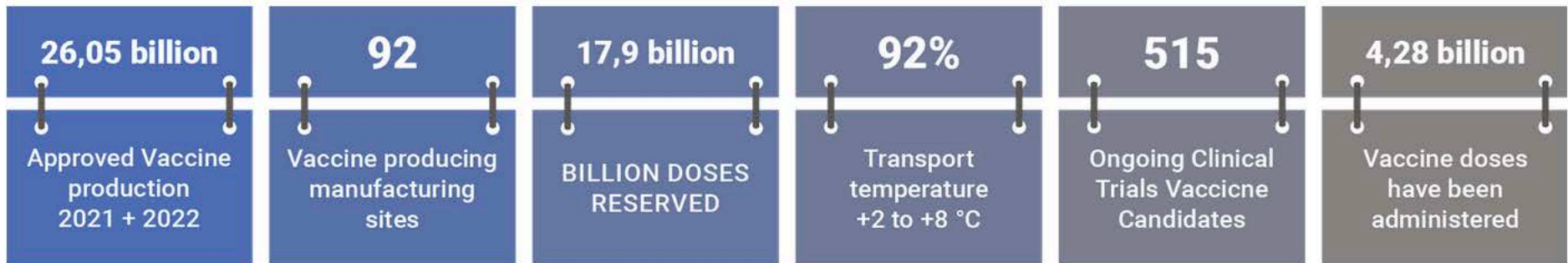


Issue 5 - December 2021



Last updated 25 Nov 2021

[Source link](#)

Welcome

Even though there has been a brief hiatus since our last edition of VACScene, we have taken time to prepare this issue to update you with the latest updates.

In the “Hot from the needle” section, we have identified a few key developments. While 2021 is coming to an end, the pandemic is yet to be behind us. The world is now challenged with the new Omicron COVID-19 variant. Currently, 3.2 billion people have been fully vaccinated and 4.2 billion have received at least 1 dose. The challenge remains to deliver the COVID-19 vaccines into hard-to-reach countries and remote regions of the world such as Sub-Saharan Africa, where vaccination coverage is still below 20% of the total population received at least one vaccine shot of which only 5,5% is fully vaccinated. On the other hand, based on World Health Organisation (WHO) statistics, the recorded number of deaths among the vaccinated population is much lower compared to the unvaccinated population. This underscores the importance of immunization to reduce the percentage of susceptible people. Governments are actively rolling out booster shot programs to ensure continued immunity, especially since the older population that was vaccinated early start to show lower immunity to the virus and that there are still risks of further mutations and newer variants.









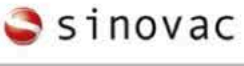








In the above regard, effective COVID-19 vaccine production and supply chain movements will continue to be vital in 2022, and vaccine shipments will continue to be a very important part of the pharma airfreight industry. In the coming months, we expect more vaccines procurement deals to be concluded and that vaccines supplies would be ramped up, thereby achieving a wider coverage, and fast-tracking global vaccine timeline.

In addition, novel COVID-19 oral antiviral treatments have showed signed of progress and promising clinical trials results by major pharma manufacturers MSD and Pfizer.

We hope you continue to find the material contained within VACScene of value and we extend seasonal greeting and best wishes to all readers.

