



World Health  
Organization



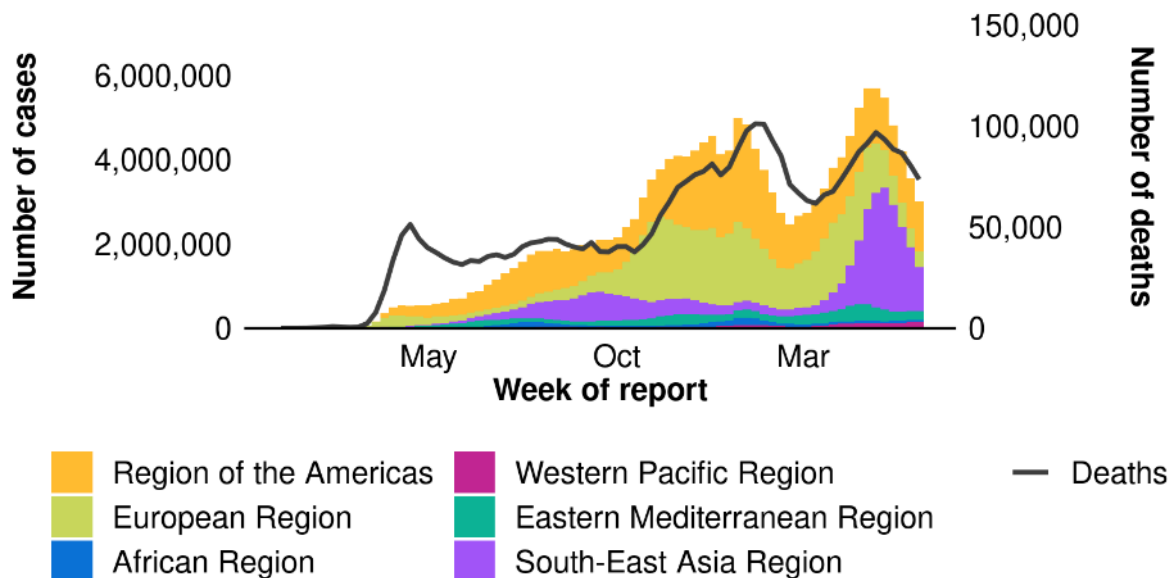
# COVID-19 GLOBAL EPIDEMIOLOGY UPDATE – MS BRIEFING

Dr. Boris Pavlin, WHO HQ COVID-19 Epidemiology Pillar Lead 10-6-2021

# Global weekly epidemiological overview (as of 6 June 10h00 CET)



- **Previous week:**
  - 3,009,518 new confirmed cases.
  - 73,546 new deaths.
- **Cumulative:**
  - 172,630,637 confirmed cases.
  - 3,718,683 deaths.



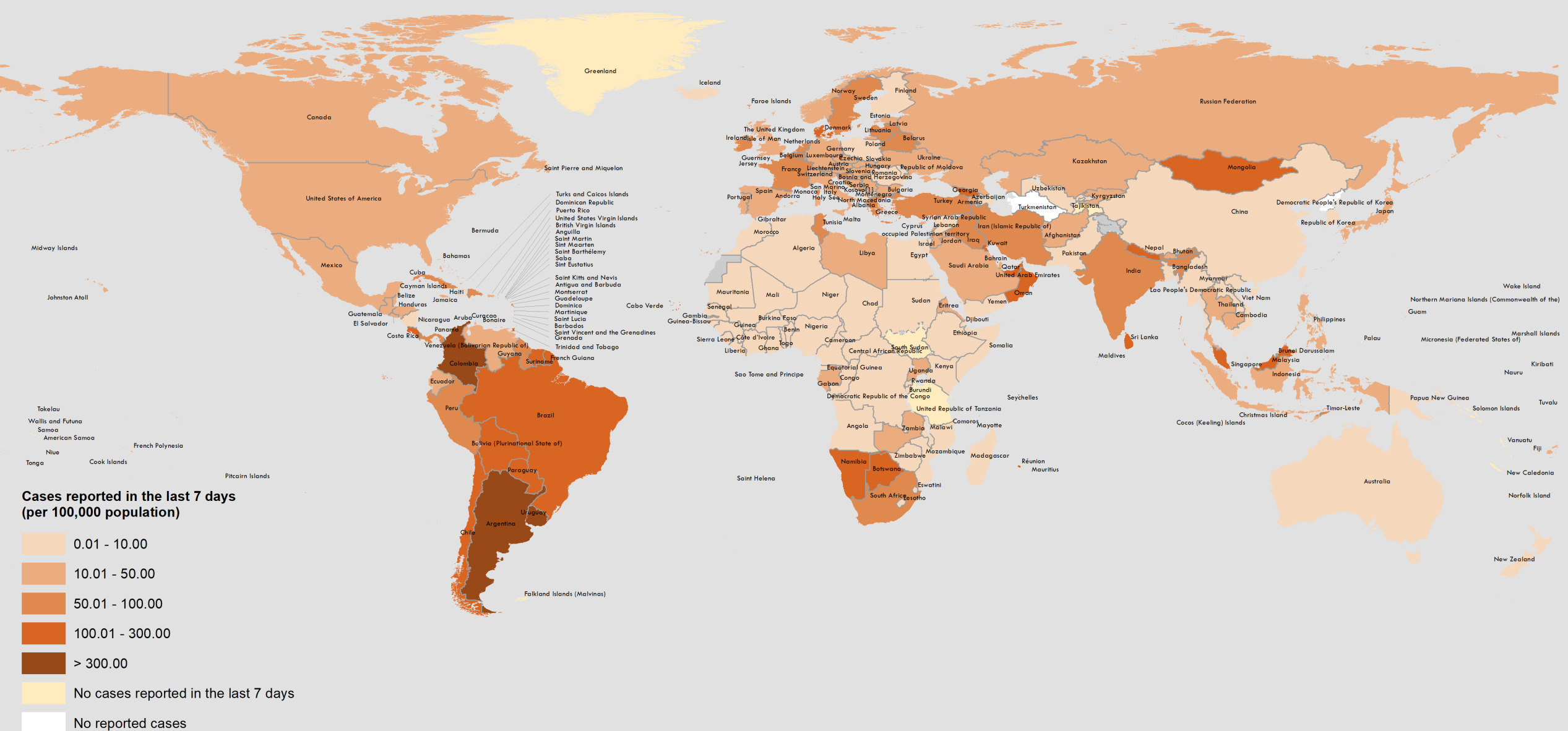
\* Data are incomplete for the current week. Cases depicted by bars; deaths depicted by line.

