

THE ALCIVAX

Alcimed breaks down the current COVID crisis in India and how it threatens the progress we have made globally to end the pandemic.

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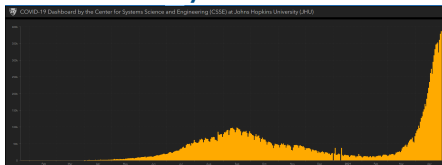


Edition #40 - 30 April 2021

India's 2nd Wave is a Global Crisis

"Solidarity is not an act of charity, but mutual aid between forces fighting for the same objective." - Samora Machel. The pandemic is far from over, but as can be seen from the vaccination map to the globe isn't recovery together. India's 2nd COVID wave has recently hit crisis proportions likely to derail global efforts to end the pandemic. On Friday, a new daily country case record was set by India at 386,452 new cases, following more than a week of 300K + new case days, bringing the global COVID-19 case total to 150 M. This rapid uptick in India's COVID cases dwarfs anything seen thus far.

India's Daily case counts:



Jan 2020 - April 2021, Source: [John's Hopkins](https://www.jhu.edu/)



Healthcare Fallout

Indian health officials wrongfully assumed that they had reached the pandemic "end game" and started relaxing restrictions as well as increasing medical resource exports to

other nations. Thus, now that the 2nd wave has really hit, ICUs and hospitals all over India are full, oxygen resources are running out, and the death toll is topping 3600 per day in the country. "We completely let down our guard and assumed in January that the pandemic was over—and COVID surveillance and control took a back seat," says K. Srinath Reddy, president of the Public Health Foundation of India.

One of the main contributors to the massive second wave is a newly identified variant that originated in India. The B.1.617 variant, a double mutant, was discovered after concern over the growing number of cases from the British variant. Recent evidence suggests that the AstraZeneca vaccine is effective against the double mutant, but less than 9% of the population is vaccinated and the overwhelming number of new cases has disrupted vaccine efforts. The current COVID surge is unlikely to calm down any time soon, but international aid has begun to arrive in country to help to lessen the death toll and keep the Indian healthcare system from collapsing.



Global Fallout from India's Crisis

The rest of the world cannot sit by without helping India out of this crisis. India is one of the world's largest manufacturer of COVID vaccines, especially for COVAX efforts, with the Serum Institute of India producing 2.4 M doses of vaccine per day. President Modi has currently suspended any exports of the vaccine while the crisis in India continues. This export ban primarily impacts Africa were much of the AstraZeneca vaccine manufactured is meant to be shipped. Modi is also in talks for Russian vaccine supply which will also put strain on vaccine supplies in LATAM and the Middle East.

Further delays in the global vaccination efforts will encourage the development of new variants further putting vaccine efficacy at risk and will fuel COVID surges in neighboring countries that have lower percentages of vaccinated citizens potentially fueling a massive wave of new COVID cases across South East Asia.

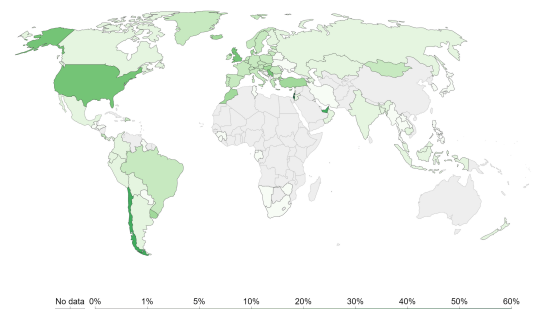
Economic recovery in India is already contracting, with increasing unemployment, threatening to impact the global efforts towards economic recovery from the pandemic.



The COVID Vaccine Race In Graphs

255M people globally already fully vaccinated!

Share of the population fully vaccinated against COVID-19, Apr 28, 2021
Share of the total population that have received all doses prescribed by the vaccination protocol. This data is only available for countries which report the breakdown of doses administered by first and second doses.



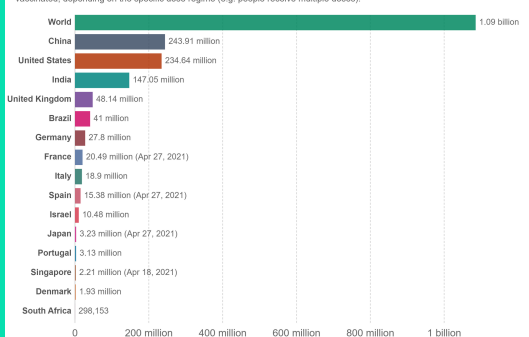
Source: Official data collated by Our World in Data - Last updated 29 April, 18:10 (London time)

OurWorldinData.org/coronavirus • CC BY

More than 1B vaccine doses have been given globally in the 6 months doses have been available!

COVID-19 vaccine doses administered, Apr 28, 2021

Total number of vaccination doses administered. This is counted as a single dose, and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses).



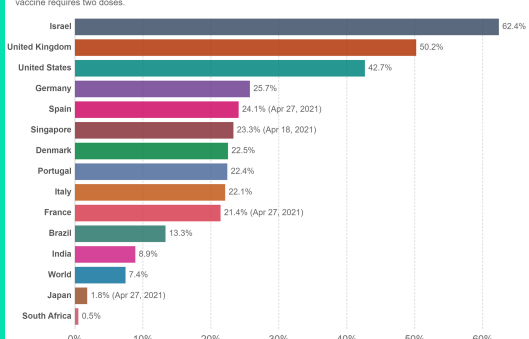
Source: Official data collated by Our World in Data - Last updated 29 April, 18:10 (London time)

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Israel crests 62% with the UK not far behind at 50% of the population, while the world still at just 7.4%.

