Vaccination Report – 21 June 2022

1. Vaccine Implementation

• WHO's Emergency Use Listing(EUL) Vaccines (Last Updated 26 May 2022)

	Manufacturer	Name of Vaccine	NRA of Record	Vaccine type
1	Pfizer-BioNTech (US)	BNT162b2/COMIRNATY Tozinameran (INN)	EMA,USFDA	mRNA
2	AstraZeneca (UK)	AZD1222 Vaxzevria	EMA, MFDS KOREA, Japan MHLW/PMDA, Australia TGA, COFEPRIS(Mexico), ANMAT(Argentina)	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, DCGI	Non ReplicatingViral vector
5	Moderna (US)	mRNA-1273	EMA, USFDA, MFDS	mRNA
6	Sinopharm Beijing (China)	SARS-CoV-2 Vaccine(Vero Cells)	NMPA	Inactivated virus (Vero Cells)
7	Sinovac (China)	COVID-19 Vaccine (Vero Cells)	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
11	CanSinoBIO (China)	Ad5-nCoV	NMPA	Non ReplicatingViral vector

• 38 Vaccines Approved by at Least One Country

Vaccine Type	mRNA	Non Replicating Viral vector	Inactivated virus	Protein Subunit	DNA	Virus-like Particles (VLP)	Total
In Use	3	7	11	15	1	1	38

Source: https://covid19.trackvaccines.org/vaccines/ (Last Updated 17 June 2022)

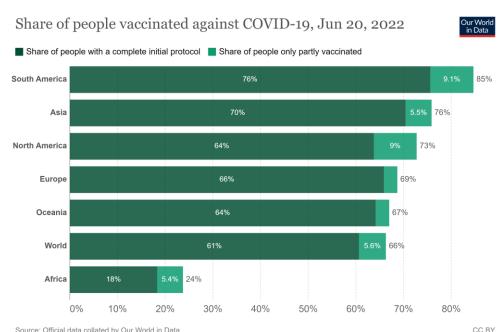
• Vaccination against COVID-19 has now started in 218 locations

(Source: Our World in Data. Last Updated 20 June 2022)

Location	Doses Given	Complete Initial Protocol (% of population)	Partly Vaccinated (% of population)
Worldwide	12 billion	4.78 billion	5.22 billion
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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.

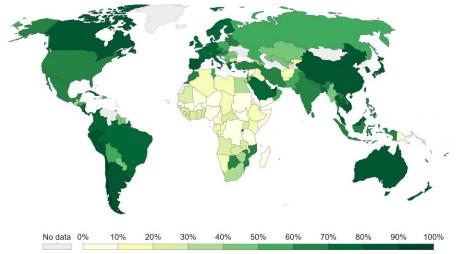


Source: Official data collated by Our World in Data Note: Alternative definitions of a full vaccination, e.g. having been infected with SARS-CoV-2 and having 1 dose of a 2-dose protocol, are ignored to maximize comparability between countries.

Share of people who completed the initial COVID-19 vaccination protocol, Jun 20, 2022

Our World in Data

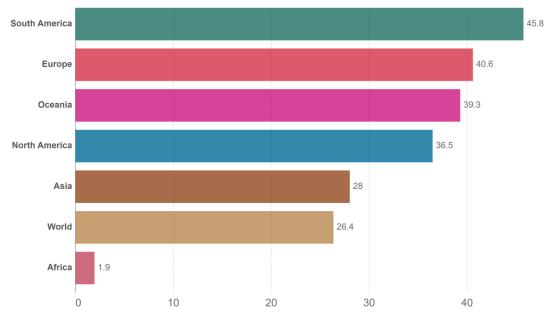
Total number of people who received all doses prescribed by the initial vaccination protocol, divided by the total population of the country.



COVID-19 vaccine boosters administered per 100 people, Jun 20, 2022

Our World in Data

Total number of vaccine booster doses administered, divided by the total population of the country. Booster doses are doses administered beyond those prescribed by the original vaccination protocol.



