

11,2 billion	52	8.6 billion doses	91%	326	1.12 billion
Approved Vaccines Production	Vaccine Producing manufacturing sites	Total signed country deals	Transport Temperature +2 to +8 °C	Ongoing Clinical Trials vaccine candidates	Global population with at least 1 vaccine

Last updated on 5 May 2021

[Source link](#)

## Welcome










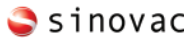


It has been over more than a year now since the world has come to a standstill with global lockdowns arising from the Covid-19 pandemic. In restarting economies and saving lives, we have witnessed vaccine manufacturers around the world speed up their Covid-19 vaccine development, production and distribution so as to inoculate the global population. Air cargo has proven to be the fastest mode of transportation to deliver the vaccines to their distribution centers, especially across continents.

Back in August 2020, with the key objectives to create transparency between vaccines manufacturers and the global air cargo industry, Pharma.Aero and TIACA collaborated in Project Sunrises, examining the readiness of our air cargo industry for this global logistical mission and identifying best practices in ensuring the safe, reliable and effective handling and transportation of each vaccine shipment. Both organizations realized that staying abreast of new developments and open communication was key to raise preparedness of the industry. To this end, both organisations are announcing our first volume of the VACscene, a regular member newsletter that details an overview of latest Covid-19 vaccine key statistics, as well as news on vaccine production and supply chains, a monthly volume will be available.

Pharma.Aero and TIACA wish you a great reading!

Frank Van Gelder & Glyn Hughes

## Updates on the Covid-19 vaccine global production

Company name	Vaccine name	Production sites	Approved production	Signed deals	Approved countries	Vaccine type
 AstraZeneca	AZD1222	16	3 Billion	2.420.100.000	83	Non Replicating Viral Vector
 BIONTECH Pfizer	BNT162b2	5	2,5 Billion	1.556.970.075	81	mRNA
 moderna	mRNA - 1273	5	700 Million	803.000.000	44	mRNA
 SINOPHARM	BBIBP-CorV (Beijing)	2	1 Billion	147.000.000	30	Inactivated
 МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ	Sputnik V	5	390 Million	303.987.500	59	Non Replicating Viral Vector
 CanSinoBIO	Ad5-nCoV	3	500 Million	28.360.000	4	Non Replicating Viral Vector
 SERUM INSTITUTE OF INDIA PVT. LTD. Cyrus Poonawalla Group	Covishield	1	200 Million		32	Non Replicating Viral Vector
 BHARAT BIOTECH	Covaxin	2	150 Million	26.000.000	5	Inactivated
 janssen JOHNSON & JOHNSON	Ad26.COV2.S	7	1 Billion	1.035.000.000	37	Non Replicating Viral Vector
 sinovac	Coronavac	4	1,75 Billion	480.220.000	20	Inactivated
 Z-FSW INSTITUTE OF MEDICAL BIOLOGY CHINESE ACADEMY OF MEDICAL SCIENCES	RBD-Dimer	1	1 Million	0	2	Protein Subunit
 BEKTOP	EpiVacCorona	1	5 Million	0	2	Protein Subunit

[Source link](#)

## Hot from the needle



### A 3rd shot might be needed (NBC News)(link1)(link2)

Both Pfizer-BioNTech and Moderna have announced recently they are studying the need for a third, what is a so-called "booster shot" in order to protect the individual on middle long term against the Covid 19 cov-2-Sars virus. It is necessary in order to multiply the antibody production response in the body and eventually increase the immunization. Pfizer disclosed the information that the new study will monitor the safety and efficacy of a third dose in participants received two doses of the vaccine three weeks apart in a first trial in May 2020. This also suggests that the Covid 19 will stay around requesting a yearly Covid shot similar to the flu shots of today.

### Contracts of Johnson & Johnson and AstraZeneca under discussion within the European Union (Reuters)

More information suggests that the EU Commission might not renew Covid-19 vaccine contracts next year with AstraZeneca and Johnson & Johnson. The European Commission needs to focus on technologies that have proven their worth. The EU was in talks with Pfizer and BioNTech for a new contract for 1.8 billion doses. In the meantime, the European Commission is seeking clarification from Johnson & Johnson about the company's "completely unexpected" announcement of delays in COVID-19 vaccine deliveries to the EU.

Later this week, the EMA (European Medicine Agency) and their Pharmacovigilance Risk Assessment Committee (PRAC) confirmed the overall benefit-risk profile remains positive.

