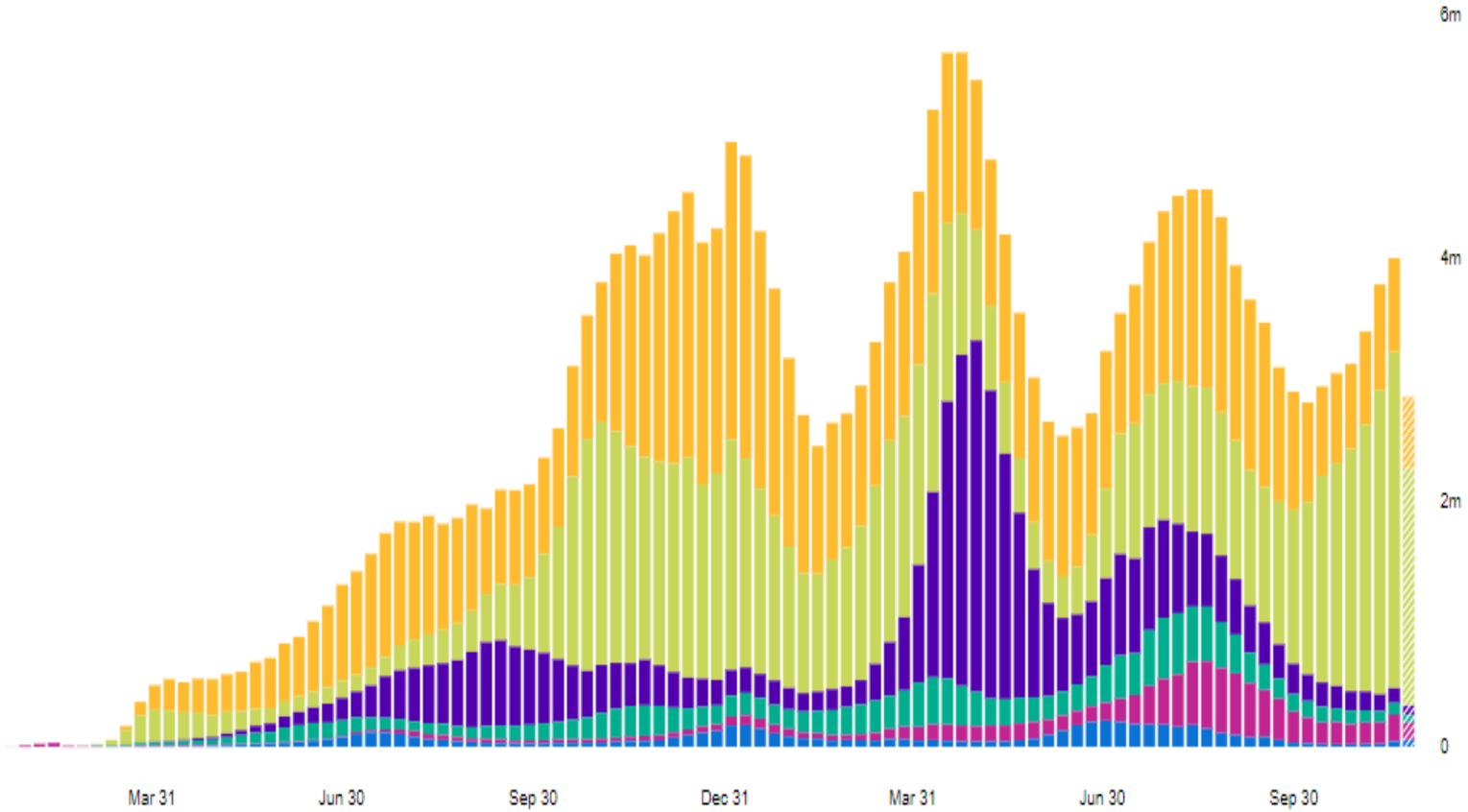
Update Situasi Global dan Varian Omicron

6 Desember 2021

Outline

- Situasi global kasus COVID-19
- Situasi global update vaksinasi COVID-19
- Skenario dimasa depan
- Varian Omicron
- Rekomendasi

Kurva Epidemiologi

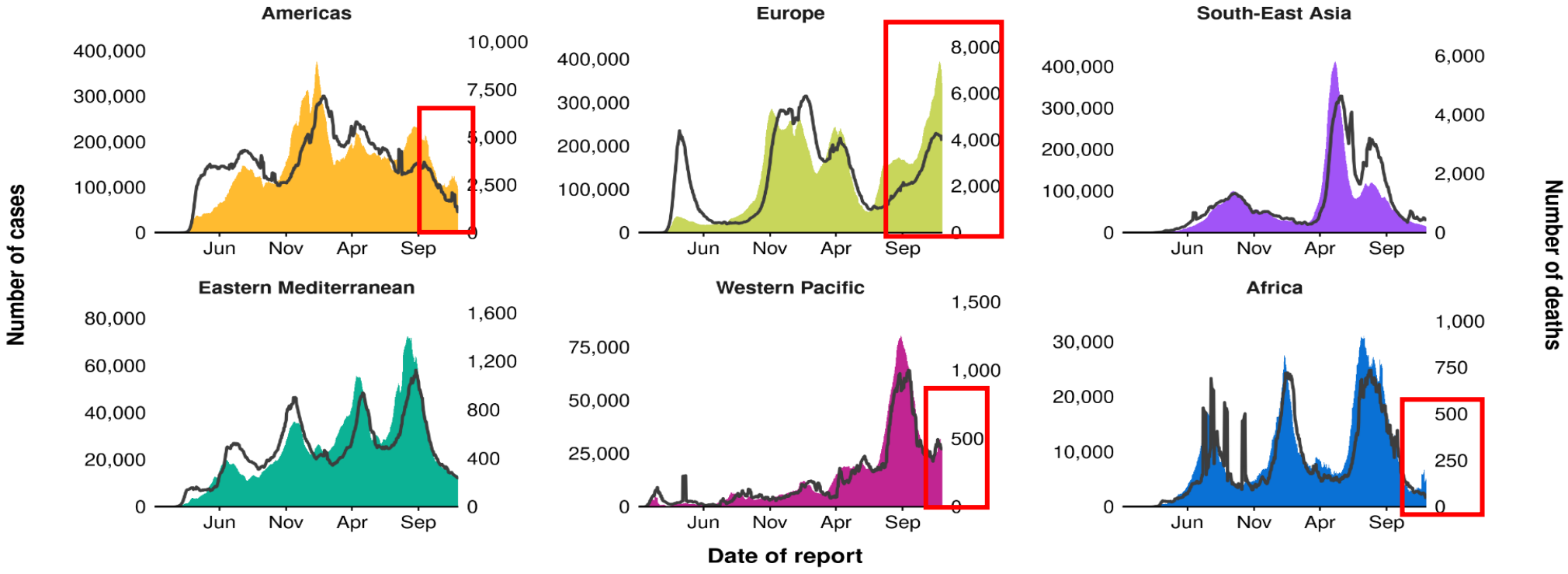


Gambar 1. Kurva epidemiologi kasus COVID19 global, 6 Desember 2021

- Peningkatan kembali terjadi, total kasus global adalah >260 juta dengan kematian >5.2 juta.
- Peningkatan regional Afrika (93%), Western Pasifik (24%), Eropa (7). Eropa Kembali berkontribusi terhadap 70% peningkatan kasus baru minggu lalu.
- Negara dengan penambahan kasus tertinggi adalah Amerika Serikat, Jerman, Inggris, Rusia, dan Perancis

Epidemic curve by Region

(as of 01 Dec 10H, CET)



Cases depicted by bars; deaths depicted by line. Data smoothed with 7-day moving average. Note different scales for y-axes.