Frank Van Gelder & Glyn Hughes

Approved vaccine production and distribution 2021 + 2022

Company name/logo	Vaccine name	Type platform	Production sites	Approved production	Signed deals	Doses	Approved countries
 AstraZeneca	AZD1222	Non Replicating Viral Vector	16	2.100.000.000	3.237.665.000	2	125
 BIONTECH Pfizer	BNT162b2	mRNA	14	7.000.000.000	4.279.945.905	2	107
 moderna messenger therapeutics	mRNA - 1273	mRNA	7	3.800.000.000	1.905.900.000	2	77
 SINOPHARM	BBIBP-CorV (Beijing)	Inactivated	4	5.553.400.000	4.466.000.000	2	68
 THE GAMALEYA NATIONAL CENTER OF EPIDEMIOLOGY AND MICROBIOLOGY	Sputnik V	Non Replicating Viral Vector	14	40.122.500	349.877.500	2	73
 CanSinoBIO	Ad5-nCoV	Non Replicating Viral Vector	4	1.000.000.000	146.700.000	2	9
 SERUM INSTITUTE OF INDIA PVT. LTD Crisis Preparedness Group	Covishield	Non Replicating Viral Vector	1	200.000.000	100.000.000	2	46
 BHARAT BIOTECH	Covaxin	Inactivated	4	1.590.000.000	563.600.000	2	10
 janssen Johnson & Johnson	Ad26.COVS.2.S	Non Replicating Viral Vector	8	1.000.000.000	894.600.000	1	78
 sinovac	Coronovac	Inactivated	6	3.750.000.000	1.028.603.000	2	43
 Z-SW INSTITUTE OF MEDICAL BIOLOGY CHINESE ACADEMY OF MEDICAL SCIENCES	RBD-Dimer	Protein Subunit	1	1.000.000	0	2	3
 BEKTOP	EpiVacCorona	Protein Subunit	1	5.000.000	0	2	2
 BAKHSIA KOPYCHAYPYCHAR	KoviVac	Inactivated	1	3.000.000	0	2	1
 RIISP Research Institute for Biological Safety Problems	QazCovid-in	Inactivated	1	4.000.000	0	2	2
 MINHAI 民海生物 WWW.MINHAI-BIOTECH.CO.LTD	SARS-CoV-2 Vaccine (Vero Cells)	Inactivated	1	1.000.000	0	2	2
 Shafa Pharm Pars	Covid-19	Inactivated	1	1.000.000	0	2	1
 ICGEB International Centre for Genetic Engineering and Biotechnology Developing Knowledge	CIGB-66	Protein Subunit	1	500.000	0	2	4
 THE GAMALEYA NATIONAL CENTER OF EPIDEMIOLOGY AND MICROBIOLOGY	Sputnik Light	Non Replicating Viral Vector	6	500.000	0	2	19
 MVC 高塘疫苗生物製劑股份有限公司 MEDIGEN VACCINE BIOLOGICS CO	MVC-COV1901	Protein Subunit	1	500.000	0	2	1

[Source Link](#)

Hot from the needle

Could oral antiviral pills be a game-changer for COVID-19?

Medical x press - Nov 22, 2021

[Read the full article](#)

WHO looking forward to oral, nasal Covid vaccines

RTE - Nov 9, 2021

[Read the full article](#)

Bloomberg News: EU recommends 9-month limit on Covid-19 vaccine validity for travel

Malay mail - Nov 25, 2021

[Read the full article](#)

Covid will continue to spread as people mix and travel : WHO

Healthworld - Nov 25, 2021

[Read the full article](#)

Russia gives permission to launch clinical trials of nasal spray COVID-19 vaccine

Post online - Nov 25, 2021

[Read the full article](#)

