Vaccination Report – 23 November 2021

1. Vaccine Implementation

• WHO's Emergency Use Listing(EUL) Vaccines (Last Updated 11 Nov 2021)

	Manufacturer	Name of Vaccine	NRA of Record	Vaccine type	
1	Pfizer-BioNTech (US)	BNT162b2/COMIRNAT Y Tozinameran (INN) EMA/USFDA		mRNA	
2	AstraZeneca (UK)	ChAdOx1 (AZS1222 Vaxzevria)	EMA/ MFDS KOREA/ Non ReplicatingVira Japan MHLW/PMDA/ vector Australia TGA		
3	Serum Institute of India (India)	Covishield (ChAdOx1_nCoV-19)	DCGI	Non Replicating Viral Vector	
4	Johnson &Johnson (US)	Ad26.CoV2.S	EMA	Non ReplicatingViral vector	
5	Moderna (US)	mRNA-1273	EMA/USFDA	mRNA	
6	Sinopharm Beijing (China)	BBIBP-CorV	NMPA	Inactivated virus (Vero Cells)	
7	Sinovac (China)	SARS-CoV-2 Vaccine	NMPA	Inactivated virus (Vero Cell)	
8	Bharat Biotech (India)	SARS-CoV-2 Vaccine, Inactivated (Vero Cell)/ COVAXIN	DCGI	Whole-Virion Inactivated (Vero Cell)	

• 24 Vaccines Approved by at Least One Country

Vaccine Type	mRNA	Non Replicating Viral vector	Inactivated virus	Protein Subunit	DNA	Total
In Use	3	6	8	6	1	24

Source: <u>https://covid19.trackvaccines.org/vaccines/</u> (Last Updated 22 Nov 2021)

 Vaccination against COVID-19 has now started in 217 locations (Source: <u>Our World in Data</u>.Last Updated 22 Nov, 2021)

Location	Doses given	Fully vaccinated (% of population)	At least 1 dose (% of population)
Worldwide 7.74 billion		3.31 billion (42.00%)	4.21 billion (53.43%)

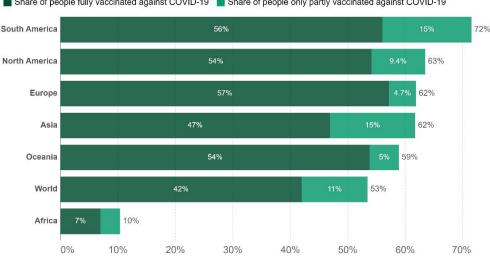
About this data:

a: This data changes rapidly and might not reflect doses still being reported. It may differ from other sites & sources.

b: Where data for full vaccinations is available, it shows how many people have received at least 1 dose and how many people have been fully vaccinated (which may require more than 1 dose). Where data for full vaccinations isn't available, the data shows the total number of vaccine doses given to people. Since some vaccines require more than 1 dose, the number of fully vaccinated people is likely lower.

c: It only has full vaccination totals in some locations.

Share of people vaccinated against COVID-19, Nov 22, 2021 Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and having 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries.

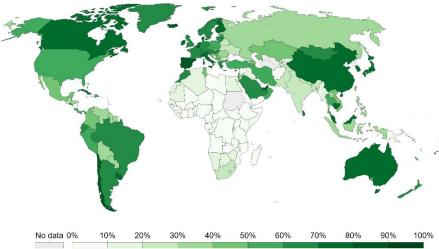


Share of people fully vaccinated against COVID-19 Share of people only partly vaccinated against COVID-19

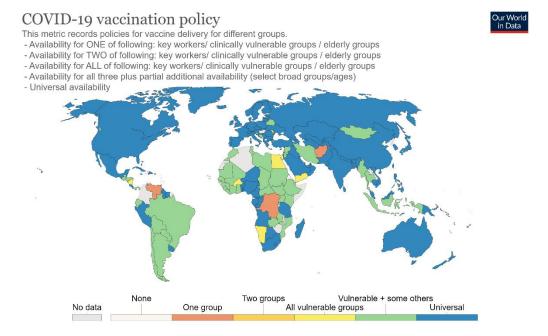
Source: Official data collated by Our World in Data. This data is only available for countries which report the breakdown of doses administered by first and second doses in absolute number CC BY

