k people



### News / Context

- Country with **highest reported new cases per 1 million daily increases** (Mar 6<sup>th</sup>)<sup>2</sup>: Chile: 1,645
- Country with highest reported new deaths per 1 million (Mar 6<sup>th</sup>): Czechia: 21.8
- **Test positivity** is highest in Oman (36%), Tunisia (34%), Paraguay (32%), DRC (30%), Ecuador (29%),
- **Case fatality** rates have varied a lot by country but are settling around a global average of 2.2%. Many countries are reporting less than a 1% case fatality rate, while Yemen has reported the highest case fatality rate at 27.7%
- **Ghana** became first country in Africa to receive the SARS-CoV-2 vaccine through **COVAX**. Both Ghana and Cote d'Ivoire have begun vaccination efforts.
- As demand surges, over half a million people in LMIC are impacted by a shortage of Oxygen ([WHO](#))
- Global air traffic is estimated to have decreased by 3.7 billion passengers (60%) compared to previous years. At this time WHO does not recommend to require proof of immunization given low levels of evidence that vaccination prevents asymptomatic infection (and potential transmission) and limited availability of vaccines should be used for at risk groups ([WHO](#)), **travelers who have been vaccinated should continue to follow the same risk mitigating measures**

<sup>1</sup> Official numbers and WHO visualizations available [here](#)

<sup>2</sup> Our World in Data [Incidence](#)

## New variants of SARS-CoV-2<sup>3</sup>

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.<sup>4</sup>

- **(SARS-CoV-2 VUI 202012/01 or “B.1.1.7”)** first detected in the UK has now been detected in **106** countries. Community transmission has been found in at least 42 of these countries. The variant is associated with higher transmissibility (of potentially 36-75%), and potentially increased severity.

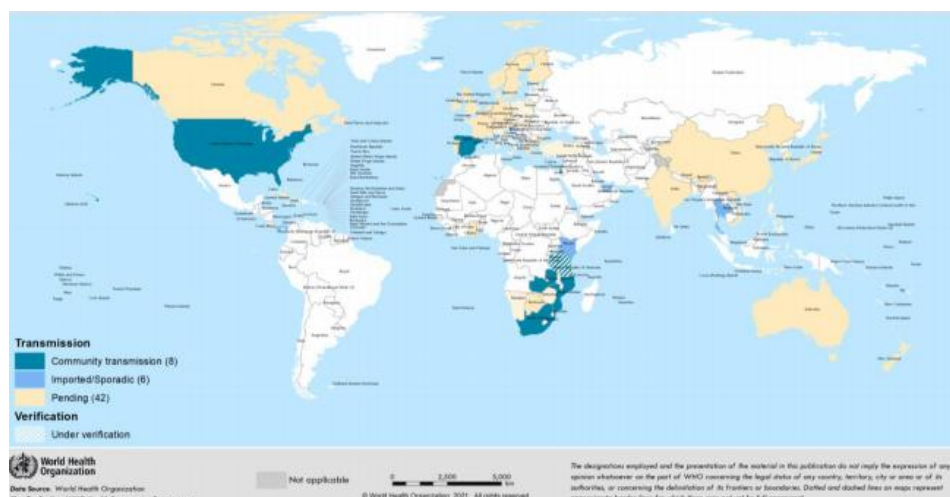
- Increased transmissibility (36-75%) & secondary attack rate by 10-13%.
- Potential increased severity (linked to higher viral load)
- No significant implications for vaccines
- Proportion of new cases with the variant continue to rise in Europe
- Variant of B.1.1.7 called **E484K** detected in South



West England continues to be followed due to its potential impact on immune response, vaccine efficacy and transmission. It is currently reported in 26 cases in the area.

- **(501Y.V2 or “B.1.351”)** detected in **South Africa** has been detected in 56 countries. With community transmission reported in at least 6 countries.

- Increased transmissibility (estimated 150%)
- No evidence on increased severity
- Reduction of neutralizing antibodies from several vaccines (moderate infection) – however vaccines still effective against severe disease



- **B.1.1.28 (P.1) detected in Japan from travellers coming from Brazil** has now been reported 29 countries. Community transmission has been reported in at least 3 countries.

- Potential increased transmission.
- Potential no impact on severity (studies ongoing)
- Studies ongoing regarding vaccine effectiveness



- **B.1.525 (VUI-202102/03) was first detected in Nigeria and the UK** and now in 13 countries and is under investigation.

<sup>3</sup> 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. Definitions of VOC and VOI can be found [here](#).

<sup>4</sup> Additional useful sources: [US CDC](#), [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](#).

