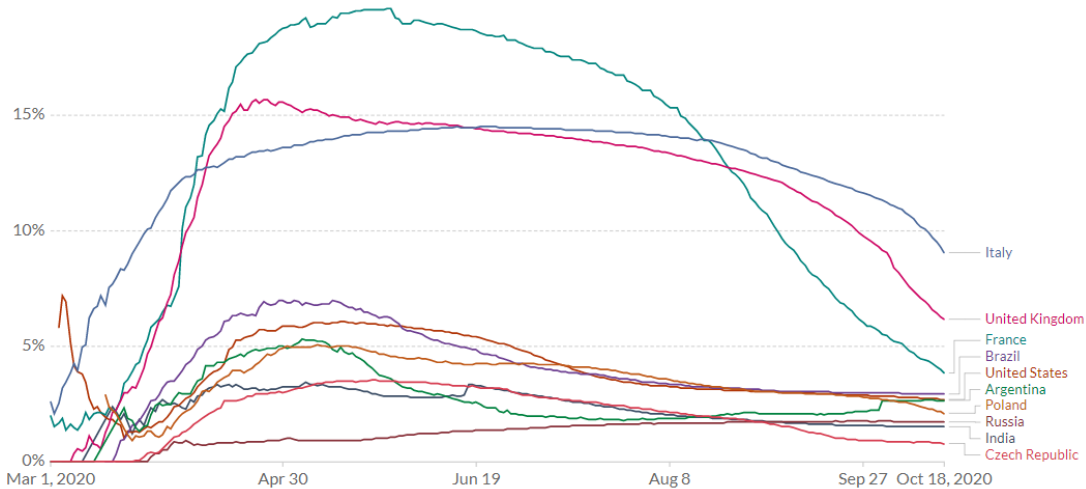


## Weekly COVID-19 Update: 11-18 October 2020

**Over 39.5 million cases confirmed** and reported, with **over 1.1 million deaths** reported to date ([unofficially](#) over 40.1 million cases and over 1.1 million deaths, over 9 million active cases (increase from previous week) and over 29.9 million recovered). **India, the US, Brazil and Mexico are reporting the highest daily incidences in death** in the last 24 hours. **The United States, India, France, Brazil, Argentina, the UK, Russia, and Italy reporting the highest daily increases**, all **reporting above 10,000 newly confirmed cases in the past 24 hours**.<sup>1</sup> In the last week there have been over 2.2 million new cases and 39,000 deaths of COVID-19 have been reported across the world – **this is the highest number of new cases reported in a single week since the beginning of the pandemic**.<sup>2</sup>

### Case fatality rate of the ongoing COVID-19 pandemic

The Case Fatality Rate (CFR) is the ratio between confirmed deaths and confirmed cases. During an outbreak of a pandemic the CFR is a poor measure of the mortality risk of the disease. We explain this in detail at [OurWorldInData.org/Coronavirus](https://ourworldindata.org/coronavirus)



Source: European CDC - Situation Update Worldwide - Last updated 18 October, 10:05 (London time)

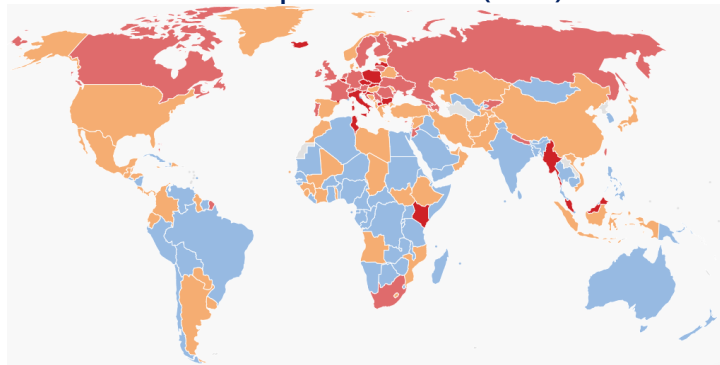
CC BY

**Above: Case fatality rate for countries currently reporting the highest, or highest incidence of cases or deaths**  
**Below: Effective Reproduction number (Lancet)**

