Vaccination Report – 4 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/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

- **31** 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	11	1	**31**

Source: https://covid19.trackvaccines.org/vaccines/ （Last Updated 3 Jan 2022）

- Vaccination against COVID-19 has now started in **218** locations
(Source: Our World in Data.Last Updated 3 Jan, 2022)

Location	Doses	Fully vaccinated	At least 1 dose

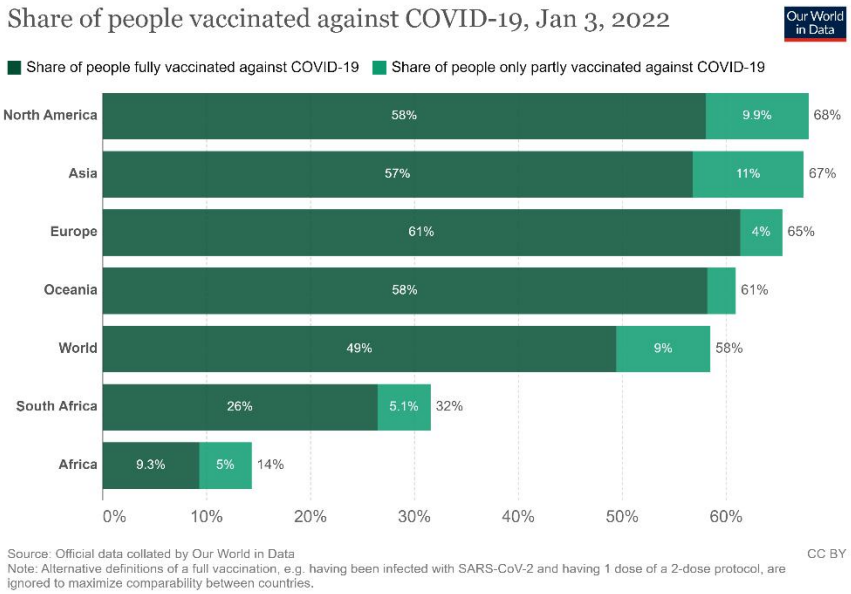
	given	(% of population)	(% of population)
Worldwide	9.25 billion	3.89 billion (49.42%)	4.60 billion (58.46%)

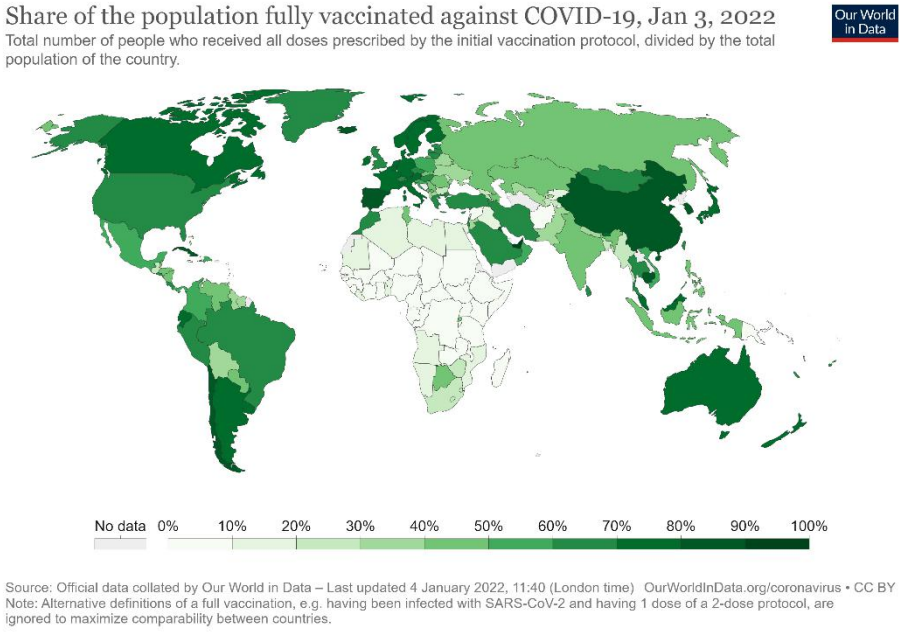
About this data:

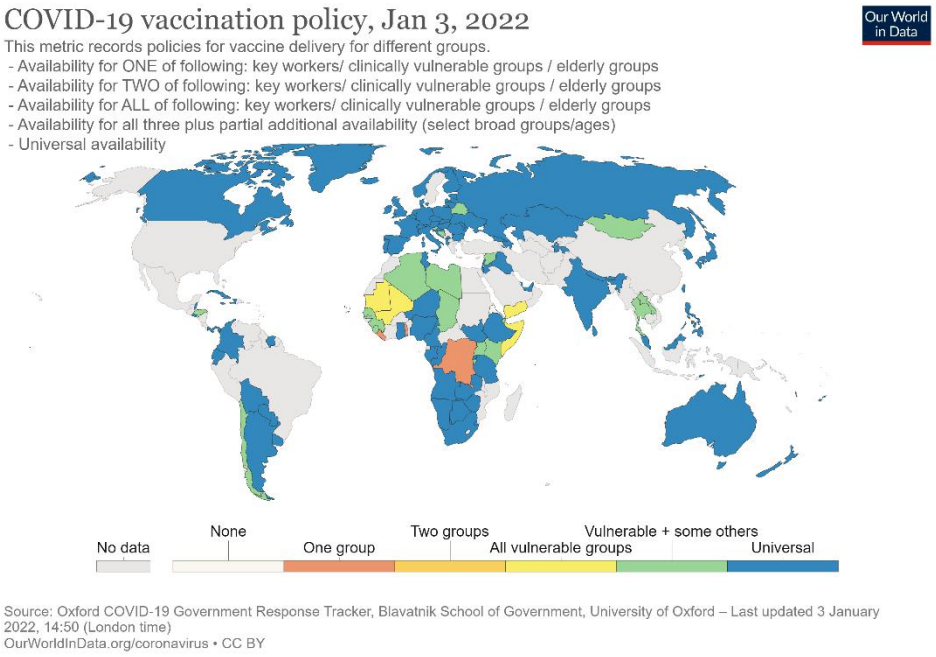
a: This data changes rapidly and might not reflect doses still being reported. It may differ from other sites & sources.

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**
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

- Effectiveness of BNT162b2 Vaccine against Omicron Variant in South Africa
- SARS-CoV-2 spike T cell responses induced upon vaccination or infection remain robust against Omicron
- High Rate of Asymptomatic Carriage Associated with Variant Strain Omicron
- Characteristics and Outcomes of Hospitalized Patients in South Africa During the COVID-19 Omicron Wave Compared With Previous Waves

4. Other Information

- CDC:COVID-19 vaccine safety in children aged 5–11 years — United States, November 3–December 19, 2021
- CDC Recommends Pfizer Booster at 5 Months, Additional Primary Dose for Certain Immunocompromised Children