

# COVID-19 Update **Weeks 16-17**

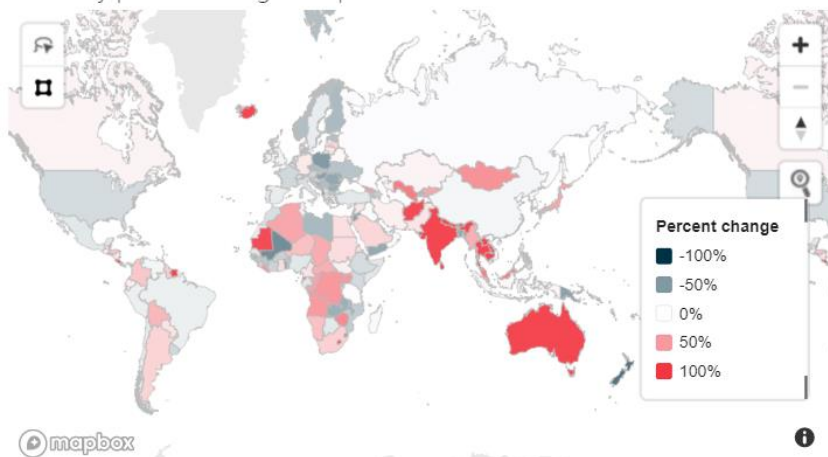
**April 18<sup>th</sup>- May 2<sup>nd</sup> 2021**

**Format update** this week includes shifting of sections (all sections remain): 1. Global update & trends (including important modelling), 2. Regional updates, 3. Vaccination updates & trends, 4. Emerging variants of concern, 5. Research & Evidence, 6. Humanitarian impacts

**Over 151.8 million cases confirmed** and reported, with **over 3.1 million deaths** reported to date (unofficially over 153.3 million cases and over 3.2 million deaths, over 19.4 million active cases estimated and an estimated over 130.6 million recovered). **India, Brazil, the US, are reporting the highest daily incidences in death** in the last 24 hours. **India, Brazil, the US, Turkey, France, Argentina, Colombia, Iran, Germany, Italy are reporting the highest daily increases, all reporting above 10,000 newly confirmed cases in the past 24 hours.**<sup>1</sup>

For the ninth consecutive week new cases increased globally last week to the highest levels to the highest weekly incidence so far. All regions are reporting a decrease except for South East Asia, driven by the current outbreak in India. Notably, India surpassed both the US and Brazil, reporting the highest daily incidence of COVID-19 cases globally, accounting for 38% of cases globally.

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

- Countries with **highest reported new cases per 1 million** daily increases (May 1<sup>st</sup>)<sup>2</sup> Seychelles, Uruguay, Cyprus, Maldives, Bahrain.
- Countries with **highest reported new deaths** per 1 million (May 1<sup>st</sup>): Hungary, North Macedonia, Uruguay, Bosnia and Herzegovina, Paraguay.
- **Case Fatality** is highest in Vanuatu (25%), Yemen (19.4%), Mexico (9.2%), Syria (6.9%), Sudan (6.9%)
- **Countries vaccinating at the fastest rate** (relative to population size) currently: Mongolia, San Marino, Andorra, Iceland, Hungary. **Israel** continues to have the highest proportion of its

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

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

citizens fully vaccinated at 57.3% of the population with **Seychelles** ranking second with 46.7% of the population fully vaccinated.

- Globally, **health systems are stretched**, and showing gaps in capacity to provide care for both COVID-19 cases as well as other illnesses. **90% of countries have reported levels of service disruptions and 40% have reported disruptions to essential primary health services** (WHO).

