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Editorial commentary

More than 18 months into the COVID pandemic and we have learned a lot. And we are overwhelmed by information, some of it false, some of it conflicting, some of it from relatively small scientific studies that may not have too much statistical significance.

So, if you're responsible for your organisation's COVID response, what do you do? You only need to remember three main things: vaccines work, so persuade as many of your workforce as possible to get vaccinated; variants transmit faster and will transmit even if you're vaccinated to ensure they know they're not superman/superwoman if vaccinated; and, linked to this, reinforce the importance of still wearing masks, social distancing, practicing good hygiene. This trifecta will decrease your COVID risk. For more detail, read on.

In the scientific journals, evidence continues to emerge showing that full doses of COVID-19 vaccines prevent severe illness and hospitalisation for the general population and for immunocompromised people. Which is good, but not a panacea for all other preventive measures as some fully vaccinated people will still get sick.

There's also evidence that being fully vaccinated reduces the rate of transmission and the severity of symptoms if people get infected. But not completely. And not so much with the Delta variant. So remember preventive measures.

Non-vaccinated people are at risk of getting a severe infection and ending up in hospital even if they are young and healthy. This risk is even higher when infected with the delta variant.

Some countries such as the US continue to witness an increase in hospitalisation and new COVID cases due to fast spread in pockets of unvaccinated people. This led the CDC to reverse its earlier advice on wearing masks and to ask people living in areas with high prevalence of COVID-19 to wear masks in public indoor places.

Wearing masks and other non-pharmaceutical interventions (NPIs) continue to be a common practice in the UK despite it not being a legal requirement since the 19th July. A recent survey by the Office of National Statistics (ONS) showed that one in 20 British adults continue to wear masks in public places. While it is difficult to attribute the recent decrease of new cases in the UK to NPIs or vaccines, it seems that a combination of both is saving lives and protecting people.

More positive developments are on the way with more than 105 vaccines at different stages of clinical trials across the world. There are high hopes that when more vaccines are available, more people will be vaccinated especially in low income countries. Amidst the current global shortage of vaccines, equitable distribution could be accelerated even further if evidence shows that one dose provides sufficient immunity to people who had already had COVID-19.

Location	Total vaccine doses administered per 100 people	Percentage of population fully vaccinated	Daily new cases per million (7-day average)	Total cases per million	Daily new deaths per million (7-day average)	Total deaths per million people
Global	54.06 (+17%)	14.77	77.05 (+21%)	25,520.23 (+5%)	1.18 (+15%)	543.42 (+4%)
Asia	58.30 (+20%)	11.06	55.46 (+33%)	13,469.54 (+7%)	0.93 (+40%)	195.57 (+8%)
Africa	5.21 (+23%)	1.77	29.36 (-4%)	5,055.76 (+11%)	0.70 (+11%)	128.20 (+10%)
Europe	87.26 (+12%)	39.79	163.06 (+2%)	69,496.59 (+5%)	1.45 (+14%)	1,520.12 (+2%)
North America	84.65 (+8%)	37.97	198.76 (+118%)	70,845.57 (+4%)	1.66 (+59%)	1,562.52 (+1%)
Oceania	36.12 (+28%)	11.71	29.49 (+33%)	2,039.35 (+32%)	0.21 (+82%)	32.76 (+17%)
South America	62.44 (+19%)	20.02	145.96 (-26%)	82,612.85 (+4%)	4.43 (-26%)	2,535.02 (+4%)

Table 1: International SOS, COVID-19 data globally and continental, data from 1-2 August compared with data from 15-16 July (1)

Global, regional, and local situation

The global trend continues upward at a steady rate: 194 million confirmed COVID-19 cases and more than 4.16 million deaths recorded to date. The leading contributors to the total number of COVID-19 cases on a by country basis this week remain the USA, India, Brazil, France, Russia, Turkey, United Kingdom, Argentina, Colombia, Italy, Spain, Germany, Iran, Poland, Indonesia, Mexico, and Ukraine, with Indonesia having surpassed Mexico.

Worldwide, the total case growth is increasing by approximately 2.43 million cases every 5 days, more than the 2.6 million 2 weeks ago. The number of new cases is increasing in the US with the last 14 days seeing 170% increase nationally. Hospitalisation and death rates are slowly rising at 58 and 28 % respectively over the same period. Arkansas, Missouri, Louisiana, Florida and Nevada are seeing marked outbreaks.

In Latin America, Brazil is seeing a stabilization in the number of new cases over the past week; while Argentina, Colombia and Peru are experiencing persistent decline. Mexico is, however, experiencing a resurgence.

