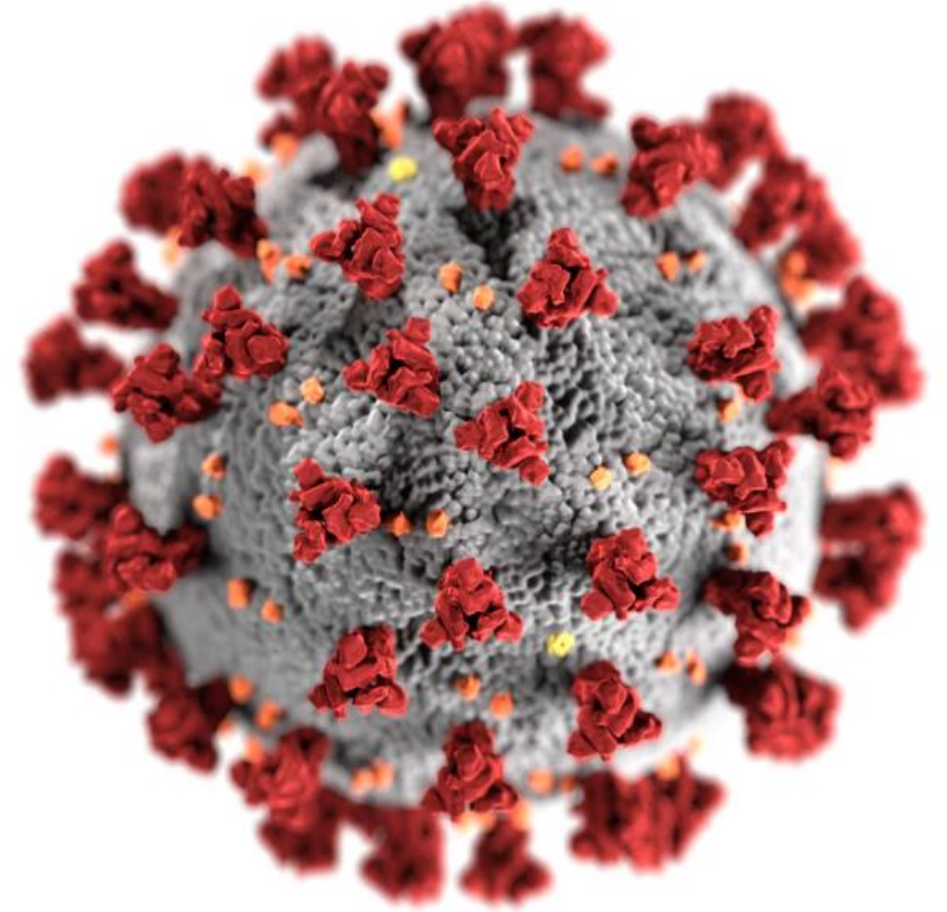




COVID19

A PERSPECTIVE

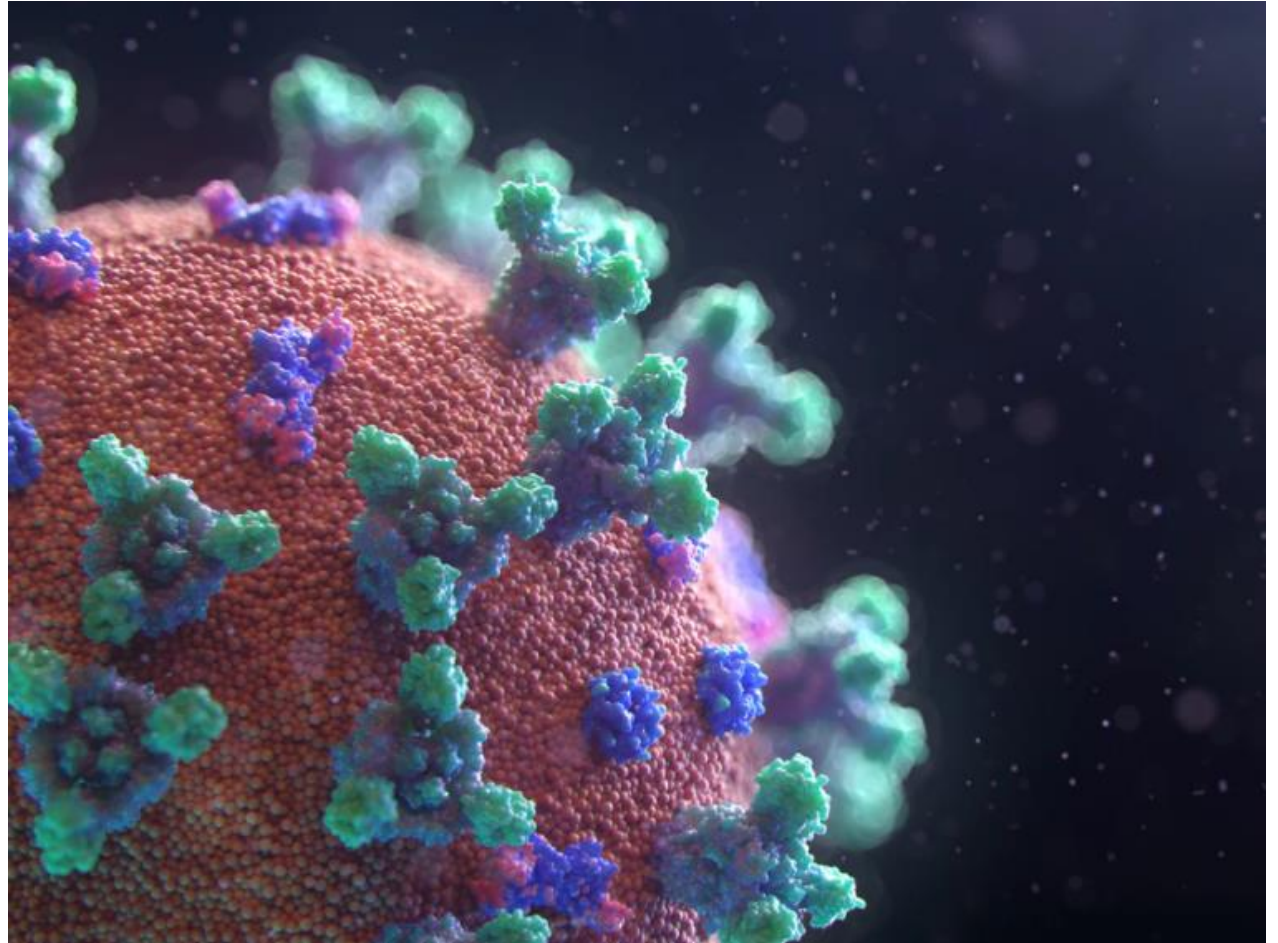


AKSHITA MISHRA

MISHRA.AKSZITA@GMAIL.COM

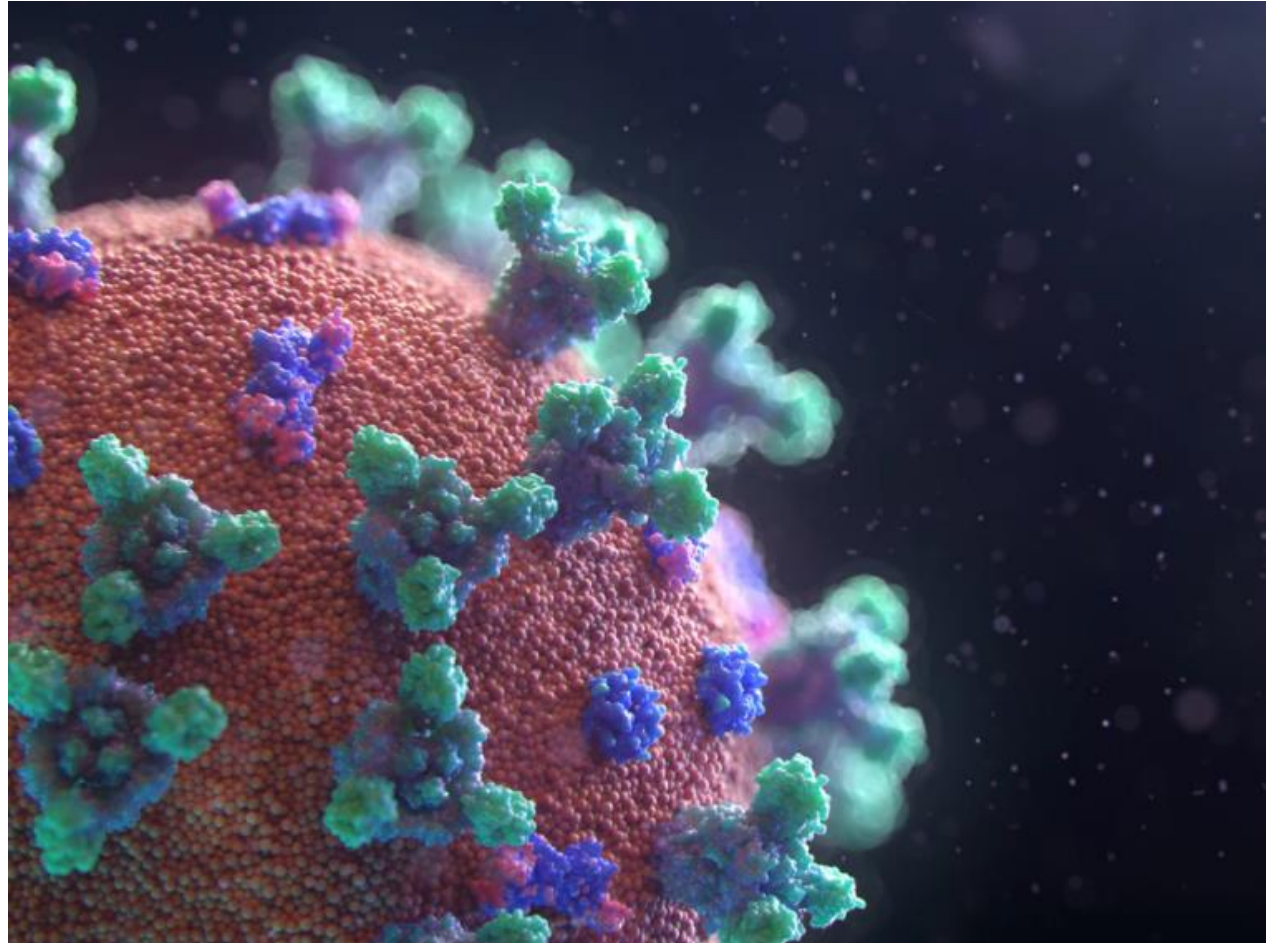
CONTENT

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- Current