

# Reducing transmission of COVID-19: Spotlight on vaccines



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# Expert panel



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# Agenda

**COVID-19 vaccination: Where are we now?**

**Factors contributing to differential uptake of COVID-19 vaccines in population subsets**

**What are the most effective strategies to increase COVID-19 vaccination rates?**

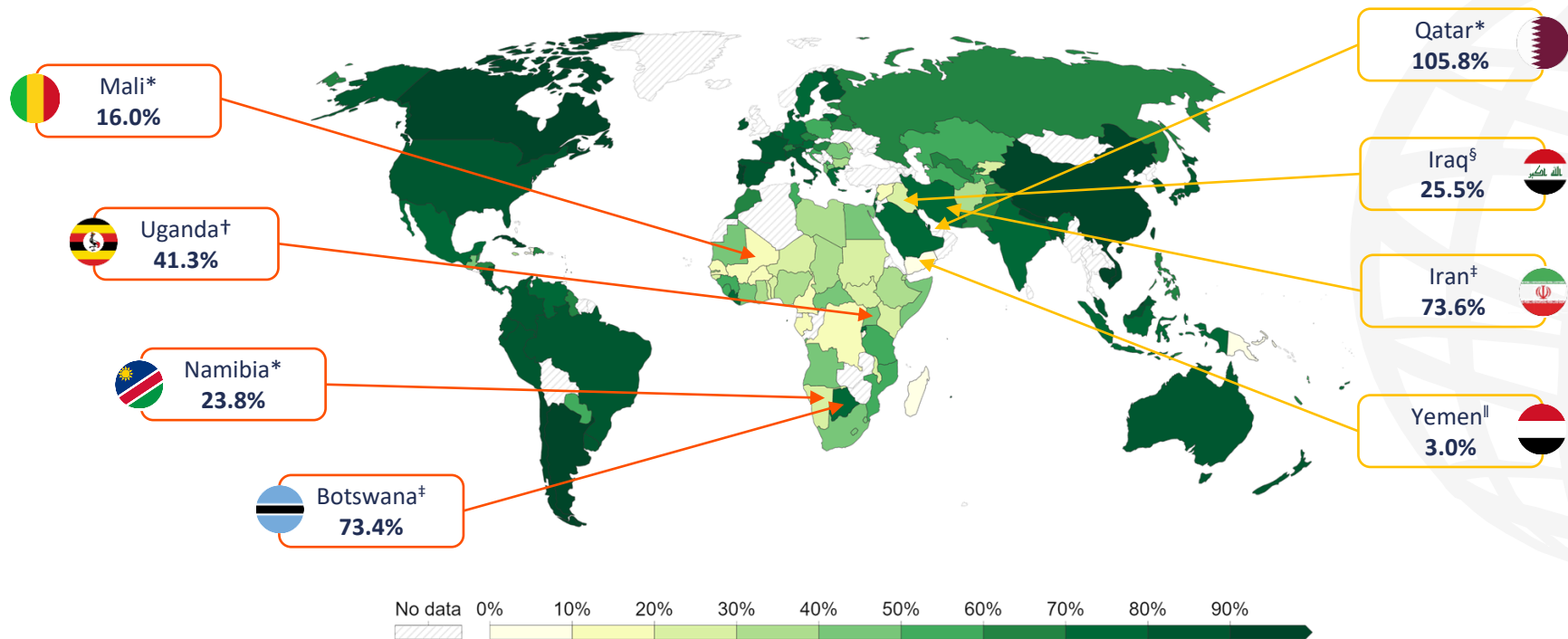
**Looking ahead: Future direction of COVID-19 vaccination**



