

Vaccination Report – 21 December 2021

1. Vaccine Implementation

- WHO's Emergency Use Listing(EUL) Vaccines (Last Updated 20 Dec 2021)
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	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/ Japan MHLW/PMDA/ Australia TGA	Non ReplicatingViral vector
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)
9	Serum Institute of India (India)	NVX-CoV2373/Covovax	DCGI	Protein Subunit
10	NOVAVAX (US)	NVX-CoV2373/Covovax	EMA	Protein Subunit

- **29** Vaccines Approved by at Least One Country

Vaccine Type	mRNA	Non Replicating Viral vector	Inactivated virus	Protein Subunit	DNA	Total
In Use	3	6	9	10	1	29

Source: <https://covid19.trackvaccines.org/vaccines/> (Last Updated 20 Dec 2021)

- Vaccination against COVID-19 has now started in **218** locations (Source: Our World in Data.Last Updated 20 Dec, 2021)

Location	Doses	Fully vaccinated	At least 1 dose
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	given	(% of population)	(% of population)
Worldwide	8.78 billion	3.75 billion (47.65%)	4.48 billion (56.95%)

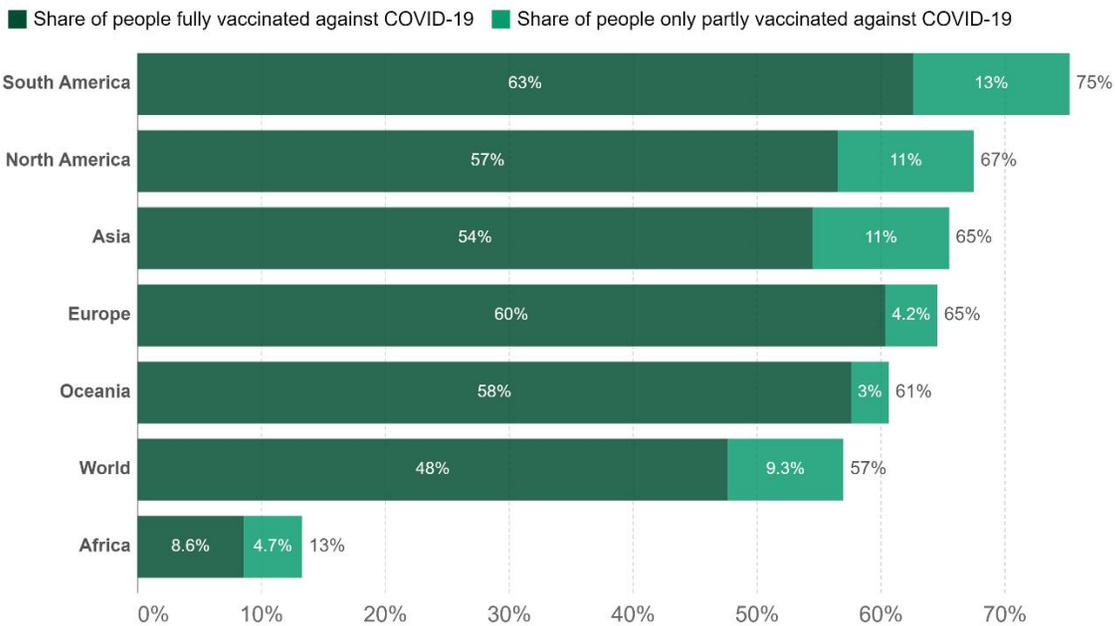
About this data:

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, Dec 20, 2021



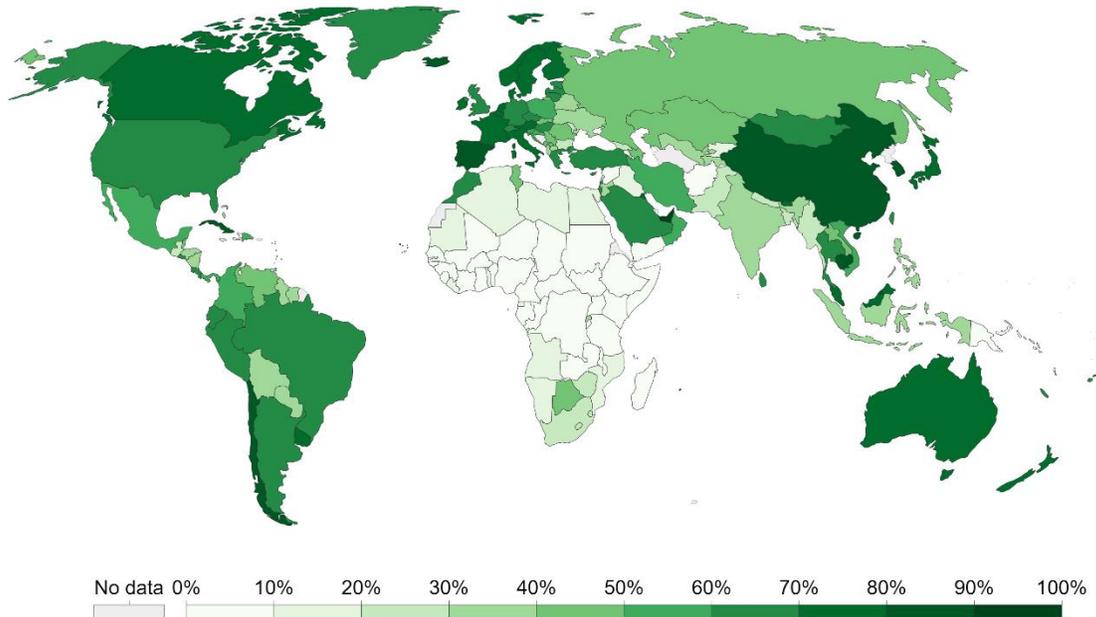
Source: Official data collated by Our World in Data