Vaccine clinical trial updates

Protein Subunit					
<u>FINLAY-FR-1</u> Instituto Finlay de Vacunas Cuba 4 trials in 1 country	<u>Recombinant Protein</u> Sonofi/GSK 4 trials in 2 countries	<u>UB-612</u> COVAXX 4 trials in 1 country	<u>FINLAY-FR-2</u> Instituto Finlay de Vacunas Cuba 3 trials in 1 country	<u>NVX-CoV2373</u> Novavax 5 trials in 6 countries	<u>Nanocovax</u> Nanogen 3 trials in 1 country
Protein Subunit					
<u>Recombinant (Sf9 cell)</u> West China Hospital 5 trials in 1 country	<u>Razi Cov Pars</u> Razi Vaccine an Serum Research Institute 3 trials in 1 country	<u>COVOVAX</u> Serum institute of India 2 trials in 1 country	<u>SCTV01C</u> Sinocelltech 3 trials in 0 countries	<u>COVAX-19</u> Vaccine/CinnaGen Co. 4 trials in 1 country	<u>Recombinant (Sf9 cell)</u> West China Hospital 5 trials in 4 countries
Protein Subunit	DNA			VLP	
<u>GBP510</u> SK Bioscience Co Ltd 5 trials in 2 country	<u>INO-4800</u> Inovio 6 trials in 7 countries	<u>ZyCoV-D</u> AnGes 6 trials in 1 country	<u>ZyCoV-D</u> Genexine 6 trials in 1 country	<u>Plant-based VLP</u> Medicago 3 trials in 2 countries	
RNA					
<u>BNT162b1</u> Pfizer/BioNTech 3 trials in 2 countries	<u>BNT162b2s01</u> Pfizer/BioNTech 3 trials in 1 country	<u>mRNA-1273.617.2</u> Moderna 2 trials in 1 country	<u>mRNA-1273.211</u> Moderna 2 trials in 1 country	<u>mRNA</u> Walvax 4 trials in 1 country	<u>ARCT-154</u> Arcturus Therapeutics Inc 5 trials in 3 countries
Non Replicating Viral Vector		Replicating Viral Vector			
<u>GRAd-COV2</u> ReiThera 5 trials in 12 countries	<u>AZD2816</u> Oxford/AstraZeneca 2 trials in 2 countries	<u>DelNS1-2019-nCov-RBD-OPT</u> Wantai 3 trials in 2 countries	<u>IIBR-100</u> Israel Institute for Biological Research (IIBR) 4 trials in 1 country		
Inactivated					
<u>Inactivated (Vero Cells)</u> Chinese Academy of Medical Sciences 5 trials in 3 countries	<u>VLA2001</u> Valneva 3 trials in 1 country	<u>FAKHRAVAC (MIVAC)</u> Organization of Defensive Innovation and Research 3 trials in 1 country	<u>VLA2101</u> Valneva 1 trials in 1 country	<u>EUROCOV-VAC</u> Health Institutes of Turkey 6 trials in 1 country	<u>KD-414</u> KM Biologics Co Ltd 1 trials in 1 country

