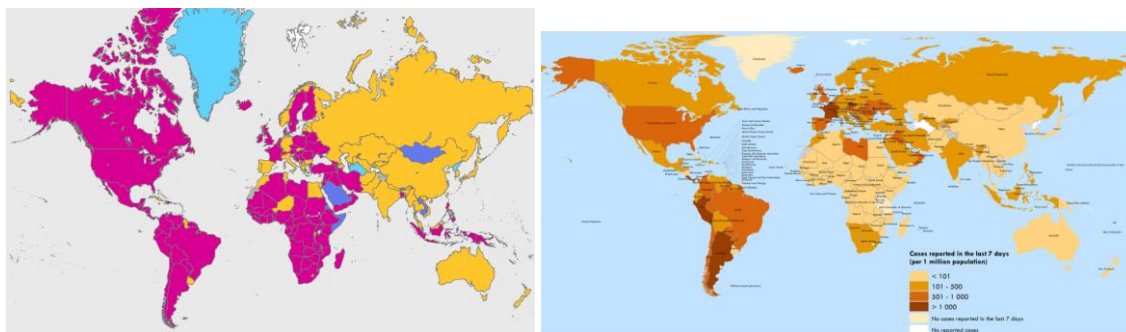


COVID-19 Update 27 September – 3 October 2020

Over 34.8 million cases confirmed and reported, with **over 1 million deaths** reported to date (unofficially over 35.3 million cases and over 1 million deaths, over 8 million active cases (increase from previous week) and over 26.3 million recovered). **India, the US, Brazil are reporting the highest daily incidences in death**, with India reporting over 1,000 in the last 24 hours. **India, the United States, Brazil, Argentina, France and the UK reporting the highest daily increases**, all reporting above 10,000 newly confirmed cases in the past 24 hours.¹ **50% of deaths reported from just 4 countries: India, the US, Mexico and Brazil.**

Weekly cases and transmission classification (WHO)

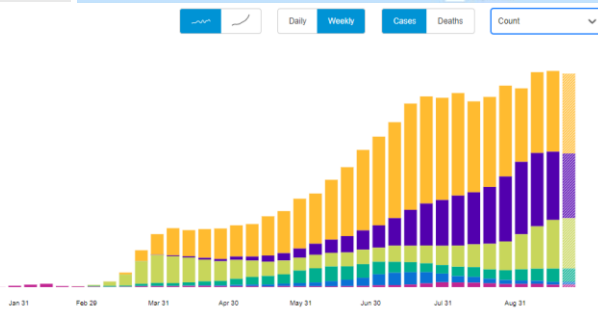
Below Left Map by Transmission Classification (Pink=Community Transmission, Yellow= Clusters, Purple= Sporadic Cases, Blue= No cases); Below Right: WHO: Cases per 1 million population reported in the last 7 days



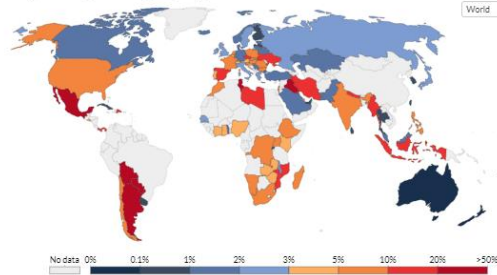
Situation by WHO Region

Americas	16,990,036 confirmed
South-East Asia	7,335,273 confirmed
Europe	6,187,384 confirmed
Eastern Mediterranean	2,466,722 confirmed
Africa	1,198,550 confirmed
Western Pacific	625,642 confirmed

Source: World Health Organization
Data may be incomplete for the current day or week.



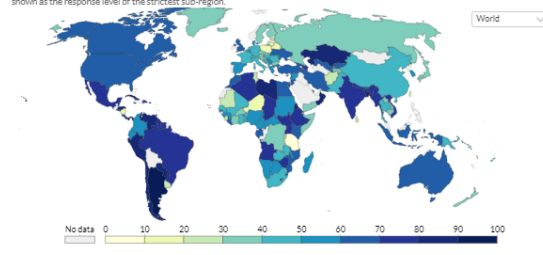
The share of COVID-19 tests that are positive, Sep 30, 2020
The daily positive rate, given as a rolling 7-day average.



Source: Official data collated by Our World in Data
Note: Comparisons of testing data across countries are affected by differences in the way the data are reported. Daily data is interpolated for countries not reporting testing data on a daily basis. Details can be found in our Testing Outset page.

COVID-19: Government Response Stringency Index, Oct 1, 2020

This is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the subnational level, the index is shown as the response level of the strictest sub-region.