Number of new cases in Africa continues to grow relatively slowly. The resurgence in South Africa is slowing down similarly to neighbouring Namibia, Zambia, Zimbabwe and Botswana.

In Europe, number of new cases has plummeted 10% over the last week. The UK is seeing a significant slowdown in its resurgence, while France, Italy and Denmark are continuing to see a rise in cases.

Most countries in Middle East are experiencing an increase in new cases, with the main contributors, Iran and Iraq, recording an increase of 48% and 28% respectively. Most GCC countries, however, have had stable and plateaued numbers.

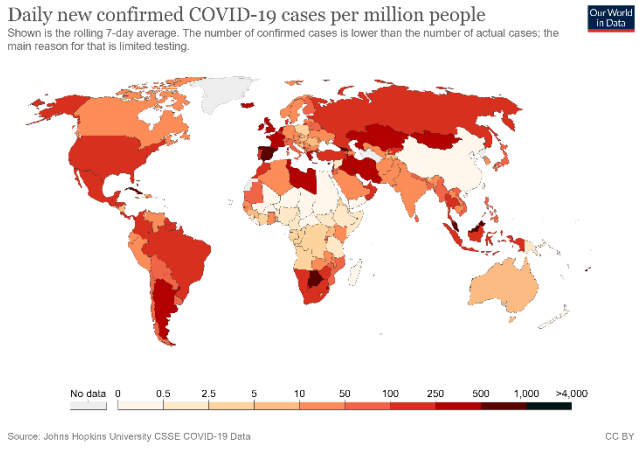


Figure 1: Our World in Data, Daily new confirmed COVID-19 cases per million people (1).

Vaccines

There are currently 16 vaccines in use in at least one country (2). Seven of these vaccines have been approved for emergency use by the World Health Organisation (WHO), and 108 other vaccines are currently at different stages of clinical development worldwide.

So far, at least 198 countries have begun vaccinating people for the coronavirus and have administered more than 3.9 billion doses of the vaccine. More than 28 % of the world population has received at least one dose, with more than 14% fully vaccinated. However, disparities in the international distribution of vaccines continue to compromise global progress.

Europe is currently the continent with the highest vaccination coverage with more than 48% of the population having received one dose at least. Vaccination coverage exceeds 47% in North America and 43% in South America but remains less than 4% in Africa (figure 2). South America and Asia and the two continents with the highest share of fully vaccinated people at 24 and 17% respectively.

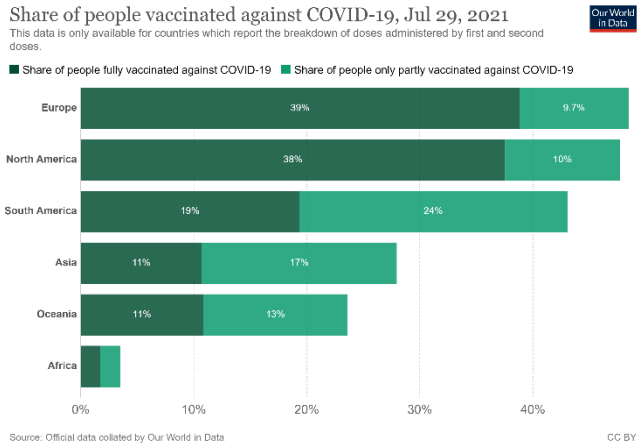


Figure 2: Our World in Data, Share of people who have been partially and fully vaccinated (1).

The pandemic of the unvaccinated

The Delta variant currently constitutes more than 92% of COVID-19 cases across the US. An increase of almost 100% since last month. It is fuelling a surge of cases and deaths almost entirely among unvaccinated people.

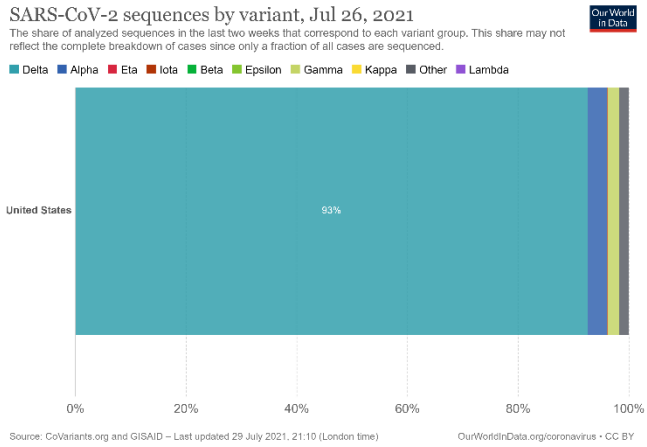
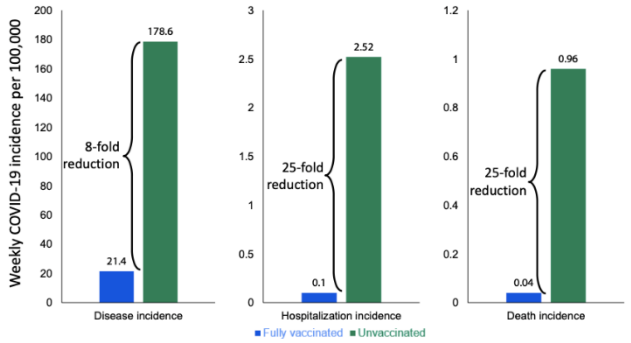