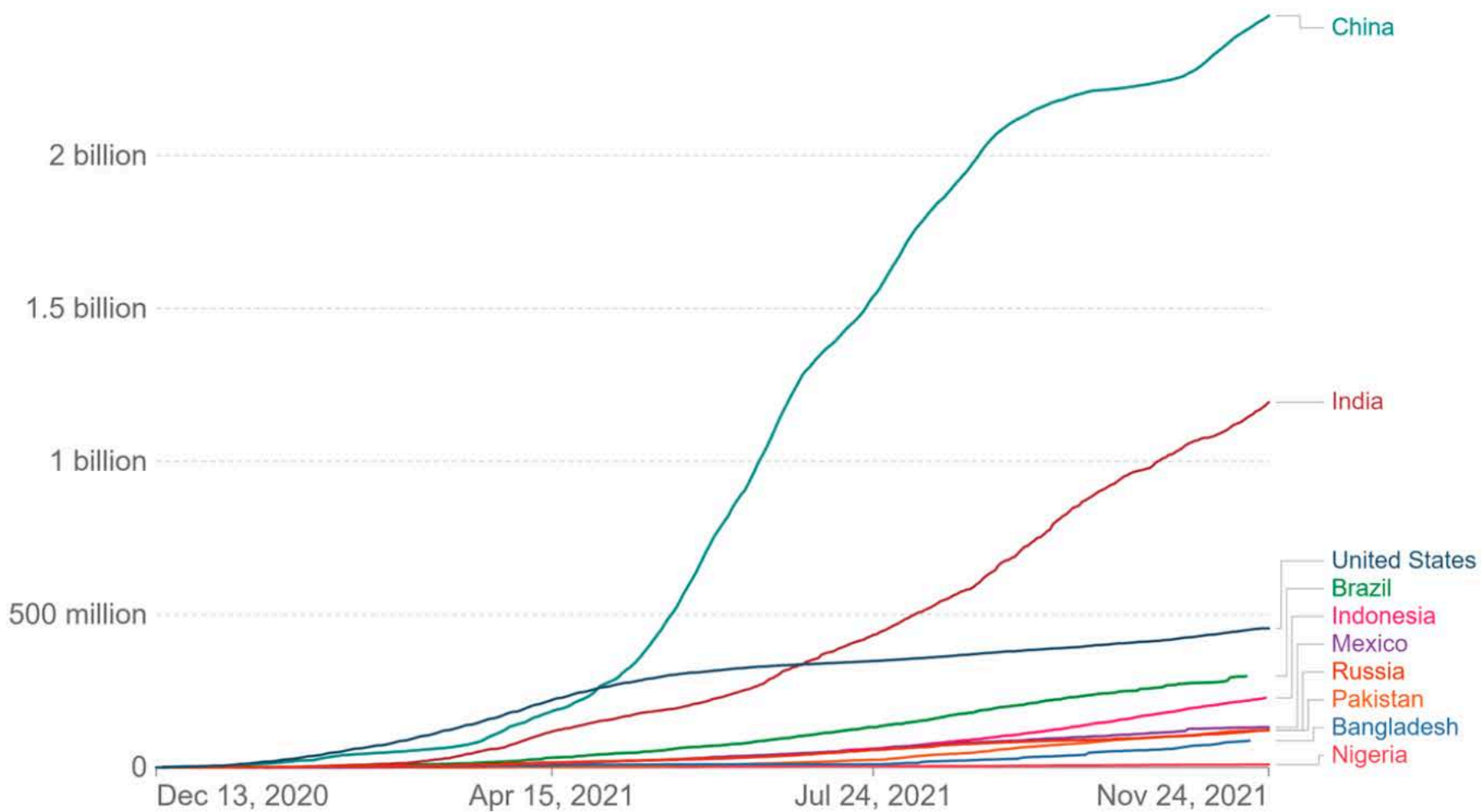
Global vaccine administration progress

Last updated 29 Sep 2021

COVID-19 vaccine doses administered

All doses, including boosters, are counted individually. As the same person may receive more than one dose, the number of doses can be higher than the number of people in the population.