Source: Hale, Webster, Petherick, Phillips, and Kiira (2020). Oxford COVID-19 Government Response Tracker – Last updated 1 October, 08:20 (London time)
Note: This index simply records the number and strictness of government policies, and should not be interpreted as 'scoring' the appropriateness or effectiveness of a country's response.
CC BY

Above Right: Test positivity – anywhere over 3% is generally deemed “high” for proportion of tests that come back positive.

Above Left: COVID-19 Government Response Stringency Index: Darker= more strict measures put in place as part of the country’s response (this is not qualifying them in any way – only quantifying the measures).²

News / Political Context

- Countries with **highest reported new cases per 1 million daily increases**³:
1. Guam (US territory): 882 per 1 million population

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

² [Our World in Data](#)

³ Our World in Data [Incidence](#)

2. **Israel: 688**
3. Bahamas: 481
4. Montenegro: 213
5. *Gibraltar (British): 256*
6. Aruba: 337
7. Bahrain: 298
8. Costa Rica: 266
9. France: 260
10. Argentina*: 246
11. Czechia*: 239
12. Netherlands: 231

**Only Argentina, Czechia and France have the recommended 5 hospital beds per 1,000 population*

- **Daily confirmed deaths doubling most rapidly in Jordan, Myanmar, Georgia, French Polynesia, Malta, Jamaica, Tunisia,**⁴[Total Deaths per 1 million population highest in San Marino and Peru \(reporting more than 950 per million population and rising\).](#)
- Cases doubling rapidly in **Jordan** (8 days), **Myanmar** (10 days), **Bonaire Sint Eustatius and Saba** (12 days), **Georgia** (12 days), **Tunisia** (14 days).⁵
- Only a 10% of what is needed to for vaccine scale-up through COVAX facility has been received to date. **WHO plans to have 2 billion doses of the vaccine available by the end of 2021.**⁶
- Use of dogs in Helsinki and Dubai airports to sniff out COVID-19, and have been found to be over 90% accurate.⁷
- WHO fosters global partnership to make 120 million **antigen-based rapid-diagnostic tests** available to low and middle-income countries. Agreement with Bill and Melinda Gates Foundation, and developed by Abbot and SD Biosensor.⁸ While these tests are less sensitive than NAAT, they offer rapid, inexpensive and early detection options for the majority of cases – especially where community transmission is widespread.
- **UNICEF** has warned that approximately 463 million children cannot access remote learning due to a range of factors, lack of access to computers, reliable internet access, or other technology. And **approximately 24 million children are projected to drop out of school entirely as a result of the pandemic.**
- **Asia Pacific Region:**
 - Compared to the previous week, Asia Pacific region reported an **overall decrease** in new cases (7% decrease in Southeast Asia) and deaths (3% decrease in Southeast Asia)
 - **Southeast Asia represents the second most affected region:** With the highest number of new cases continue to be **India, Indonesia and Bangladesh**, while **Myanmar** reported the highest increase in cases (92% increase) and deaths (80% increase) compared to the previous week.⁹

⁴ <https://ourworldindata.org/coronavirus>

⁵ Reference to ECDC data using <https://ourworldindata.org/coronavirus>

⁶ [Speech on COVAX initiative](#)

⁷ [Washington Post](#), [Reuters](#)

⁸ [WHO Correspondence](#)

⁹ [WHO Epi Sit Rep: September 27, 2020](#)