Trends and Statistics
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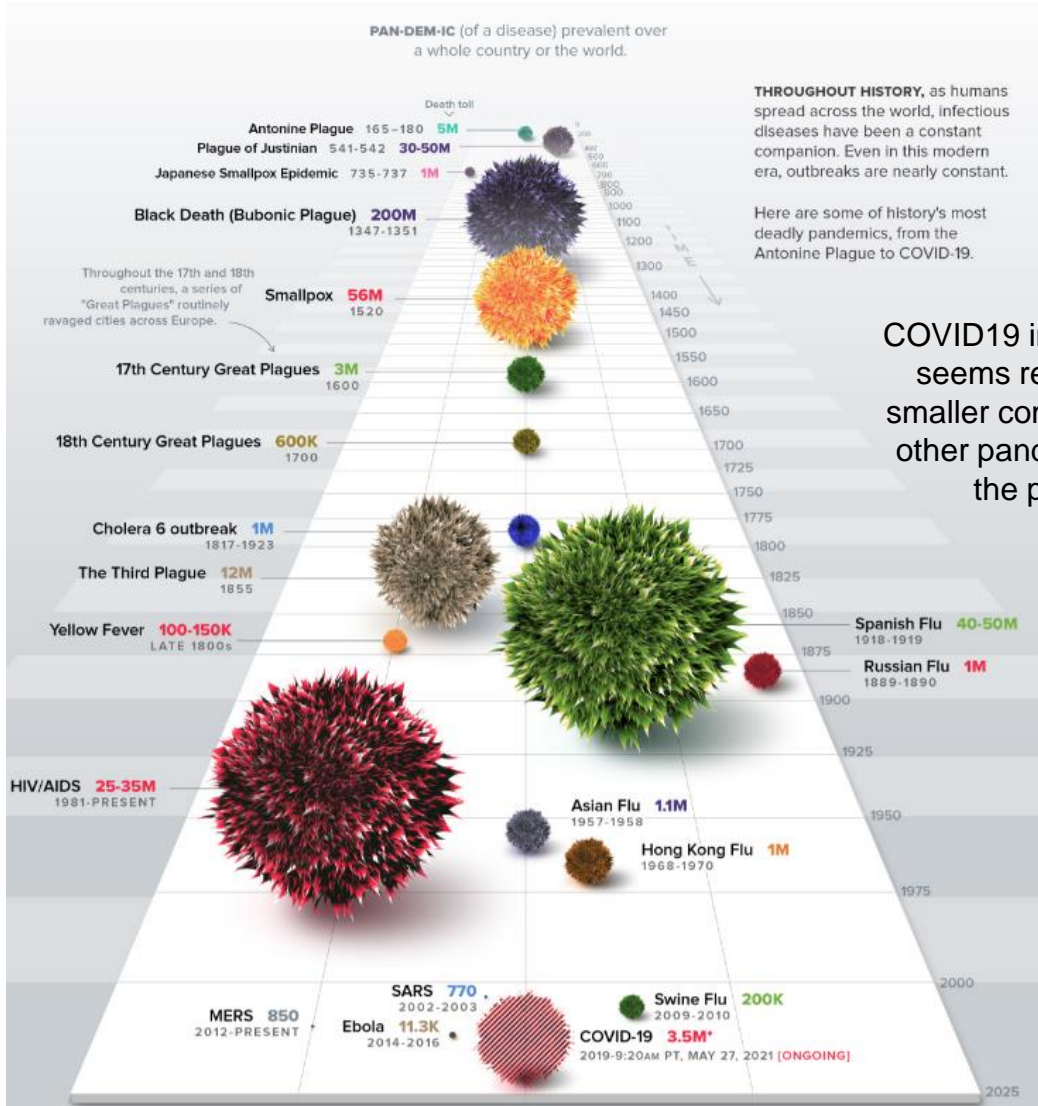


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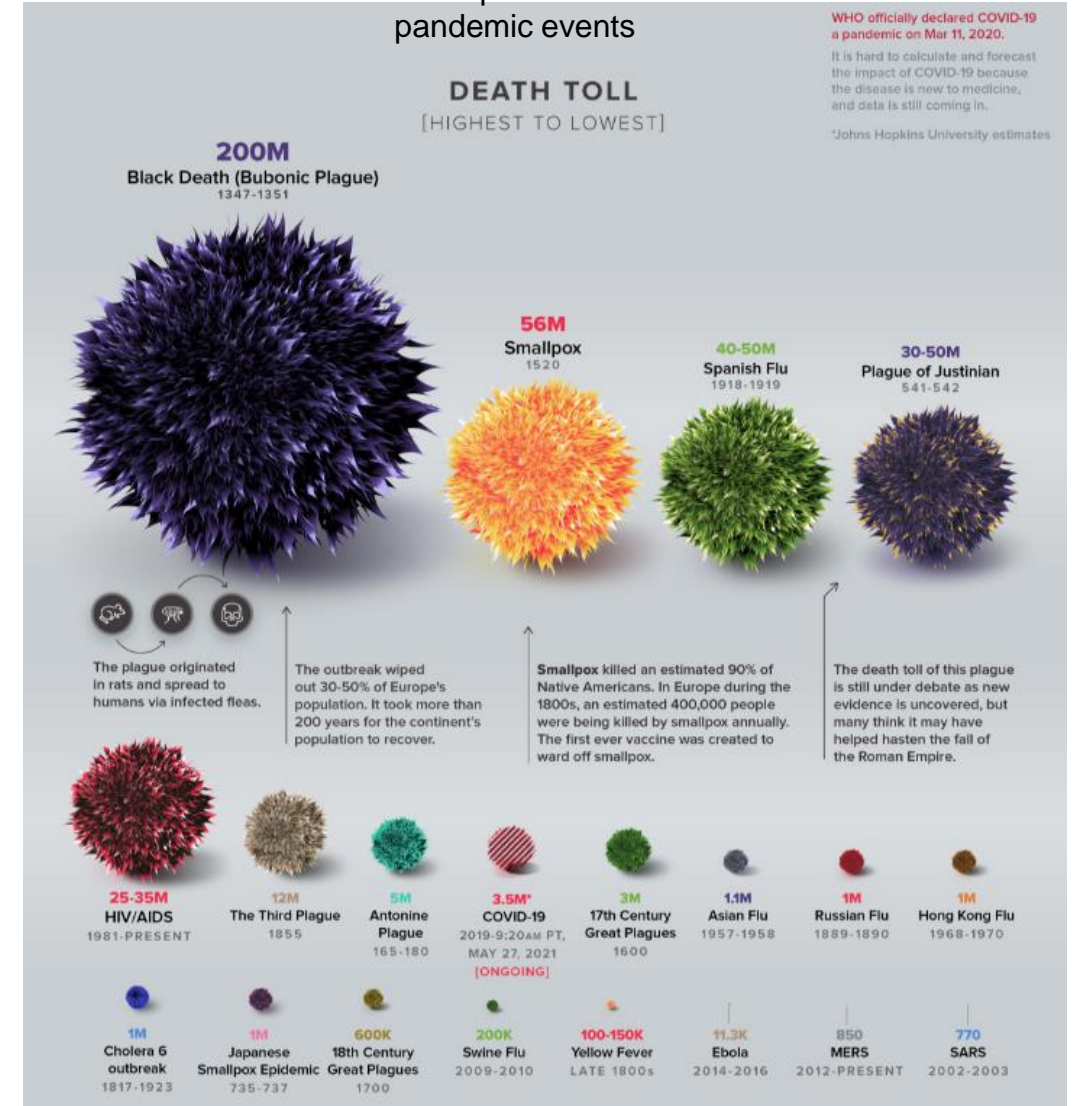