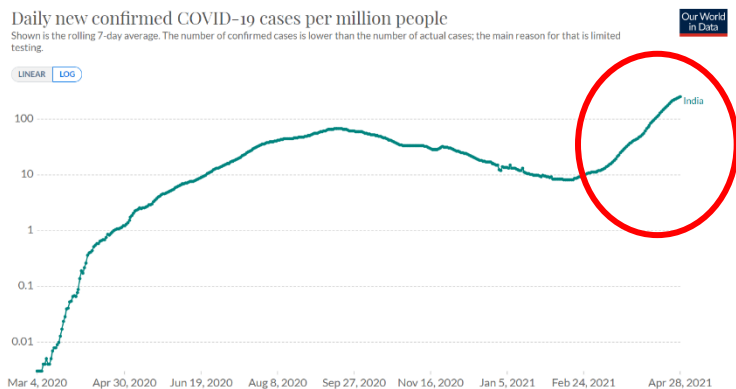
## Regional Trends

- **Africa Region**
  - For the second week, the region saw a decrease in both cases (by 9%) and deaths (by 1%).
  - Countries reporting the highest new cases include **Ethiopia, Kenya, and South Africa**, with the same countries reporting the highest number of deaths.
- **Americas Region**
  - After eight weeks of case increases and five weeks of increasing incidence of deaths, the **region experienced a decrease in both new cases (by 8%) and deaths (by 7%)**.
  - The highest number of new cases were reported from the US, Brazil and Argentina, with the highest number of new deaths reported in Brazil, the US and Colombia (reporting a 26% increase compared to the previous week).
  - **More than 400,000 people have died due to COVID-19 in Brazil, with more than 14 million cases reported**
- **MENA Region**
  - After ten weeks of increasing incidence of new cases, the **region has seen a plateau in the past week of newly reported cases**, while **new deaths in the region continue to rise for the ninth week in a row**, increasing by 17% compared to the previous week.
  - The Islamic Republic of **Iran** and **Iraq** reported the highest number of cases over the past week, with Iran and **Tunisia** reporting the highest number of deaths.
  - **Fire in Baghdad, Iraq hospital** through the ICU unit of a COVID-19 treatment ward has killed at least 82 people, with over 100 injured. The fire is reported to have started from an oxygen tank explosion.
- **European Region:**
  - New cases and deaths have been decreasing for the past two weeks.
  - The highest number of new cases were reported in **Turkey, France and Germany** with the highest number of deaths reported by **Poland, Russia and Ukraine**.
  - **Turkey's current COVID-19 surge is twice as large as its previous peak** in December 2020
  - Mortality rate for [EU/EEA & the UK](#) was estimated at 77.6 per 1 million people across 30 countries (increase). ICU new admissions (from 18 countries) were 3.3 per 100,000 (slight decrease compared to previous week). An **estimated 13.4 patients per 100,000 are in the hospital** across 20 countries **due to COVID-19** (an increase).
  - **Switzerland** (14-day incidence [available here](#)) has a 14-day incidence of 315.6 new cases per 100,000 population (increasing), occupancy rate for ICU for COVID-19

estimated at 23.9% (total ICU occupancy at 70.3%). Positive test rates reported at 9.5% (PCR) and 5.5% (Antigen) have been increasing compared to the previous two weeks. Reproductive number is currently estimated at 1.02 (Geneva 1.05).

- **Asia Pacific Region:**

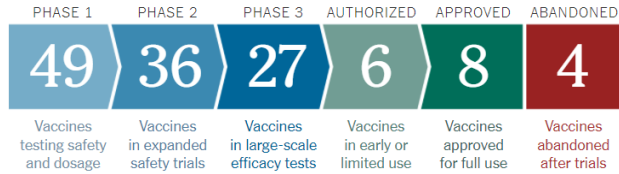
- Since early March, the WHO South East Asia region has experienced a **significant increase in both new cases and deaths**, reporting a 40% in reported new cases and 81% increase in reported new deaths compared to the previous week. This is the highest incidence in cases in the region since the beginning of the pandemic.
- Countries with the highest number of new cases in the South East Asia region include **India** (reporting 52% of new cases in the region), **Indonesia** and **Bangladesh**. The same countries reported the highest number of new deaths (with India reporting an increase in new deaths of 93% compared to previous weeks).
- For the past seven weeks, the WHO Western Pacific region has reported an increase in new reported cases, with a decrease in new deaths for the second week in a row. **Japan, the Philippines** and **Malaysia** continue to report the highest number of new cases and deaths in the region.
- **India continues to pass daily records in new cases and deaths**, reporting over 350,000 new cases in 24 hours most recently. The health system is reporting being under risk of collapse, and basic supplies such as oxygen and PPE is short. Several countries now are trying to support by sending additional oxygen and supplies to support India's response.



*As a reference, the chart to the left is using a logarithmic scale – that means for every block the line moves up it is moving by a multiple of 10. When epidemiologists consider the path of an epidemic, they look at this slope– For India this has not been a gradual, or subtle increase. India is currently experiencing an exponential increase on an exponential scale.*

*On the positive side, there appears to be slowing in exponential growth, however India has a long way to go before transmission rates and the impacts of this surge will decrease.*

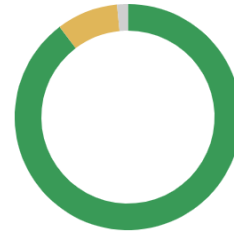
## Vaccination Updates



- May 1 Baltimore-based **Elixirgen Therapeutics** enters Phase 1/2.
- April 30 Turkey's **Scientific and Technological Research Council of Turkey** enters Phase 1.
- April 28 A third vaccine from China's **Sinopharm** enters Phase 1/2.
- April 28 **Kazakhstan** begins public use of its QazVac vaccine.
- April 26 A vaccine from **Baylor College of Medicine** and **Texas Children's Hospital** moves to Phase 3.
- April 23 The European Commission is preparing a legal case against **AstraZeneca** for failing to deliver enough doses.