## Countries with the highest number of new cases in past week (wk22/2021)

Country	New Cases	New Cases per 1M Pop	Total Cases	Total Cases per 1M Pop
India	914,539	663	28,809,339	20,876
Brazil	449,478	2,115	16,841,408	79,232
Argentina	212,975	4,712	3,915,397	86,632
Colombia	175,479	3,449	3,518,046	69,140
United States of America	99,103	299	33,015,604	99,744
Iran (Islamic Republic of)	67,533	804	2,960,751	35,250
Russian Federation	62,995	432	5,126,437	35,128
Malaysia	52,040	1,608	610,574	18,865
Chile	50,510	2,642	1,420,266	74,296
France	47,719	734	5,605,392	86,185

# COVID-19 cases reported in the last 7 days per 100,000 population

(from 31 May 2021, 10:00AM to 06 June 2021, 10:00AM (CEST))



**Data Source:** World Health Organization  
United Nations Population Division (Population prospect 2020)  
**Map Production:** WHO Health Emergencies Programme

Not applicable

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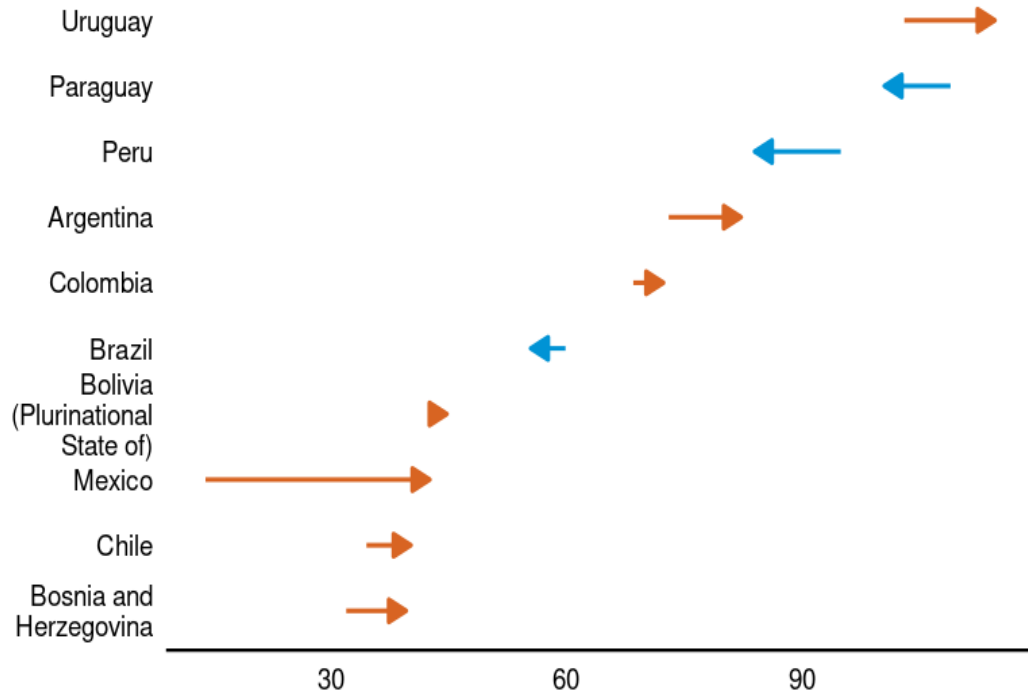
# Global Situation: Weekly Overview – Mortality



Highest number of new deaths per 1M, excluding countries with <2M population (as of 6 June 10H CEST)

## Change in 7-day New Deaths per 1M Population

Week 22 (31 May - 06 Jun) vs. Week 21 (24 May - 30 May)



## Change in 7-day New Deaths per 1M Population

Change • No change → Increasing → Decreasing

## Countries with the highest mortality rate in past week (wk22/2021)

Country	New Deaths	New Deaths per 1M Pop	Total Deaths	Total Deaths per 1M Pop
Uruguay	398	115	4,516	1,300
Paraguay	717	101	9,609	1,347
Peru	2,770	84	185,813	5,636
Argentina	3,718	82	80,411	1,779
Colombia	3,683	72	90,890	1,786
Brazil	11,797	55	470,842	2,215
Bolivia (Plurinational State of)	523	45	14,900	1,276
Mexico	5,496	43	228,568	1,773
Chile	769	40	29,816	1,560
Bosnia and Herzegovina	130	40	9,352	2,851