Figure 3: Our World in Data, prevalence of SARS-CoV-2 variants in the US (1).

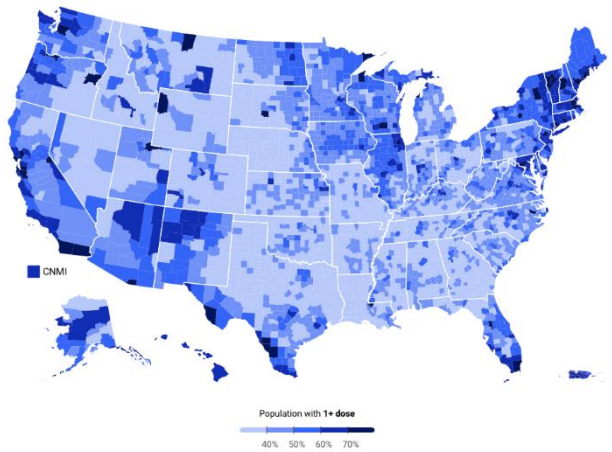
According to an internal CDC document leaked on the 30th July in the Washington Post (3), 96% of hospital admissions and deaths have occurred among unvaccinated people. Additionally, vaccinated people who did get infected had less viral load, shorter duration of infection, lower risk of having symptoms and shorter duration of symptoms.



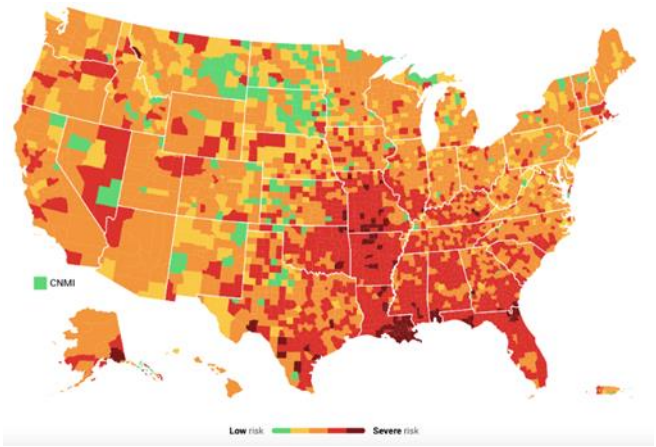
Figures 4: CDC internal document, comparison between death, hospitalization and infection rates among vaccinated and unvaccinated people (3)

The delta variant is 60% more transmissible than the alpha variant and it increases the risk of hospitalisation in people with five or more underlying conditions. Vaccines have proven to be effective against hospitalization (96% after two doses of Pfizer and 92% after two doses of AstraZeneca) and symptomatic illness (88% after two doses of Pfizer and 60% after two doses of AstraZeneca). However, this effectiveness is much less after one dose and consequently, being fully vaccinated is key for the protection against delta variant (4).

Despite high nation-wide vaccination rate in the US with 49% of the population being fully vaccinated, hundreds of counties mainly in the southern eastern states have less than 30% vaccination rate and more than 50 cases per 100k of the population (5). These counties are at significantly high risk of experiencing local outbreaks that could overwhelm local health services (6).



Figures 5: Covid Act Now, vaccination levels per county (5)



Figures 6: Covid Act Now, risk levels per county (5) Covid Act Now uses six key metrics to assess COVID across U.S. states, metros, and counties. Three of these—daily new cases (incidence), infection rate (RT) and positive test rate—assess a location's overall risk level. The other three—ICU capacity used, % vaccinated and vulnerability—reflect a location's ability to protect itself and recover from COVID.

