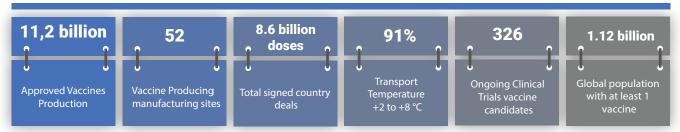






#### Issue 1 - April 2021



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 across, 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 Sunrays, 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 Prizer	BNT162b2	5	2,5 Billion	1.556.970.075	81	mRNA
moderna" messenger (herapeutics	mRNA - 1273	5	700 Million	803.000.000	44	mRNA
SINOPHARM E	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
<b>CanSinoBIO</b>	Ad5-nCoV	3	500 Million	28.360.000	4	Non Replicating Viral Vector
SERUM INSTITUTE OF INDIA PVT. LTD.  Cyrus Peenawalla Group	Covishield	1	200 Million		32	Non Replicating Viral Vector
BHARAT BIOTECH	Covaxin	2	150 Million	26.000.000	5	Inactivated
Janssen J 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
S ZFSW W INSTITUTE OF MEDICAL BIOLOGY OF RESIDENCE SOCIOES	RBD-Dimer	1	1 Million	0	2	Protein Subunit
<b>ВЕКТОР</b>	EpiVacCorona	1	5 Million	0	2	Protein Subunit
						Source link

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#### 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

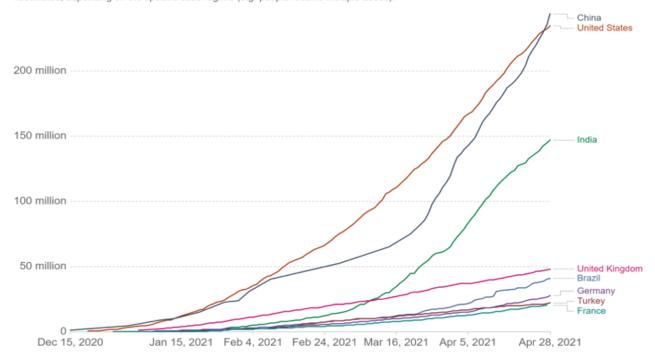
Protein Subunit						
FINLAY-FR-1	Recombinant Protein	CIGB-66	SCB-2019	COVAXX	FINLAY-FR-2	
Instituto Finlay de Vacunas Cuba	Sonofi/GSK	Center for Genetic Engineering and Biotechnology (CIGB)	Clover	UB-612	Instituto Finlay de Vacunas Cuba	
5 trials in 1 country	4 trials in 2 countries	5 trials in 1 country	5 trials in 10 countries	4 trials in 1 country	3 trials in 1 country	
		DNA RNA				
Protein Subunit	VLP	DN	IA	RI	NA .	
Protein Subunit	VLP Plant-based VLP	AG0302-COVID19	INO-4800	CVnCoV	BNT162b1	
NVX-CoV2373	Plant-based VLP	AG0302-COVID19	INO-4800	CVnCoV	BNT162b1	

### **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).



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

OurWorldInData.org/coronavirus • CC BY

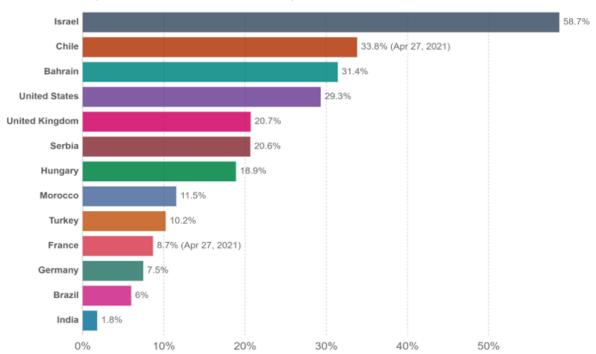
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Total: 1.12 billion