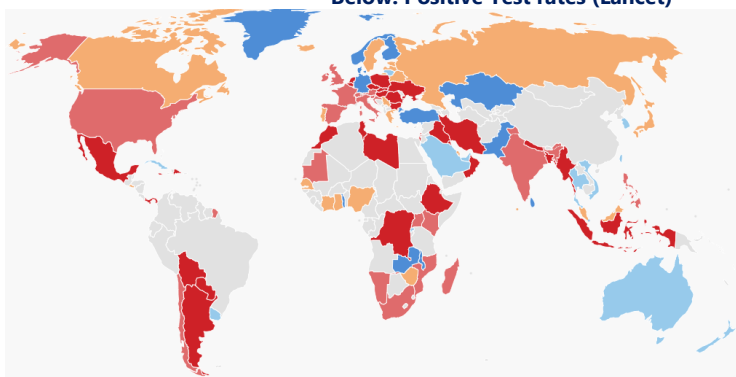
#### Legend

Click on a country to see its performance.

- 1 and below
- 1 – 1.2
- 1.2 – 1.5
- more than 1.5



#### Below: Positive Test rates (Lancet)



#### Legend

Click on a country to see its performance.

- 0.01 and below
- 0.01 – 0.02
- 0.02 – 0.05
- 0.05 – 0.1
- more than 0.1

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

<sup>2</sup> [WHO Epi Sit Rep 12 Oct](#)

## News / Political Context

- While case numbers continue to increase, locations seeing a marked increase in cases are not seeing the same rates of hospitalization and need for intensive care as the last wave.<sup>3</sup>
- Countries with **highest reported new cases per 1 million daily increases**<sup>4</sup>:
  1. Czechia: 814
  2. Slovenia: 781
  3. Armenia: 520
  4. Belgium: 512
  5. France: 497
- Countries with **highest reported new deaths per 1 million**
  1. Aruba: 18.7
  2. Guam: 17.8
  3. Tunisia: 9.6
  4. Argentina: 8.5
  5. Czechia: 6.4
- **Daily confirmed deaths doubling most rapidly in Jordan, Georgia, Myanmar, Tunisia, French Polynesia, Czechia**, (trends remained stable for 2 weeks).<sup>5</sup>
- Cases doubling rapidly in **Vatican, Slovakia, Jordan, Czechia, Slovenia, Georgia, Myanmar**.<sup>6</sup>
- Estimate that around **14% of COVID-19 cases reported to WHO are identified as occurring in health workers**<sup>7</sup> this is a high proportion given that HCWs only account for 3-8% of the population. There has been a declines in HCW infections since the beginning of the epidemic

Figure 9. Share of health workers amongst total reported infections in selected countries, by month of reporting, March-August 2020

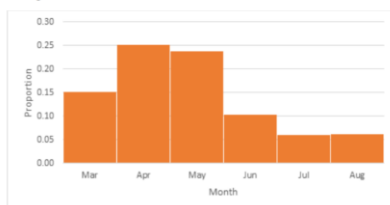
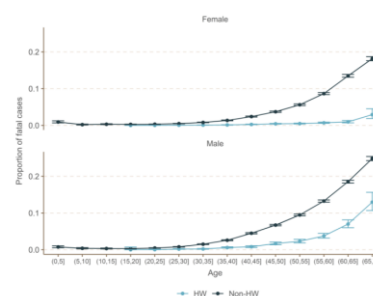


Figure 12. Proportion of fatal COVID-19 cases by age group and sex, amongst health workers and non-health workers (n=1 159 169)



- **Asia Pacific Region:**
  - The region represents one of the highest incidence of COVID-19, however there has been continued decline over the past week
  - Myanmar and Nepal reported an increase in the number of new deaths in the past week
  - Highest number of new deaths per million population are India and Myanmar, with 5 and 4 new deaths per million population respectively
  - Bangladesh and Indonesia currently reporting community transmission
  - Rapid increase in cases in Sri Lanka and Nepal
- **European Region:**
  - **Europe's epidemic is now twice the size that it was in April at its previous peak.**
  - The region registered the highest weekly incidence since the beginning of the pandemic, weekly incidence in cases and deaths increased by 34% and 16% respectively in comparison to the previous week
  - Spain, with over 50 000 cases reported in the past week, is **showing a noticeable decline** in the weekly incidence of cases and deaths of 24% and 19% respectively.
  - An estimated **19% of EEA/EU & UK COVID-19 patients required hospitalization** with an estimated 8% of those requiring ICU care (with a country range of 0-69%).
  - Poland increased this week by 93% and 104% respectively compared to the previous week, with almost 23 500 new cases and 370 deaths reported
  - **The United Kingdom, France, the Russian Federation and Spain** account for over half of all new cases reported in the region
  - **Switzerland:** Saw most new reported cases in a day since the beginning of the pandemic. 7-day incidence rates reported over 200 per 100,000

