Vaccination Report – 11 January 2022

1. Vaccine Implementation

- WHO's Emergency Use Listing(EUL) Vaccines (Last Updated 23 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	

• 32 Vaccines Approved by at Least One Country

Vaccine Type	mRNA	Non Replicating Viral vector	Inactivated virus	Protein Subunit	DNA	Total
In Use	3	6	10	12	1	32

Source: <u>https://covid19.trackvaccines.org/vaccines/</u> (Last Updated 10 Jan 2022)

 Vaccination against COVID-19 has now started in 218 locations (Source: <u>Our World in Data</u>. Last Updated 10 Jan, 2022)

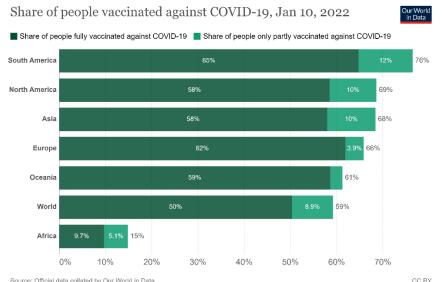
Location	Doses given	Fully vaccinated (% of population)	At least 1 dose (% of population)
Worldwide	9.49 billion	3.96 billion (50.33%)	4.66 billion (59.23%)

About this data:

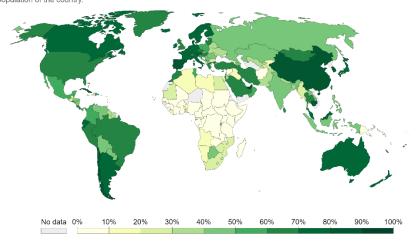
a: This data changes rapidly and might not reflect doses still being reported. It may differ from other sites & sources.

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.

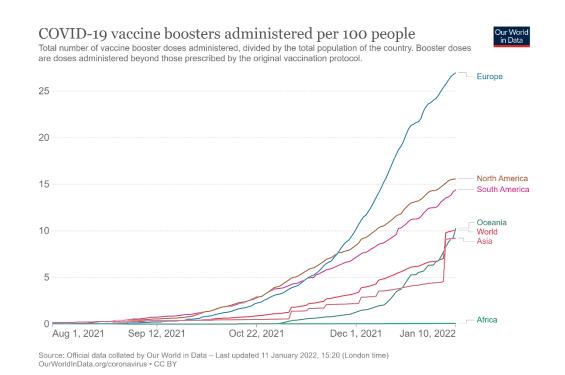


Source: Onicial data collated by Our Work in Data Note: Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and having 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries.



Share of the population fully vaccinated against COVID-19, Jan 10, 2022 Total number of people who received all doses prescribed by the initial vaccination protocol, divided by the total population of the country. Our Work

Source: Official data collated by Our World in Data – Last updated 11 January 2022, 15:20 (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



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

Vaccine Status	Vaccine Effectiveness				
	Alpha	Delta	Omicron		
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%Cl: 25.2-35.7%) ¹ 56%(BNT162b2) ⁴ 67%(ChAdOx1) ⁴ 82% (95% Cl: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	50% (95% Cl: 35%–62%) ⁸		
2 Doses (ChAdOx1 nCoV-19)	74.5% (95%CI: 68.4-79.4%) ¹	67.0% (95%Cl: 61.3-71.8%) ¹			
2 Doses (mRNA-1273)	86%, (95%Cl: 81-90.6%) ²	76%, (95% CI: 58-87%) ²	30.4% (95% Cl: 5.0%-49.0%) ⁹		
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			
3 Doses(mRNA-1273)			62.5% (95% CI: 56.2%-67.9%) ⁹		

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 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) <u>A RCT of a third dose CoronaVac or BNT162b2 vaccine in adults with two doses</u> of CoronaVac
- 7) Effectiveness of BNT162b2 Vaccine against Delta Variant in Adolescents
- 8) Effectiveness of BNT162b2 Vaccine against Omicron Variant in South Africa
- 9) Effectiveness of mRNA-1273 against SARS-CoV-2 omicron and delta variants

3. Latest Relevant Articles

- Effectiveness of mRNA-1273 against SARS-CoV-2 omicron and delta variants
- Heterologous immunization with inactivated vaccine followed by mRNA booster elicits strong humoral and cellular immune responses against the SARS-CoV-2 Omicron variant
- Effect of Covid-19 Vaccination on Transmission of Alpha and Delta Variants
- <u>Clinical outcomes among patients infected with Omicron (B.1.1.529) SARS-CoV-</u> 2 variant in southern California
- <u>Protection afforded by prior infection against SARS-CoV-2 reinfection with the</u> <u>Omicron variant</u>
- <u>The Dynamics of SARS-CoV-2 infectivity with changes in aerosol</u> <u>microenvironment</u>

4. Other Information

- CDC Recommends Moderna Booster at 5 Months: January 7, 2022
- <u>CDC Expands Booster Shot Eligibility and Strengthens Recommendations for 12-</u> <u>17 Year Olds: January 5, 2022</u>
- ECDC updates its guidance regarding quarantine and isolation considering the rapid spread of Omicron in the EU/EEA: 7 January 2022
- <u>UK Health Security Agency: Boosters continue to provide high levels of protection</u> against severe disease from Omicron in older adults:7 January 2022