HISTORY OF PANDEMICS



COVID19 impact still seems relatively smaller compared to other pandemics in the past

This chart displays the death toll w.r.t. past historical pandemic events



DEFINITION AND VARIANTS

Definition of COVID-19:

- COVID-19 stands for Corona Virus Disease. It is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The disease was first identified in Wuhan, China in 2019.

SARS-CoV-2 Variants (as of now):

Different variants and classifications around that can be explored in CDC site. Variants of interest are as follows (please refer to CDC site for latest on this):

- B.1.526 - First detected in US in Nov2020
- B.1.526.1 - US in Oct2020
- B.1.525 - UK/Nigeria in Dec2020
- P.2 - Brazil in Apr2020
- B.1.617 - India in Feb2021
- B.1.617.1 - India in Dec2020
- B.1.617.2 - India in Dec2020
- B.1.617.3 - India in Oct2020

Variant of Interest

A variant with specific genetic markers that have been associated with changes to receptor binding, reduced neutralization by antibodies generated against previous infection or vaccination, reduced efficacy of treatments, potential diagnostic impact, or predicted increase in transmissibility or disease severity.

Possible attributes of a variant of interest:


- Specific genetic markers that are predicted to affect transmission, diagnostics, therapeutics, or immune escape
- Evidence that it is the cause of an increased proportion of cases or unique outbreak clusters
- Limited prevalence or expansion in the US or in other countries

A variant of interest might require one or more appropriate public health actions, including enhanced sequence surveillance, enhanced laboratory characterization, or epidemiological investigations to assess how easily the virus spreads to others, the severity of disease, the efficacy of therapeutics and whether currently authorized vaccines offer protection.

Current variants of interest in the United States that are being monitored and characterized are listed in the table below. The table will be updated when a new variant of interest is identified.

NEW NAMES FOR COVID-19 VARIANTS

Variants of concern

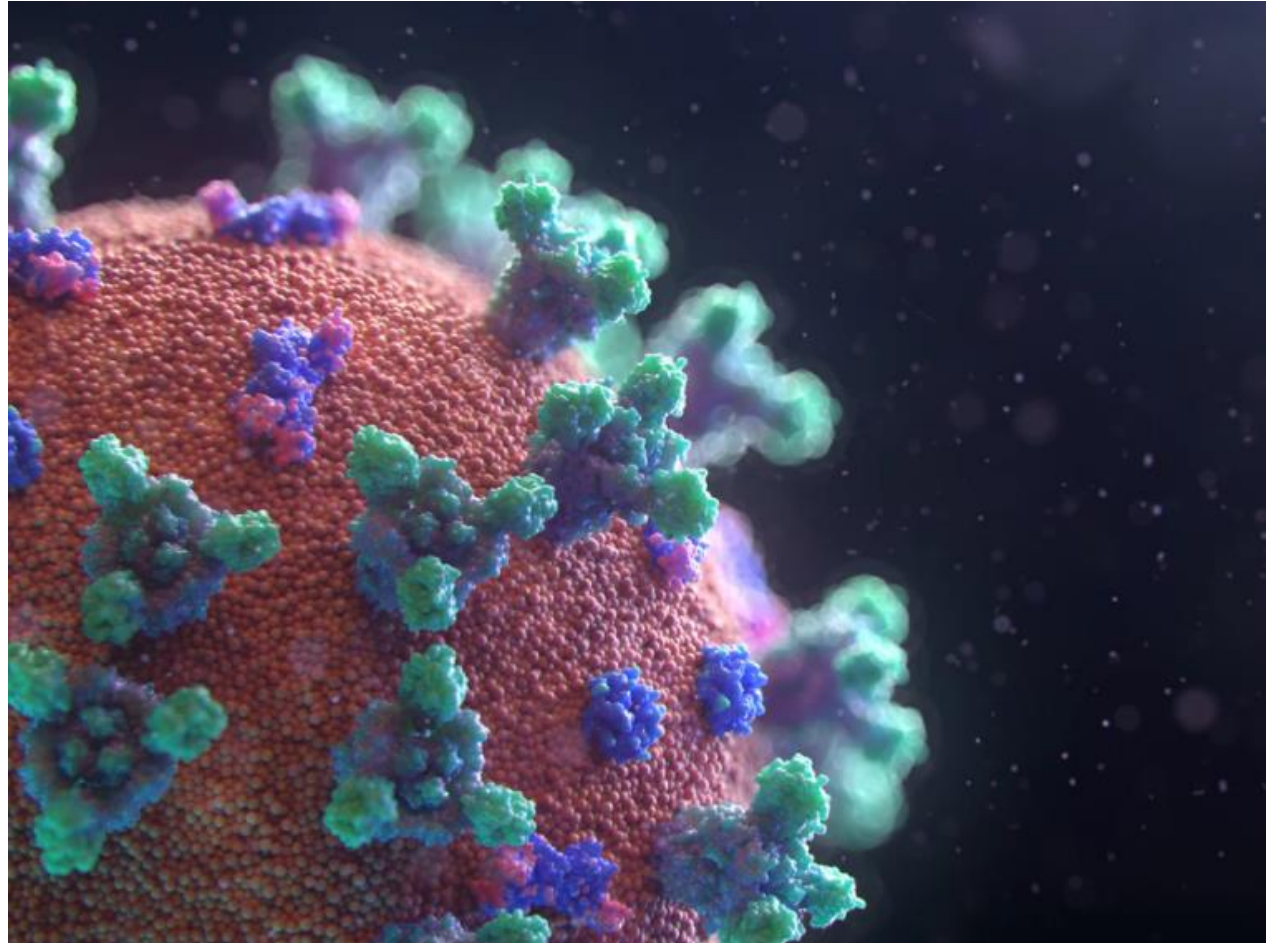


WHO label	Pango lineage	Earliest documented samples
Alpha	B117	United Kingdom Sep 2020
Beta	B1351	South Africa May 2020
Gamma	P1	Brazil Nov 2020
Delta	B16172	India Oct 2020

Source: WHO, 31/May/2021

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NUMBER OF CASES, DEATHS AND RECOVERED

Coronavirus Cases:

179,005,513

[view by country](#)

Deaths:

3,876,667

Recovered:

163,522,333

Data – as of 20/Jun/2021

Source: <https://www.worldometers.info/coronavirus/>

Top 3 countries accounting
for most of the total cases

#	Country, Other	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	New Recovered	Active Cases	Serious, Critical	Tot Cases/ 1M pop	Deaths/ 1M pop	Total Tests	Tests/ 1M pop	Population
	World	179,005,513	+59,166	3,876,667	+1,390	163,522,333	+50,403	11,606,513	82,677	22,965	497.3			
1	USA	34,401,712		617,083		28,694,843		5,089,786	3,989	103,347	1,854	498,689,211	1,498,123	332,876,117
2	India	29,881,965	+613	386,740		28,766,009	+7,562	729,216	8,944	21,450	278	391,019,083	280,685	1,393,086,773
3	Brazil	17,883,750		500,868		16,183,849		1,199,033	8,318	83,562	2,340	52,714,701	246,310	214,017,366
4	France	5,755,496		110,724		5,555,389		89,383	1,703	87,987	1,693	90,467,735	1,383,023	65,413,043
5	Turkey	5,365,208		49,122		5,228,419		87,667	829	62,962	576	58,339,486	684,624	85,213,922
6	Russia	5,316,826	+17,611	129,361	+450	4,869,972	+8,629	317,493	2,300	36,418	886	144,800,000	991,815	145,994,938
7	UK	4,620,968		127,970		4,299,835		193,163	210	67,726	1,876	200,024,844	2,931,615	68,230,263
8	Argentina	4,258,394		88,742		3,868,105		301,547	7,386	93,395	1,946	15,791,124	346,329	45,595,737
9	Italy	4,252,095		127,253		4,035,692		89,150	394	70,427	2,108	69,765,699	1,155,523	60,375,868
10	Colombia	3,917,348		99,335		3,644,287		173,726	8,155	76,205	1,932	18,772,724	365,187	51,405,720