6:16pm CET, 1 December 2021:

Change in new COVID-19 cases and deaths compared to 1 week ago

Region	Total cases	New cases in the last 7 days	Change in new cases in the last 7 days	Total deaths	New deaths in the last 7 days	Change in new deaths in the last 7 days
Europe	87,265,549	2,705,697	3.3%	1,553,016	29,230	-1.5%
Americas	97,016,540	750,869	-12.3%	2,350,543	9,693	-29.7%
Western Pacific	10,251,596	198,140	-5.7%	142,231	3,009	-12.9%
South-East Asia	44,572,662	112,677	-14.0%	707,236	3,241	3.8%
Eastern Mediterranean	16,793,616	94,760	2.4%	309,838	1,708	-7.9%
Africa	6,277,676	30,494	-26.6%	152,868	420	-16.0%
Total	**262,178,403**	**3,892,637**	**-1.5%**	**5,215,745**	**47,301**	**-9.7%**

SEARO COVID-19 | Countries with the Highest Number of Newly Reported Cases in last 7 days

	Country/Area/Territory	Case Trend	New Cases: past 7 days	New Cases per 1M Pop: past 7 days	7-day % Change (cases)	Total Cases	Death Trend	New Deaths: past 7 days	New Deaths per 1M Pop: past 7 days	7-day % Change (deaths)	Total Deaths
1	United States of America		508,779	1,537	-22	47,945,945		5,787	18	-42	773,083
2	Germany		405,902	4,881	15	5,836,813		1,911	23	32	101,344
3	United Kingdom		299,133	4,406	3	10,189,063		838	12	-18	144,810
4	Russian Federation		236,046	1,617	-7	9,636,881		8,614	59	-1	275,193
5	France		203,051	3,122	60	7,394,153		461	7	39	116,545
6	Turkey		173,962	2,063	6	8,770,372		1,400	17	-6	76,635
7	Poland		162,238	4,274	10	3,540,061		2,354	62	14	83,583
8	Netherlands		155,967	8,960	3	2,621,022		355	20	44	19,349
9	Czechia		131,675	12,313	20	2,150,042		668	63	-3	33,069
10	Viet Nam		119,275	1,225	71	1,224,110		1,104	11	44	25,055

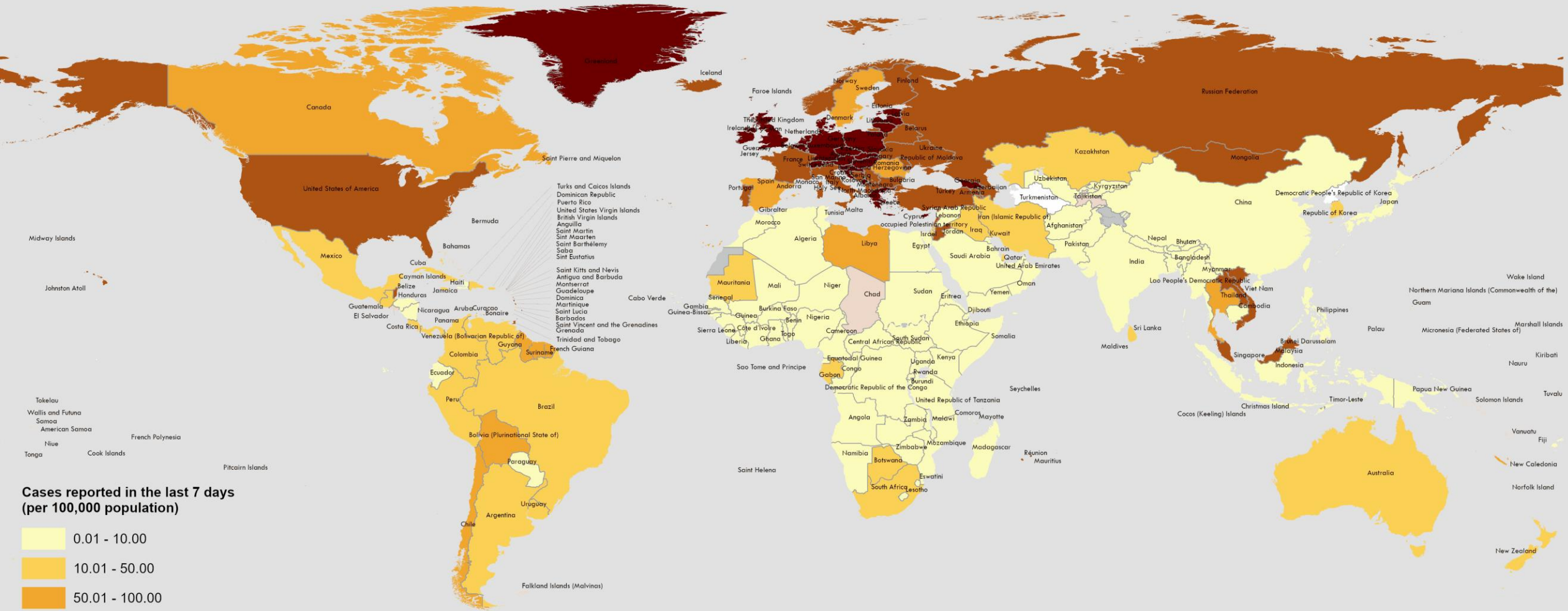
(As of 5:48 pm CET, 30 November 2021)

https://covid19.who.int/table

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

(from 22 November 2021, 10:00AM to 28 November 2021, 10:00AM (CET))

World Health Organization



Cases reported in the last 7 days (per 100,000 population)

- 0.01 - 10.00
- 10.01 - 50.00
- 50.01 - 100.00
- 100.01 - 300.00
- > 300.00
- No cases reported in the last 7 days
- No reported cases

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

Not applicable

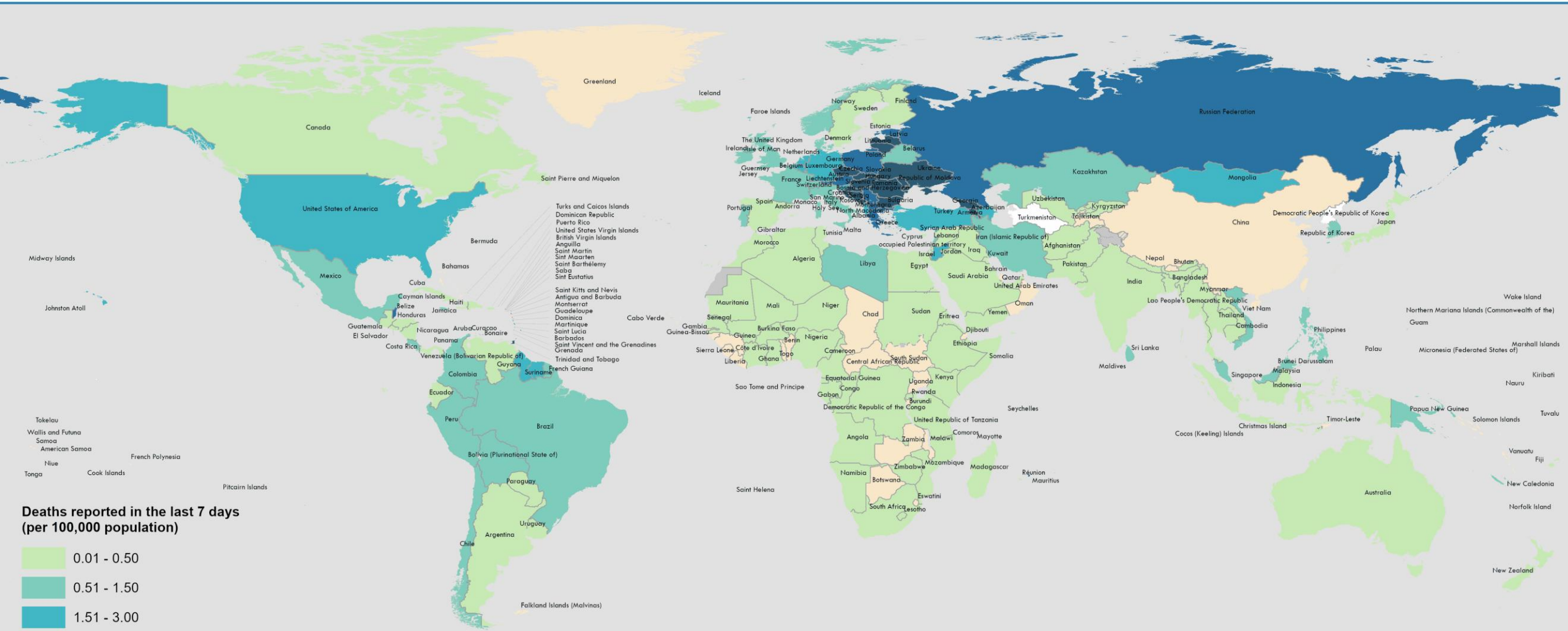
0 2 500 5 000 km

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. [1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). Number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes. Data for Bonaire, Sint Eustatius and Saba have been disaggregated and displayed at the subnational level.