Source: COVID Intel Database

# SARS-CoV-2 Variants of Interest (VOI) and Concern (VOC)



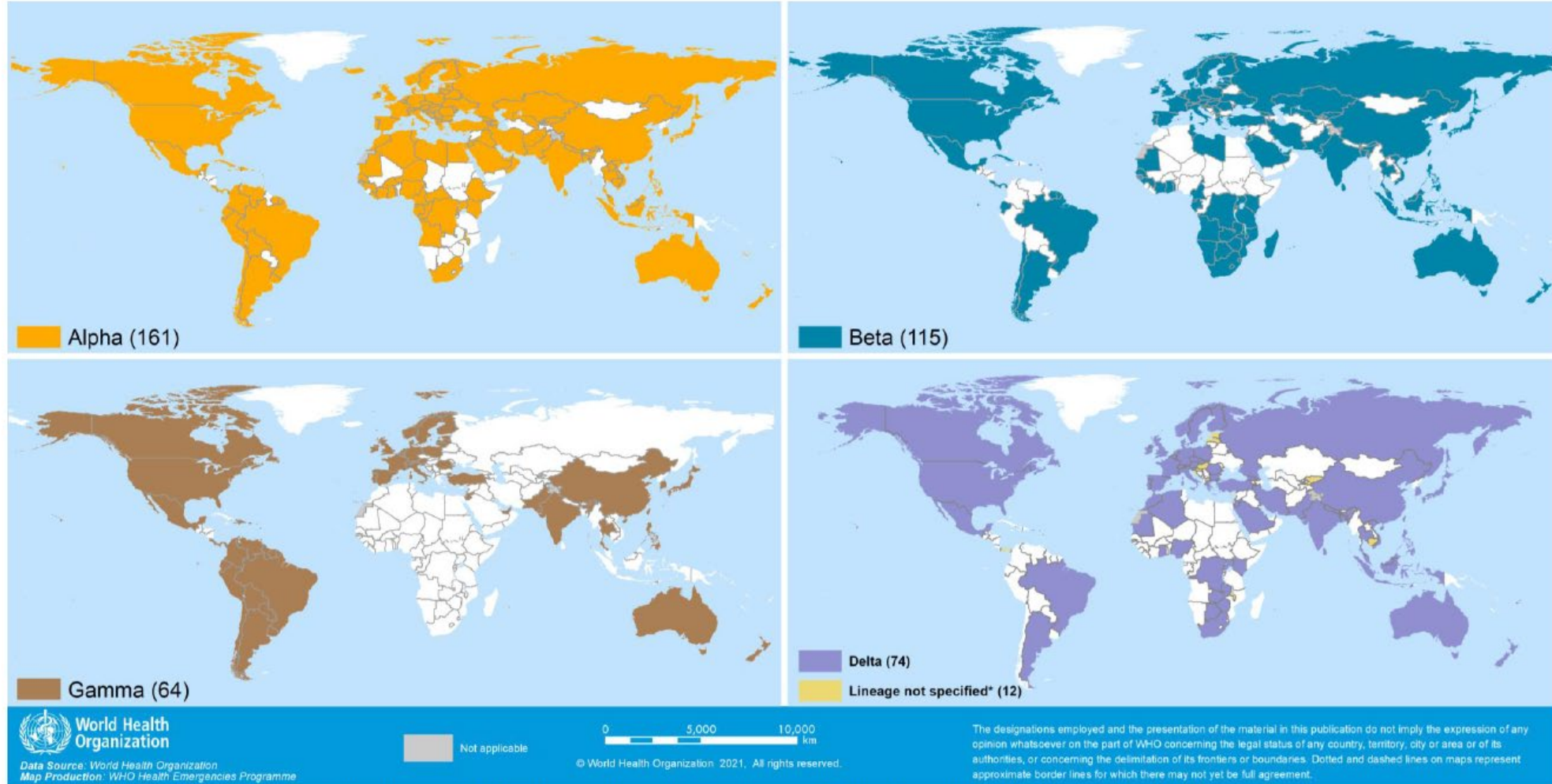
## New nomenclature

WHO label	Pango lineage	GISAID clade	Nextstrain clade	Earliest documented samples	Date of designation
<b>Variants of Concern (VOCs)</b>					
Alpha	B.1.1.7	GRY (formerly GR/501Y.V1)	20I/501Y.V1	United Kingdom, Sep-2020	18-Dec-2020
Beta	B.1.351	GH/501Y.V2	20H/501Y.V2	South Africa, May-2020	18-Dec-2020
Gamma	P.1	GR/501Y.V3	20J/501Y.V3	Brazil, Nov-2020	11-Jan-2021
Delta	B.1.617.2	G/452R.V3	21A/S:478K	India, Oct-2020	VOI: 4-Apr-2021 VOC: 11-May-2021
<b>Variants of Interest (VOIs)</b>					
Epsilon	B.1.427/ B.1.429	GH/452R.V1	20C/S.452R	United States of America, Mar-2020	5-Mar-2021