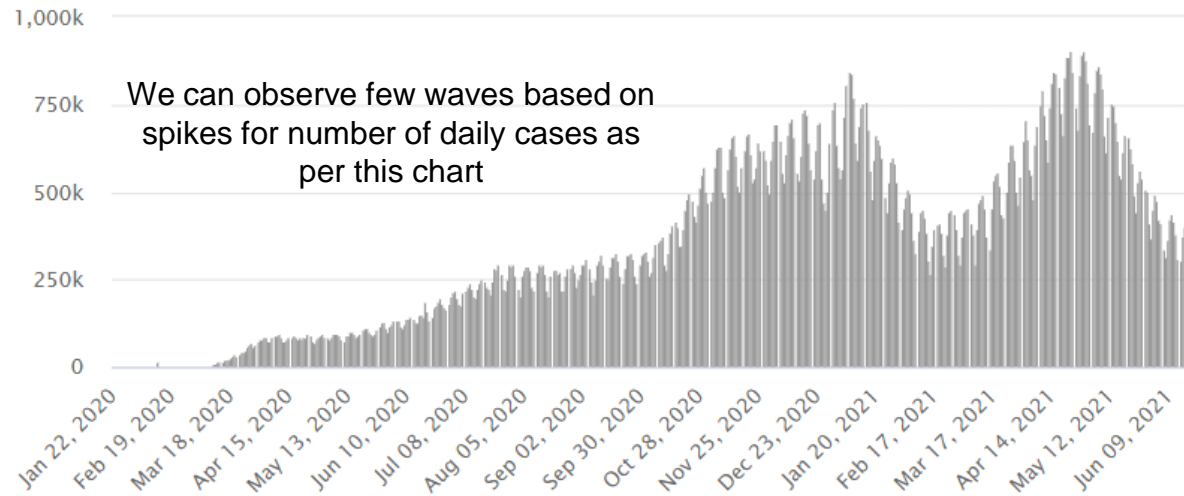
These are numbers of Top 10 countries in the world
as of 20/Jun/2021 based on worldometers report

India's total case per
1M population is the
least compared to Top
10 countries and also
below average of world
number