## Regional Trends

- **Africa Region**
  - For a sixth week the region has experienced a decrease in new cases (24% decrease in the past week) with a decrease in deaths compared to the previous week (19%). While the region as a whole continued to see a decrease in reported cases, 17 countries reported increasing trends in new cases and 13 countries reported increasing trends in new deaths.
  - Countries reporting the highest new cases include: **South Africa, Ethiopia** (increasing), and **Nigeria**, with the same countries also reporting the highest number of deaths.
  - Travelers from **Tanzania** continue to test positive, suggesting wide-spread community transmission throughout the country, however the country continues not to report COVID-19 cases to WHO.
- **Americas Region**
  - After seeing a decline in both cases and deaths for several weeks, the region saw an increase in new cases compared to the previous week by 6%, while still experiencing declining deaths. New cases were reported as increasing in 22 out of 56 countries in the region.
  - Most cases have been reported from the **US** (decreasing), **Brazil** (increasing), **Argentina** (increasing), with the highest number of new deaths reported in the US (increasing), Brazil (increasing), and Mexico (decreasing).
  - COVID-19 deaths in the US have passed 500,000
- **MENA Region**
  - For two weeks the region has seen an increase in new cases and new deaths (14% and 5% increases compared to the previous week respectively). Overall, 64% of countries across the region reported an increasing trend in new reported COVID-19 cases.
  - The Islamic Republic of **Iran** (increase), **Iraq** (increase), and **Jordan** (increase) reported the highest number of cases over the past week, with Iran, **Egypt** and **Lebanon** reporting the highest number of deaths.
- **European Region:**
  - Following decreasing cases and deaths reported since the second week of January, the region reported an increase in new cases by 9% compared to the previous week, while deaths continued to decline (by 15% compared to the previous week). Increasing trends in new cases were reported in 59% of countries across the region. The highest number of cases were reported in **France, Italy** and **Czechia** (all increasing), 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 69.5 per 1 million people across 30 countries (decreasing for 2 week). ICU new admissions (from 12 countries) were 3 per 100,000 (slight increase compared to previous week). An estimated 10 patients per 100,000 are in the hospital across 22 countries due to COVID-19.
  - **Czechia** continues to struggle with a prolonged high incidence
  - **Switzerland** (14-day incidence [available here](#)) has a 7-day incidence of 163.8 new cases per 100,000 population (decreasing), occupancy rate for ICU for COVID-19 estimated at 18.2% (total ICU occupancy at 73.3%). Positive test rate has remained stable around 4.8% (PCR) and 4.8% (Antigen). Reproductive number estimated at 1.04 (Geneva 0.99).
- **Asia Pacific Region:**
  - Following a decline for several weeks in the region, the WHO South East Asia region saw an increase in new cases for the past two weeks (9% compared to the previous week) and new deaths (6%). Half of all countries in the region reported an increase in new cases. Countries with the highest number of new cases include **India** (increase), **Indonesia** (decrease) and **Sri Lanka** (decrease). New deaths were highest in Indonesia, India (increase) and **Bangladesh** (no change).
  - New cases in the Western Pacific Region decreased for the fifth week (by 2%), with a increase in new deaths (by 35%) compared to the previous week. **Japan, Malaysia** & the **Philippines** (showing an increase) continue to report the highest number of new cases in the region, all of which were also reporting the highest new deaths (although declining) in the region.

## Recent Research/ Evidence

- UK government completed a study looking at **occupational risk for contracting COVID-19**, and found that occupations with the higher **risk included teachers, law enforcement and prison staff, childcare and home care**, and secretarial professions with lower risk associated with farmers, gardeners, scientists, engineer, researchers, legal, social work and news and media. No one occupation was associated with significant greater risk, with occupation-specific risk ranging from 2.1- 4.8% ([UK National Statistics](#)).
- Using the lives saved tool, researchers examined the potential deaths in infants comparing potential infection with SARS-CoV-2 through breastfeeding and close contact, and the contrast recommendation if infected mothers were suggested to stay away from their children/ avoid breast feeding, and found that the **benefits of close contact and breastfeeding from a public health perspective outweighed the cons in low and middle income countries** ([Lancet](#)).
- Continued emphasis of **masks** as an important line of defense from COVID-19 at the community level. The WHO suggests that countries produce requirements for cloth mask makers, but in the absence of guidance the following points are key:
  - The mask should be snug with no gaps
  - The mask should have adequate breathability (without a valve) to allow the user to continually wear it without removing the mask
  - The mask should have adequate filtration – if not labeled the following can be considered: 3-layer fabric mask with inner layer of absorbent cotton, middle filtration layer and outer moisture-resistant layer. More details available [here](#).
- Nationwide study in Israel found increasing evidence that the Pfizer BioTech **vaccine has been largely effective (greater than 90%) in preventing severe as well as mild COVID-19 infections** among those vaccinated ([NEJM](#)).
- Pre-print in the UK has also shown positive results that a single dose of AstraZeneca can protect against both symptomatic and asymptomatic infection. The results of the real-world investigation are still under review.
- [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](#))
- In a recent review in [JAMA](#), overall convalescent plasma did not significantly differ from placebo or standard of care for any of the major outcomes of interest: all-cause mortality, length of hospital stay, mechanical ventilation use, clinical improvement, clinical deterioration, and serious adverse events.
- In a [peer-print](#) article under review, researchers have found that the **average age of a population plays an important role** in transmissibility patterns and median ages of both ages and deaths across counties throughout the world.
- Research published in [JAMA](#) show the potential of **wastewater testing for COVID-19** to be used moving forward to improve targeted vaccination campaigns in communities where communal waste water treatment exists.
- Increasing reports of long-term illnesses related to COVID-19, or "long covid" most worrisome multisystem inflammatory syndrome" in children. In the US these cases are represented by 66% Black and Hispanic/ Latino children ([US CDC](#), [Kaiser Health News](#)).
- Data from the US and UK show an increase rates in preterm delivery and elevated risks when infected, supporting vaccination prioritization for pregnant women along with other efforts to prevent infection ([J OBGYN](#))
- Delayed reaction in some who receive the Moderna vaccine reported (localized skin rash on the arm) days after vaccination which dissipated with treatment ([NEJM](#))