# **COVID-19 vaccination: Where are we now?**

# Global COVID-19 vaccine coverage

Percentage of people who have received  $\geq 1$  dose of COVID-19 vaccine



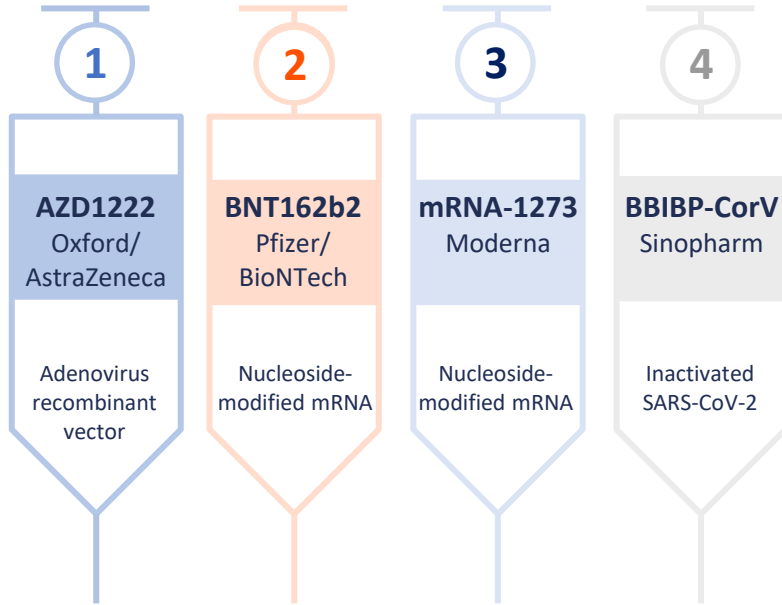
\*As of 26 February 2023; †as of 29 January 2023; ‡as of 19 February 2023; §as of 2 January 2023; ||as of 28 February 2023.

Our World In Data. Available at: [www.ourworldindata.org/covid-vaccinations](https://www.ourworldindata.org/covid-vaccinations) (accessed 13 March 2023).

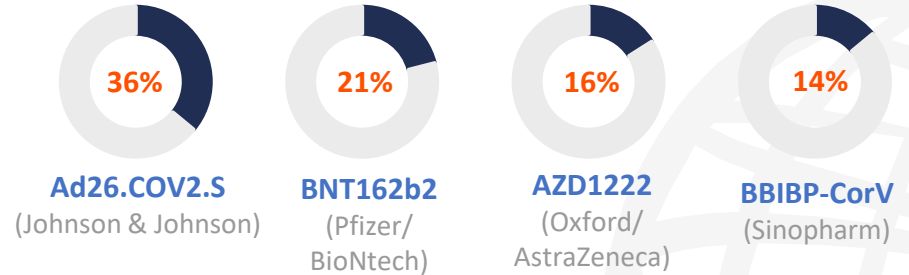
# COVID-19 vaccines



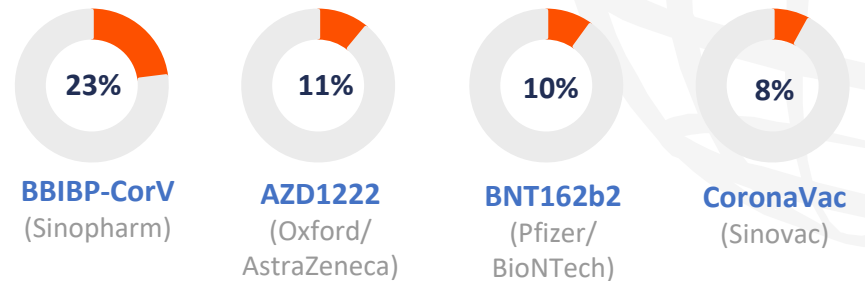
## Top four vaccines with greatest global reach<sup>1</sup>



## Four most commonly acquired vaccines in Africa<sup>2</sup>



## Four most commonly acquired vaccines in MENA<sup>\*3</sup>



\*The manufacturer is unknown for 37% of vaccines delivered.

MENA, Middle East and North Africa; mRNA, messenger ribonucleic acid; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2.

1. Rashedi R, et al. *J Med Virol.* 2022;94:1294–9; 2. Africa CDC. 2023. Available at: [www.africacdc.org/covid-19-vaccination](http://www.africacdc.org/covid-19-vaccination) (accessed 7 March 2023);

3. UNICEF. Available at: [www.unicef.org/supply/covid-19-market-dashboard](http://www.unicef.org/supply/covid-19-market-dashboard) (accessed 13 March 2023).