Our World in Data



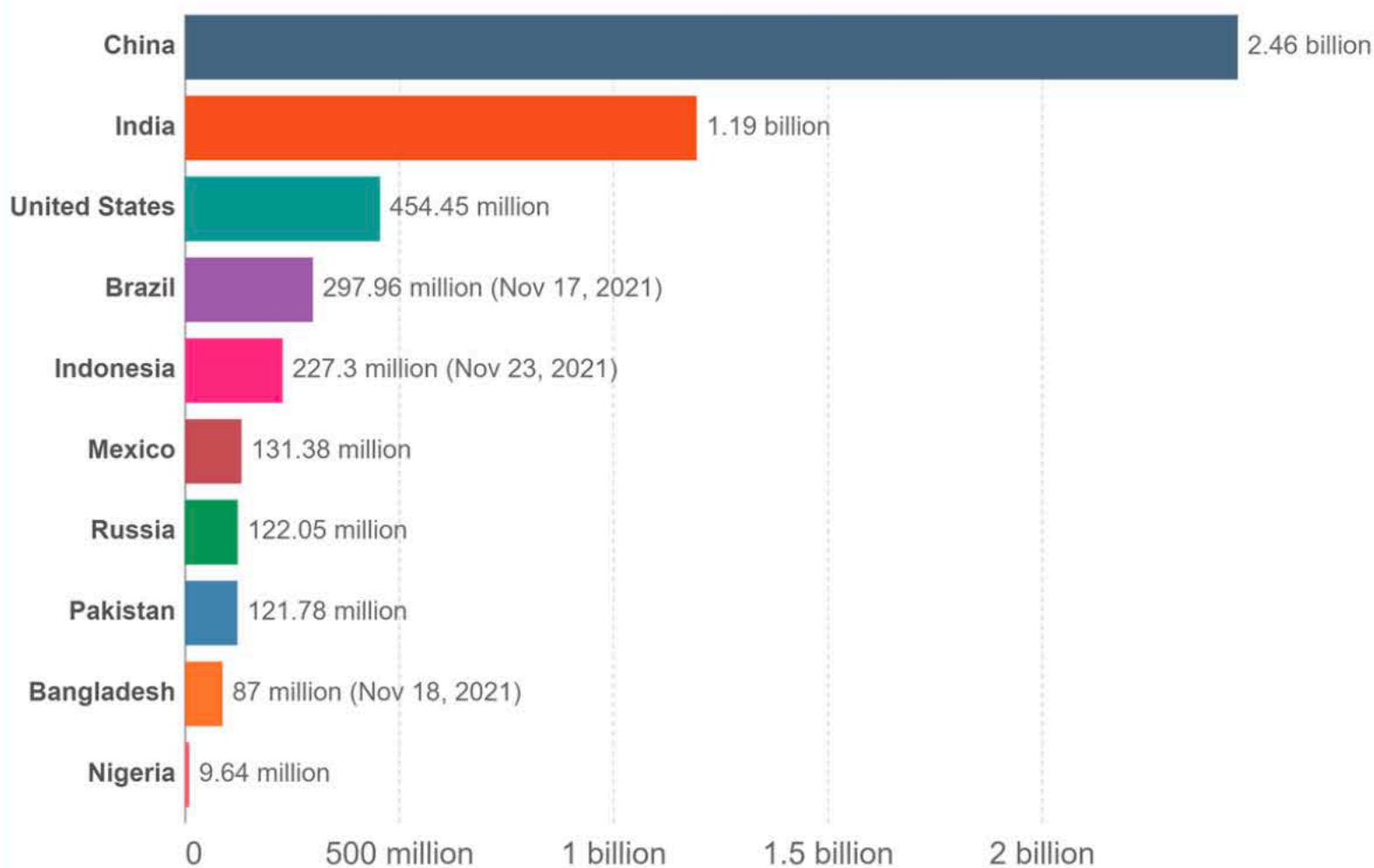
Source: Official data collated by Our World in Data – Last updated 25 November 2021, 09:20 (London time)
OurWorldInData.org/coronavirus • CC BY