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

(From 22 November 2021, 10:00AM to 28 November 2021, 10:00AM (CET))

World Health Organization



Deaths reported in the last 7 days (per 100,000 population)

- 0.01 - 0.50
- 0.51 - 1.50
- 1.51 - 3.00
- 3.01 - 6.00
- > 6.00
- No deaths reported in the last 7 days
- No reported cases

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

Not applicable

0 2 500 5 000 km

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. [1] All references to Kosovo in this document should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). Number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes. Data for Bonaire, Sint Eustatius and Saba have been disaggregated and displayed at the subnational level.

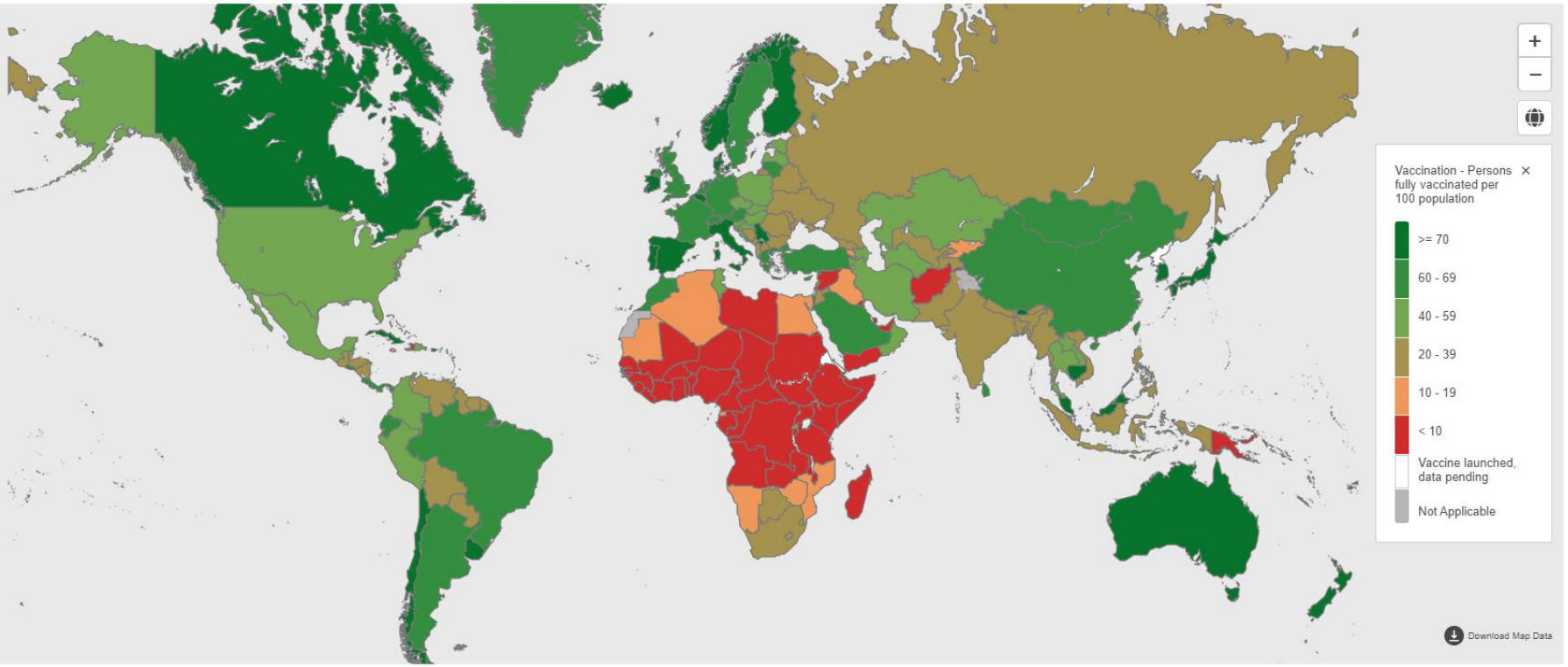
[INTERNAL] Weekly Situations of Concern (SOC) assessed by HQ on 24 Nov 2021
Risk of experiencing high, uncontrolled transmission in the next few weeks.
*****Only the top four classifications shown.***[1]**

WHO regional office	SOC classification	Count	List
AFRO	Critical	0	
	Very high	0	
	High	2	Mauritius; South Africa
	Medium	8	Botswana; Burkina Faso; Eritrea; Ethiopia; Guinea-Bissau; Mali; Mauritania; Niger
EMRO	Critical	1	Afghanistan
	Very high	3	Somalia; Sudan; Syrian Arab Republic
	High	1	Egypt
	Medium	3	Jordan; Lebanon; Yemen
EURO	Critical	3	Bulgaria; Slovakia; Ukraine
	Very high	14	Armenia; Austria; Czechia; Georgia; Germany; Greece; Hungary; Netherlands; Poland; Republic of Moldova; Romania; Russian Federation; Serbia; Slovenia
	High	10	Azerbaijan; Belarus; Belgium; Bosnia and Herzegovina; Croatia; Denmark; Estonia; Ireland; Latvia; Lithuania
	Medium	15	Cyprus; Faroe Islands; France; Gibraltar; Greenland; Guernsey; Italy; Liechtenstein; Montenegro; North Macedonia; Norway; San Marino; Switzerland; Turkey; United Kingdom
PAHO	Critical	2	Cayman Islands; Trinidad and Tobago
	Very high	0	
	High	2	Anguilla; Chile
	Medium	8	Barbados; Bolivia (Plurinational State of); Dominica; Dominican Republic; Haiti; Paraguay; Peru; Venezuela (Bolivarian Republic of)
SEARO	Critical	0	
	Very high	0	
	High	0	
	Medium	4	Bangladesh; Myanmar; Sri Lanka; Thailand
WPRO	Critical	0	
	Very high	3	Lao People's Democratic Republic; Papua New Guinea; Viet Nam
	High	2	New Zealand; Republic of Korea
	Medium	3	Mongolia; Northern Mariana Islands (Commonwealth of the); Philippines

[1]Countries with unknown classification due to limited data:
Democratic People's Republic of Korea; Nicaragua; Turkmenistan; Western Sahara