TRENDS OF DAILY CASES, DEATHS

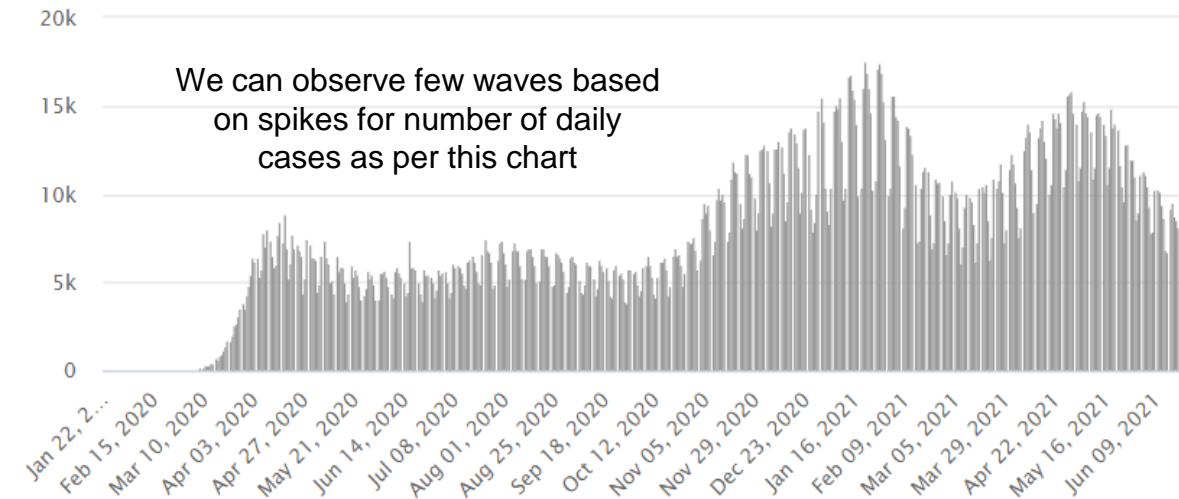
Daily New Cases

Cases per Day
Data as of 0:00 GMT+0



Daily Deaths

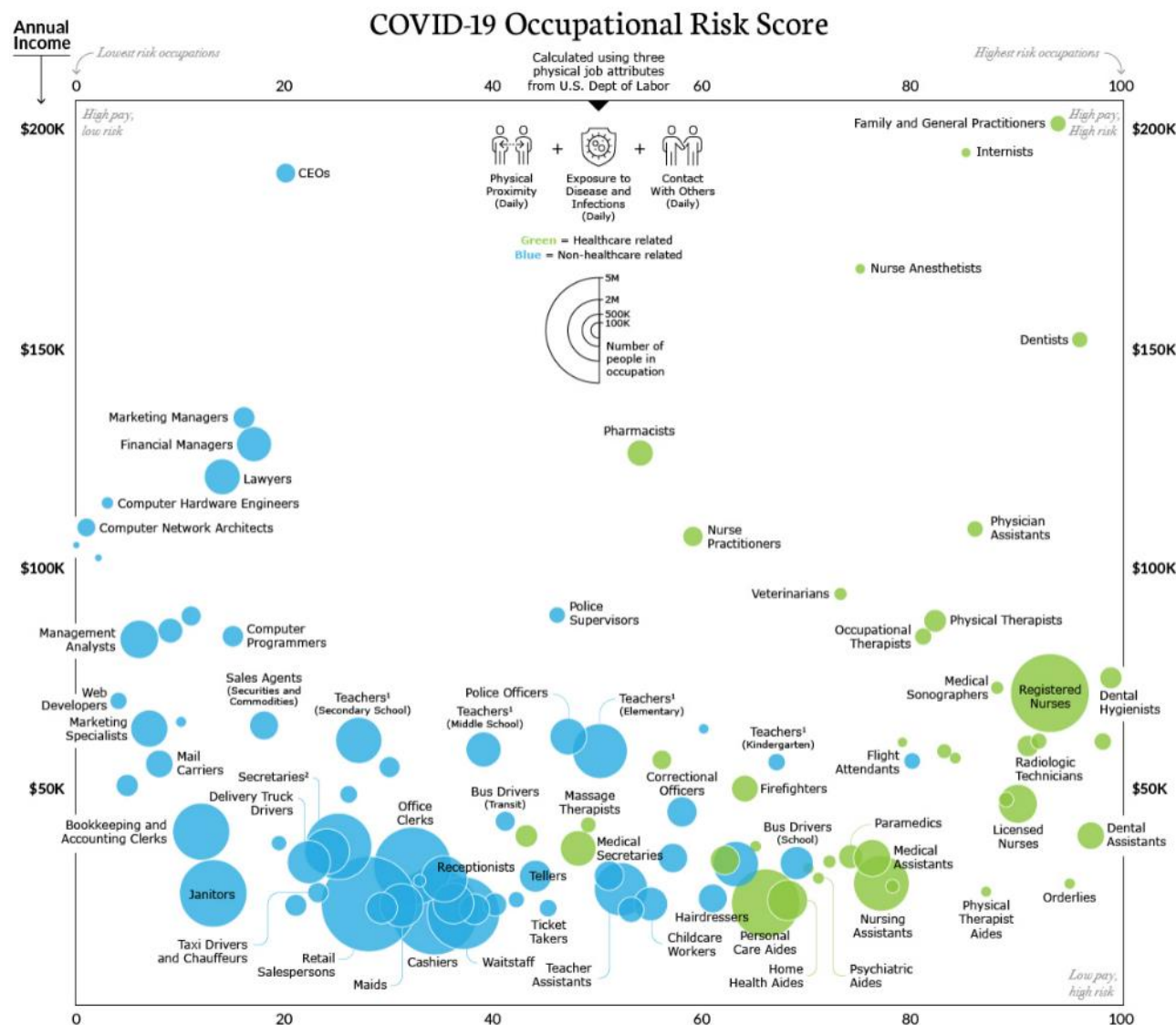
Deaths per Day
Data as of 0:00 GMT+0



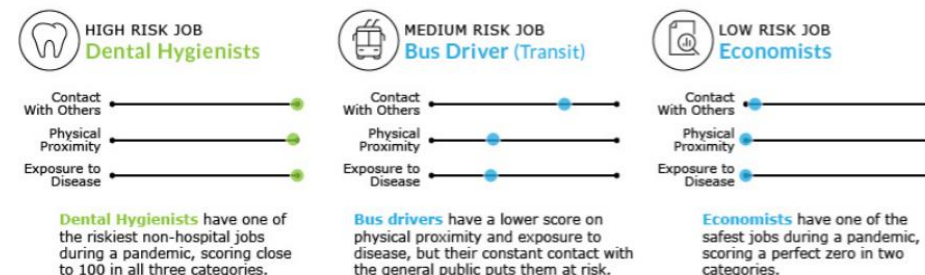
Data – as of 20/Jun/2021

Source: <https://www.worldometers.info/coronavirus/>

THE FRONTLINE: VISUALIZING THE OCCUPATIONS WITH HIGH RISK

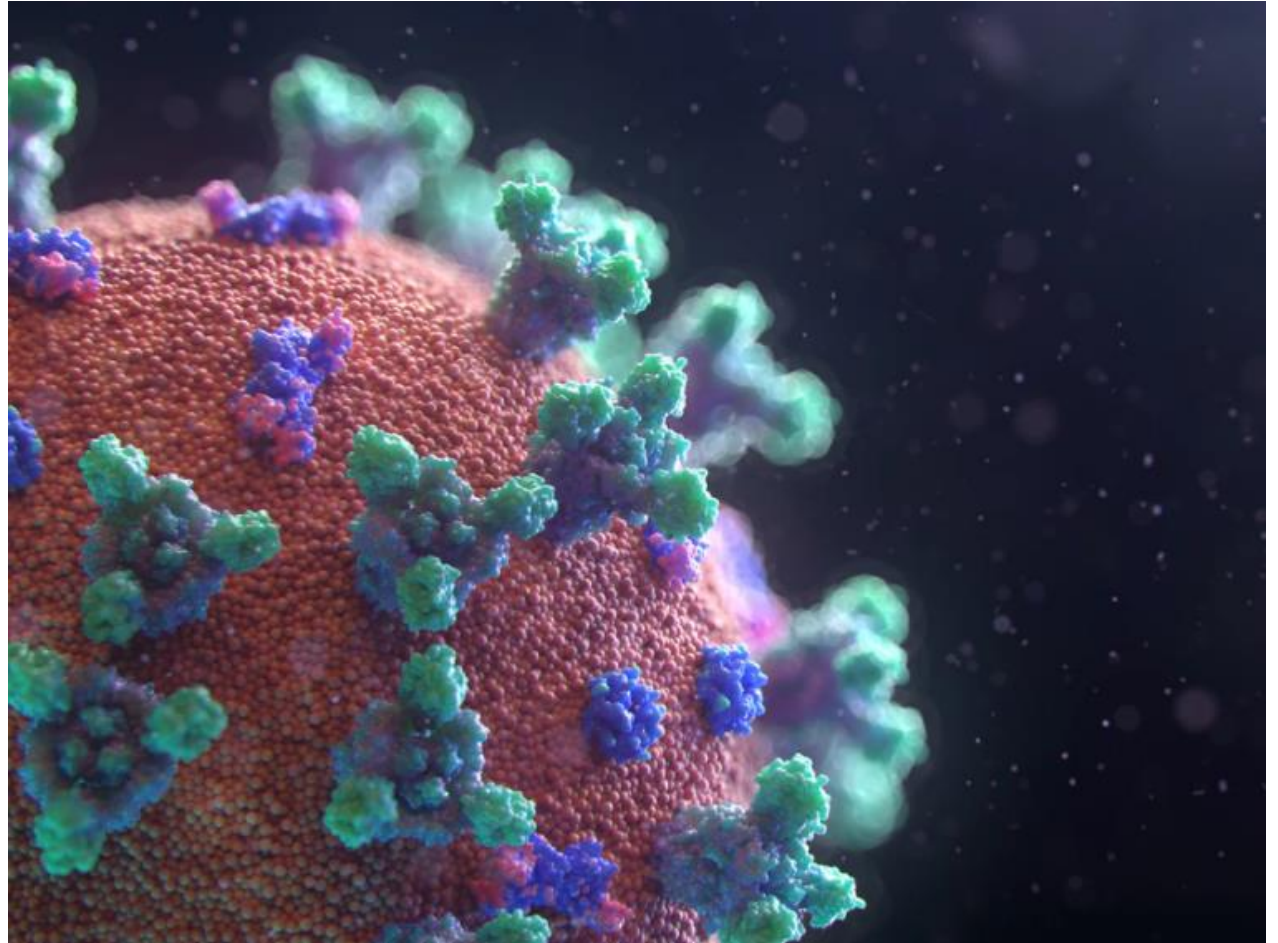


- This is computed based on 3 physical job attributes from US Dept of Labor
 - Physical Proximity (daily)
 - Exposure to disease & infections (daily)
 - Contact with others (daily)



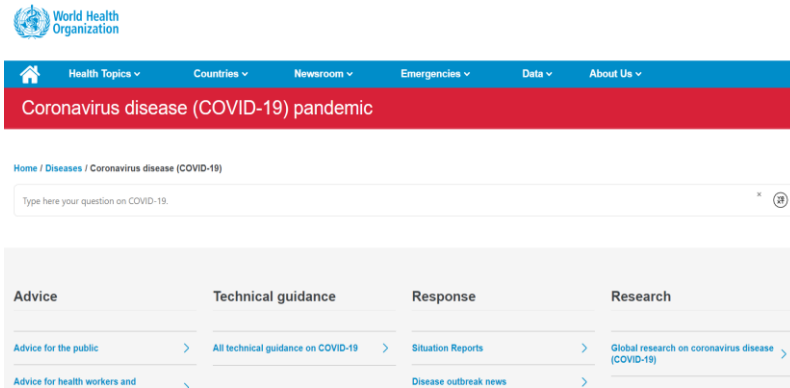
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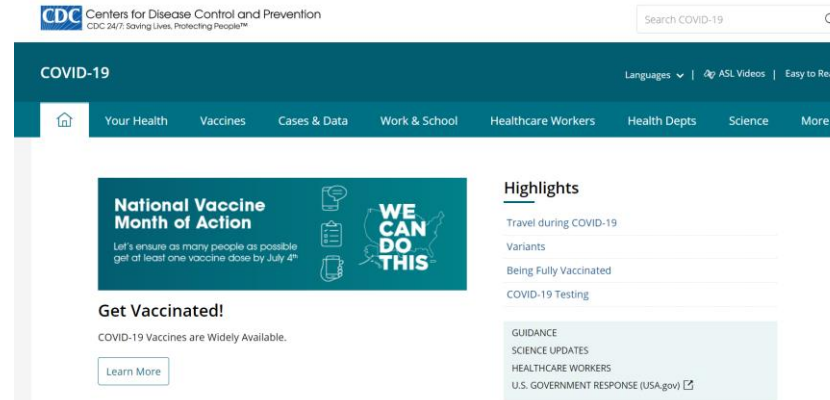