<sup>3</sup> [NYT](#)

<sup>4</sup> Our World in Data [Incidence](#)

<sup>5</sup> <https://ourworldindata.org/coronavirus>

<sup>6</sup> Reference to ECDC data using <https://ourworldindata.org/coronavirus>

<sup>7</sup> [WHO SitRep 12 Oct](#)

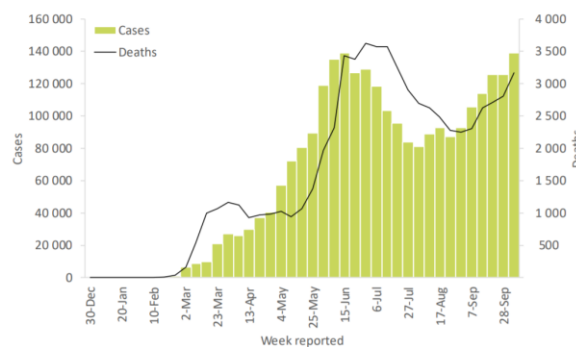
- **Americas Region**

- There was a 6% increase in the number of new cases in the past week which is a bigger increase than the increase reported in the previous week
- The **United States of America, Brazil, Argentina, Mexico, and Colombia** registered the highest number of newly- reported cases
  - Highest daily increase reported in the US since the pandemic started last week, with 20% of states reporting an increase (including in the South where hurricanes have been prevalent)
- The number of newly- reported cases has been increasing in **Canada** since mid September, with an increase of 26.7% cases and 14.3% deaths in the past week. Outbreaks in long-term care facilities account for most outbreaks.
- Mexico's daily incidence is down 38% from its peak, and Panama's is down 40%.

- **MENA Region**

- Weekly number of new cases and deaths have increased by 10% and 13% respectively in comparison to the previous week.
- **Iran** accounts for 20% of cases in the region.
- **Oman** has seen cases increase by 60% compared to the previous week

Figure 5: Number of COVID-19 cases and deaths reported weekly by the WHO Eastern Mediterranean Region, as of 11 October 2020\*\*



- **Africa Region**

- Number of new cases has risen in the first time in several weeks, mostly driven by increased reporting of cases throughout the region (11% more newly reported cases compared to the previous week)
- **South Africa and Ethiopia** continue to report the highest numbers of new cases in Africa, followed by **Uganda**, and **Kenya**.

## Recent Research/ Evidence

- Individuals with overweight and obesity were found to be at elevated risk of death and intubation<sup>8</sup>
- Study by US defence on air circulation on 767 and 777 passenger planes found a **low exposure risk** of SARS-CoV-2 infection (from one individual) **during flight** and that the average time it took to circulate air within the aircraft was 6 minutes (compared to 90 mins in a household).<sup>9</sup>
- Retrospective study from over 473,000 tested for COVID-19 in Denmark found that **blood type O may offer some protection against SARS-CoV-2** infection (reduced infection).<sup>10</sup> A

<sup>8</sup> Int J Obes 2020 Sep;44(9):1832-1837. doi: 10.1038/s41366-020-0648-x. Epub 2020 Jul 25

<sup>9</sup> USTRANSCOM releases results from study testing risk of COVID exposure on contracted aircraft

<sup>10</sup> Blood Advances 14 Oct 2020. <https://doi.org/10.1182/bloodadvances.2020002657>

smaller study in Canada found type **A and AB were more likely to require mechanical ventilation and had longer admissions times** than type B or O.<sup>11</sup> Other studies have been mixed.<sup>12</sup>