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Our World in Data

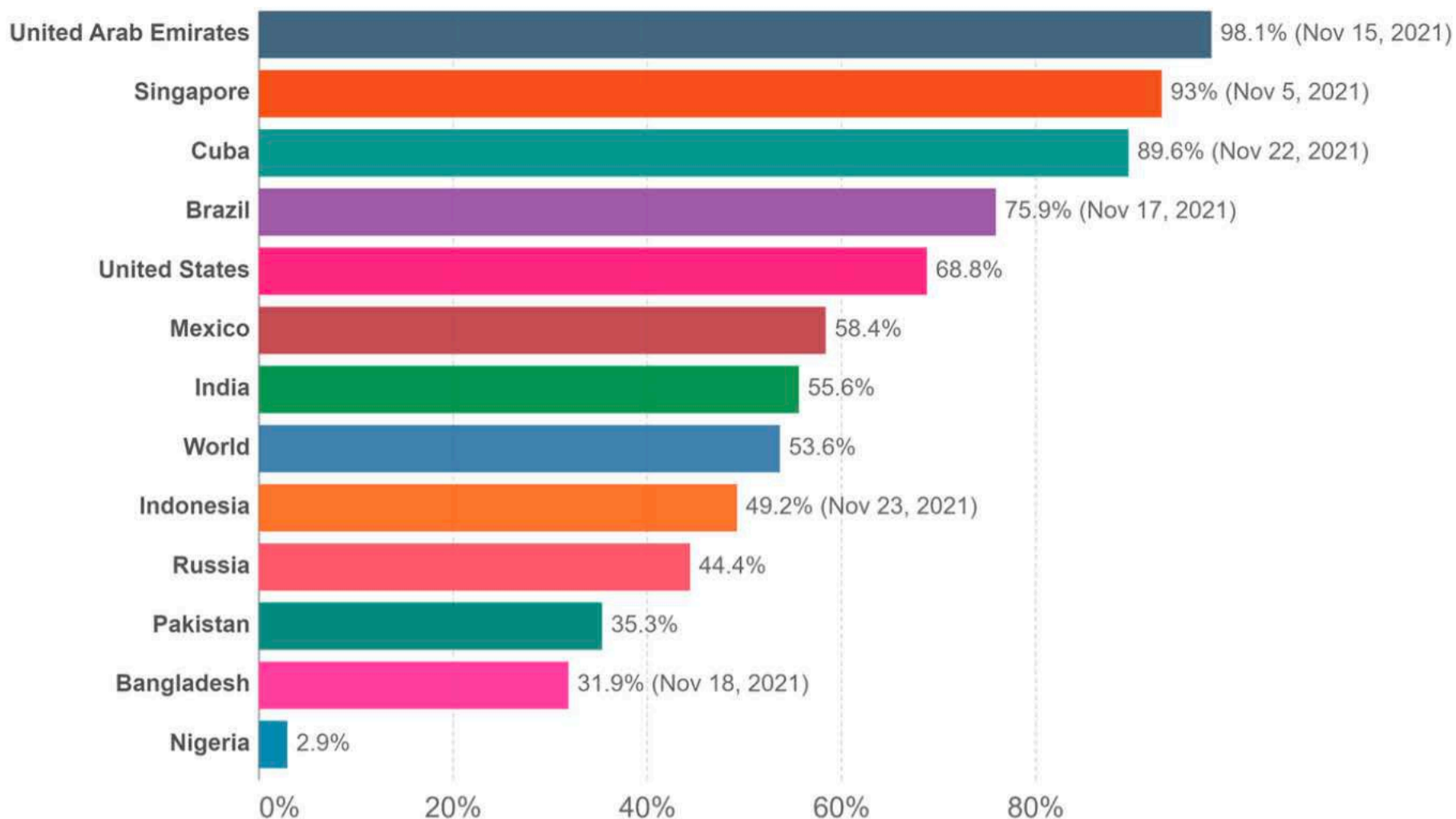


Source: Official data collated by Our World in Data – Last updated 25 November 2021, 09:20 (London time)
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Share of people who received at least one dose of COVID-19 vaccine

Total number of people who received at least one vaccine dose, divided by the total population of the country.