- WHO Western Pacific Region represents the lowest cumulative cases: The Philippines and Japan accounting for the highest number of new cases and deaths in the region. Only Malaysia reported an increase in deaths in the region
- In a nationwide survey, **75% of Indians reported being food insecure** in part due to secondary impacts of COVID-19¹⁰
- **European Region:**
 - The region experienced a **rise in deaths by 9% compared to the previous week**, and rise in new cases by 5% compared to the previous week although the rate of increase has slowed in the past 7 days.
 - By 20 September, the **14-day case notification rate for the EU/EEA and the UK was 94.0** (country range: 4.7–300.5) per 100 000 population. *The rate has been increasing for 63 days.*¹¹ Highest incidence observed in the following countries: Austria, Belgium, Croatia, Czechia, Denmark, Estonia, France, Hungary, Ireland, Luxembourg, Malta, Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the UK (ECDC)
 - **Weekly test positivity** was over 3% in: Austria, Belgium, Bulgaria, Croatia, Czechia, Hungary, Netherlands, Poland, Portugal, Romania, Slovakia and Slovenia.¹²
 - **France, the Russian Federation, Spain and the United Kingdom** continue to report the highest numbers of new cases (WHO).
 - The **14-day COVID-19 death rate for the EU/EEA and the UK was 6.4** (country range: 0.0–28.4) per million population. *The rate has been increasing for six days.* High levels (10 per million) or sustained increase (over 7 days) has been observed in Bulgaria, Croatia, Romania and Spain.
 - **Marseille** has emerged as the epicentre of the France outbreak. Hospitalization has remained lower than the earlier outbreak, but has recently doubled in the past 10 days. However, testing positivity have been trending upwards reaching 7.4% and over half of French departments are now classified as red zones.
 - New strict 'lock-down' measures implemented in **Israel** for up to 21 days including prohibiting residents to travel more than 1 km past their home
 - **Switzerland:** Overall Incidence for the country is estimated at 60 per 100,000. Incidence rates highest in Geneva, Vaud & Zurich
 - Geneva Canton: 84 per 100,000 (14-day incidence 16-29 September)
- **Americas Region**
 - Americas region continues to represent the highest incidence of COVID-19 globally, reporting similar trends as the previous week. **The region represents over 38% of new cases and 52% of deaths globally in the last 7 days.**¹³
 - The **United States of America, Brazil, Argentina and Colombia** continue to report the **highest number of new cases** in the past week. Mexico reported the sixth highest number of new cases and third highest number of new deaths.
 - US President tested positive for COVID-19 on October 2nd.
 - Mixed messages, lack of a coherent singular strategy for COVID-19, along with trends lead analysts to suggest the US is heading towards a "3rd wave" of the virus.
- **MENA Region**
 - The region showed the **greatest increase in cases** compared to the previous week (by 9%) as well as an increase in deaths (by 3%).
 - The highest numbers of new cases were reported by Iraq, Iran and Morocco.

¹⁰ [Interview, WBUR](#)

¹¹ [ECDC](#)

¹² [ECDC](#)

¹³ [WHO Epi Sit Rep: September 27, 2020](#)

- Algeria Jordan, United Arab Emirates and Tunisia reported the greatest relative increase in cases compared to the previous week.
- **Africa Region**
 - Compared to the previous week, the region experienced a **decrease** in new cases and deaths, reporting a 7% decrease in new cases and a 14% decrease in new deaths.¹⁴
 - South Africa continues to report the highest incidence of cases, followed by Ethiopia, Uganda, Somalia and Mozambique.
 - Cases in **Mozambique** have consistently increased over the last four week stretching health system capacity.
 - Only **Cape Verde** is reporting over 100 new cases (157) per million population in the region

Recent Research/ Evidence

- Emerging evidence points towards SARS-CoV-2 acting in **super-spreader transmission patterns**¹⁵, with the majority of spreading events caused a minority of infected individuals. In recent research from India (the largest contact tracing project ever recorded), researchers found that **71% of infected individuals did not infect any of their contacts, while a mere 8% of infected individuals accounted for 60% of new infections**.¹⁶ In a study based in Hong Kong, they found that 19% of cases (through contact tracing) were responsible for 80% of transmission.¹⁷
 - Implications from above suggested super-spreader trends lend towards suggestions for 'backward' contact tracing in populations with over dispersed transmission of COVID-19¹⁸
- Data from contact tracing study in Tamil Nadu and Andhra Pradesh States in India show **same-age contacts were associated with the greatest transmission patterns** across all age groups, children and young adults were noted as efficient transmitters (compared to previous smaller studies), and majority of deaths due to COVID-19 were among the younger 50-64 years of age group (compared to 65+ in the US and Europe).¹⁹
- Researchers examining **lessons learned from restriction measures** across 9 high-income countries in Europe and Asia have documented strategies in recent article in [the Lancet](#). The authors conclude that effective transition from COVID-19 restrictions **did not rush to return to pre-pandemic practices, but rather, worked to establish a "new normal,"** incorporating physical distancing into their recovery plans, supporting individuals and businesses in adapting along the way. The authors also note effective strategies also included an ability to recognize when incidence raises above an acceptable threshold.
- Additional research and reports supporting the use of antigen testing (cheaper and rapid tests) for population-level responses continues:²⁰

¹⁴ [WHO Epi Sit Rep: September 27, 2020](#)