### Overview

	Global	COVAX
Introduced	174	74
Planning	17	13
Not Introduced	3	3



### Resources:

[IVAC/ JHU View-Hub](#) (map shown above); [COVAX](#) and other vaccine distribution in humanitarian

settings ([HdX](#)); [Coronavirus Vaccine Tracker](#) (tables above [NYT](#)); [COVID-19 vaccine tracker](#) ([LSHTM](#)); [COVID-19 vaccine tracker](#) ([RAPS](#))

- 24 countries have yet to begin vaccination campaigns for COVID-19
- Some countries such as South Sudan and Malawi threatening to destroy doses of AstraZeneca vaccine that appear to be expired, while the WHO is reporting the manufacturer expiration date should not be taken at face value. Additional guidance is urgently needed by WHO and governing bodies to improve
- Global **vaccination rates have increased at a slower pace in the past week by 13%** averaging with 16.6 million doses distributed per day.
- US has resumed the use of Johnson & Johnson vaccine
- Gaps remain in many supply chains, including gaps in availability of container ships making cold-chain requirements challenging still for distribution.

## 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. Specific resources on variants of interest of concern are available in footnotes, and definitions of VOI per WHO are available [here](#) <sup>4</sup> This section has been adjusted this week to give a more broad over-view of emerging evidence on variants of concern (VOC) and variants of interest (VOI). For detailed updates on a specific variant please see suggested resources or contact us with questions.

	<b>Variant of Concern (VOC) or Interest (VOI)</b>	<b>Why is it of concern? What do we need to know?</b>	<b>Emerging Evidence</b>
<b>VOC</b>	<b>202012/01 or "B.1.1.7"</b> First detected in the UK Now reported in 139 countries	<ul style="list-style-type: none"> <li>Increased transmissibility &amp; potential increase in severity, with possible implications for testing</li> <li>None/ minimal impact on vaccines</li> </ul>	<ul style="list-style-type: none"> <li>Mixed <a href="#">Evidence</a> for increased severity and mortality (<a href="#">Lancet Infectious Disease</a>)</li> <li>Real world evidence shows strong support for efficacy (<a href="#">pre-print</a>; <a href="#">PH Ontario</a>; <a href="#">Lancet</a>; <a href="#">pre-print</a>)</li> </ul>
	<b>501Y.V2 or "B.1.351"</b> First detected in South Africa Now reported in 87 countries	<ul style="list-style-type: none"> <li>Increased transmissibility &amp; potentially mortality among hospitalized</li> <li>Potential risk for evading vaccine response and potential reinfection</li> </ul>	<ul style="list-style-type: none"> <li>Pre-print evidence for reduced efficacy of Jansen and Novavax (<a href="#">pre-print</a>)</li> </ul>
	<b>B.1.1.28 (P.1)</b> first detected in Japan from travellers coming from Brazil Now reported in 54 countries	<ul style="list-style-type: none"> <li>Evidence for increased transmissibility</li> <li>Reinfection has been reported, with potential implications for vaccine efficacy</li> </ul>	<ul style="list-style-type: none"> <li>None to minimal loss of effectiveness of Sinovac (<a href="#">pre-print</a>)</li> </ul>
<b>VOI</b>	<b>B.1.617</b> (.1; .2; .3) Detected first in India Now reported in 17 countries	<ul style="list-style-type: none"> <li>Similar mutations as other variants associated with increased transmission.</li> <li>Increased prevalence within the country testing samples</li> </ul>	Research on the implications of this variant still ongoing ( <a href="#">pre-print</a> )
	20C/S.452R B.1.427/ B.1.429 First detected in the US	<ul style="list-style-type: none"> <li>Evidence for increased transmissibility</li> <li>Potential reduced neutralization from antibody treatment and vaccines – more research underway</li> </ul>	<a href="#">US CDC definitions for VOC in the United States</a>
	20B/S.484K B.1.1.28.2, alias P.2		Detected in Brazil in April 2020
	B.1.1.28.3, alias P.3		Detected in the Philippines and Japan in February 2021 <ul style="list-style-type: none"> <li><a href="#">Research continues</a> into the P.3 variant in Philippines (estimated</li> </ul>

<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](#).