KEY SOURCES OF INFORMATION

World Health Organization Site



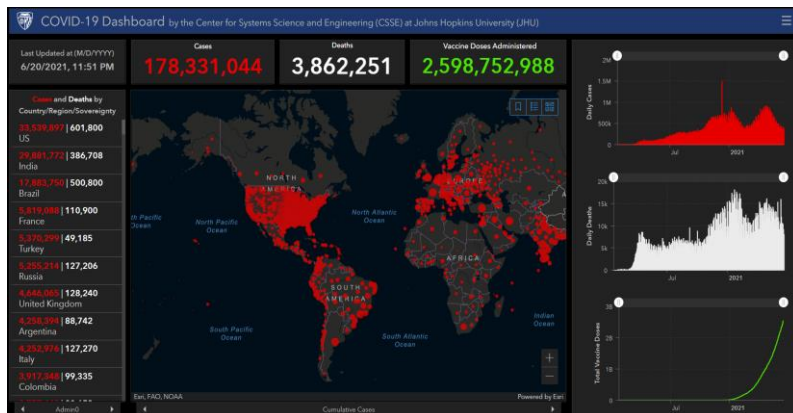
Center for Disease Control & Prevention



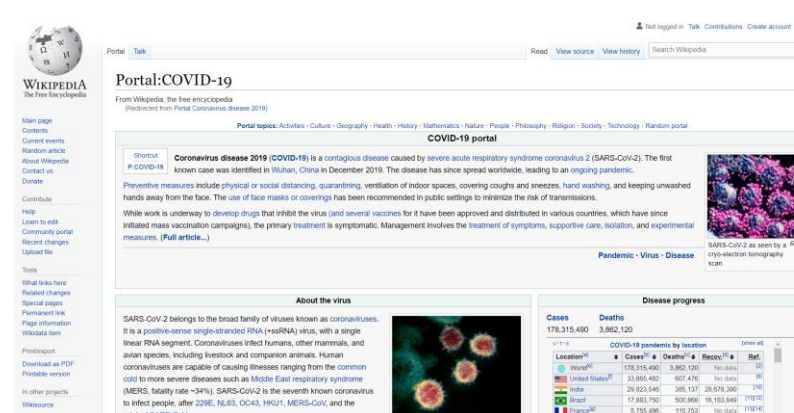
The Worldometer Site



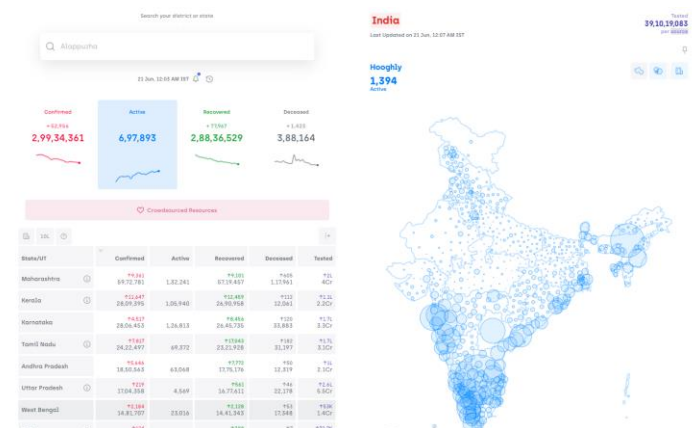
John Hopkins University dashboard for COVID19



Wikipedia on COVID19

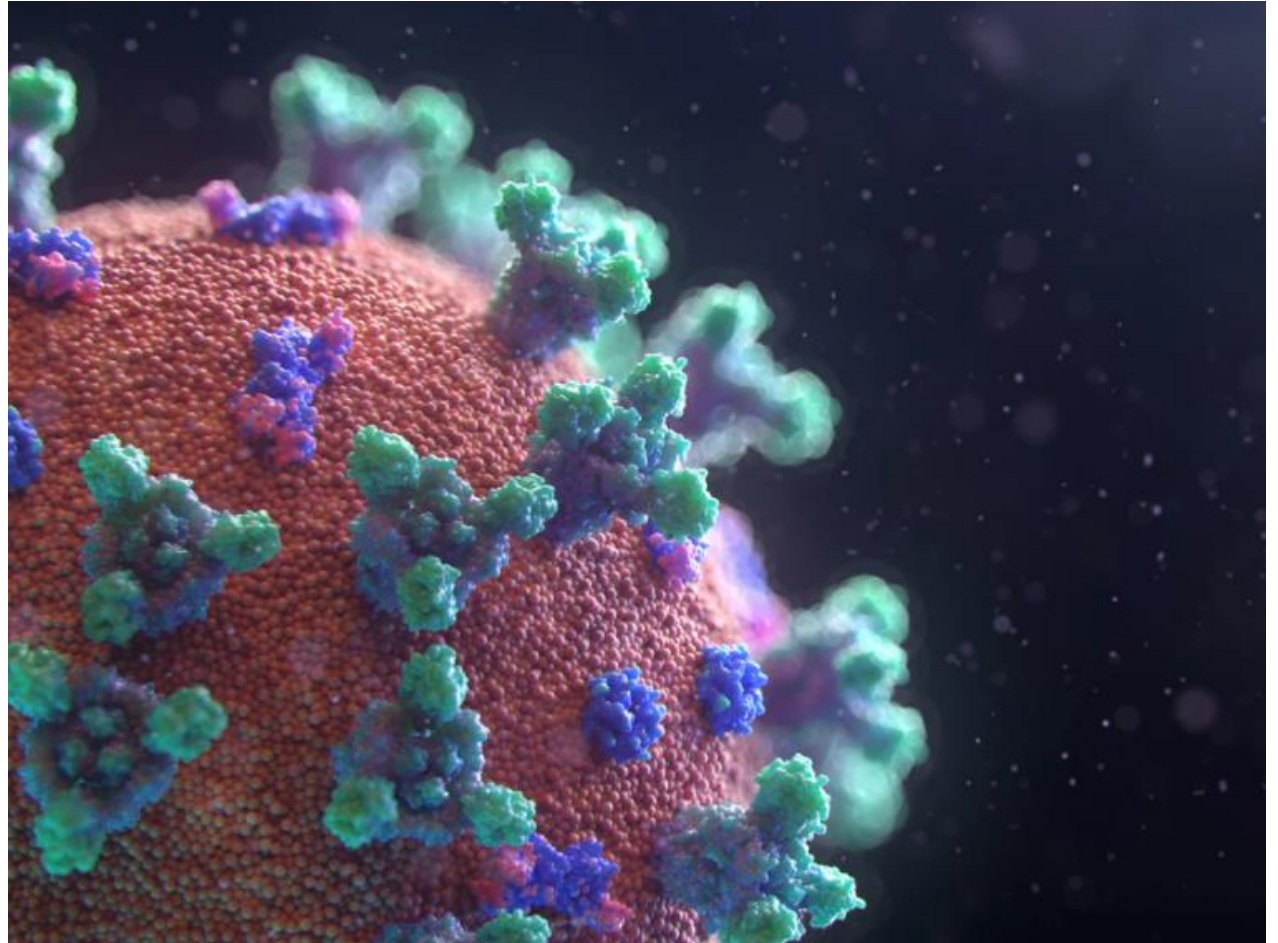


India specific data



CONTENT

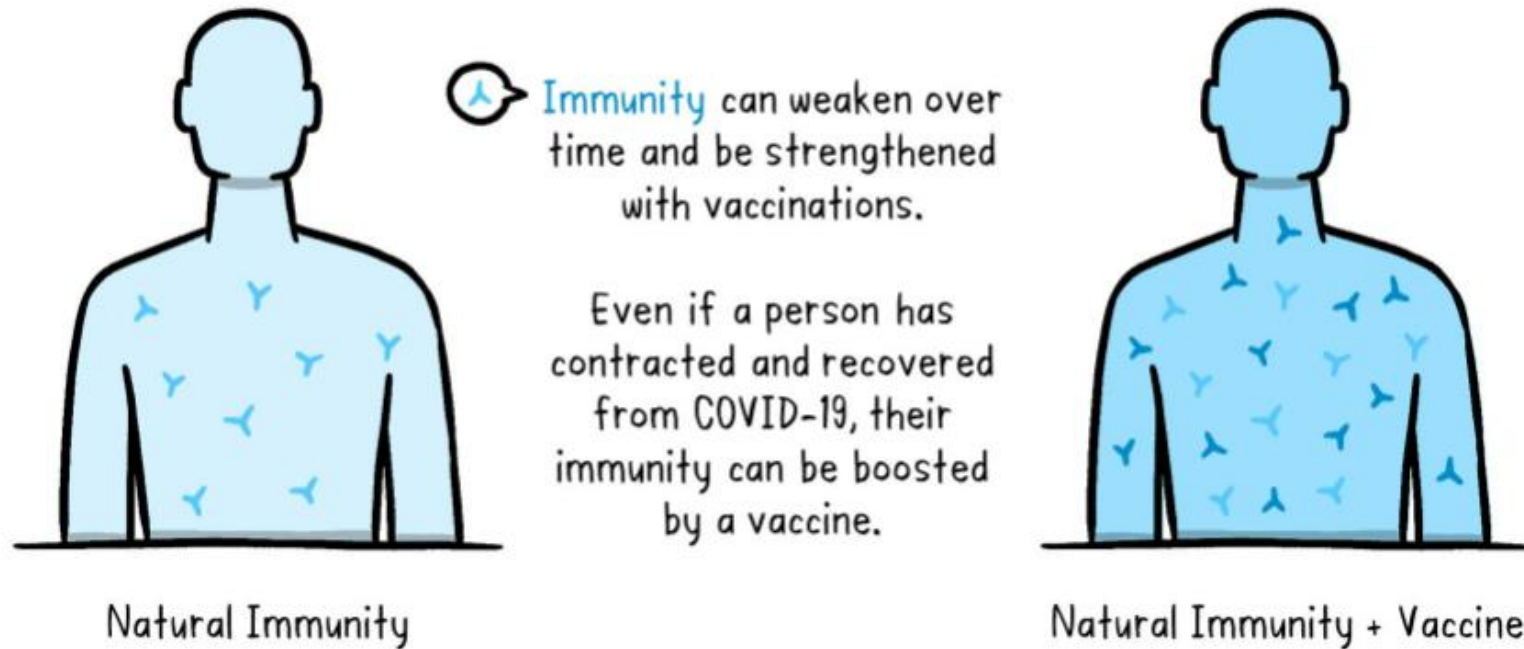
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WHY VACCINATION?