¹⁵ [The Atlantic](#) 1 Oct 2020

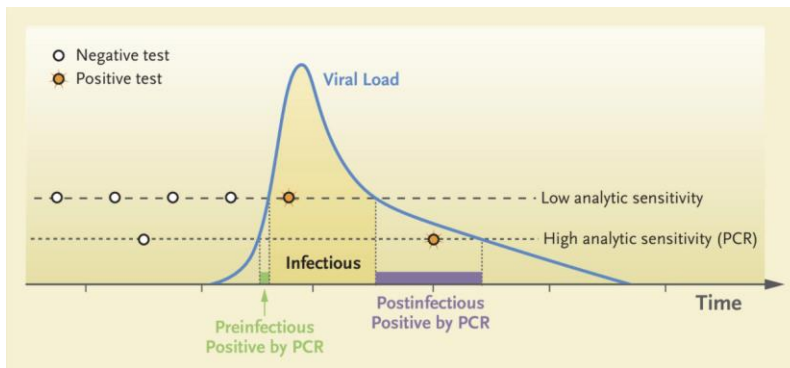
¹⁶ [Science 30 Sep 2020](#). Epidemiology & transmission dynamics of COVID-19 in two Indian States

¹⁷ [Nature, 17 Sep 2020](#); [The Atlantic](#) 1 Oct 2020

¹⁸ MedRciv preprint. 4 Aug 2020 : doi: <https://doi.org/10.1101/2020.08.01.20166595>

¹⁹ [Science 30 Sep 2020](#). Epidemiology & transmission dynamics of COVID-19 in two Indian States

²⁰ [NEJM 30 Sep 2020](#)



- Transmission **risk appears to be low on aircrafts** compared to office buildings, classrooms and supermarkets and commuter trains (around 0.3% among all aircraft passengers).²¹ Recommended precautions include wearing a mask, not traveling when you feel unwell, limit carry-ons, stay seated when possible, and if air is available keep it on full pointing towards you while seated.
 - Transmission on longer flights has been noted. Seating proximity was associated with increased risk of transmission²²
- In the **US weekly cases among young adults have increased by 55%** nationally from August 2-September 5th with the greatest increases seen in the Northeast (by 144%) and Midwest (by 123%). This has primarily been linked to school re-openings as well as social behavior and risk perception among the age group 18-22 years of age.²³ In other countries we have seen increased incidence in young adults followed by increased incidence in older adults (including 65+ age group).
- Research groups examining data on the responses on the impacts of COVID-19 show that while infection rates among young adults are going up, they are undertaking recommended protective measures²⁴
- Recent report from Every Woman and Every Child highlights that the **pandemic has disproportionately affected women's and children's health** by disrupting essential health interventions²⁵
- One case of **probable Parkinson's disease following SARS-CoV-2** infection has been described in the Lancet [here](#). The 45-year-old Israeli patient was hospitalized due to dry cough, loss of smell and muscle pain, and tested for SARS-CoV-2. While in the hospital he experienced fatigue, shortness of breath, and chest pain, and began to issues with his handwriting and speaking, which continued after his release. The authors note that Parkinson's has been associated with loss of smell prior to other symptoms and other viruses such as influenza A, Epstein-Barr virus, varicella zoster, hepatitis C virus, HIV, Japanese encephalitis virus, or West Nile virus.
 - Researchers warn about the potential "third wave" of potential long-term neurological and neuropsychiatric complications secondary to SARS-CoV-2 infection, including a potential link to worsening parkinsonism in patients with Parkinson's disease and possibly even delayed neurological effects including parkinsonism.²⁶
- Commentary that the patient-developed term "**long covid**" should continue to be used by the medical community as we are still learning more about the disease progression and long-term

²¹ Risk of COVID-19 during air travel. [JAMA 1 Oct 2020](#).

²² [CDC MMWR 26](#)

²³ [CDC MMWR 29 Sep 2020](#)

²⁴ [LIFE WITH CORONA: SHARED GLOBAL SENTIMENTS AND STARK GENERATIONAL DIVIDES](#)

²⁵ ['Protect the Progress: Rise, Refocus, Recover 2020.'](#) Every Woman Every Child

²⁶ [Nature. 20 August 2020](#)

effects of SARS-CoV-2.²⁷ Increasing reports on the long-term symptoms and effects of COVID-19 suggest the need for new and additional research.²⁸