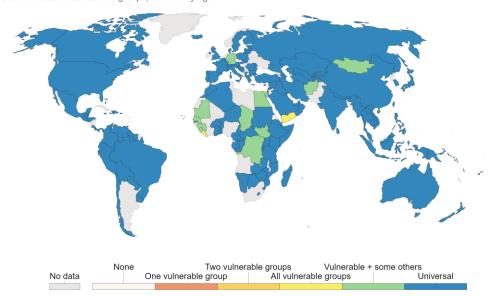
Source: Official data collated by Our World in Data - Last updated 21 June 2022

OurWorldInData.org/coronavirus • CC BY

COVID-19 vaccination policy, Jun 20, 2022



Policies for vaccine delivery. Vulnerable groups include key workers, the clinically vulnerable, and the elderly. "Others" include select broad groups, such as by age.



Source: Oxford COVID-19 Government Response Tracker, Blavatnik School of Government, University of Oxford – Last updated 21 June 2022 OurWorldInData.org/coronavirus • CC BY

2. Vaccine effectiveness against symptomatic infection for Alpha, Delta and Omicron 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%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)		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 93% (95% Cl: 88-97%) ⁷	50% (95% CI: 35%–62%) ⁸
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	30.4% (95% CI: 5.0%-49.0%) ⁹
2 Doses(Sinopharm or Sinovac)		59.0%, (95%CI: 16.0-81.6%) ³	
3 Doses (BNT162b2)		95.33% (SD 6.44) ⁶ 86.1% (95% CI, 67.3 to 94.1) ¹¹	67.2% (95% CI: 66.5- 67.8%) at 2 to 4 weeks ¹⁰ 49.4% (95% CI, 47.1 to 51.6) ¹¹ 52.2% (95% CI, 48.1 to 55.9) ¹²
3 Doses(mRNA-1273)			62.5% (95% CI: 56.2-67.9%) ⁹ 47.3% (95% CI, 40.7 to 53.3) ¹¹
2 Doses (BNT162b2) + 1Dose(mRNA-1273)			73.9% (95% CI: 73.1- 74.6%) at 2 to 4 weeks ¹⁰
2 Doses(ChAdOx1 nCoV- 19)+1Dose(BNT162b2)			62.4% (95% CI, 61.8- 63.0) at 2 to 4 weeks ¹⁰
2 Doses (ChAdOx1 nCoV-19)+ 1Dose (mRNA-1273)			70.1% (95% CI, 69.5 to 70.7) at 2 to 4 weeks ¹⁰

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) <u>Efficacy of inactivated SARS-CoV-2 vaccines against the Delta variant infection in Guangzhou: A test-negative case-control real-world study</u>
- 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
- 8) Effectiveness of BNT162b2 Vaccine against Omicron Variant in South Africa
- 9) Effectiveness of mRNA-1273 against SARS-CoV-2 omicron and delta variants
- 10) Covid-19 Vaccine Effectiveness against the Omicron (B.1.1.529) Variant
- 11) Effect of mRNA Vaccine Boosters against SARS-CoV-2 Omicron Infection in Qatar
- 12) Effects of Previous Infection and Vaccination on Symptomatic Omicron Infections

3. Latest Relevant Articles

- Effects of Previous Infection and Vaccination on Symptomatic Omicron Infections (Posted on June 15, 2022)
- Neutralization of the SARS-CoV-2 Omicron BA.4/5 and BA.2.12.1 Subvariants (Posted on June 15, 2022)
- Association between Covid-19 Vaccination and Influenza Vaccination Rates

(Posted on June 15, 2022)

- Immune boosting by B.1.1.529 (Omicron) depends on previous SARS-CoV-2 exposure(Posted on 14 Jun 2022)
- BA.2.12.1, BA.4 and BA.5 escape antibodies elicited by Omicron infection (Posted on 17 June 2022)

4. Other Information

- FDA Authorizes Moderna and Pfizer-BioNTech COVID-19 Vaccines for Children Down to 6 Months of Age (Posted on June 17, 2022)
- CDC:Hospitalization and Emergency Department Encounters for COVID-19 After Paxlovid Treatment — California, December 2021–May 2022 (Posted on June 21, 2022)