World Health Organization

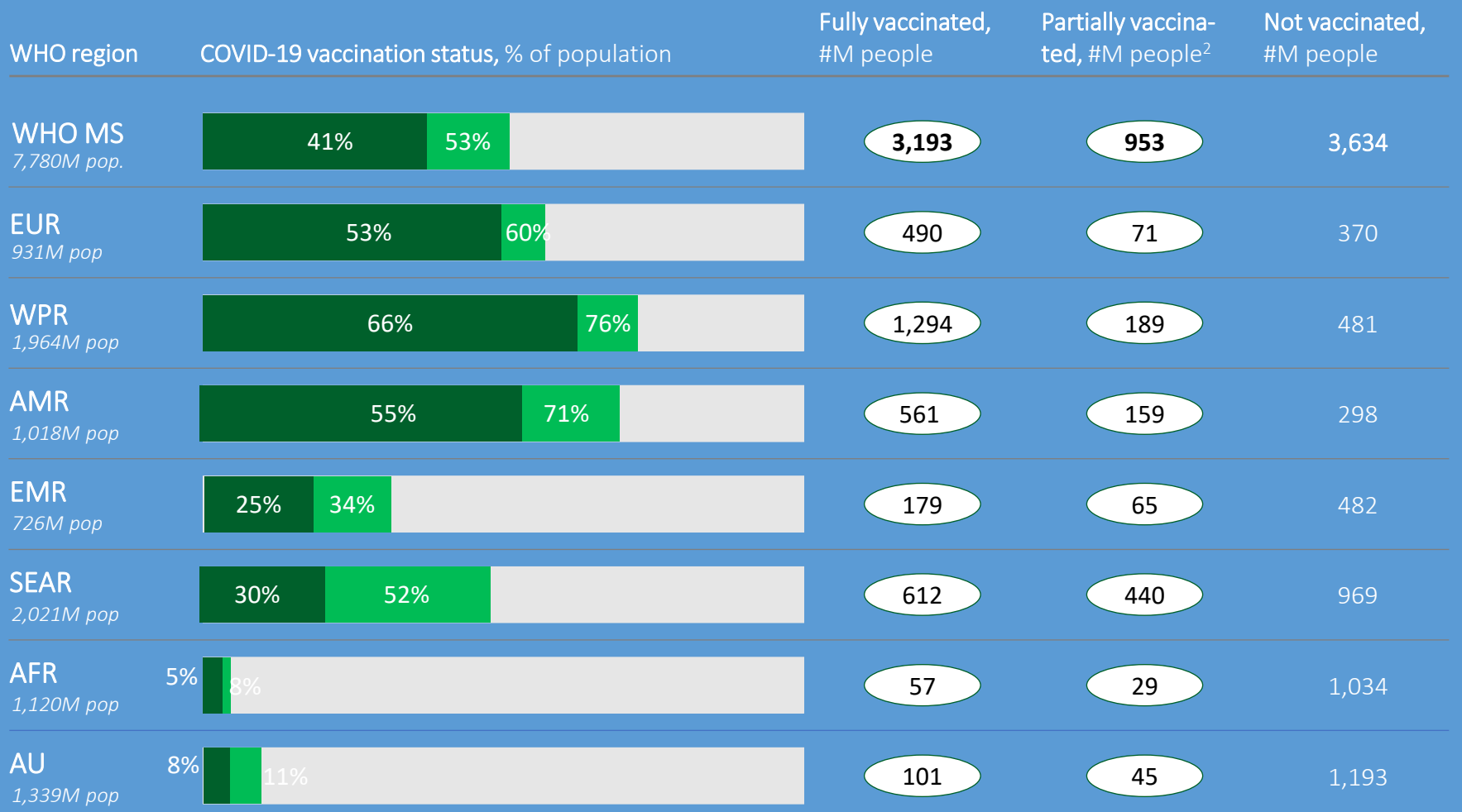
Cakupan Vaksinasi



- Per 2 Desember, 3.2 miliar orang telah *fully vaccinated*
- 4.17 miliar telah mendapatkan minimal 1 dosis

DATA AS OF NOV 29 06:00 AM CET

53% dari total populasi negara-negara anggota telah mendapatkan minimal 1 dosis vaksinasi



1. Incl. fully vaccinated people II 2. Excl. fully vaccinated people

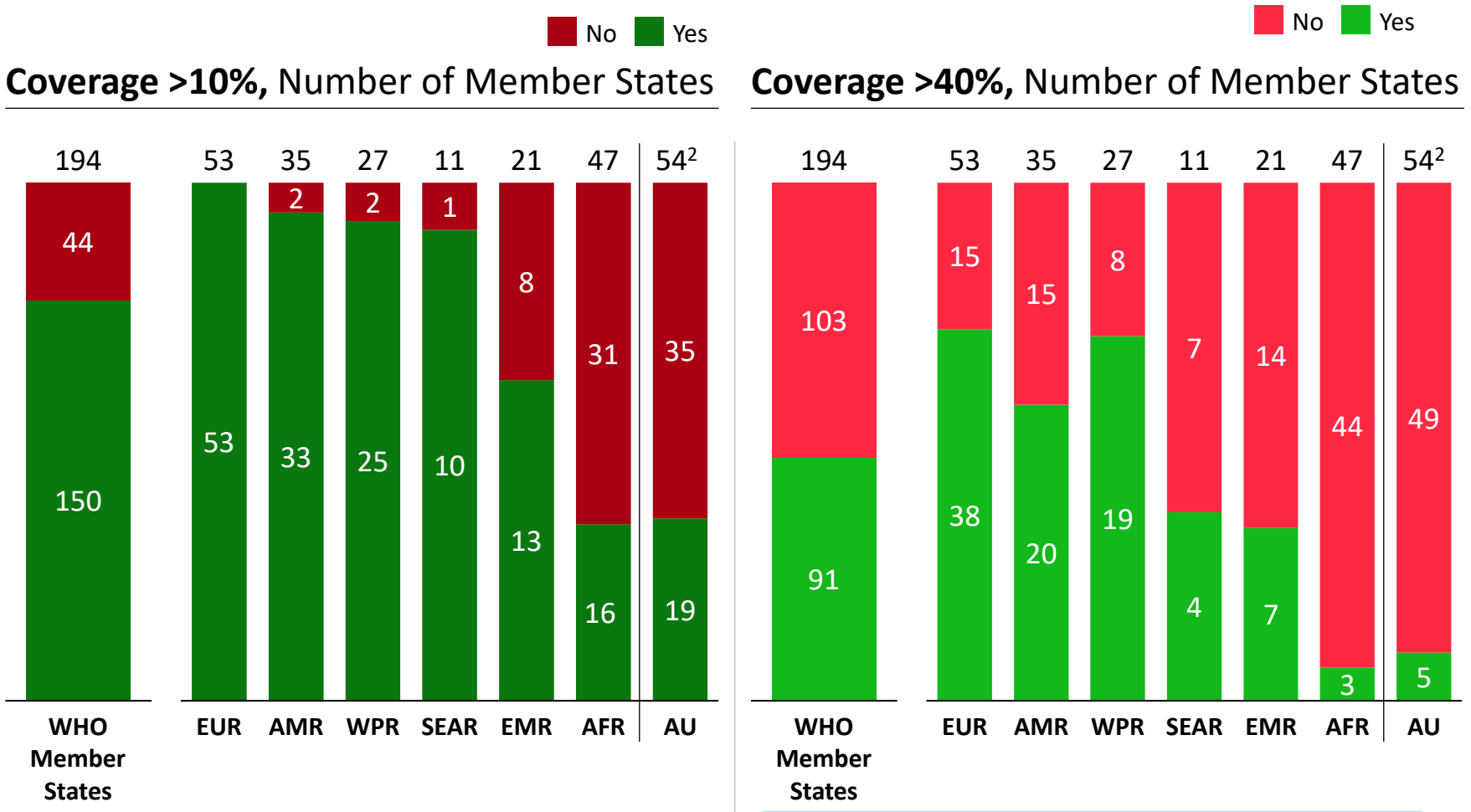
Source: WHO COVID-19 Dashboard

Share of population fully vaccinated
Share of population with at least one dose[1]

44 WHO Member States have vaccinated less than 10% of their population, and 103 less than 40%

ACTaccelerator
ACCESS TO COVID-19 TOOLS
Hosted by World Health Organization

Share of WHO Member States with coverage[1] of at least 10/40%



- Only **15 AMC countries** have reached >40% coverage
- **~1.1bn doses** still need to be administered in AMC countries for all AMC to reach 40%