- Key informant interviews following increased incidence of COVID-19 in 18-23 age group found that risk factors reported exposure to misinformation, conflicting messages, or opposing views about the need for and effectiveness of masks likely led to increased exposure among young adults.<sup>13</sup>
- Recent study looking at seroprevalence and among 60,000 in **Wuhan**, China found that **seroprevalence among the population was low**, around 2.39%.<sup>14</sup>
- Growing evidence of the long-term health effects of COVID-19. [National Institute of Health Research](#) UK published a review of emerging evidence towards “**long covid**” and specifically at the **4 syndromes** affiliated with it:
  1. permanent damage to the lungs and heart,
  2. post-intensive care syndrome,
  3. post-viral fatigue syndrome,
  4. continuing COVID-19 symptoms
- [Review of evidence](#) in the Lancet suggests the the degree of **cytokinaemia is markedly less** in COVID-19 than that seen in other disorders associated with elevated cytokines.
- **Genomic evidence for reinfection** of SARS-CoV-2 reported in [Lancet Infectious Disease](#) (25 year old from Nevada). The case was previously documented in a pre-print editorial. Implications for previously infected individuals to continue to follow precautions and potential implications for vaccine development.
- Compared with other countries, the **US experienced high COVID-19-associated mortality and excess all-cause mortality into September 2020**. After the 1st peak in early spring, US death rates from COVID-19 and from all causes remained higher than even countries with high COVID-19 mortality. This may have been a result of several factors, including weak public health infrastructure and a decentralized, inconsistent response to the pandemic<sup>15</sup>
- Pre-print article in the US demonstrates the how children and adolescents can spread COVID-19 to other household members, including those in higher risk groups and other children.<sup>16</sup>

## Clinical Trails

- [Institute of Genomics and Integrative Biology](#) in New Delhi, India, developed a [CRISPR-based testing assay](#) called **FELUDA** that exhibits [comparable sensitivity and specificity](#) to the gold standard PCR-based diagnostic tests—96% and 98%. The test takes less than 1 hour.
  - The test is similar to the “SHERLOCK test” developed by MIT which received emergency authorization by US FDA in May.
- **BioNTech** and **Pfizer**: The safety and immunogenicity data from this U.S. phase 1 trial of two vaccine candidates in younger and older adults, suggest that **BNT162b2** should advance to phase 2-3 safety and efficacy evaluation trials.<sup>17</sup>
- Safety and immunogenicity of an inactivated **SARS-CoV-2 vaccine, BBIBP-CorV** in a randomised, double-blind, placebo-controlled, phase 1/2 trial in **China** found no severe

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<sup>11</sup> Blood advances 14 Oct <https://doi.org/10.1182/bloodadvances.2020002623>

<sup>12</sup> [Mass General 16 Jul 2020](#); [NIH preprint 11 Apr 2020](#)

<sup>13</sup> [CDC MMWR 16 Oct 2020](#)

<sup>14</sup> [CMI 6 Oct 2020](#)

<sup>15</sup> [JAMA 12 Oct 2020](#)

<sup>16</sup> Pre-[print](#) 13 Oct 2020

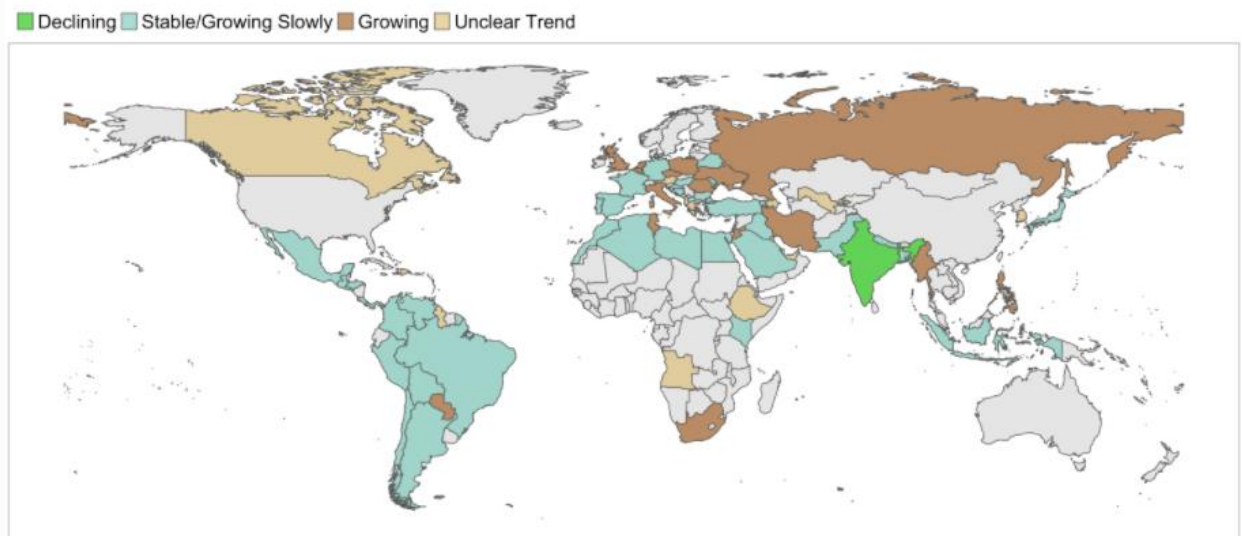
<sup>17</sup> NEJM 14 Oct 2020, DOI: 10.1056/NEJMoa2027906