Share of the population fully vaccinated against COVID-19

Total number of people who received all doses prescribed by the vaccination protocol, divided by the total population of the country



Source: Official data collated by Our World in Data - Last updated 23 November 2021, 14:30 (London time) Note: Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and having 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries OurWorldInData.org/coronavirus • CC BY



Source: Oxford COVID-19 Government Response Tracker, Blavatnik School of Government, University of Oxford – Last updated 22 November 2021, 21:50 (London time) OurWorldInData.org/coronavirus • CC BY

2. Vaccine effectiveness against symptomatic infection for Alpha and Delta variants

Vaccine Status	Vaccine Effectiveness		
	Alpha	Delta	
1 Dose (BNT162b2 or ChAdOx1 nCoV-19)	48.7% (95%CI: 45.5-51.7%) ¹ 66%(BNT162b2) ⁴ 64% (ChAdOx1) ⁴	30.7% (95%CI: 25.2-35.7%) ¹ 56%(BNT162b2) ⁴ 67%(ChAdOx1) ⁴	
1 Dose (mRNA-1273)	83% ⁴	72%4	
1 Dose(Sinopharm or Sinovac)	Unknown	13.8%,(95%CI: -60.2-54.8%) ³	
2 Doses (BNT162b2)	93.7% (95%CI: 91.6-95.3) ¹ 76% (95%CI: 69-81%) ² 89% ⁴	88% (95%Cl: 85.3-90.1%) ¹ 42% (95% Cl: 13-62%) ² 87% ⁴ 93%(95% Cl: 88-97%/12-18Y) ⁵	
2 Doses (ChAdOx1 nCoV-19)	74.5% (95%CI: 68.4-79.4%) ¹	67.0% (95%CI: 61.3-71.8%) ¹	
2 Doses (mRNA-1273)	86%, (95%Cl: 81-90.6%) ²	76%, (95% CI: 58-87%) ²	
2 Doses(Sinopharm or Sinovac)	Unknown	59.0%, (95%Cl: 16.0-81.6%) ³	
3 Doses (BNT162b2)	Unknown	95.33% (SD 6.44) ⁶	

References:

- 1) Effectiveness of Covid-19 Vaccines against the B.1.617.2 (Delta) Variant
- 2) <u>Comparison of two highly-effective mRNA vaccines for COVID-19 during periods of</u> <u>Alpha and Delta variant prevalence</u>
- 3) Efficacy of inactivated SARS-CoV-2 vaccines against the Delta variant infection in Guangzhou: A test-negative case-control real-world study
- 4) Effectiveness of COVID-19 vaccines against variants of concern in Ontario, Canada

- 5) Effectiveness of BNT162b2 Vaccine against Delta Variant in Adolescents
- 6) A RCT of a third dose CoronaVac or BNT162b2 vaccine in adults with two doses of CoronaVac

3. Latest Relevant Articles

- Immune correlates analysis of the mRNA-1273 COVID-19 vaccine efficacy
 <u>clinical trial</u>
- Antibody titers before and after booster doses of SARS-CoV-2 mRNA vaccines in healthy adults
- Duration of Effectiveness of Vaccines Against SARS-CoV-2 Infection and COVID-<u>19 Disease: Results of a Systematic Review and Meta-Regression</u>
- <u>Transmission potential of vaccinated and unvaccinated persons infected with the</u> <u>SARS-CoV-2 Delta variant in a federal prison, July—August 2021</u>
- Effectiveness of public health measures in reducing the incidence of covid-19, SARS-CoV-2 transmission, and covid-19 mortality: systematic review and metaanalysis

4. Other Information

- Canada approved vaccinations for ages 5-11.
- CDC expands eligibility for COVID-19 booster shots to all adults.