Following the PRAC recommendation, Johnson & Johnson will resume shipments of the Janssen COVID-19 vaccine in the European Union (EU), Norway and Iceland. There will be an updated EMA and Healthcare Professionals guidance available to national healthcare authorities.

### EU allows Pfizer/BioNTech COVID-19 vaccine to be stored at higher temperatures (By Sean Whooley | March 26, 2021)

Pfizer and BioNTech announced today that European authorities approved storage of their COVID-19 vaccine at a new temperature. Based on data showing stability in standard pharmaceutical freezers, the European Medicines Agency (EMA) approved storage of the vaccine at -25°C to -15°C for a total of two weeks. As a result of the approval, vials of the vaccine can be stored in all 27 European Union (EU) member states at the updated temperatures as an alternative to the ultra-low requirements, offering flexibility to distribution and inoculation, according to a news release. Ultra-low temperature storage requirements are intended to protect the mRNA in the vaccines. "We appreciate the collaboration with the EMA and other regulatory agencies around the world as we work to ensure our vaccine can be shipped and stored under increasingly flexible conditions," added Pfizer chairman & CEO Albert Bourla.

## Vaccine clinical trial updates

Protein Subunit					
FINLAY-FR-1	Recombinant Protein	CIGB-66	SCB-2019	COVAXX	FINLAY-FR-2
Instituto Finlay de Vacunas Cuba	Sonofi/GSK	Center for Genetic Engineering and Biotechnology (CIGB)	Clover	UB-612	Instituto Finlay de Vacunas Cuba
5 trials in 1 country	4 trials in 2 countries	5 trials in 1 country	5 trials in 10 countries	4 trials in 1 country	3 trials in 1 country
Protein Subunit	VLP	DNA		RNA	
NVX-CoV2373	Plant-based VLP	AG0302-COVID19	INO-4800	CVnCoV	BNT162b1
Novavax	Medicago	AnGes	Inovio	Curevac	Pfizer/BioNTech
5 trials in 6 countries	3 trials in 2 countries	4 trials in 1 country	6 trials in 3 countries	10 trials in 11 countries	5 trials in 3 countries

Last updated on 5 May 2021

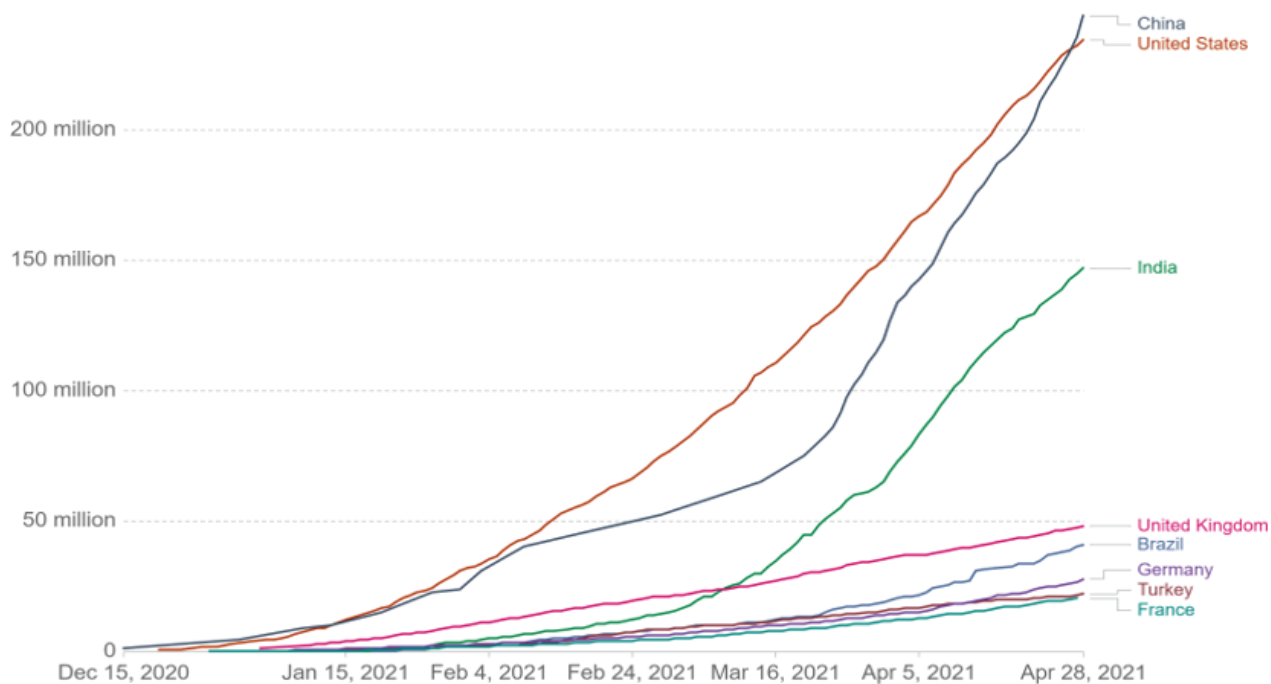
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## Global vaccine administration progress