“Getting vaccinated is better than getting infected” – WHO (World Health Organization)

Do people who've already had the virus still need to be vaccinated?



WHAT TO EXPECT WHEN GETTING A VACCINE ?



1. Medical professionals will advise on whether or not you should receive the vaccine.



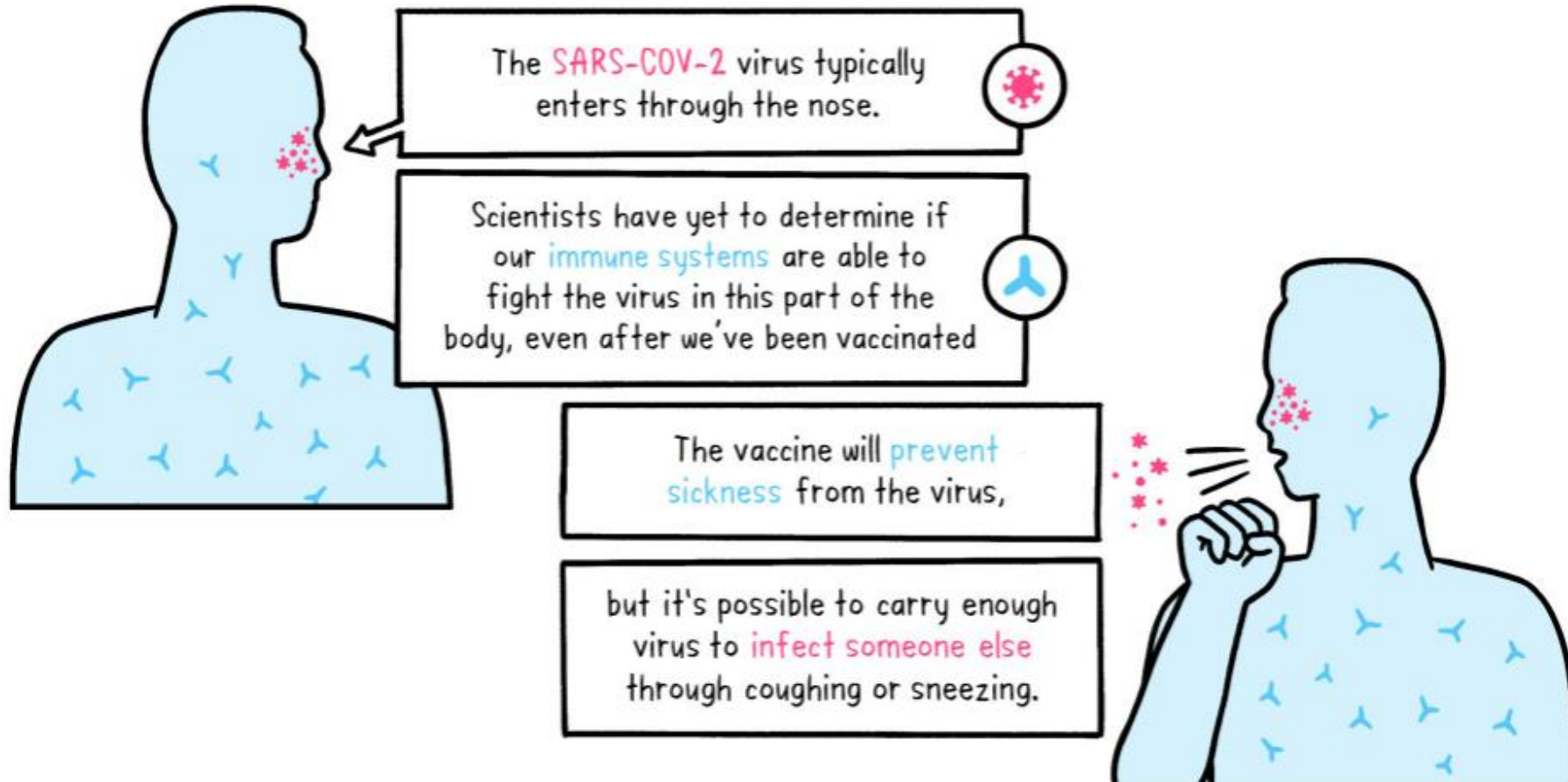
2. A health worker will administer the vaccine.



3. You may need to wait for a few minutes before leaving to ensure there are no unexpected reactions.

SAFETY AGAINST INFECTION AND TRANSMISSION AFTER VACCINATION

Wearing a mask still saves lives, even after you've been vaccinated










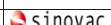


VACCINATION INFORMATION

- Vaccination efforts have been started and in progress with tremendous efforts from scientists, researchers across the globe.
- Please refer Guidance document on Status of Vaccines within WHO EUL/PQ evaluation process for latest details of vaccines available globally. This gets updated on a regular basis. Please refer to WHO website for the latest on this always.

Vaccines

Guidance Document
04 May 2021

Status of COVID-19 Vaccines within WHO EUL/PQ evaluation process

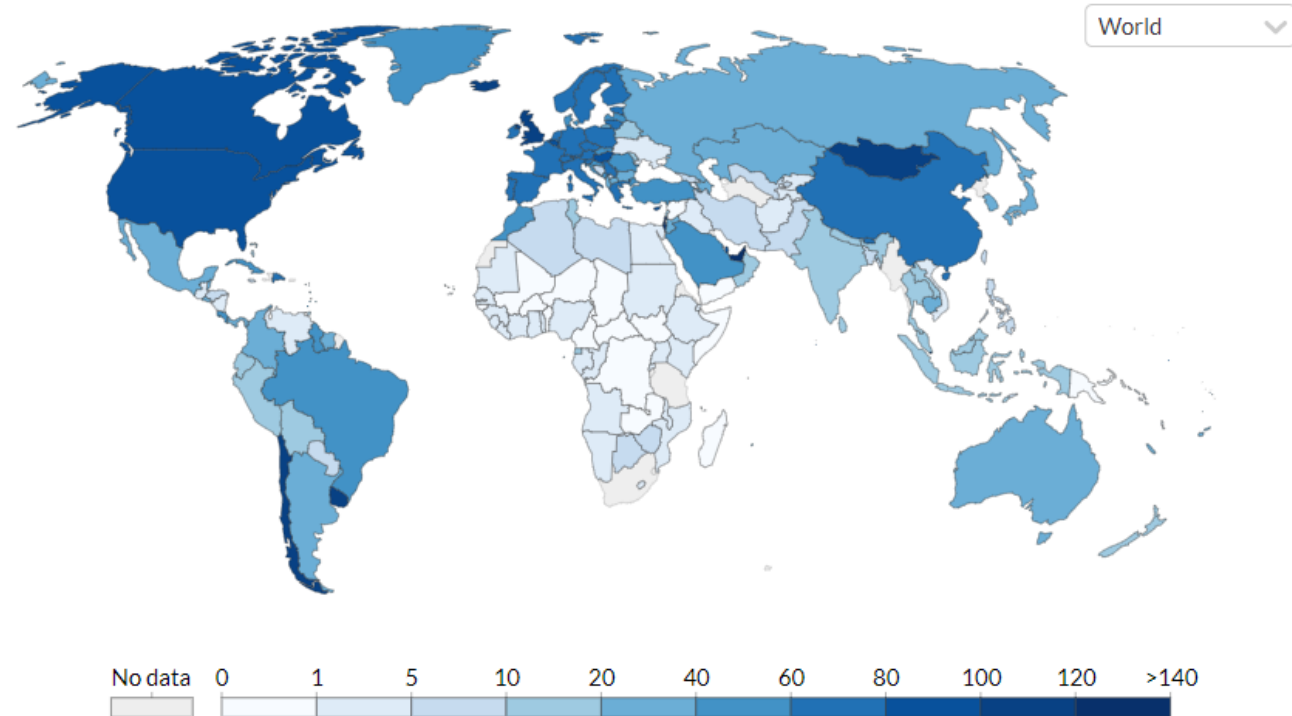
	Manufacturer / WHO EUL holder	Name of Vaccine	NRA of Record	Platform	EOI accepted	Pre-submission meeting held	Dossier accepted for review*	Status of assessment**	Anticipated decision date**
1.		BNT162b2/COMIRNATY Tozinameran (INN)	EMA	Nucleoside modified mRNA	✓	✓	✓	Finalized	31/12/20
2.		AZD1222	EMA	Recombinant ChAdOx1 adenoviral vector encoding the Spike protein antigen of the SARS-CoV-2.	✓	✓	Accepted core data	Finalized	16 April 2021
							Data for Covax sites expected in April 2021 onwards	Finalized: SK-Catalent Wuxi (DS)	16 April 2021 30 April 2021
								Other sites	As submitted
3.		AZD1222	MFDS KOREA	Recombinant ChAdOx1 adenoviral vector encoding the Spike protein antigen of the SARS-CoV-2.	✓	✓	✓	Finalized	15 Feb 2021
4.		Covishield (ChAdOx1_nCoV-19)	DCGI	Recombinant ChAdOx1 adenoviral vector encoding the Spike protein antigen of the SARS-CoV-2.	✓	✓	✓	Finalized	15 Feb 2021
5.		Ad26.COV2.S	EMA	Recombinant, replication-incompetent adenovirus type 26 (Ad26) vectored vaccine encoding the (SARS-CoV-2) Spike (S) protein	✓	✓	Core data ✓	Finalized (US +NL sites)	12 March 2021
							Additional sites awaited	Aspen South Africa	May 2021
								Other sites	As submitted
6.		mRNA-1273	EMA	mRNA-based vaccine encapsulated in lipid nanoparticle (LNP)	✓	✓	✓	Finalized	30 April 2021
7.		SARS-CoV-2 Vaccine (Vero Cell), Inactivated (InCoV)	NMPA	Inactivated, produced in Vero cells	✓	✓	✓	In progress	Early May 2021
8.		SARS-CoV-2 Vaccine (Vero Cell), Inactivated	NMPA	Inactivated, produced in Vero cells	✓	✓	✓	In progress	Early May 2021
9.		Sputnik V	Russian NRA	Human Adenovirus Vector-based Covid-19 vaccine	Additional information submitted	Several meetings held.	"Rolling" submission of clinical and CMC data has started.	Additional data (Non-CLIN, CLIN, CMC) Required. Inspections in April, May and June 2021	Will be set after all data is submitted and inspections completed.
10.		Ad5-nCoV	NMPA	Recombinant Novel Coronavirus Vaccine (Adenovirus Type 5	✓	✓	Rolling data starting May 2021		