Zeta	P.2	GR	20B/S.484K	Brazil, Apr-2020	17-Mar-2021
Eta	B.1.525	G/484K.V3	20A/S484K	Multiple countries, Dec-2020	17-Mar-2021
Theta	P.3	GR	20B/S:265C	Philippines, Jan-2021	24-Mar-2021
Iota	B.1.526	GH	20C/S:484K	United States of America, Nov-2020	24-Mar-2021
Kappa	B.1.617.1	G/452R.V3	21A/S:154K	India, Oct-2020	4-Apr-2021

# Global distribution of Variants of Concern



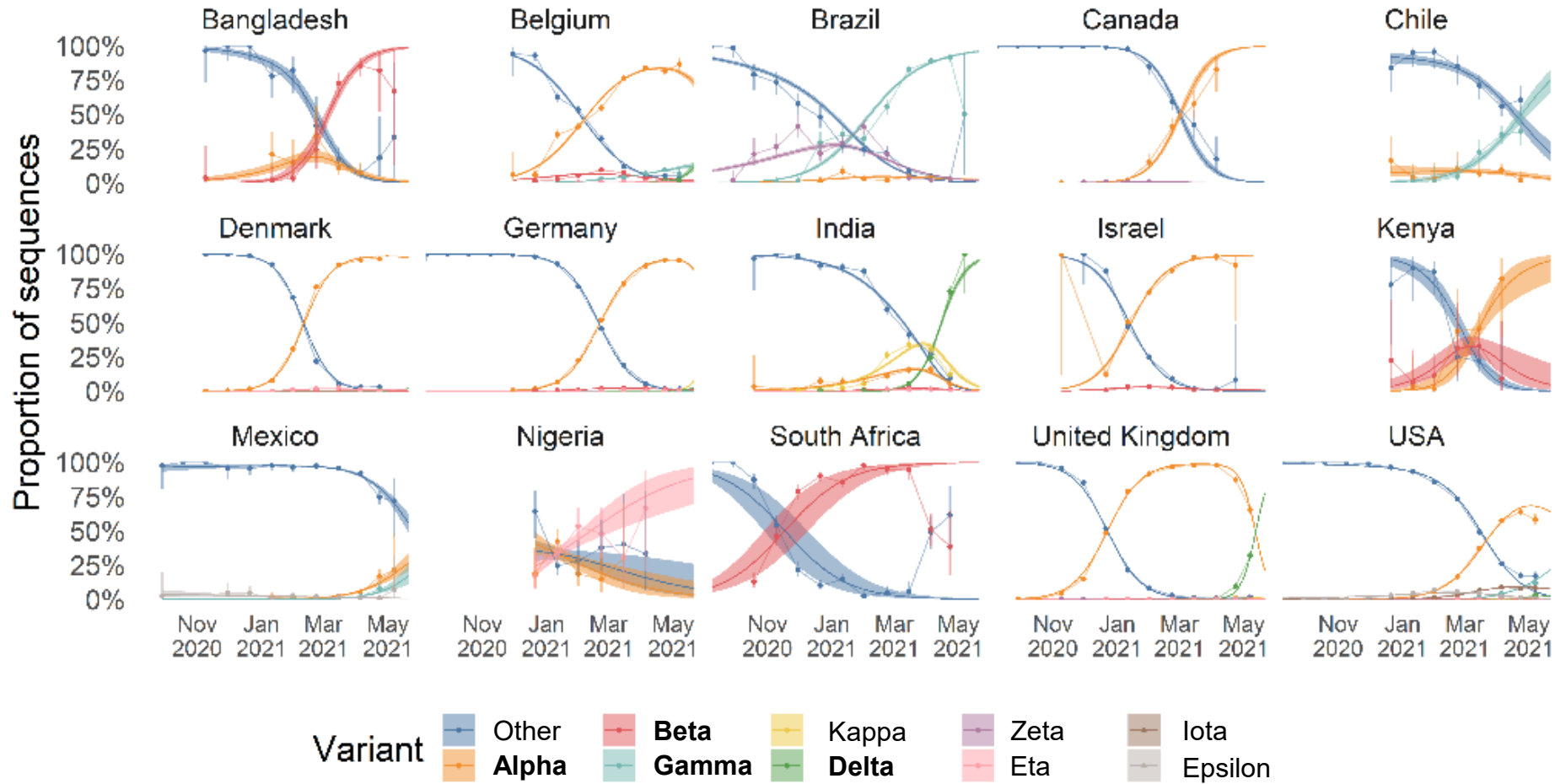
Countries, territories and areas reporting variants Alpha (B.1.1.7), Beta (B.1.351), Gamma (P.1) and Delta (B.1.617.2), as of 8 June 2021\*\*



\*Includes countries/territories/areas reporting the detection of B.1.617 without further specification of lineage at this time. These will be reallocated as further details become available.