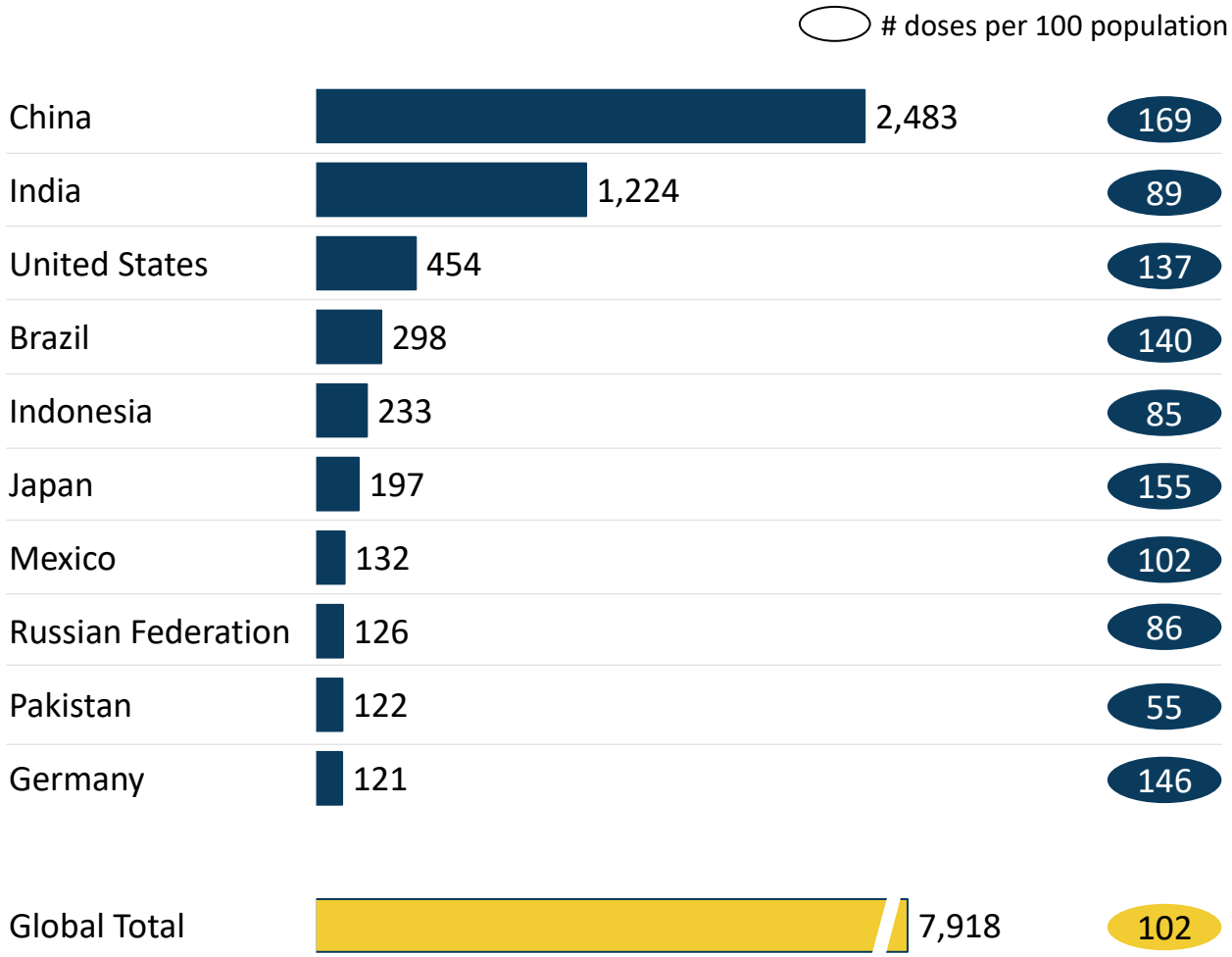
1. # of persons fully vaccinated as a proportion of total population
2. No data available for Sahrawi Arab Democratic Republic

Source: WHO COVID-19 Dashboard

DATA AS OF NOV 29 06:00 AM CET

10 countries administered 68% of all doses – 47% were administered by China and India

Top 10 countries by administered doses, #M doses



Source: Bloomberg

47%

dari semua dosis diberikan di 2 negara yaitu China dan India

68%

Dari dosis total yang diberikan berasal dari 10 negara

Regional Asia Tenggara

 # jumlah negara yang melakukan vaksinasi

10/11

 # vaksin yang digunakan

8*

Jumlah dosis yang telah diberikan

1.74 miliar

(last week 1.66 bn)

Minimal SATU dosis

1.08 miliar (52.3%)

(last week 1.05 bn)

Vaksinasi Lengkap

660 juta (32.0%)

(last week 1.05 bn)

All 10 negara telah memperluas program vaksinasi untuk meng-cover seluruh orang dewasa

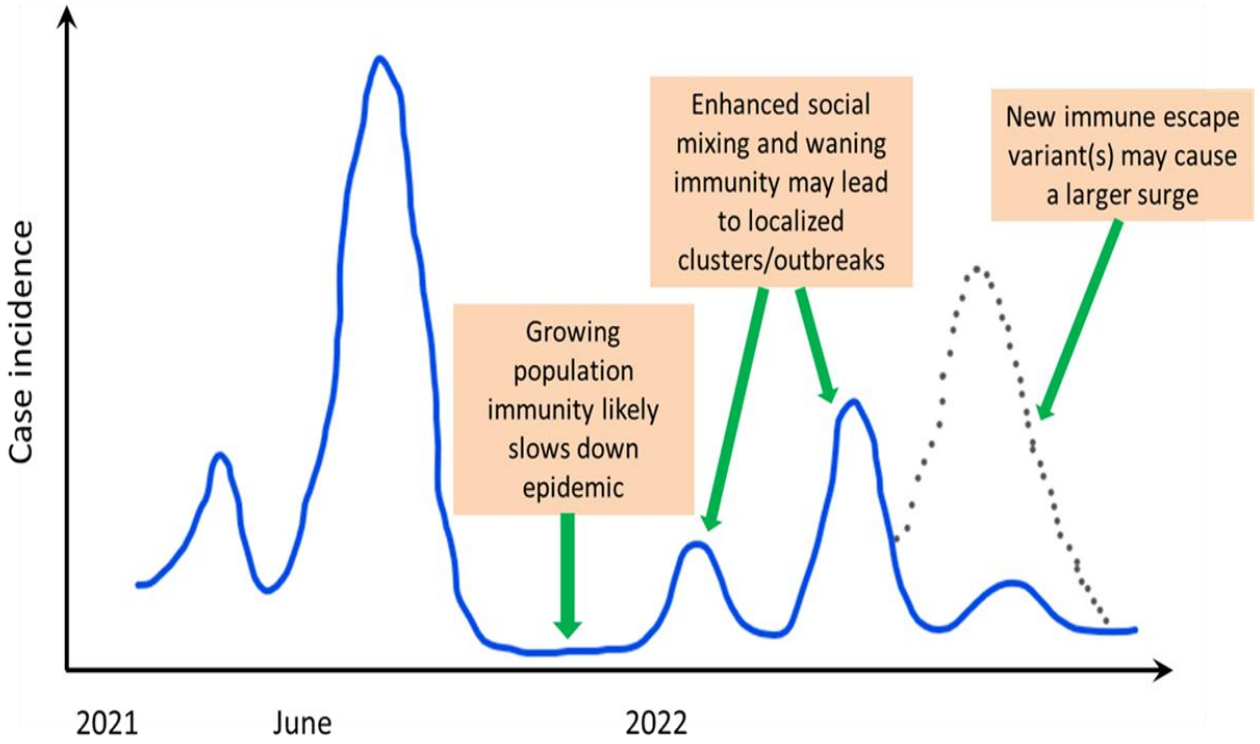
9 negara telah melakukan vaksinasi pada usia remaja

4 negara memberikan dosis tambahan pada beberapa populasi tertentu (INO, MDV, SLK, THL)

*AZ, Covaxin, Janssen, Moderna, Sinopharm, Sinovac, SputnikV, Pfizer

Highlights

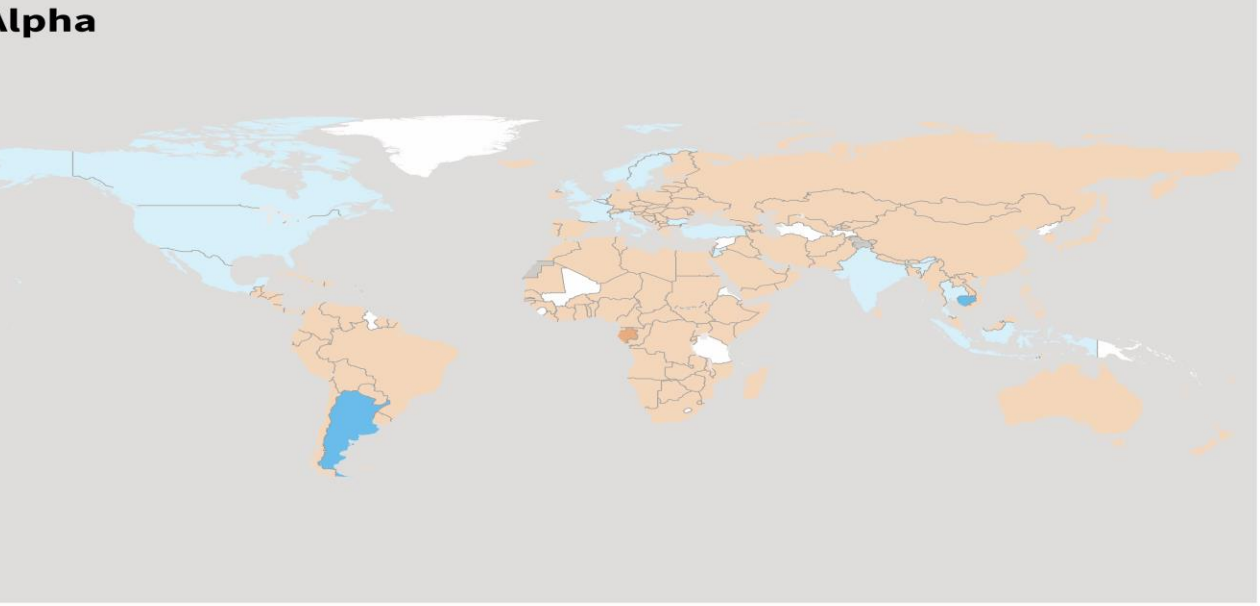
Skenario kedepan – apa yang kemungkinan mempengaruhi