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.

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Share of the population fully vaccinated against COVID-19, Dec 20, 2021

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 21 December 2021, 11:00 (London time)

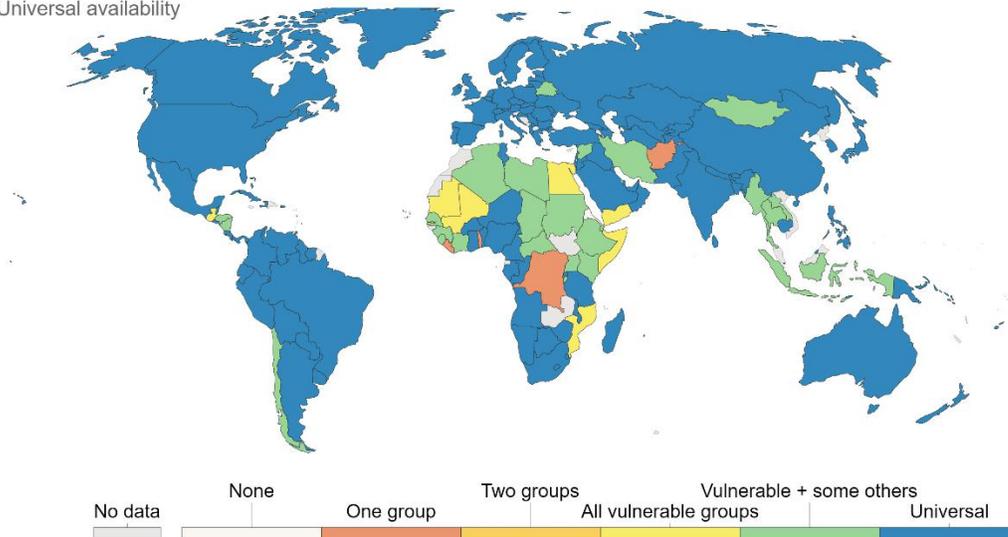
Note: Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and having 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries.

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COVID-19 vaccination policy, Dec 21, 2021

This metric records policies for vaccine delivery for different groups.

- Availability for ONE of following: key workers/ clinically vulnerable groups / elderly groups
- Availability for TWO of following: key workers/ clinically vulnerable groups / elderly groups
- Availability for ALL of following: key workers/ clinically vulnerable groups / elderly groups
- Availability for all three plus partial additional availability (select broad groups/ages)
- Universal availability



Source: Oxford COVID-19 Government Response Tracker, Blavatnik School of Government, University of Oxford – Last updated 21 December 2021, 02:50 (London time)

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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 82% (95% CI:73- 91%) ⁷
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%CI: 85.3-90.1%) ¹ 42% (95% CI: 13-62%) ² 87% ⁴ 93%(95% CI: 88-97%/12-18Y) ⁵ 93% (95% CI: 88-97%) ⁷
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%CI: 81-90.6%) ²	76%, (95% CI: 58-87%) ²
2 Doses(Sinopharm or Sinovac)	Unknown	59.0%, (95%CI: 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) [Comparison of two highly-effective mRNA vaccines for COVID-19 during periods of Alpha and Delta variant prevalence](#)
- 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](#)
- 7) [Effectiveness of BNT162b2 Vaccine against Delta Variant in Adolescents](#)

3. Latest Relevant Articles

- [Broadly neutralizing antibodies overcome SARS-CoV-2 Omicron antigenic shift](#)
- [Neutralization and Stability of SARS-CoV-2 Omicron Variant](#)
- [Diagnostics for COVID-19: moving from pandemic response to control](#)

4. Other Information

- [UK Health Security Agency: SARS-CoV-2 variants of concern and variants under investigation in England \(17 December 2021\)](#)
- [Moderna announces preliminary booster data and updates strategy to address Omicron variant](#)