\*\*Countries/territories/areas highlighted include both official and unofficial reports of VOC detections, and do not presently differentiate between detections among travellers (e.g., at Points of Entry) or local community cases.

# SARS-CoV-2 variant evolution over time

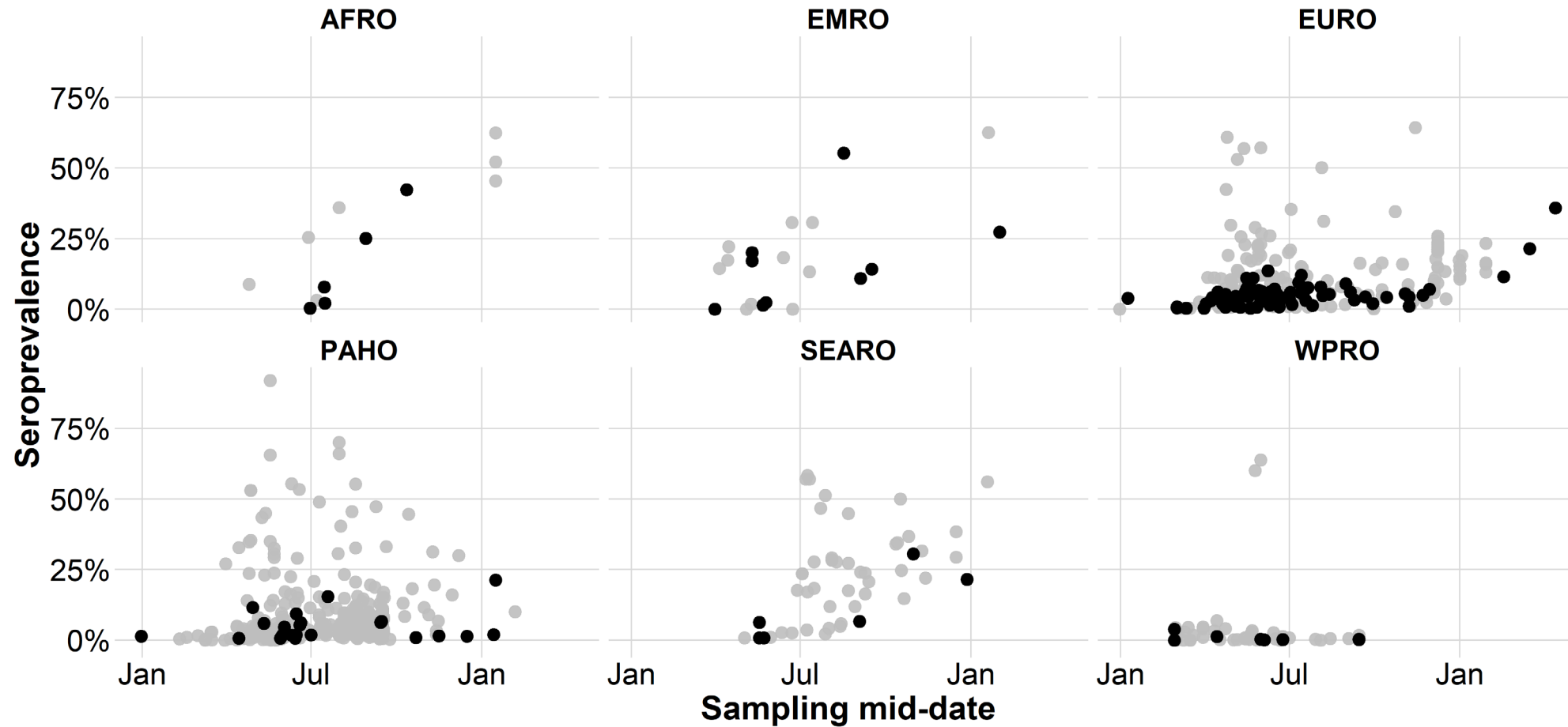


# Infection-derived immunity



## National and sub-national COVID-19 seroprevalence survey estimates

Survey scope ● National ● Sub-national



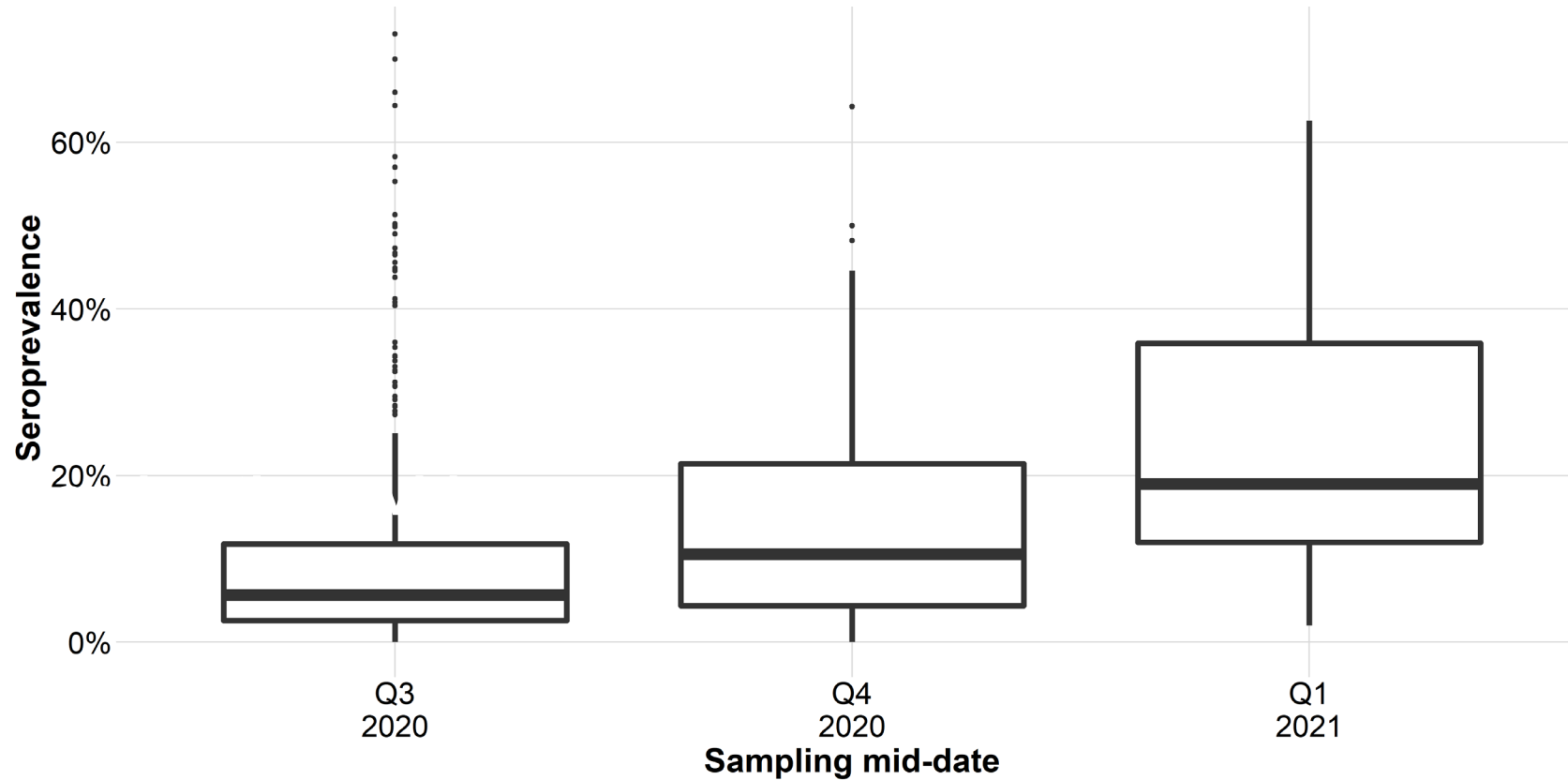
Point estimates from 788 surveys with low or moderate risk of bias, from serotracker.com as of 20 May 2021  
Produced by WHO COVID-19 analytics team