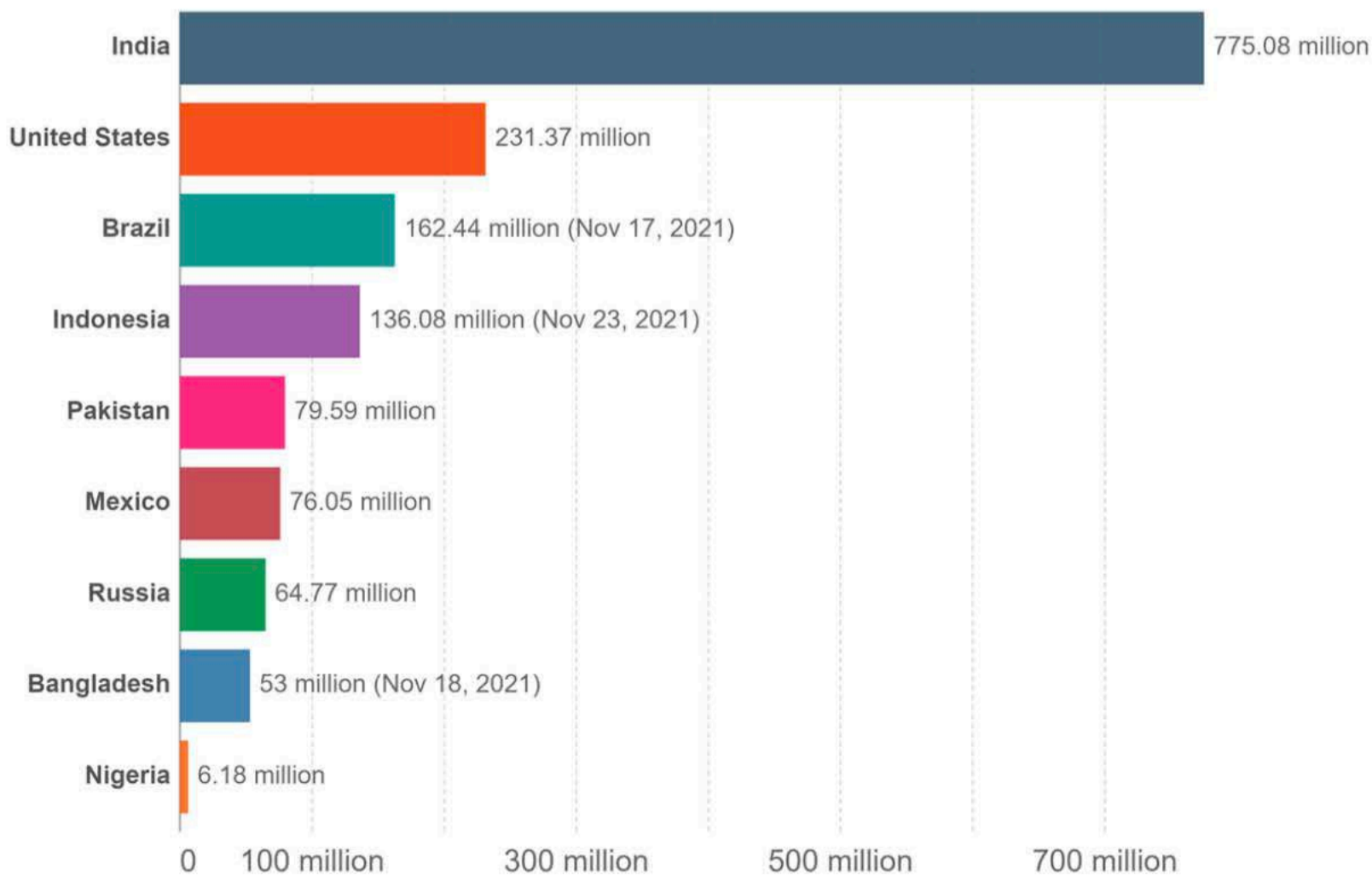


Source: Official data collated by Our World in Data – Last updated 25 November 2021, 09:20 (London time)
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Number of people who received at least one dose of COVID-19 vaccine

Total number of people who received at least one vaccine dose.



Source: Official data collated by Our World in Data – Last updated 25 November 2021, 09:20 (London time)
OurWorldInData.org/coronavirus • CC BY

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Production forecast 2021



China	3.988.000.000	India	1.782.250.000
Sinovac	2.013.000.000	AstraZeneca	886.250.000
Sinopharm	1.000.000.000	Bharat BioTech	570.000.000
CanSinoBio	500.000.000	SIOInlo	200.000.000
ZFSW	375.000.000	GNC	126.000.000
AstraZeneca	100.000.000		

US	2.520.000.000	Belgium	1.125.000.000
BioTech Pfizer	1.000.000.000	BioTech Pfizer	1.125.000.000
Moderna	1.000.000.000		
AstraZeneca	420.000.000		
Bharat BioTech	100.000.000		

Australia	50.000.000	Italy	25.000.000	South Africa	150.000.000
AstraZeneca	50.000.000	Johnson&Johnson	25.000.000	Johnson&Johnson	150.000.000
Brazil	265.500.000	Japan	30.000.000	South Korea	250.000.000
AstraZeneca	163.500.000	AstraZeneca	30.000.000	GNC	150.000.000
GNC	56.000.000	Kazakhstan	5.640.000	Moderna	100.000.000
Sinovac	46.000.000	GNC	5.640.000	Spain	85.000.000
Egypt	60.300.000	Malaysia	12.035.000	Moderna	60.000.000
Sinovac	60.300.000	Sinovac	12.000.000	Johnson&Johnson	25.000.000
France	108.000.000	CanSinoBio	35.000	Switzerland	50.000.000
Johnson&Johnson	108.000.000	Mexico	285.000.000	BioTech Pfizer	50.000.000
Germany	1.046.000.000	AstraZeneca	250.000.000	Thailand	61.000.000
BioTech Pfizer	1.000.000.000	CanSinoBio	35.000.000	AstraZeneca	61.000.000
GNC	36.000.000	Netherlands	692.000.000	UAE	150.000.000
AstraZeneca	10.000.000	Johnson&Johnson	692.000.000	Sinopharm	150.000.000
Indonesia	250.000.000	Pakistan	21.000	UK	562.500.000
Sinovac	250.000.000	CanSinoBio	21.000	AstraZeneca	562.500.000