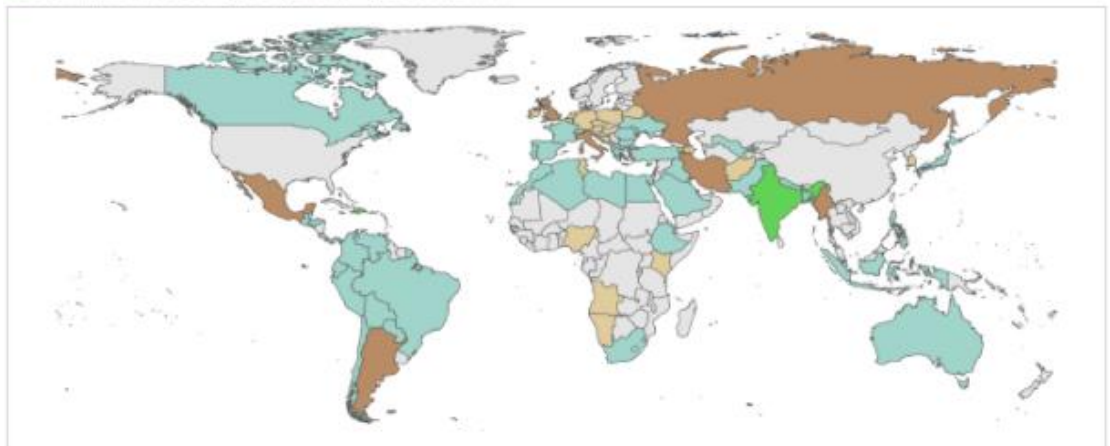
Clinical Trails

- A **useful visual** explaining some of the strategies behind vaccine research and development are available here: [Nature: The race for coronavirus vaccines: a graphical guide](#)
- UK Government considering “**challenge trials**” for candidate SARS-CoV-2 vaccines (where volunteers are deliberately exposed to coronavirus) to expedite the vaccine development process²⁹
- Ongoing [review](#) in the US of FDA guidelines for evaluating candidate SARS-CoV-2 vaccines

Modeling & Forecasting

- **Projections for the reproductive number** ([ICL weekly projections](#))³⁰
As of September 27st estimates for the effective reproductive number:
 - **Europe:** Average of about 1, Highest: **Netherlands:** estimated around 2.5
 - **Asia:** Average of about 1, Highest: **Myanmar** 1.5-2
 - **Africa:** Average of about 1, Highest: **Angola, Kenya** (1-1.5)
 - MENA (not included): Highest: **Tunisia** (1.5-2)
 - **North & Central America:** Average of about 1, Highest: **Canada:** 1-1.5
 - **South America:** Average of about 1, Highest: **Argentina:** 1-1.5

■ Declining ■ Stable/Growing Slowly ■ Growing ■ Unclear Trend



- 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 1.7.³¹

²⁷ [BMJ Opinion, 1 Oct 2020](#), [The Atlantic 19 Aug 2020](#)

²⁸ [NYT 28 Sep 2020](#)

²⁹ [Reuters](#), [CNN](#)

³⁰ **Map:** Estimates of transmissibility in countries with active transmission for the week ending 27th September 2020. A country is defined to be in the declining phase if the 97.5th quantile of the effective reproduction number is below 1. It is defined to be in the growing phase if the 2.5th quantile of the effective reproduction number is above 1 and the width of the 95% CrI is less than 1. If the 2.5th 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](#)

³¹ 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.

- [IHME projections](#) for daily infections using current trends, easing of mandates and increased mask use

Humanitarian Impacts

- [Recent report from Norwegian Refugee Council](#) survey shows 77% of respondents had lost their jobs or income since March, and 62% stated the normal financial support coming from family members abroad has decreased. **Food insecurity has also increased**, with 70% reporting that their household has reduced the number of meals since the start of the pandemic. It is strongly recommended that governments explicitly include refugees and displaced populations in their stimulus and social support programs.
- [The Internal Displacement Monitoring Centre](#) published a report stating that within the first 6 months of 2020 4.8 million displacements were caused by violence, and 9.8 million were caused by disasters. Notably this is an **increase in displacements from the entire estimates from 2019**.
- [Mapping of COVID in Humanitarian settings available here](#) depicted below showing COVID-19 cases compared to where vaccination campaigns have been postponed

Guidance Launched or Highlighted This week

Weekly update [from WHO available here](#) (last updated Epi 28 Sep, Operational 25 Sep)

- [Video Series](#) explaining specific issues related to COVID-19 released by WHO
- WHO: [Emergency Global Supply Chain System \(COVID-19\) catalogue](#)
- Global Preparedness Monitoring Board released new report "[A World in Disorder](#)"
- [WHO Tracking COVID-19: Contact Tracing in the Digital Age](#)
- [US CDC](#) Releases Indicators for Dynamic School Decision-Making
- WHO: [Antigen-detection in the diagnosis of SARS-CoV-2 infection using rapid immunoassays](#)
- WHO: [Guidance on the use of Corticosteroids for COVID-19](#)
- WHO [Partners Platform: Supply Portal and Country Preparedness training](#)
- [Coronavirus disease \(COVID-19\) training: Simulation exercise](#)
- Multiple trainings available on <https://openwho.org/>

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](#)

[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](#)