# Infection-derived immunity (2)



COVID-19 seroprevalence survey estimates

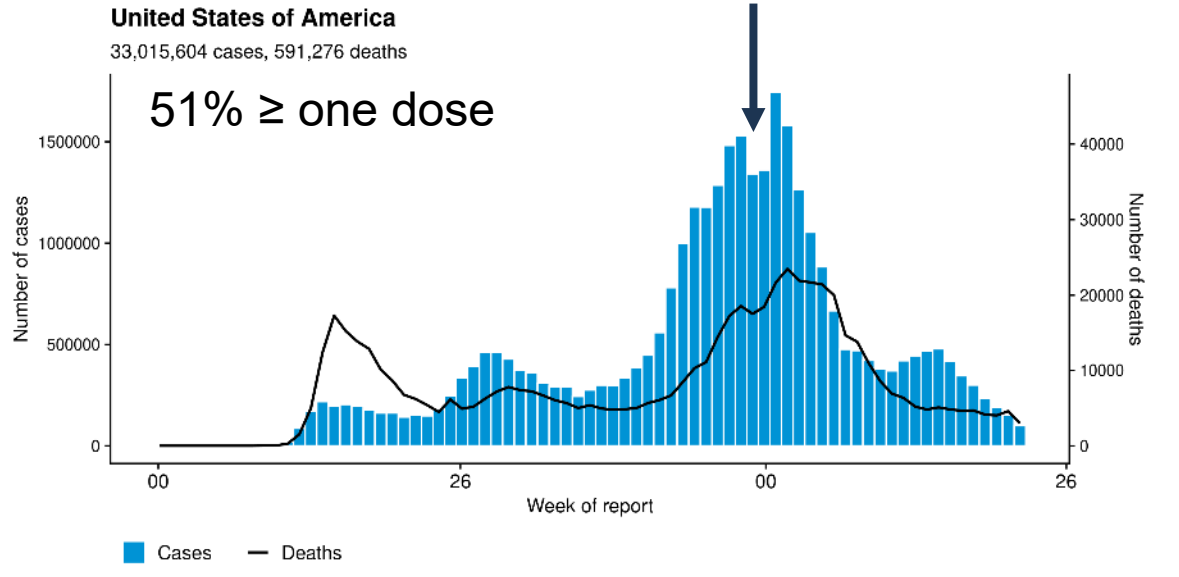
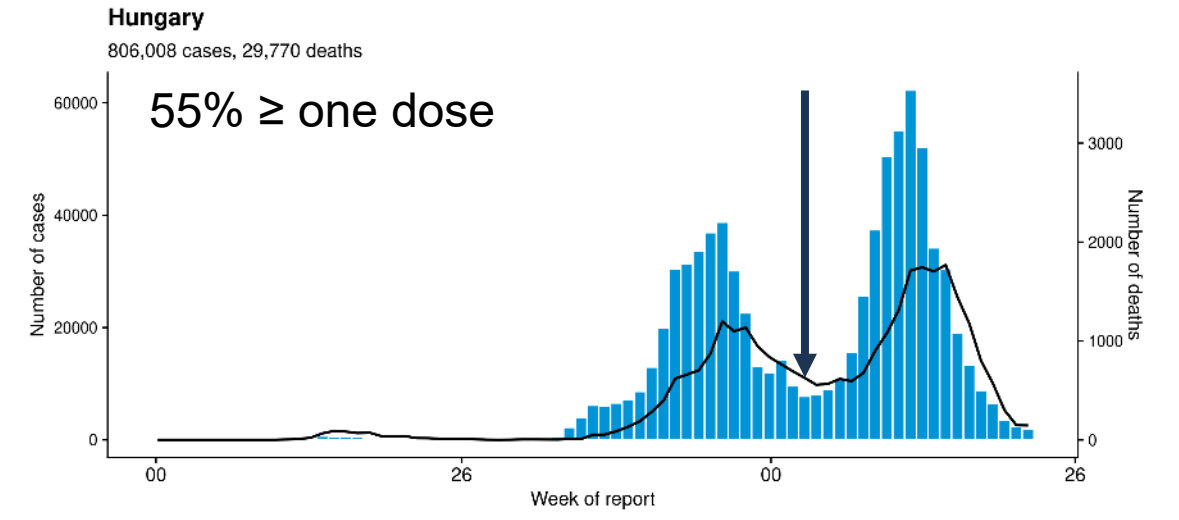
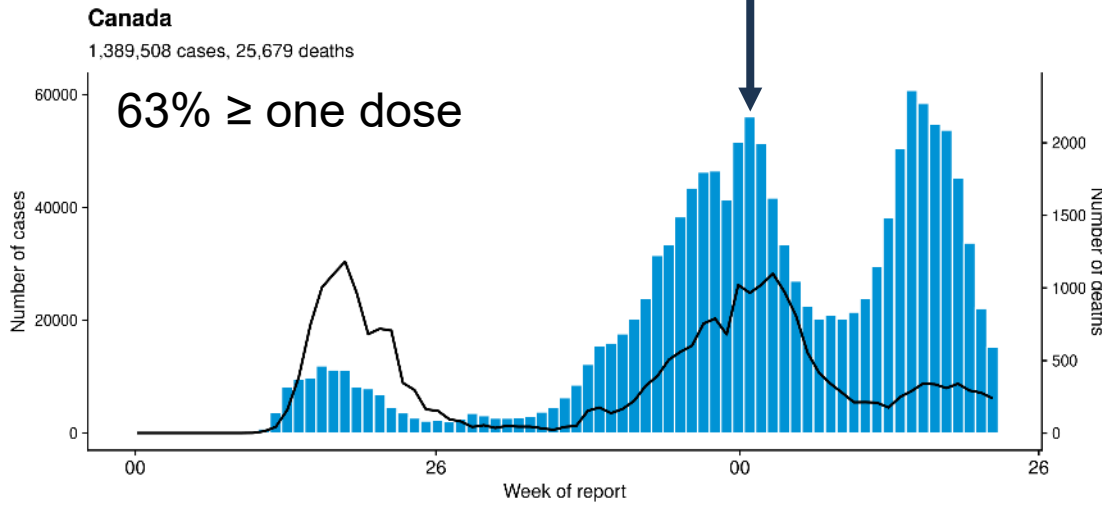
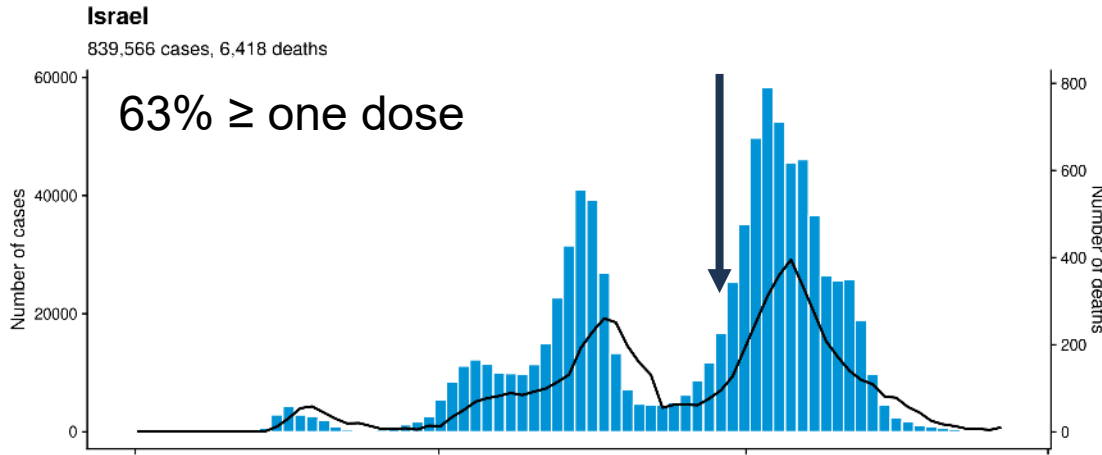
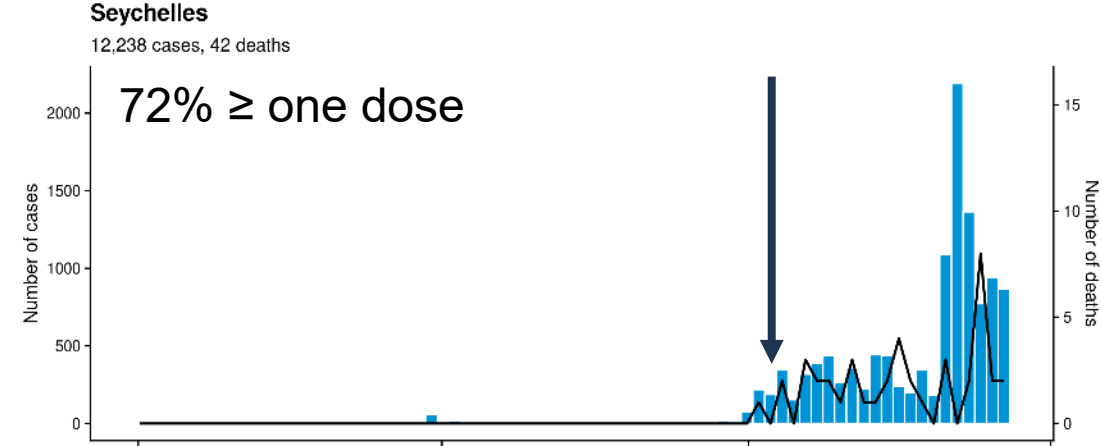