Approved vaccine production and distribution

Company name/logo	Vaccine name	Type platform	Product temperature	Transport temperature
 AstraZeneca	AZD1222	Non Replicating Viral Vector	+2C° to +8C°	+2C° to +8C°
 BIONTECH Pfizer	BNT162b2	mRNA	-70C°	+15C° to +25C°
 moderna	mRNA - 1273	mRNA	-20C°	+2C° to +8C°
 SINOPHARM	BBIBP-CorV (Beijing)	Inactivated	+2C° to +8C°	+2C° to +8C°
 THE GAMALEYA NATIONAL CENTER OF EPIDEMIOLOGY AND MICROBIOLOGY	Sputnik V	Non Replicating Viral Vector	+2C° to +8C°	+2C° to +8C°
 CanSinoBIO	Ad5-nCoV	Non Replicating Viral Vector	+2C° to +8C°	+2C° to +8C°
 SERUM INSTITUTE OF INDIA PVT. LTD. <small>Corona Vaccines India</small>	Covishield	Non Replicating Viral Vector	+2C° to +8C°	+2C° to +8C°
 BHARAT BIOTECH	Covaxin	Inactivated	+2C° to +8C°	+2C° to +8C°
 janssen Johnson & Johnson	Ad26.COV2.S	Non Replicating Viral Vector	-20C°	+2C° to +8C°
 sinovac	Coronavac	Inactivated	+2C° to +8C°	+2C° to +8C°
 ZFSW INSTITUTE OF MEDICAL BIOLOGY <small>CHINESE ACADEMY OF MEDICAL SCIENCES</small>	RBD-Dimer	Protein Subunit	+2C° to +8C°	+2C° to +8C°
 BEKTOP	EpiVacCorona	Protein Subunit	+2C° to +8C°	+2C° to +8C°
 KoviVac	KoviVac	Inactivated	+2C° to +8C°	+2C° to +8C°
 RIBSP <small>Research Institute for Biological Safety Problems</small>	QazCovid-in	Inactivated	+2C° to +8C°	+2C° to +8C°
 MINHAI 民海生物 <small>MINHAI BIOTECHNOLOGY CO., LTD</small>	SARS-CoV-2 Vaccine (Vero Cells)	Inactivated	+2C° to +8C°	+2C° to +8C°
 Shafa Pharmed Pars	Covid-19	Inactivated	+2C° to +8C°	+2C° to +8C°
 IGEB <small>International Centre for Genetic Engineering and Biotechnology</small> <small>Developing Knowledge</small>	CIGB-66	Protein Subunit	+2C° to +8C°	+2C° to +8C°
 THE GAMALEYA NATIONAL CENTER OF EPIDEMIOLOGY AND MICROBIOLOGY	Sputnik Light	Non Replicating Viral Vector	+2C° to +8C°	+2C° to +8C°
 MVC <small>高福疫苗生物製劑股份有限公司</small> <small>MEDIGEN VACCINE BIOLOGICS CO</small>	MVC-COV1901	Protein Subunit	+2C° to +8C°	+2C° to +8C°

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Contact details

www.pharma.aero
secgen@pharma.aero

www.tiaca.org
secretariat@tiaca.org

www.4advice.eu
info@4advice.eu



Authors:
4Advice
Pharma.Aero
TIACA



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