VACCINE DOSES ADMINISTERED

COVID-19 vaccine doses administered per 100 people, Jun 19, 2021

Total number of vaccination doses administered per 100 people in the total population. 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).

Our World
in Data



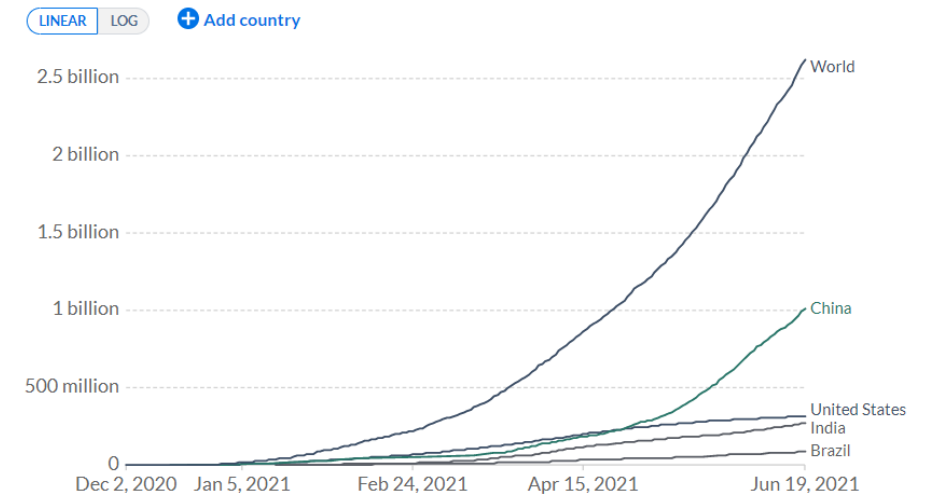
Source: Official data collated by Our World in Data - Last updated 20 June, 11:20 (London time)
OurWorldInData.org/coronavirus • CC BY

Source: Our World in Data

COVID-19 vaccine doses administered

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).

Our World
in Data

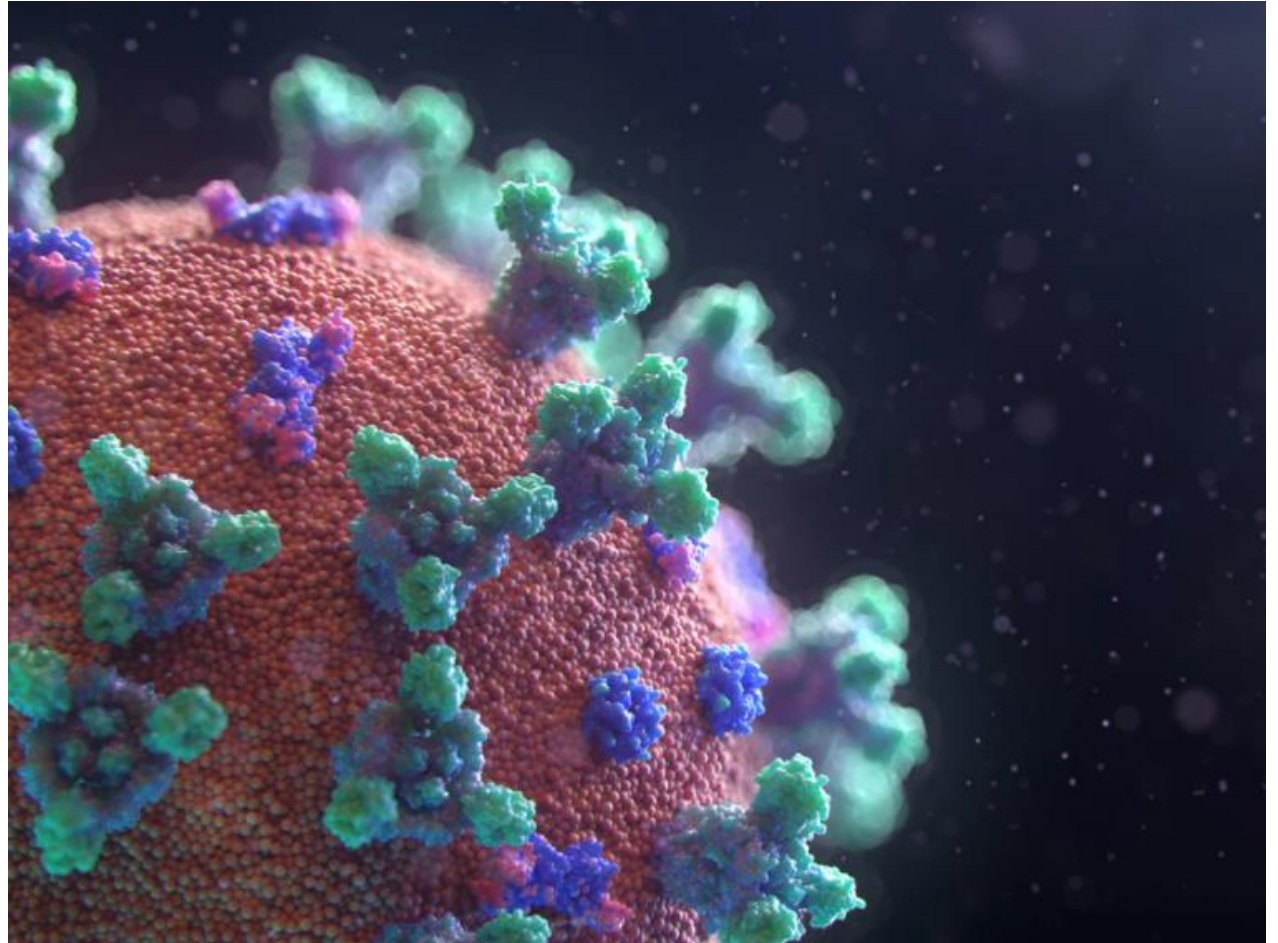


Source: Official data collated by Our World in Data - Last updated 20 June, 11:20 (London time)
OurWorldInData.org/coronavirus • CC BY

Almost > 2.5 billion doses of vaccine have been administered across the world. The chart shows for some of the countries such as India, China, United States, Brazil

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THINGS TO DO



Get Vaccination Completed and follow all general precaution protocols



Such waves will keep coming until we attain 70% vaccination & herd immunity. Do not lower your guard, especially mask, till we achieve herd immunity



Avoid junk food. No over exertion/over exercise. Adopt Yoga and Pranayama in your daily routine



People with co-morbidities like obesity, diabetes etc must take extra precaution

We should all follow “Covid19 Appropriate Guidelines” as instructed and suggested by our national/local authorities. We should be able to defeat Corona Virus by taking Vaccine as soon as possible for us whenever we get time to do so and by following “Covid appropriate behavior” always!!

THANK YOU



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Email: mishra.akszita@gmail.com

Disclaimer:

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