# Epidemiology of COVID-19 in high vaccination coverage

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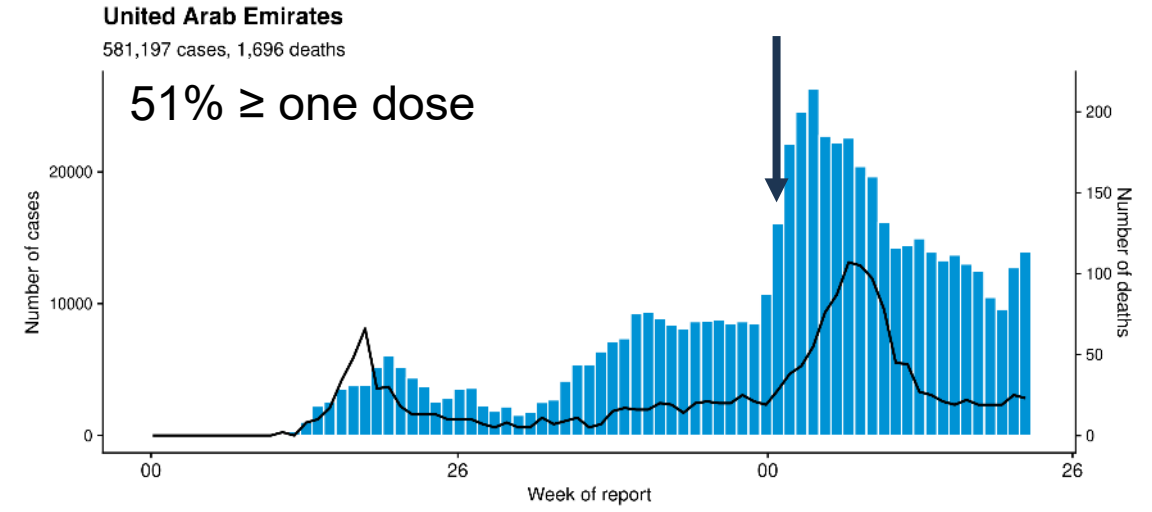
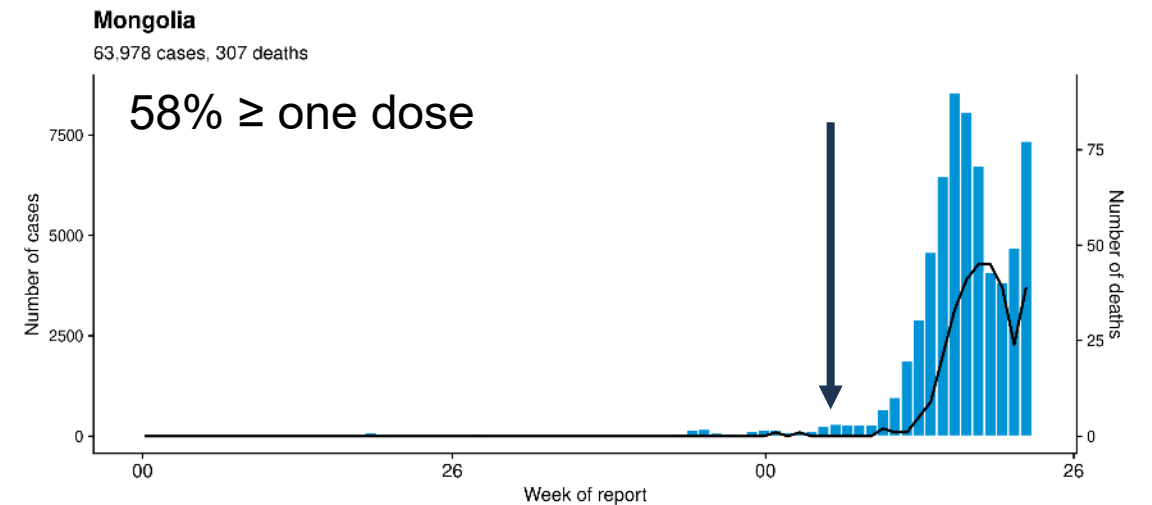
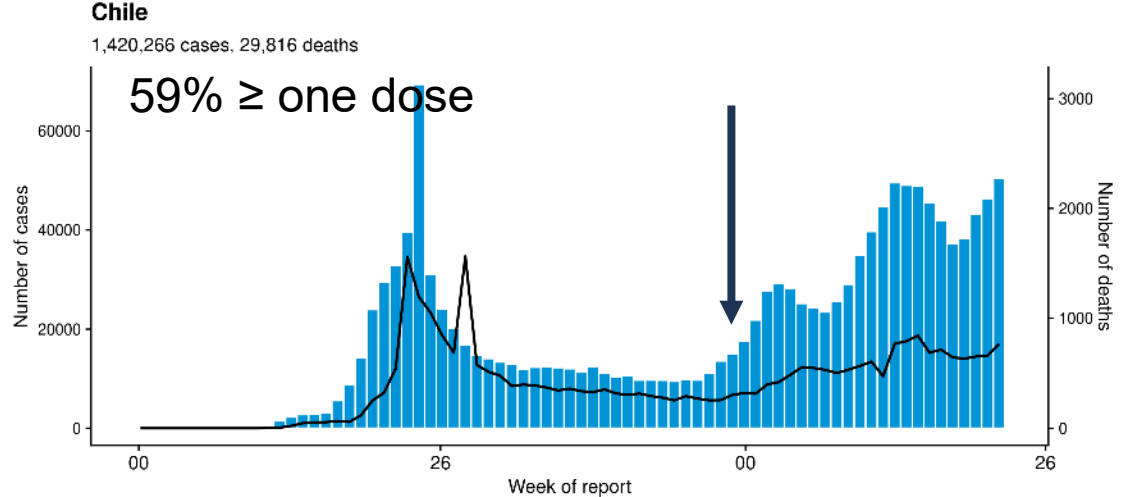
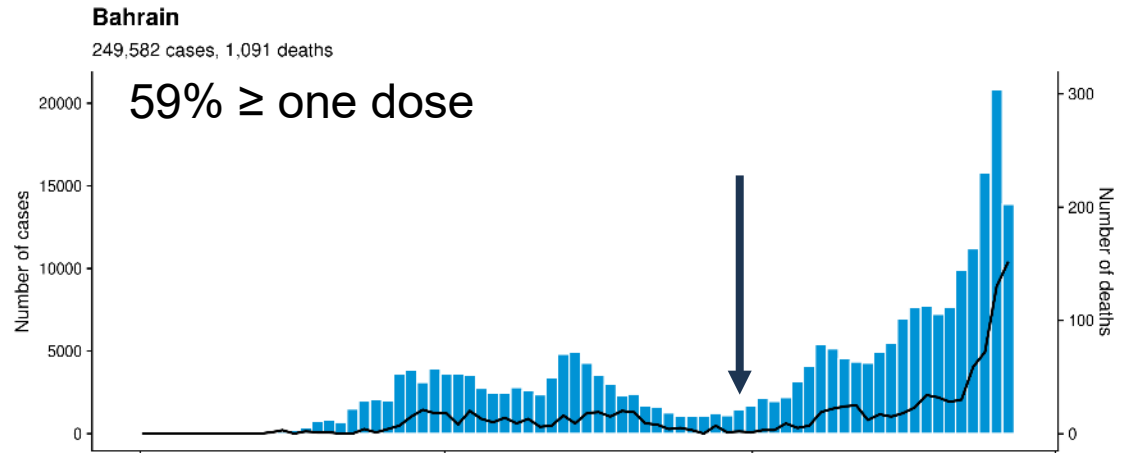
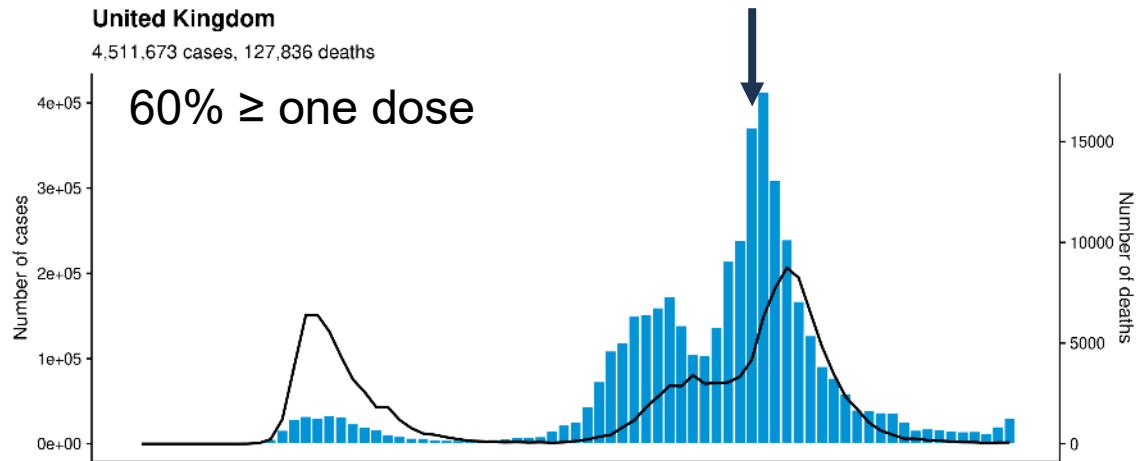
# Countries with decreasing incidence or mortality