# Factors contributing to differential uptake of COVID-19 vaccines in population subsets





# Taxonomy for determinants of vaccine uptake<sup>1-3</sup>



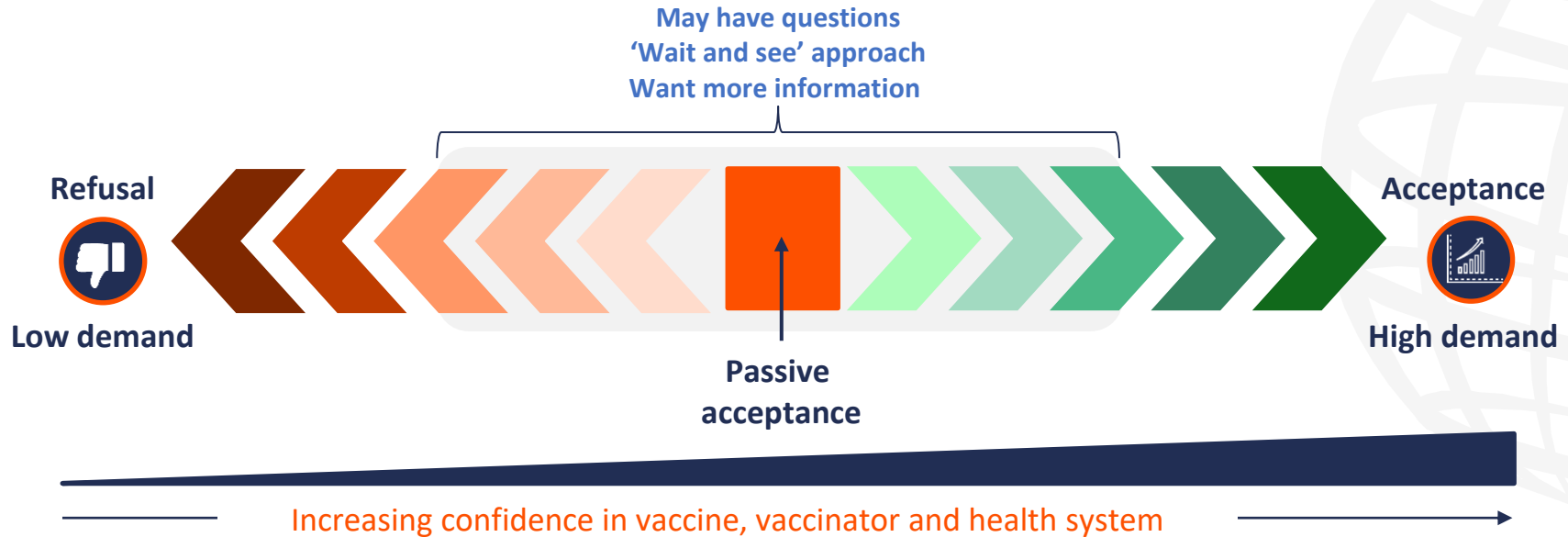
The 6As taxonomy of determinants of vaccination uptake was developed by Dr Angus Thomson.

1. Thomson A, et al. *Vaccine*. 2016;34:1018–24; 2. Joshi A, et al. *Front Public Health*. 2021;9:698111; 3. Kassianos G, et al. *Drugs Context*. 2021;10:2020–9–5.

# Continuum of vaccine acceptance

In 2019, the WHO declared that vaccine hesitancy was one of ten threats to global health<sup>1</sup>

## Vaccine hesitancy continuum<sup>2,3</sup>



WHO, World Health Organization.