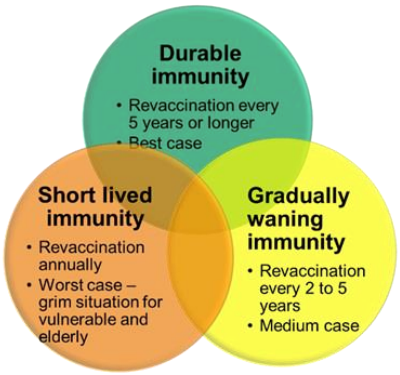
Given the increased transmissibility of the delta variant, reduced vaccine effectiveness and patchy vaccine coverage, non-pharmaceutical interventions (NPIs) such as masks are needed to curb this recent surge. Therefore, the CDC has changed its recommendations regarding wearing masks for fully vaccinated people who are now being asked to wear a mask indoors in public if they are in an area of substantial or high transmission. Additionally, they are encouraged to wear a mask regardless of the level of transmission, particularly if they are immunocompromised or at increased risk for severe disease from COVID-19, or if they have someone in their household who is immunocompromised, at increased risk of severe disease or not fully vaccinated (7).

News and literature updates

Booster Jabs

A booster vaccine is designed to strengthen the body's immune response to the virus after it had been primed to respond to by a previous vaccine. Boosters are commonly used to protect against diseases such as tetanus and polio, where, after time, immunity wanes.

There is uncertainty about the need for booster jabs for COVID-19, and scientists are still studying how long the immunity provided by the COVID-19 vaccines lasts. Booster jabs might be needed if the current regimens of vaccines result in short lived or gradually waning immunity instead of durable immunity.



Booster jabs can be from the same vaccine people had received or from a different one. Several studies are underway to examine the potential need for booster jabs after receiving the final dose, and to compare different combinations of vaccines. No evidence on the need for booster jabs have been published.

However, Governments in the UK and US are considering an option to offer booster jabs to people who are vulnerable to COVID-19 during the winter (8). As of July 2021, five countries (Bahrain, Dominican Republic, UAE, Russia and Turkey) have started offering booster jabs to people who had already been fully vaccinated.

Vaccination for people who have been infected by SARS-CoV-2

Many people who have been infected with SARS-CoV-2 will probably make long lasting antibodies against the virus as part of their natural immunity response (9). Some studies show that people with previous exposure to SARS-CoV-2 tend to mount powerful immune responses to single shots and gain little added benefit from another injection (10). However, the strength and duration of the immune responses to SARS-CoV-2 are not completely understood and currently available data suggests that it varies by age and the severity of symptoms (11). Moreover, natural immunity may not be sufficiently protective against new variants.

There's ample laboratory-based evidence that people who have been infected would benefit from vaccination, prompting the World Health Organization and other public-health agencies to recommend that such individuals still get vaccinated. However, there is little evidence on whether they will need two doses or if one dose is enough.

Within 6 months after an initial natural infection, available data show that symptomatic reinfection due to the same variant is uncommon. Given limited vaccine supply, WHO recommends that people with PCR-confirmed infection in the preceding 6 months may therefore choose to delay their AstraZeneca vaccination until near the end of this period (12).

However, emerging data indicate that symptomatic reinfection may occur by emerging variants of concern that are associated with markedly reduced protection conferred by previous natural infection and reduced vaccine effectiveness (Beta variant for example). In these settings, WHO recommends earlier immunization after infection, e.g. within 90 days following natural infection.

Many countries around the world still offer the full regime of vaccine to all adults. However, France, Italy and Germany amongst other countries currently offer one dose only to people with a healthy immune system and a confirmed previous diagnosis.

Future outlook

The race between vaccination rate, emerging variants of concern and the use of non-pharmaceutical interventions continues to define how well countries are doing in combating COVID-19. Questions remain around the long-term effects of COVID-19, not merely on individual health with the effects of Long COVID, but also on public health systems and global medical supplies.

One potential long-term effect of COVID-19 pandemic is a mental health and wellbeing pandemic that we started to see its early signs. Several studies highlighted alarming effects such as anxiety, sleep disorders and depression on different groups including office workers. Luckily, there is plenty that employers can do to avoid such consequences including offering flexibility at work, listening to employees concerns and providing mental health support when needed.

Vaccinating and protecting everyone against COVID-19 is key to end this pandemic, for as long as the virus is circulating and multiplying, the possibility of a new variant of concern that could evade vaccines is there. Therefore, it is crucial to maintain caution when making business decisions such as the return to office and travel.

Additional information

Go to the International SOS Pandemic site to get the latest newest data and information on the Covid-19 pandemic: COVID-19 (internationalsos.com)

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