adverse side effects (mild fever reported as the only side effect). A second dose – either after 21 or 28 days was found to increase efficacy in the small study.<sup>18</sup>

- Emphasis that safety and efficacy of vaccinations should include a median 2-3 months post full vaccination regimen following phase 3 trials to adequately capture any negative effects following phase 3 trials (and ensure confidence in vaccines for large-scale distribution).<sup>19</sup>

## Modeling & Forecasting

- Sampling and Modeling from Imperial College of London on the outbreak in the UK, shows indication that the epidemic is slowing, but still showing an estimate of  $R=1.1$  compared to the previous estimate of 1.7.<sup>20</sup>
- **Projections for the reproductive number** ([ICL weekly projections](#))<sup>21</sup>



### As of October 12<sup>th</sup> estimates for the effective reproductive number:

- **Europe:** Average of about 1, Highest: **Poland:** estimated around 1.5-2
- **Asia:** Average of about 1, Highest: **Philippines, Nepal, Myanmar** 1.5-2
- **Africa:** Average about 1, Highest: **South Africa, Angola** 1-1.5
- MENA (not included): Highest: **Jordan** (1.5-2)
- **North & Central America:** Average of about 1, Highest: **Canada:** 1-1.5
- **South America:** Average of about 1, Highest: **Guiana, Paraguay:** 1-1.5
- **IHME projections** for daily infections using current trends, easing of mandates and increased mask use

## Humanitarian Impacts

- Potential better outcomes than originally predicted following initial COVID-19 estimates of the effects of the pandemic and government-led NPIs may have on food security throughout

<sup>18</sup> [The Lancet 15 Oct 2020](#)

<sup>19</sup> [NEJM Perspective 14 Oct 2020](#)

<sup>20</sup> ICL: [High prevalence of SARS-CoV-2 swab positivity in England during September 2020: interim report of round 5 of REACT-1 study](#). September 2020.

<sup>21</sup> **Map:** Estimates of transmissibility in countries with active transmission for the week. A country is defined to be in the declining phase if the 97.5<sup>th</sup> quantile of the effective reproduction number is below 1. It is defined to be in the growing phase if the 2.5<sup>th</sup> quantile of the effective reproduction number is above 1 and the width of the 95% CrI is less than 1. If the 2.5<sup>th</sup> quantile of the effective reproduction number is below 1 and the width of the 95% CrI is less than 1, we define the phase as stable/growing slowly. If the width of the 95% CrI is more than 1, the phase is defined as uncertain. Note that estimates of transmissibility rely on a constant rate of reporting of deaths. This assumption does not always hold. [ICL short term forecast](#)

the Africa region. High food insecurity still highlighted as an upcoming major challenge – however ongoing complex humanitarian settings remain the leading drivers in most locations<sup>22</sup>

- [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 Epi 12 Oct, Operational 19 Oct)

- Guidance on [risk assessments for Health Care workers](#) (WHO)
- Multiple trainings available on <https://openwho.org/>
- The [Lancet COVID-19 Data Portal](#) provides useful maps
- [Public consultation for review of draft Considerations for the Assessment of COVID-19 Vaccines for Listing by WHO](#)

### 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](#)

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

[End Coronavirus Visualizations](#)

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

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

[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](#)

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<sup>22</sup> [The New Humanitarian. Are warnings of a COVID-19 famine in Africa overblown? 14 Oct 2020](#)

[Next Strain \(Phylogeny of SARS-CoV-2\)](#)

[Our world in Data](#)

[PLOS COVID-19](#)

[ProMed](#)

[WHO](#)

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

[MobLabs](#)

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

[World Meters](#)