### 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 29 April, 18:10 (London time)

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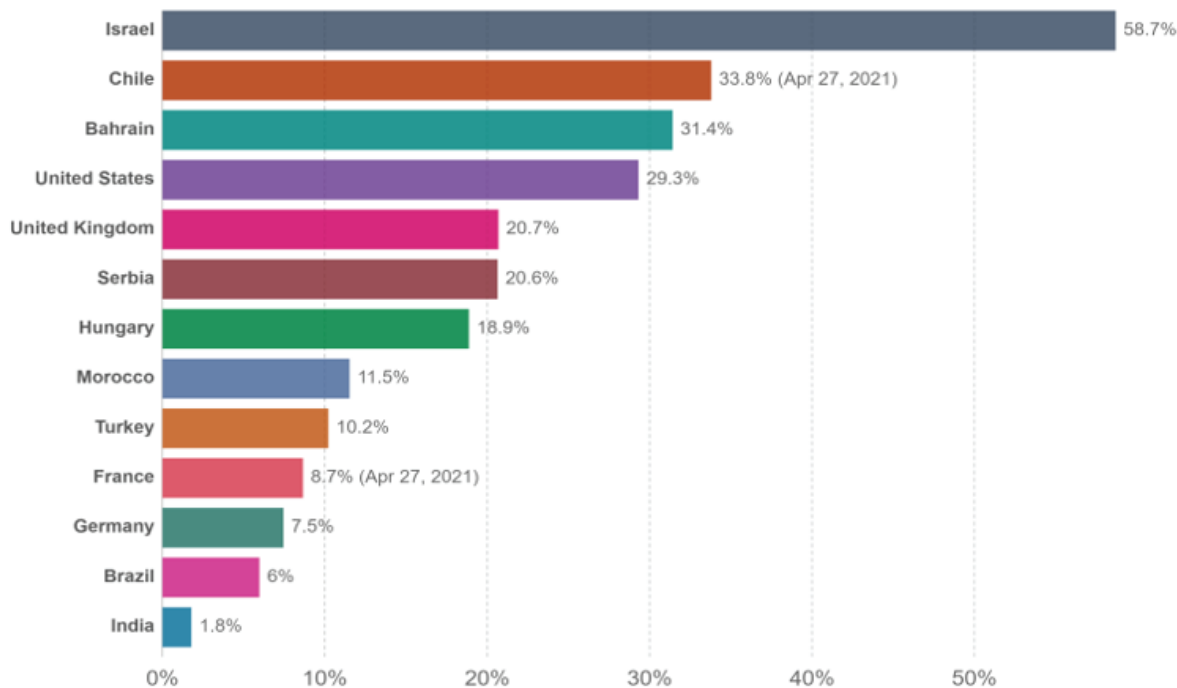
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Total: 1.12 billion