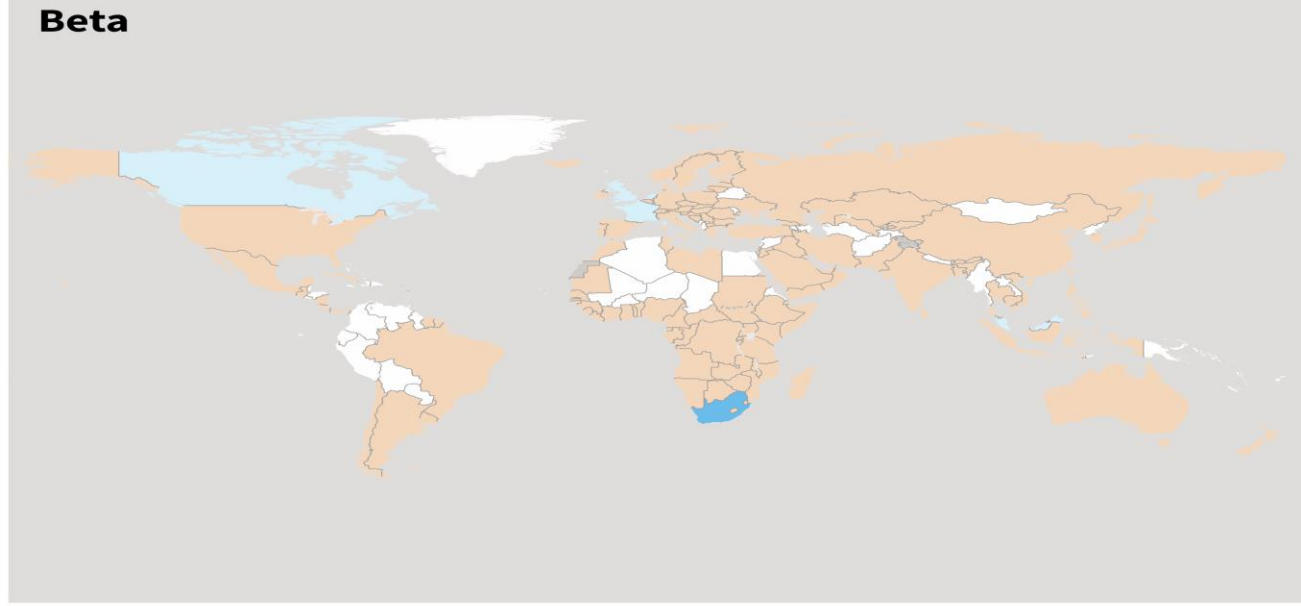


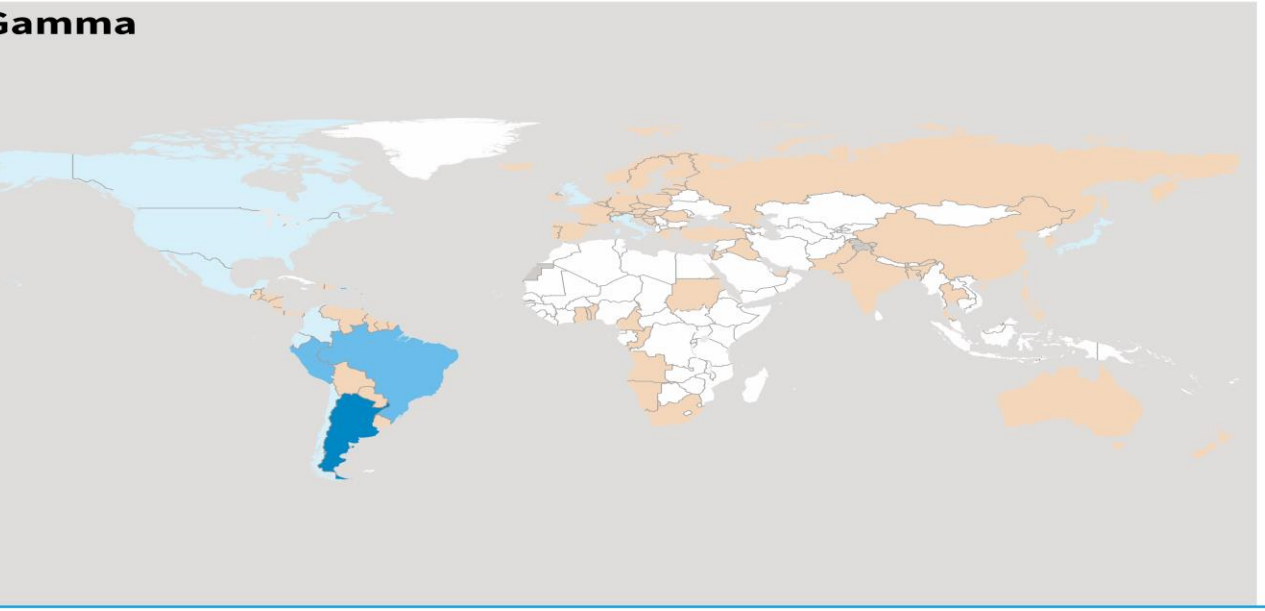
1. **Kekebalan populasi baik yang didapat dari infeksi alami dan vaksinasi**

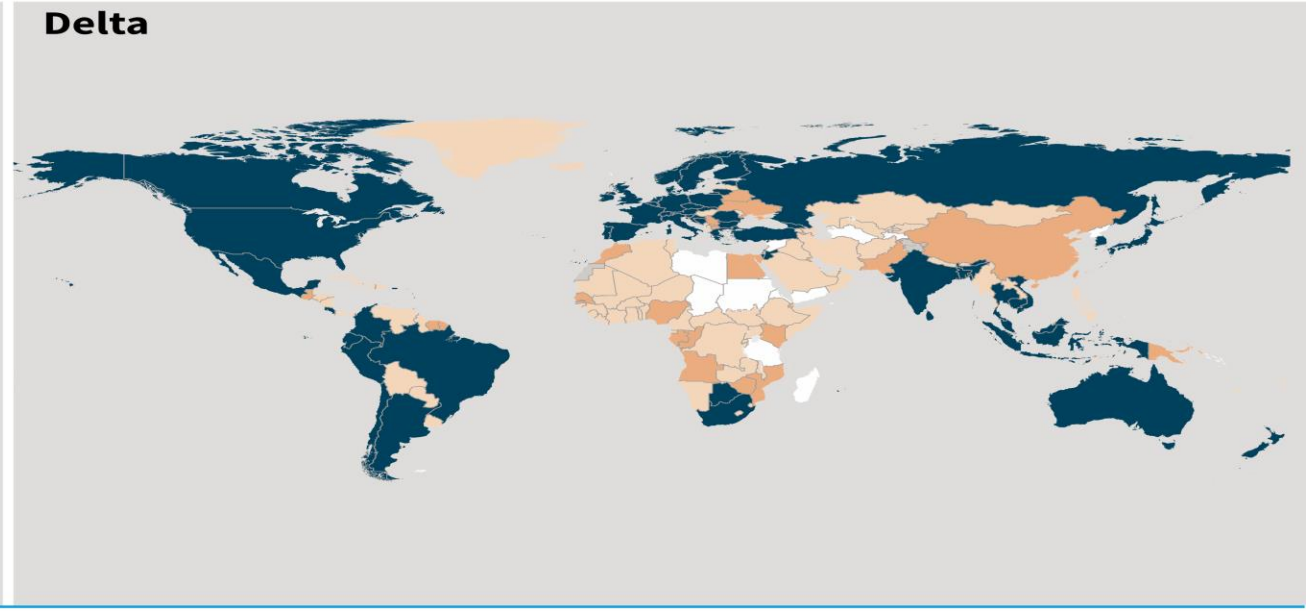
2. Level **interaksi dan mobilitas** masyarakat dan penerapan upaya **pembatasan dan protocol Kesehatan,**

3. **Munculnya varian-varian baru**









revalence calculated as a proportion of VOC sequences among total sequences uploaded to GISAID with sample collection dates thin the past 60 days prior to the latest date of collection, excluding low coverage sequences, limited to countries with ≥100 total quences in the same period. Countries assigned by location of sample collection.
ncludes both official reports to WHO and unofficial reports of VOC detections.