Share of people who received at least one dose of COVID-19 vaccine, Apr 28, 2021

Share of the total population that received at least one vaccine dose. This may not equal the share that are fully vaccinated if the vaccine requires two doses.



Source: Official data collated by Our World in Data - Last updated 29 April, 18:10 (London time)

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The Vaccine Game

The quest for a COVID vaccine has driven some interesting discussions in the last two weeks that will impact healthcare going forward. But first some good news:

Even one dose of a COVID vaccine cuts transmission in half. This provides much needed assurance that vaccination will drastically cut down on the number of new COVID cases, as has been seen in Israel and the US where vaccination efforts are most advanced.



Vaccine Deals, Don'ts, and Demand

After AstraZeneca failed to deliver on its vaccine manufacturing promises, the EU has shifted gears, penning a deal with Pfizer/BioNTech to purchase 1.8 B doses of vaccine. The deal was only struck after assurances from Pfizer that it would deliver the 300 M doses already promised to the EU.

The new Pfizer deal comes on the heels of the EU suing AstraZeneca after it reduced their manufacturing projections by 75%. AstraZeneca was originally slated to deliver 300 M doses to the EU before June 2021. Current estimations suggest that AstraZeneca is about 200 M doses short. If successful, the EU would send a strong message to other vaccine manufacturers about being realistic in their manufacturing capacity when striking deals. The EU largely blames AstraZeneca for their delayed vaccination roll out. The court case has been given an expedited review and a ruling is expected by the end of June.

On the flip side, Moderna is ramping up production to 3 B doses per year in 2022, more than 2X its previous forecast to meet growing demand. Moderna also says it has evidence that its vaccine can be safely stored in a refrigerator for 3 months. "That might be a breakthrough that really matters in 2022 in Africa and across lower and middle income countries," Moderna President Stephen Hoge said.



The Deadliest Pandemic Variants

Much has been made of different virus variants that have driven new infections and disrupted vaccine effectiveness, but perhaps the deadliest variants of the pandemic are the numerous anti-vax website and social media campaigns that are driving large numbers of available COVID vaccine doses to go unused. A recent study in Nature shows that on Facebook alone there are 1,300 anti-vax pages with more than 85 million followers. Individual pro-vaccination groups have larger numbers of followers but the content isn't shared as frequently than the smaller anti-vax materials. Perhaps some of the most troubling anti-vax messaging has been noted by US and UK security authorities showing efforts by Russian intelligence to discredit Western developed vaccines in Africa to drive increased interest in the Sputnik V vaccine developed in Russia.

• 2/3s of the Americans not currently vaccinated have no plans of being vaccinated and a private school in Miami said vaccinated teachers can't teach.

• Counteracting such disinformation may require a different approach, moving out of just evidence-based health information distribution into cyber security, law enforcement, and international relations.

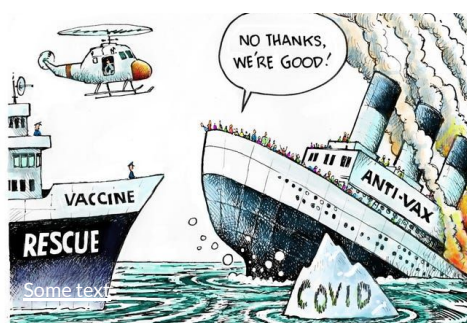


Image Credit: [Dave Granlund](#)

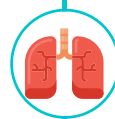


The Risk Long Haul

Did you know that even having a mild case of COVID can negatively impact your long term health? In a Nature paper soon to be published, 73K hospitalized and non-hospitalized COVID patients were followed for 6 months to assess health outcomes. Two things are clear from the study. The risk of developing new health problems post COVID occurs even in the non-hospitalized, but the risk increases with COVID severity. The highest risks are highlighted below:



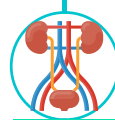
Cardiovascular | Arrhythmias & Chest Pain



Pulmonary | Hypoxemia & Shortness of Breath



Endocrine | Diabetes mellitus & Hyperlipidemia



Kidneys | Chronic Kidney disease



All Joking Aside



Image Credit: [LA Times](#)

COVID-19 has spread off world. But that may be a good thing. Strict lockdowns and big vaccine effort pushes have drastically cut COVID cases of in California. So today the Disneyland is reopening to visitors.

The new restrictions have encouraged Disney to revamp its virtual line waiting technology to reduce line waiting times. Hopefully, this will persist into the future when the park is back open at full capacity.



Image Credit: [micechat.com](#)

There is light at the end of the tunnel, don't give up now!

Hibernation Ending



Image Credit: [John Darkow](#)

Send Help Now!



Image Credit: [Satish Acharya](#)

We all need to stick together



Image Credit: [Chappatte](#)

Don't exit stage left

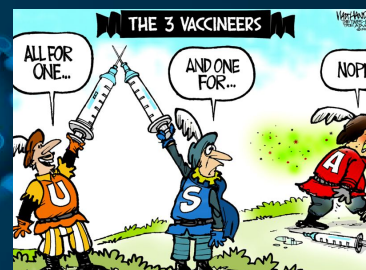


Image Credit: [Walt Handelsman](#)