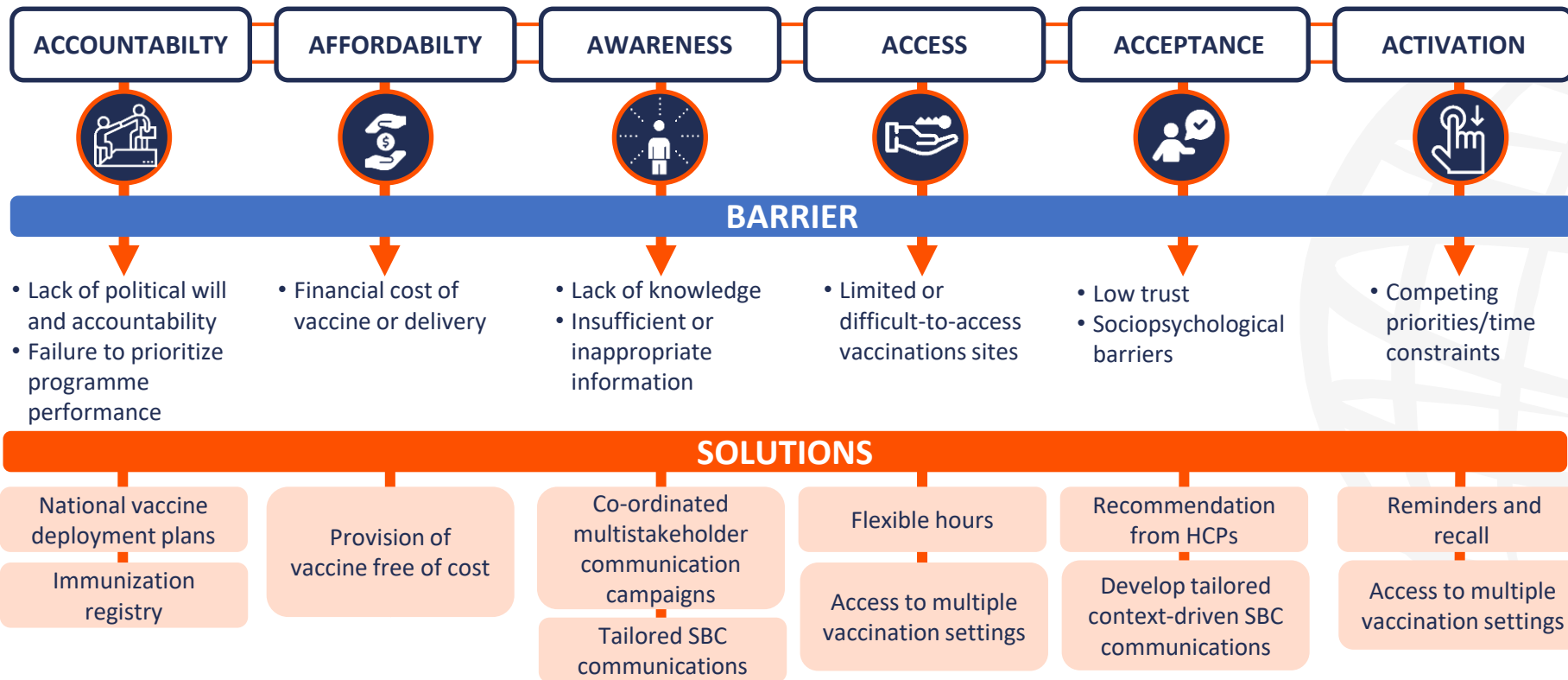
1. WHO. Available at: [www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019](http://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019) (accessed 27 February 2023); 2. SAGE Working Group. Report of the SAGE Working Group on Vaccine Hesitancy. World Health Organization: Geneva, Switzerland. 2014; 3. CDC. 2021. Available at: [www.cdc.gov/vaccines/covid-19/downloads/vaccinatewconfidence-tipsforhcteam\\_508.pdf](http://www.cdc.gov/vaccines/covid-19/downloads/vaccinatewconfidence-tipsforhcteam_508.pdf) (accessed 19 March 2023).



**What are the most effective strategies  
to increase COVID-19 vaccination rates?**



# Tackling barriers to vaccine uptake<sup>1-3</sup>



The 6As taxonomy of determinants of vaccination uptake was developed by Dr Angus Thomson. SBC, social and behaviour change.

1. Thomson A, et al. *Vaccine*. 2016;34:1018–24; 2. WHO. *Weekly Epidemiological Record*. No 20. 2022;97:209–24;

3. Kassianos G, et al. *Drugs Context*. 2021;10:2020–9–5.

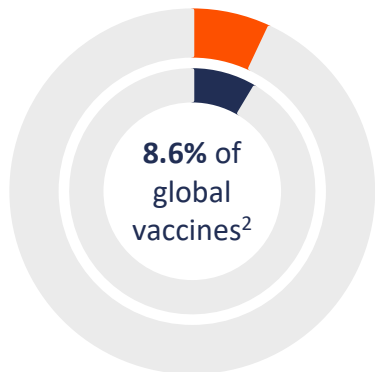


# Looking ahead: Future direction of COVID-19 vaccination



# A spotlight on Africa and the Middle East

**North America** makes up ~8% of the world's population<sup>1\*</sup> and has received

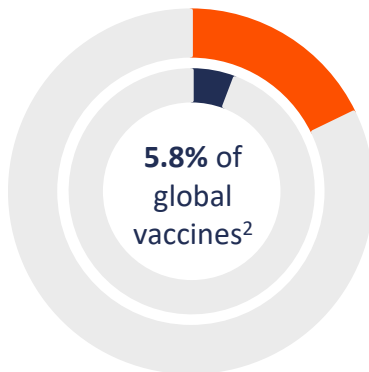


This is equivalent to<sup>2</sup>...