### 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.

Our World  
in Data

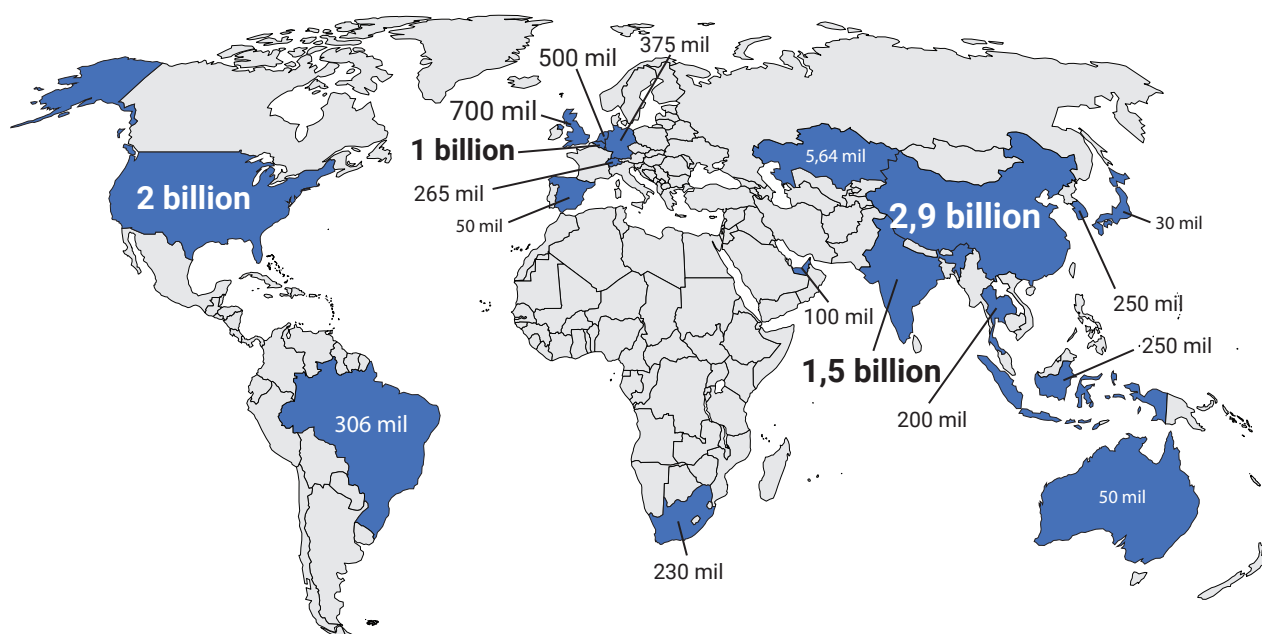


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## Production forecast 2021



### China 2.913.000.000

Sinovac	1.013.000.000
Sinopharm	1.000.000.000
CanSinoBio	500.000.000
AstraZeneca	400.000.000

### US 1.980.000.000

BioTech Pfizer	1.000.000.000
Moderna	460.000.000
AstraZeneca	420.000.000
Bharat BioTech	100.000.000

### India 1.526.000.000

AstraZeneca	1.000.000.000
Bahrat BioTech	200.000.000
SIOI	200.000.000
GNC	126.000.000

### Belgium 1.000.000.000

BioTech Pfizer	1.000.000.000
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### Australia 50.000.000

AstraZeneca	50.000.000
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### Brazil 305.800.000

AstraZeneca	203.800.000
GNC	56.000.000
Sinovac	46.000.000

### Germany 375.000.000

BioTech Pfizer	375.000.000
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### Indonesia 250.000.000

Sinovac	250.000.000
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### Japan 30.000.000

AstraZeneca	30.000.000
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### Kazakhstan 5.640.000

GNC:	5.640.000
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### Netherlands 500.000.000

Johnson&Johnson	500.000.000
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### South Africa 230.000.000

Johnson&Johnson	230.000.000
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### South Korea 250.000.000

GNC	150.000.000
Moderna	100.000.000

### Spain 50.000.000

Johnson&Johnson	50.000.000
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### Switzerland 265.000.000

BioTech Pfizer	125.000.000
Moderna	140.000.000

### Thailand 200.000.000

AstraZeneca	200.000.000
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### UAE 100.000.000

Sinopharm	100.000.000
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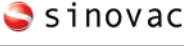


### UK 700.000.000

AstraZeneca	700.000.000
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## Supply chain insights

Company name	Vaccine name	Product temperature	Transport temperature
 AstraZeneca	AZD1222	+2C° to +8C°	+2C° to +8C°
 BIONTECH Pfizer	BNT162b2	-70C°	+15C° to +25C°
 moderna™ messenger therapeutics	mRNA - 1273	-20C°	+2C° to +8C°
 SINOPHARM	BBIBP-CorV (Beijing)	+2C° to +8C°	+2C° to +8C°
 МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ	Sputnik V	+2C° to +8C°	+2C° to +8C°
 CanSinoBIO	Ad5-nCoV	+2C° to +8C°	+2C° to +8C°
 SERUM INSTITUTE OF INDIA PVT. LTD. Cytex Pharmaceuticals Group	Covishield	+2C° to +8C°	+2C° to +8C°
 BHARAT BIOTECH	Covaxin	+2C° to +8C°	+2C° to +8C°
 janssen   johnson-johnson	Ad26.COV2.S	-20C°	+2C° to +8C°
 sinovac	Coronavac	+2C° to +8C°	+2C° to +8C°
 ZFSW INSTITUTE OF MEDICAL BIOLOGY CHINESE ACADEMY OF MEDICAL SCIENCES	RBD-Dimer	+2C° to +8C°	+2C° to +8C°
 BEKTOP	EpiVacCorona	+2C° to +8C°	+2C° to +8C°

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