### 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.

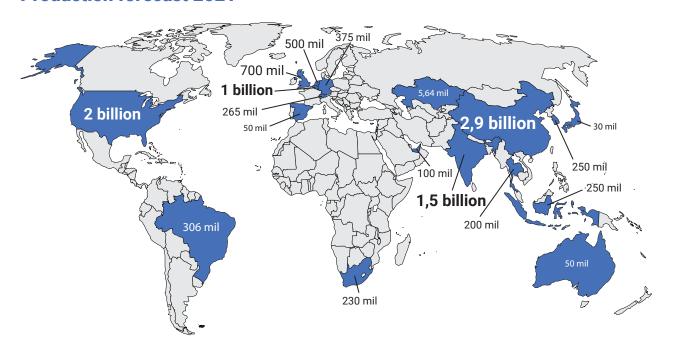


Source: Official data collated by Our World in Data - Last updated 29 April, 18:10 (London time)

OurWorldInData.org/coronavirus • CC BY

Source link

## **Production forecast 2021**



2.913.000.000	India	1.526.000.000
1.013.000.000	AstraZeneca	1.000.000.000
1.000.000.000		200.000.000
500.000.000		200.000.000
400.000.000	GNC	126.000.000
1.980.000.000	Belgium	1.000.000.000
1.000.000.000	BioTech Pfizer	1.000.000.000
460.000.000		
420.000.000		
	1.013.000.000 1.000.000.000 500.000.000 400.000.000 <b>1.980.000.000</b> 1.000.000.000 460.000.000 420.000.000	1.013.000.000 1.000.000.000 1.000.000.000 500.000.000 400.000.000  1.980.000.000 1.000.000.000 460.000.000 Belgium BioTech Pfizer

Bharat BioTe	ch	100.000.000			
<b>Australia</b> AstraZeneca	<b>50.000.000</b> 50.000.000	<b>Kazakhstan</b> GNC:	<b>5.640.000</b> 5.640.000	Switzerland BioTech Pfizer Moderna	<b>265.000.000</b> 125.000.000 140.000.000
Brazil AstraZeneca GNC Sinovac	<b>305.800.000</b> 203.800.000 56.000.000 46.000.000	Netherlands Johnson&Johnso South Africa	230.000.000	<b>Thailand</b> AstraZeneca	<b>200.000.000</b> 200.000.000
<b>Germany</b> BioTech Pfizer	<b>375.000.000</b> 375.000.000	Johnson&Johnson South Korea	on 230.000.000 <b>250.000.000</b>	<b>UAE</b> Sinopharm	<b>100.000.000</b> 100.000.000
Indonesia Sinovac	<b>250.000.000</b> 250.000.000	GNC Moderna	150.000.000 100.000.000	<b>UK</b> AstraZeneca	<b>700.000.000</b> 700.000.000
<b>Japan</b> AstraZeneca	<b>30.000.000</b> 30.000.000	<b>Spain</b> Johnson&Johns	<b>50.000.000</b> on 50.000.000		

Source link

### **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"	mRNA - 1273	-20C°	+2C° to +8C°
SINOPHARM	BBIBP-CorV (Beijing)	+2C° to +8C°	+2C° to +8C°
МИНИСТЕРСТВО 3ДРАВООХРАНЕНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ	Sputnik V	+2C° to +8C°	+2C° to +8C°
<b>CanSinoBIO</b>	Ad5-nCoV	+2C° to +8C°	+2C° to +8C°
SERUM INSTITUTE OF INDIA PYT. LTD.  Cyrax Peonavalla Graup	Covishield	+2C° to +8C°	+2C° to +8C°
BHARAT BIOTECH	Covaxin	+2C° to +8C°	+2C° to +8C°
Janssen J Gohnon-Johnson	Ad26.COV2.S	-20C°	+2C° to +8C°
sinovac	Coronavac	+2C° to +8C°	+2C° to +8C°
STITUTE OF MEDICAL BIOLOGY ORBITA SCHOOLS	RBD-Dimer	+2C° to +8C°	+2C° to +8C°
<b>ॐ</b> ВЕКТОР	EpiVacCorona	+2C° to +8C°	+2C° to +8C°

Source link



#### **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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