■ Cases — Deaths

↓ - Vaccination Start date

# Countries with increasing incidence or mortality

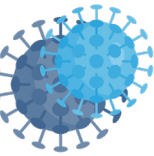


■ Cases — Deaths

↓ - Vaccination Start date

# Summary of analysis of high-coverage countries

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## **Hypotheses of factors leading to high transmission rates despite high vaccination coverage:**

- Low coverage amongst populations more responsible for transmission
- Uneven vaccination coverage
- Sudden relaxation of PHSM or poor adherence
- Mass gatherings, holidays, religious celebrations

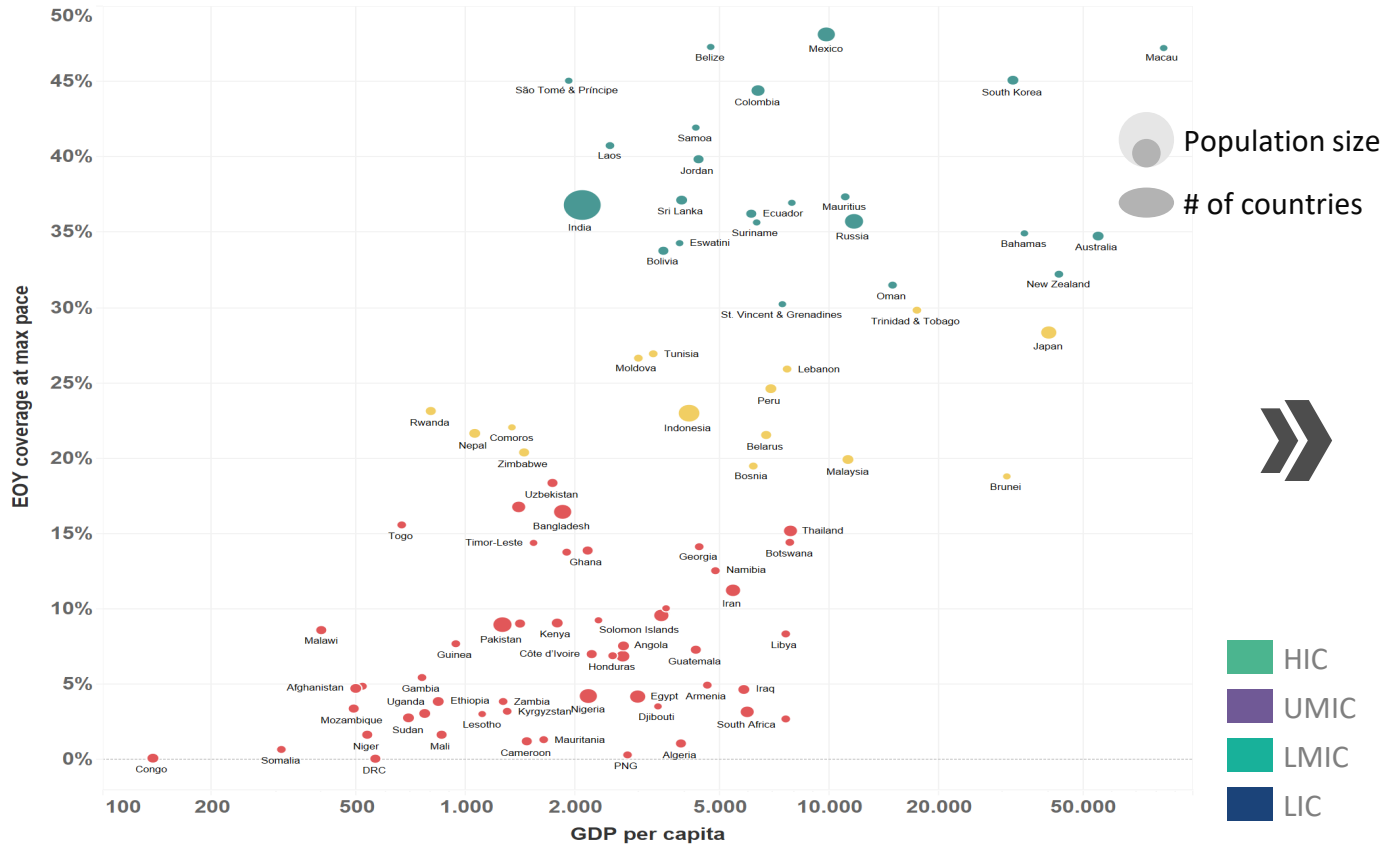
**Vaccines need to be used together with other proven tools to fight the COVID-19 pandemic**

# Vaccination rollout projections



2.8bn people live in areas where they will not reach 30% coverage at the end of 2021

## EOY coverage at maximum administration pace



Category	Population	DATA AS OF 24 May
<b>A</b> Achieves 30% coverage at end of 2021	1.08 bn (HIC), 2.21 bn (UMIC), 1.49 bn (LMIC)	4.78 bn (108 countries)
<b>B</b> Achieves 10% coverage in September 2021, no 30% at end of year	0.01 bn (HIC), 0.36 bn (UMIC), 0.13 bn (LMIC), 0.06 bn (LIC)	0.56 bn (15 countries)
<b>C</b> Coverage in September 2021 less than 10%, no 30% at end of year	1.41 bn (LMIC), 0.33 bn (UMIC)	2.25 bn (57 countries)

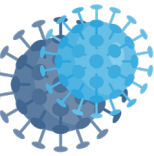
1. September coverage rate is calculated as the population coverage per May 17<sup>th</sup> augmented with theoretical coverage rate they could achieve if they were to continue at maximum administration pace assuming doses are available in country

Excludes Bhutan, Mongolia

Source: OWID, WB

# Summary

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**Epidemiological situation:** The increase in the incidence of new cases globally has slowed in recent weeks, but this masks marked variations between countries. Acute crises are ongoing in a number of countries due to premature relaxation of public health and social measures combined with low vaccination rates and high proportion of population susceptible to infection.

**Variants of interest and concern:** Tracking the evolution and geographical spread of SARS-Cov-2 variants, and evaluating their impacts on vaccines, therapeutics, and diagnostics, is crucial; but capacity to detect and monitor variants in many countries remains underpowered.

**Risk and vulnerability:** Evidence from serology studies tells us that the vast majority of countries remain susceptible to large-scale outbreaks. Vaccination rollout is uneven. Lowering incidence remains the best way to both reduce mortality and reduce the risk of significant variants arising.



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Thank you

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