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Proportion of VOC among total sequences*
- 0.501 - 1.000
- 0.101 - 0.500
- 0.011 - 0.100
- >0.000 - 0.010

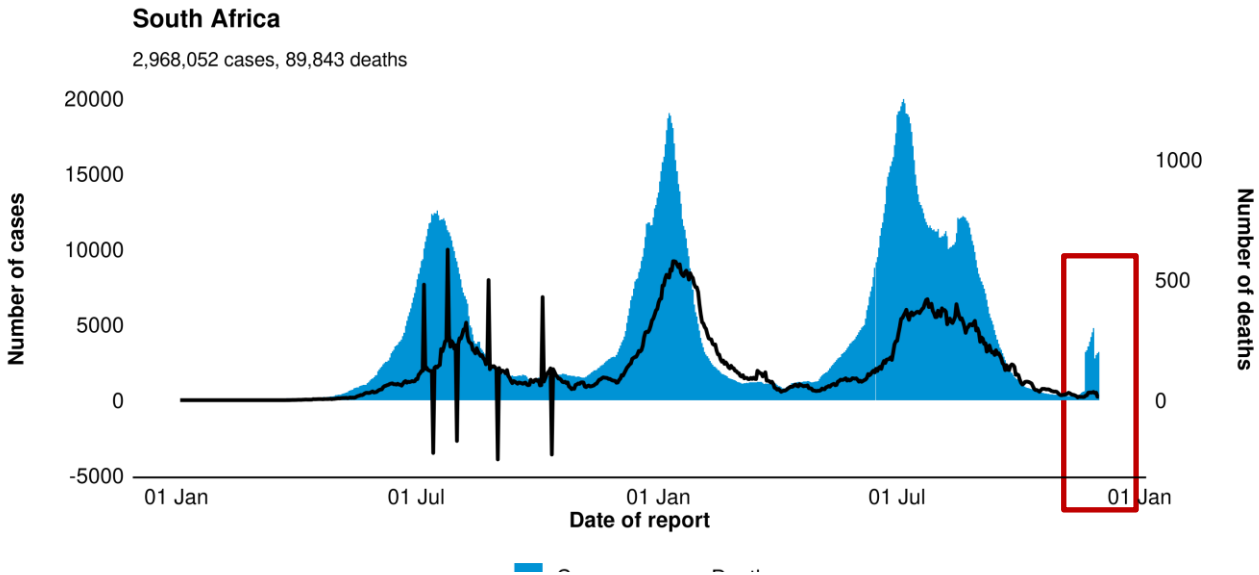
- VOC detected, too few sequences to estimate proportion
- No new VOC sequences, VOC previously reported**
- No presence of VOC reported to WHO
- Not applicable

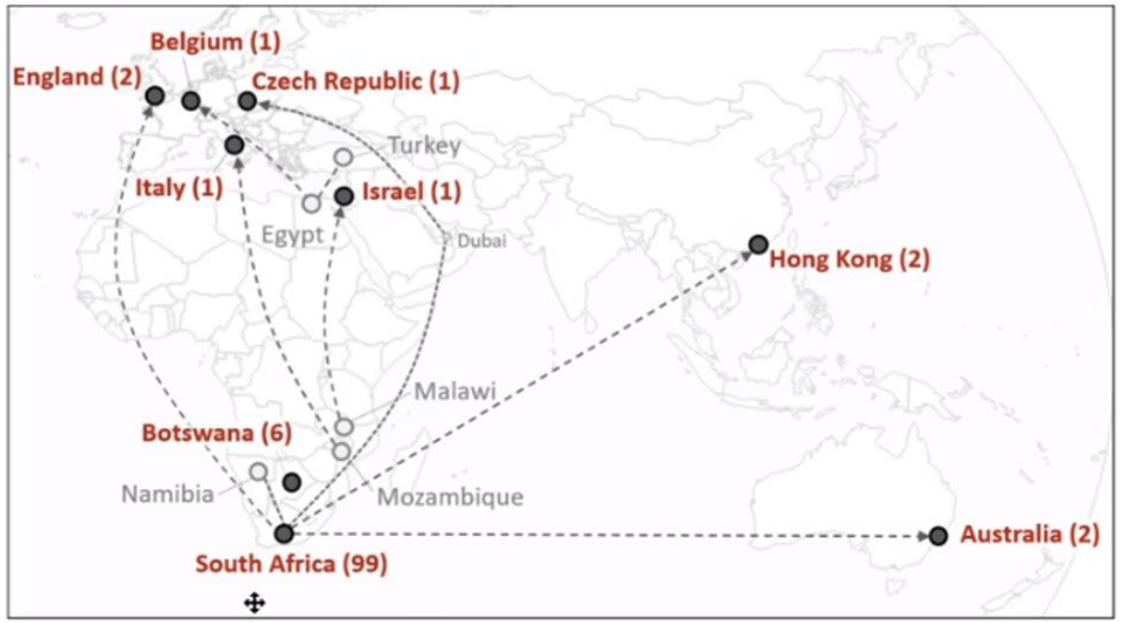
World Health Organization

Data Source: World Health Organization, GISAID
Map Production: WHO Health Emergencies Programme

Omicron – Variant of Concern (VoC)

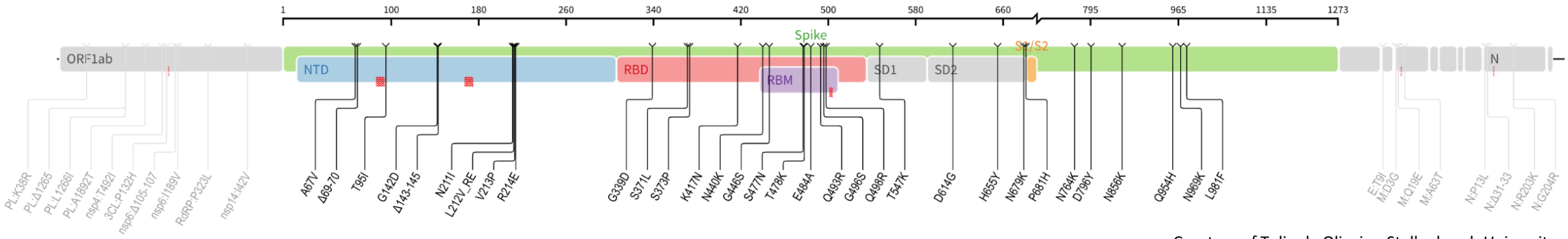
- Adanya peningkatan kasus di Provinsi Gauteng (kluster mahasiswa)
- Afrika Selatan melaporkan varian baru pada 24 November (sampel 9 November 2021)
- Data pertama kali dilaporkan ke GISAID tanggal 22 November (dari China), pelaku perjalanan
- TAG-VE memutuskan Omicron sebagai VOC pada 26





