Vaccination Report – 1 February 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/COMIRNATY 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

- **33** 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	13	1	**33**

Source: https://covid19.trackvaccines.org/vaccines/ （Last Updated 31 Jan 2022）

- Vaccination against COVID-19 has now started in **218** locations
  (Source: Our World in Data. Last Updated 31 Jan, 2022)

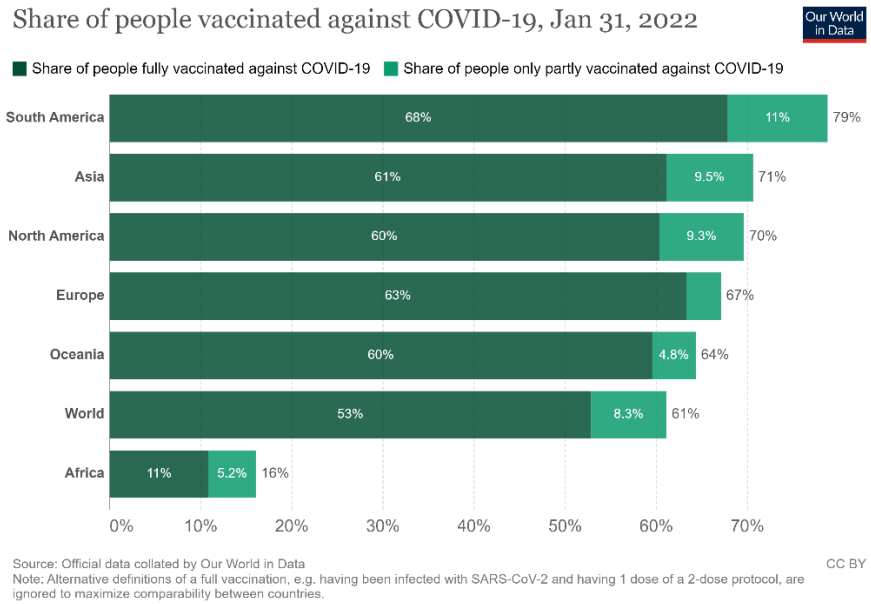
Location	Doses given	Fully vaccinated (% of population)	At least 1 dose (% of population)
Worldwide	10.1 billion	4.16 billion (52.84%)	4.81 billion (61.11%)

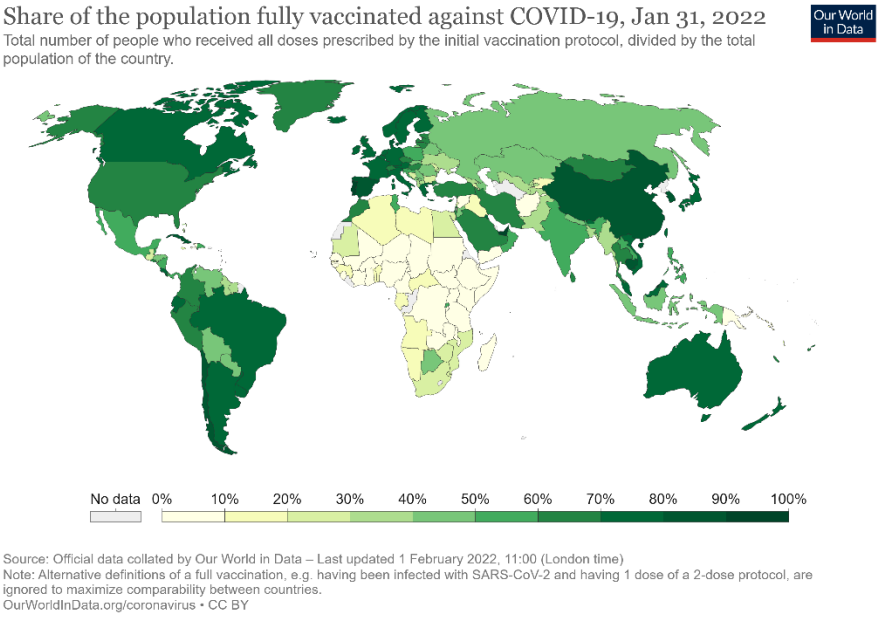
About this data:

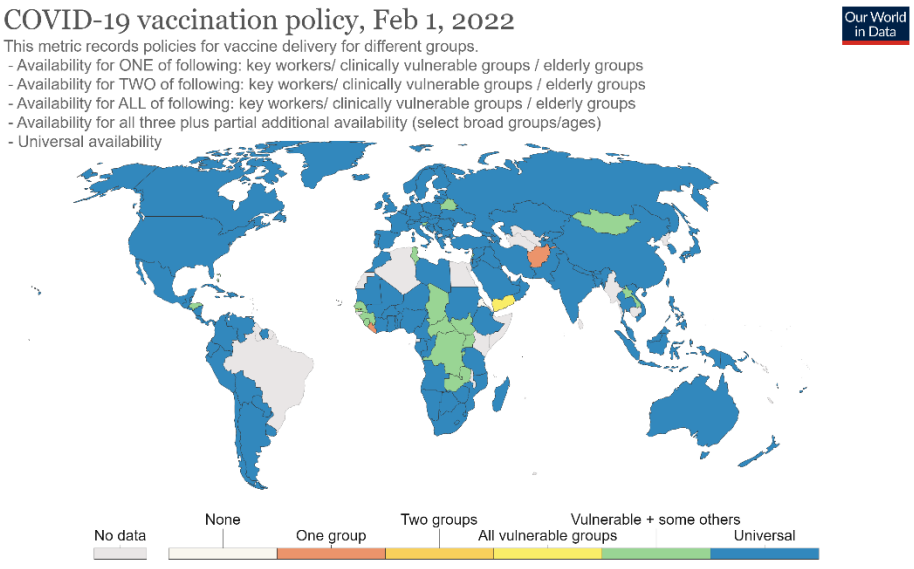
a: This data changes rapidly and might not reflect doses still being reported. It may differ from other sites & sources.

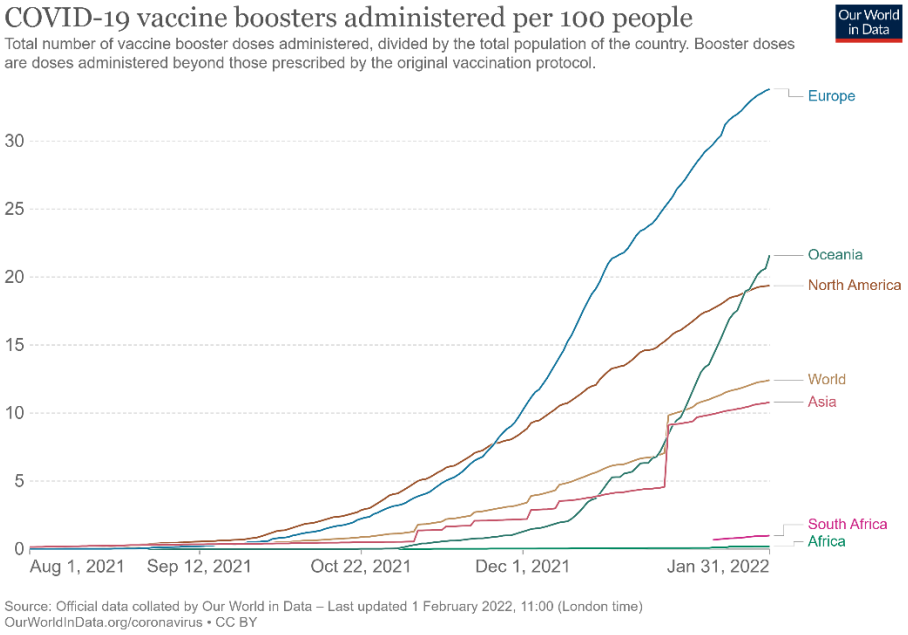
b: Where data for full vaccinations is available, it shows how many people have received at least 1 dose and how many people have been fully vaccinated (which may require more than 1 dose).Where data for full vaccinations isn't available, the data shows the total number of vaccine doses given to people.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









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%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]	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)	Unknown	59.0%, (95%CI: 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) 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
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

- Omicron Neutralizing and Anti-SARS-CoV-2 S-RBD Antibodies in Naïve and Convalescent Populations After Homologous and Heterologous Boosting With an mRNA Vaccine
- Vaccines Elicit Highly Conserved Cellular Immunity to SARS-CoV-2 Omicron
- Vaccination with BNT162b2 reduces transmission of SARS-CoV-2 to household contacts in Israel
- Indirect protection of children from SARS-CoV-2 infection through parental vaccination

4. Other Information

- UK Health Security Agency: SARS-CoV-2 variants of concern and variants under investigation in England(28 January 2022)

- CDC: SARS-CoV-2 Infection and Hospitalization Among Adults Aged ≥18 Years, by Vaccination Status, Before and During SARS-CoV-2 B.1.1.529 (Omicron) Variant Predominance — Los Angeles County, California, November 7, 2021–January 8, 2022

- Moderna's COVID-19 vaccine receives full approval from U.S. FDA