190

doses per 100 people<sup>†</sup>

**Africa** makes up ~18% of the world's population<sup>1\*</sup> and has received

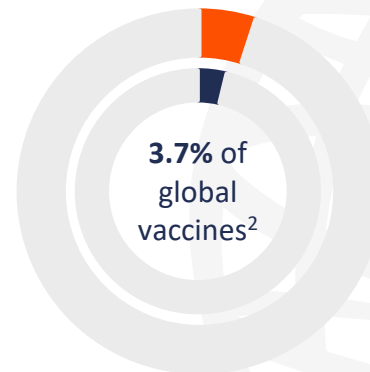


This is equivalent to<sup>2</sup>...

53

doses per 100 people<sup>†</sup>

The **Middle East** makes up ~5% of the world's population<sup>1\*</sup> and has received



This is equivalent to<sup>2</sup>...

44

doses per 100 people in Iraq<sup>‡</sup>

282

doses per 100 people in Qatar<sup>§</sup>

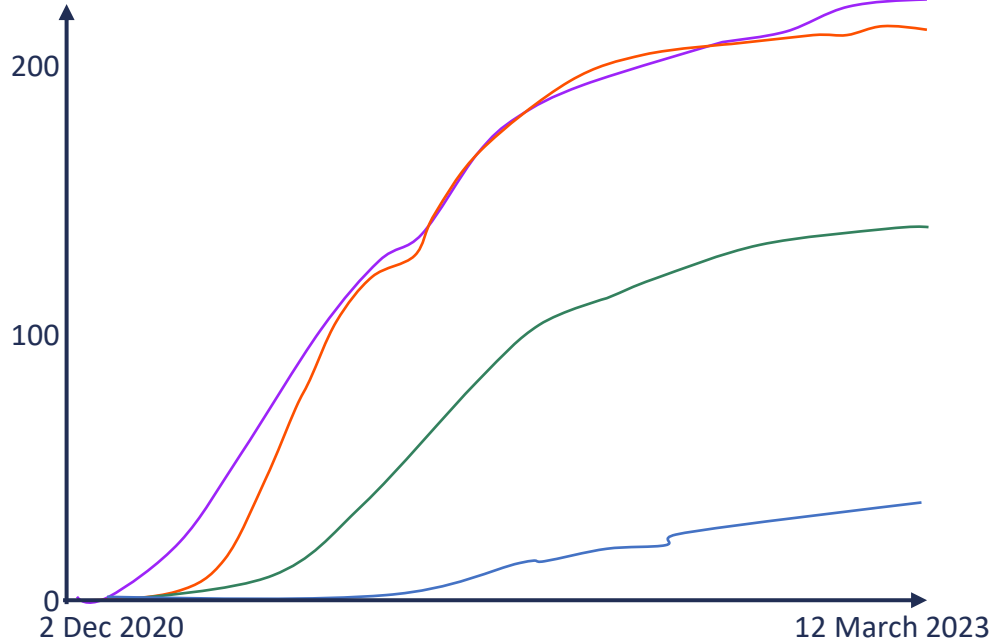
\*Data from 2021; † as of 30 January 2023 world average was 166 doses per 100; ‡as of 11 December 2022, world average was 164 doses per 100; § as of January 6 2023 world average was 165 doses per 100.

1. Our World In Data. Available at: [www.ourworldindata.org/grapher/population](http://www.ourworldindata.org/grapher/population) (accessed 31 January 2023);

2. Our World In Data. Available at: [www.ourworldindata.org/covid-vaccinations](http://www.ourworldindata.org/covid-vaccinations) (accessed 31 January 2023).

# COVID-19 vaccine administration\* by country income

Doses are counted individually, including boosters



- High income:**  
GNI per capita of ≥ \$13,205
- Upper middle income:**  
GNI per capita of \$4,256–\$13,205
- Lower middle income:**  
GNI per capita of \$1,086–\$4,255
- Low income:**  
GNI per capita of ≤ \$1,086

\*Per 100 people.

GNI, gross national income.

Our World In Data. Available at: [www.ourworldindata.org/grapher/cumulative-covid-vaccinations-income-group](https://www.ourworldindata.org/grapher/cumulative-covid-vaccinations-income-group) (accessed 13 March 2023).