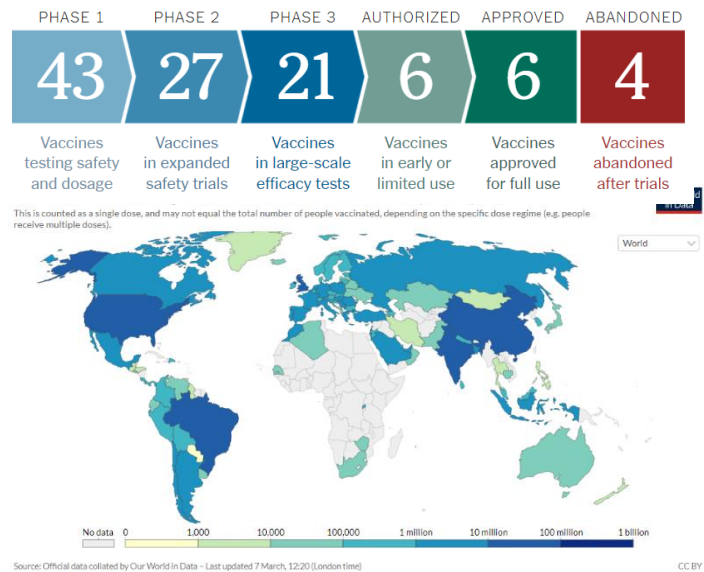
## Vaccination Updates

### New additions and recent updates

- March 5 Canada authorizes **Johnson & Johnson's** vaccine.
- March 4 A vaccine from **BioNet-Asia** and Australia's **Technovalia** enters Phase 1.
- March 4 Cuba's **Soberana 2** vaccine moves to Phase 3.
- March 1 Massachusetts-based **VBI Vaccines** enters Phase 1/2.
- Feb. 27 The Food and Drug Administration authorizes **Johnson & Johnson's** vaccine for emergency use.
- Feb. 26 Canada authorizes the **Oxford-AstraZeneca** vaccine for emergency use.
- Feb. 25 China approves two vaccines by **CanSino** and **Sinopharm** for general use.
- Feb. 25 Bahrain authorizes **Johnson & Johnson's** vaccine for emergency use.
- Feb. 22 A vaccine developed by the **Icahn School of Medicine** enters Phase 1.
- Feb. 22 **Sanofi** moves to Phase 2.

### Resources:

- Coronavirus Vaccine Tracker (above [NYT](#))
- COVID-19 vaccine tracker ([LSHTM](#))
- COVID-19 Vaccine Tracker ([McGill](#))
- COVID-19 vaccine tracker ([RAPS](#))
- Vaccine policy recommendations from [WHO](#) regarding currently available vaccines:



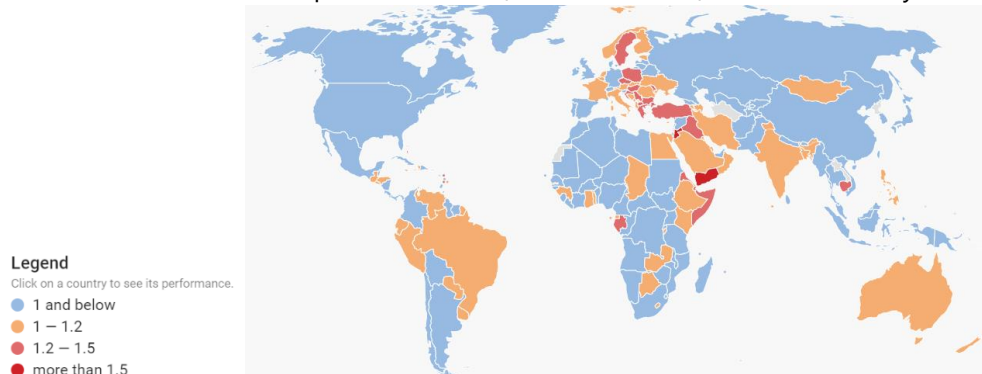
**Table 2. Who can be vaccinated with which vaccine against COVID-19?**

SAGE INTERIM RECOMMENDATION	Pfizer-BioNTech BNT162b2 vaccine	Moderna mRNA-1273 vaccine	Oxford University – Astra Zeneca AZD1222 vaccine
Minimum age requirement	16 years 🚦	18 years 🚦	18 years 🚦
Maximum age requirement	none 🚦	none 🚦	none 🚦
Ok for pregnant women?	Yes, if in high priority group and ok'd by health care provider. 🚦	Yes, if in high priority group and ok'd by health care provider. 🚦	Yes, if in high priority group and ok'd by health care provider. 🚦
Ok for breastfeeding mothers?	Yes, if in high priority group. 🚦	Yes, if in high priority group. 🚦	Yes, if in high priority group. 🚦
Ok for people with compromised immune systems?	yes 🚦	yes 🚦	yes 🚦
Ok for people living with HIV?	yes 🚦	yes 🚦	yes 🚦
Ok for people previously infected with SARS-CoV-2 (confirmed by PCR test)?	Yes, though that person may elect to delay vaccination up to 6 months from the time of infection. 🚦	Yes, though that person may elect to delay vaccination up to 6 months from the time of infection. 🚦	Yes, though that person may elect to delay vaccination up to 6 months from the time of infection. 🚦
Ok for people with a history of severe allergic reaction (anaphylaxis)?	no 🚦	no 🚦	No, if anaphylactic reaction was linked to any component of the vaccine. 🚦

- Upper & Middle income countries have vaccination rates for at least one dose ranging from just above 0% to over 55% of the population vaccinated, while low and middle income countries range from 0% of the population receiving one dose to 9.3% of the population receiving one dose (Morocco). Following Morocco, the next closest vaccination coverage in LMIC is found in India at 0.9% ([Lancet](#)). This comes at a time when we are seeing significant increases in bi-weekly reported COVID-19 cases in several countries classified as low- and middle-income including Somalia, Yemen and South Sudan.
- Johnson and Johnson vaccine received US FDA approval, and has been found to be safe and effective against emerging variants of concern, demonstrating 81.7% efficacy in preventing severe or critical COVID-19 disease and 64% efficacy in preventing moderate disease in South Africa (where B.1.351 is circulating). The Johnson and Johnson vaccine also requires only one dose rather than 2.
- Pfizer and Biotech initiating clinical trials during the booster shot to measure efficacy against emerging SARS-CoV-2 variants ([STAT](#))
- Moderna has also announced clinical trials to test a new version of their vaccine targeted towards the B.1.351 variant of the virus ([US news](#))

## Modeling & Forecasting

- Estimated current effective reproductive rate ([Lancet database](#)) as of 28 February 2021



## Humanitarian Impacts

- 56% of countries reporting had at least one vaccine campaign postponed during the first year of COVID-19. Additionally, health services were estimated to have disrupted roughly 30% of nutrition services worldwide ([GHRP COVID-19 OCHA](#)).
- COVID-19 has been increasing the stigma and reducing capacity for care in refugee settings across Europe ([New Humanitarian](#)).
- [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 \(last updated Feb 23, 25 & March 2\)](#)

- WHO [COVID-19 Strategic Preparedness and Response Plan 2021](#)
- WHO [technical review of AstraZenica ChAdOx1-S/nCoV-19 \[recombinant\], COVID-19 vaccine](#)
- WHO [Working definition of variants of interest and variants of concern](#)
- Comprehensive list of reference on emerging variants of concern available in [WHO SitRep 28 \(page 13\)](#).
- WHO [Maintaining a safe and adequate blood supply and collecting convalescent plasma in the context of the COVID-19 pandemic](#)
- WHO [Coronavirus disease \(COVID-19\): Vaccines safety](#)
- OCHA [Global Humanitarian Response Plan COVID-19 Progress Report: Final Progress Report, 22 February 2021](#)
- Updated IFRC Guidance available on the [Health Help Desk](#)

## 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](#)

[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](#)