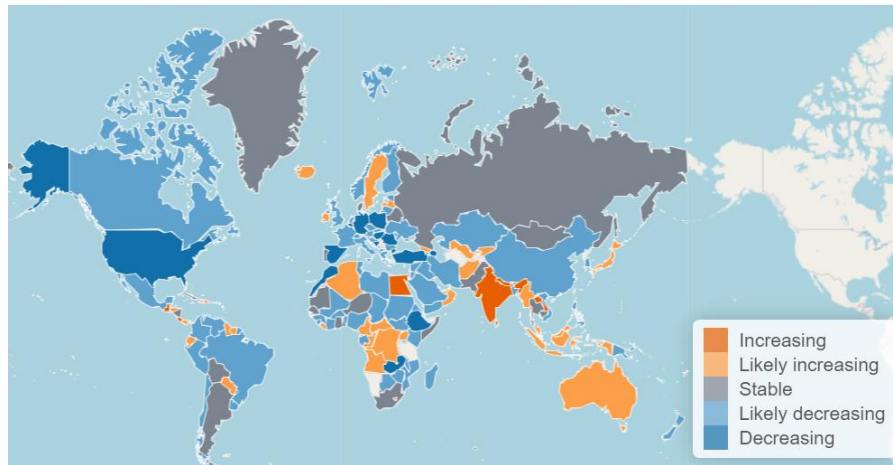
			third generation of the P.1 variant in Brazil)
	20C, B.1.526 with E484K or S477N Detected in the US	<ul style="list-style-type: none"> <li>Unknown: Two key mutations in the spike protein have been identified and are being followed closely</li> </ul>	
	20C, B.1.616		Detected in France in January 2021 ( <a href="#">pre-print</a> )
	A.23.1 Detected in Uganda	<ul style="list-style-type: none"> <li>Potential future implications for vaccine efficacy</li> </ul>	
	20A/S.484K B.1.525	<ul style="list-style-type: none"> <li></li> </ul>	Noted in the UK and Nigeria in September 2020

## Recent Research/ Evidence

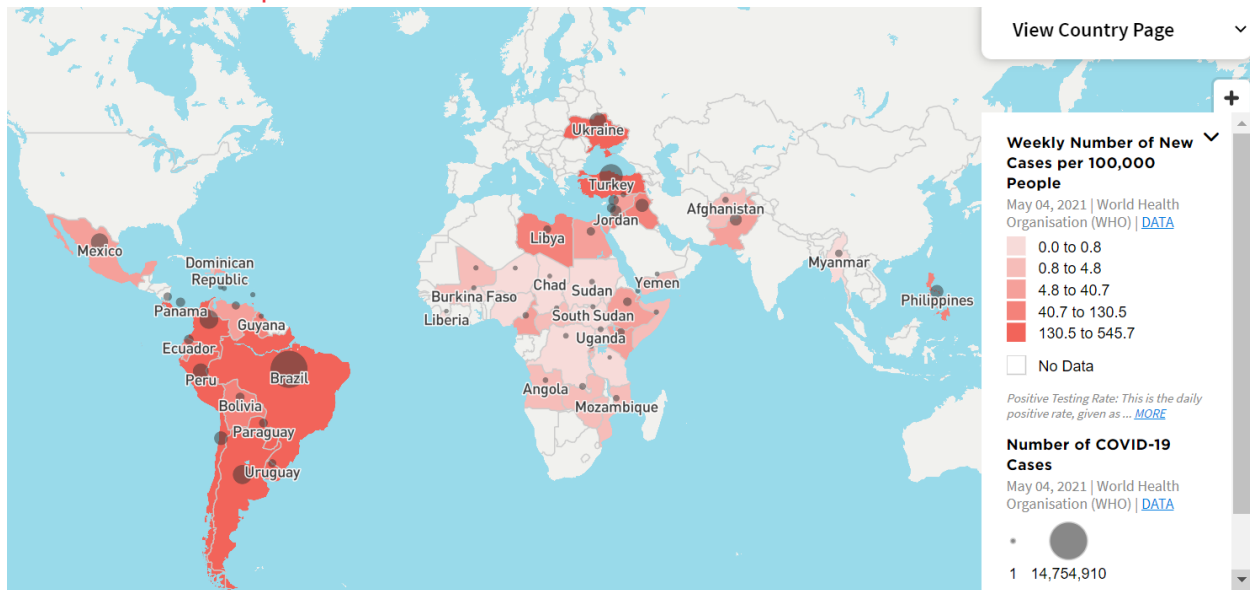
- Recent study on the long-term health impacts of COVID-19 on patients have found that **beyond the first 30 days of illness, people with COVID-19 exhibit higher risk of death and health resource utilization**, showing that beyond acute infection there is a high burden for health loss ([Nature](#)).
- [Review by WHO](#) into the **association of asthma and COVID-19** found:
  - There was not evidence to support whether a history of asthma has an association with increased risk of infection
  - Limited evidence available, but **none suggests with any statistical significance a link of asthma with disease severity**
  - Studies that looked at asthma plus COPD did find a significant increase in risk for disease severity
- A prospective study from Sweden has found that there is an **increase in neonatal respiratory disorders and neonatal morbidities**, but not mortality among those whose mothers tested positive for COVID-19 ([JAMA](#)).
- Decreased hospitalization found among children (ages 0-18) in a study conducted in the US. The likely reasons listed were longer wait time by parents before bringing children to the hospital given risk of COVID-19 infection among others ([JAMA](#)).
- Small studies have found that dogs, if appropriately trained can be very effective at detecting COVID-19 ([Diagnosis](#))
- Recent studies have found PTSD, and emotional exhaustion and burnout were high among emergency department personal, with increased SARS-CoV-2 testing showing signs of reduced risk of PTSD ([Annals of Emergency Medicine](#))
- High prevalence of SARS-CoV-2 antibodies has been noted in bus depot workers (11-47% positive), and markets (27-73% positivity) in Lima, Peru, emphasizing the need to prioritize access to vaccines among these groups of frontline workers ([Clinical Infectious Disease](#))
- In a [pre-print study](#) in Toronto researchers found **cases were 3.3 time greater and deaths 2.5 times greater due to COVID-19 in neighborhoods that had the highest percentage of essential workers compared to neighborhoods with the least percentage of essential workers**. This emphasizes the importance of community-led solutions that prioritizes the neighborhoods and communities of essential workers when it comes to vaccination campaigns.

## Modeling & Forecasting

- Reproductive number estimates from the [LSHTM Mathematical modeling department](#) (showing trends of increasing, no change or decreasing):



## Humanitarian Impacts



- [Mapping of COVID in Humanitarian settings available here depicted below showing COVID-19 cases compared to where vaccination campaigns have been postponed](#)
  - More than a third of these countries reported more COVID-19 cases in 2021 compared to the entire 2020 year ([OCHA Data explorer](#)).
  - Cameroon experienced a reported 52% rise in cases in the month of April compared to the previous month, and Yemen reported a 44% increase incidence in cases
- **North-Eastern Syria** is reporting increasing incidence in COVID-19 along with decreased capacity of hospitals to treat patients -even with under-reporting ([MSF](#))
- **In South Sudan** [IOM](#) estimates 800,000 people have reduced access to primary healthcare due to COVID-19 going into the rainy season (when incidence of disease typically rises)

- **Of concern looking ahead:**
  - Regions with large displaced populations or populations on the move (including locations near Turkey and Colombia) are seeing increasing trends in COVID-19, with major implications for vulnerable populations & strained health systems ([Devex](#))
- [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 20<sup>th</sup> & April 27<sup>th</sup>)

- WHO: [Statement on the seventh meeting of the International Health Regulations \(2005\) Emergency Committee regarding the coronavirus disease \(COVID-19\) pandemic](#)
- [Global Advisory Committee on Vaccine Safety \(GACVS\) review of latest evidence of rare adverse blood coagulation events with AstraZeneca COVID-19 Vaccine \(Vaxzevria and Covishield\)](#)
- WHO: [Pfizer BioNTech COVID-19 vaccine: What you need to know](#)
- WHO [Draft landscape and tracker of COVID-19 candidate vaccines](#)
- WHO: [Disability considerations for COVID-19 vaccination: WHO and UNICEF policy brief, 19 April 2021](#)
- [WHO COVID-19 Clinical care bundle](#)
- WHO: [COVID-19 and mandatory vaccination: Ethical considerations and caveats](#)
- WHO: [Second round of the national pulse survey on continuity of essential health services during the COVID-19 pandemic](#)
- WHO: [WHO COVID-19 essential supplies forecasting tool \(COVID-ESFT\)](#)
- **Upcoming Webinar:** [Infection prevention and control and public health and social measures in light of the variants of concern, 21 April 2021](#) (WHO)
- 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 \(Phylogeny of SARS-CoV-2\)](#)

[OCHA HdX](#)

[Our world in Data](#)

[PLOS COVID-19](#)

[ProMed](#)

[Switzerland Specific data and charts](#)

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

[WHO](#)

[WHO Detailed COVID-19 dashbaords](#)

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

[MobLabs](#)

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

[UNICEF COVID-19 vaccine dashboard](#)

[World Meters](#)