B.1.1.529 Variant of Concern: Omicron

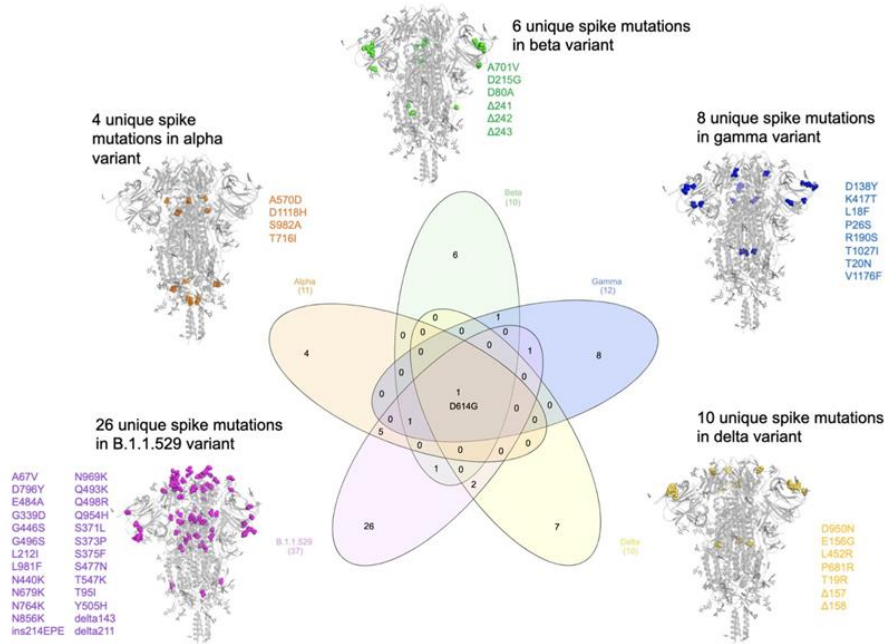
Mutational profile



Courtesy of Tulio de Oliveira, Stellenbosch University

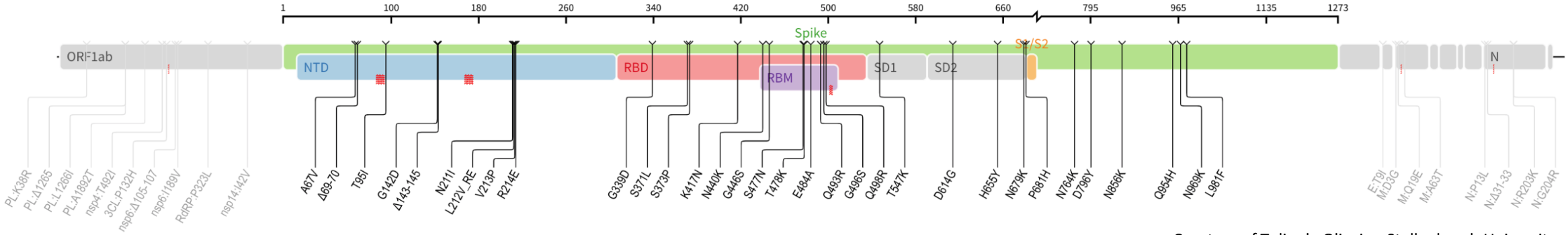
- Perubahan di 45-52 amino acid (including deletions) pada whole genome; 26-32 perubahan pada spike

- Overlapping mutations with Alpha, Beta, Gamma & Delta associated with: (Δ69-70; T95I; G142D/Δ143-145; K417N; T478K; N501Y; N655Y; N679K; P681H)
  - Berdampak pada PCRT test (S-gene target failure)
  - Peningkatan penularan
  - Peningkatan kemampuan penempelan – lebih mudah menempel pada sel
  - Memungkinkan virus untuk bisa menghindar dari antibody (partially)



B.1.1.529 Variant of Concern: Omicron

Mutational profile



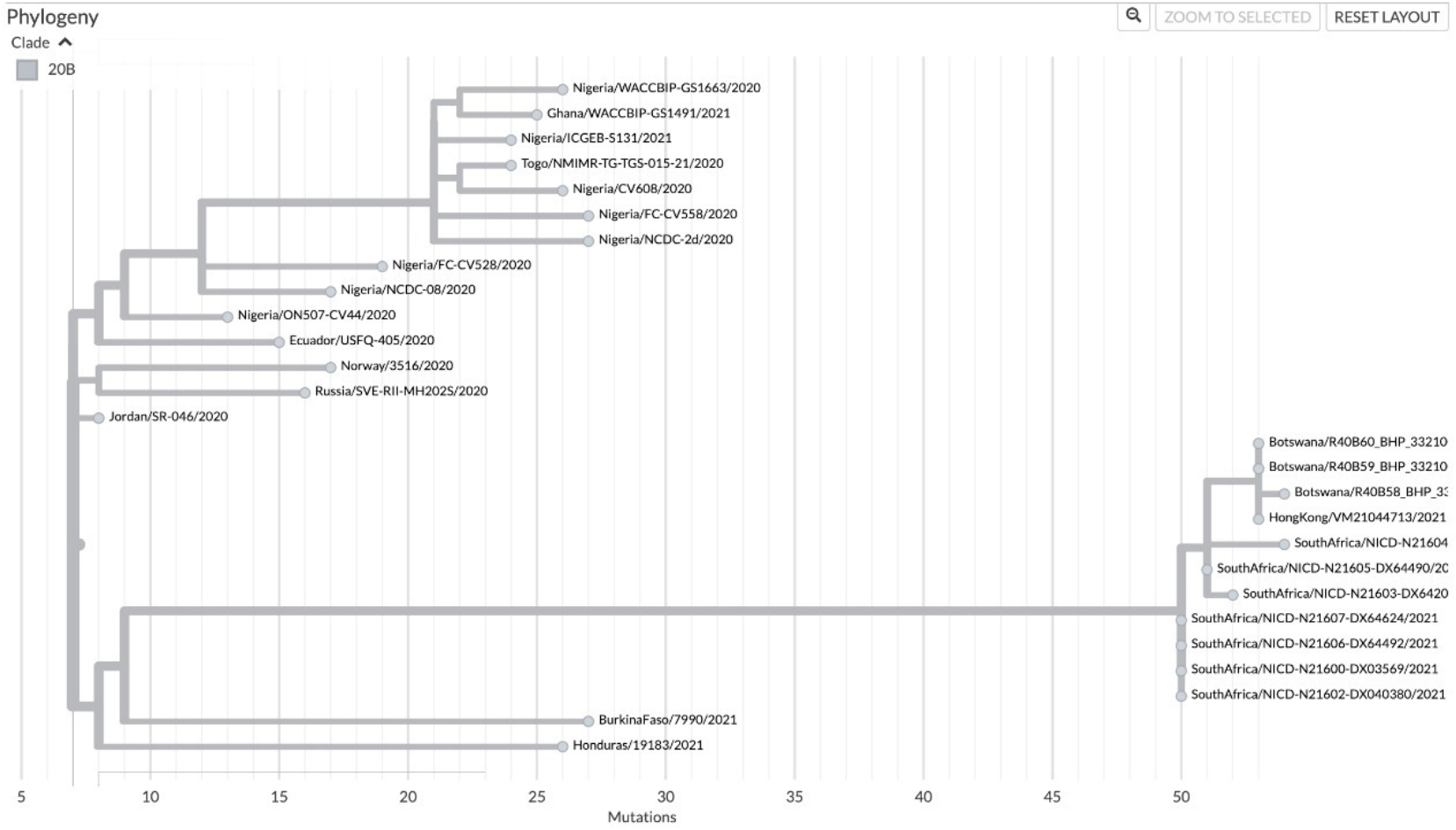
Courtesy of Tulio de Oliveira, Stellenbosch University

- Beberapa mutase tidak dimiliki VoC lain:
  A67V; Δ211/L212I; ins214EPE; N440K; G339D; S371L; S373P; S375F [near mab binding]; S477N; Q498R [predicted ACE2 binding]; E484A [key RBD site]
  - Membantu virus untuk menjadi lebih infeksius
  - Membuat antibody lebih sulit menempel dan/atau membunuh virus

- The remaining mutations are largely unknown:
  G446S; Q493K; G496S; Y505H; T547K; N764K; D796Y; N856K; Q954H; N969K; L981F

World Health Organization

B.1.1.529 sequences cluster separately from other VOC



Nampaknya bukan merupakan keturunan langsung dari varian yang mendominasi Afrika Selatan sebelumnya (Beta, Delta)

Why?

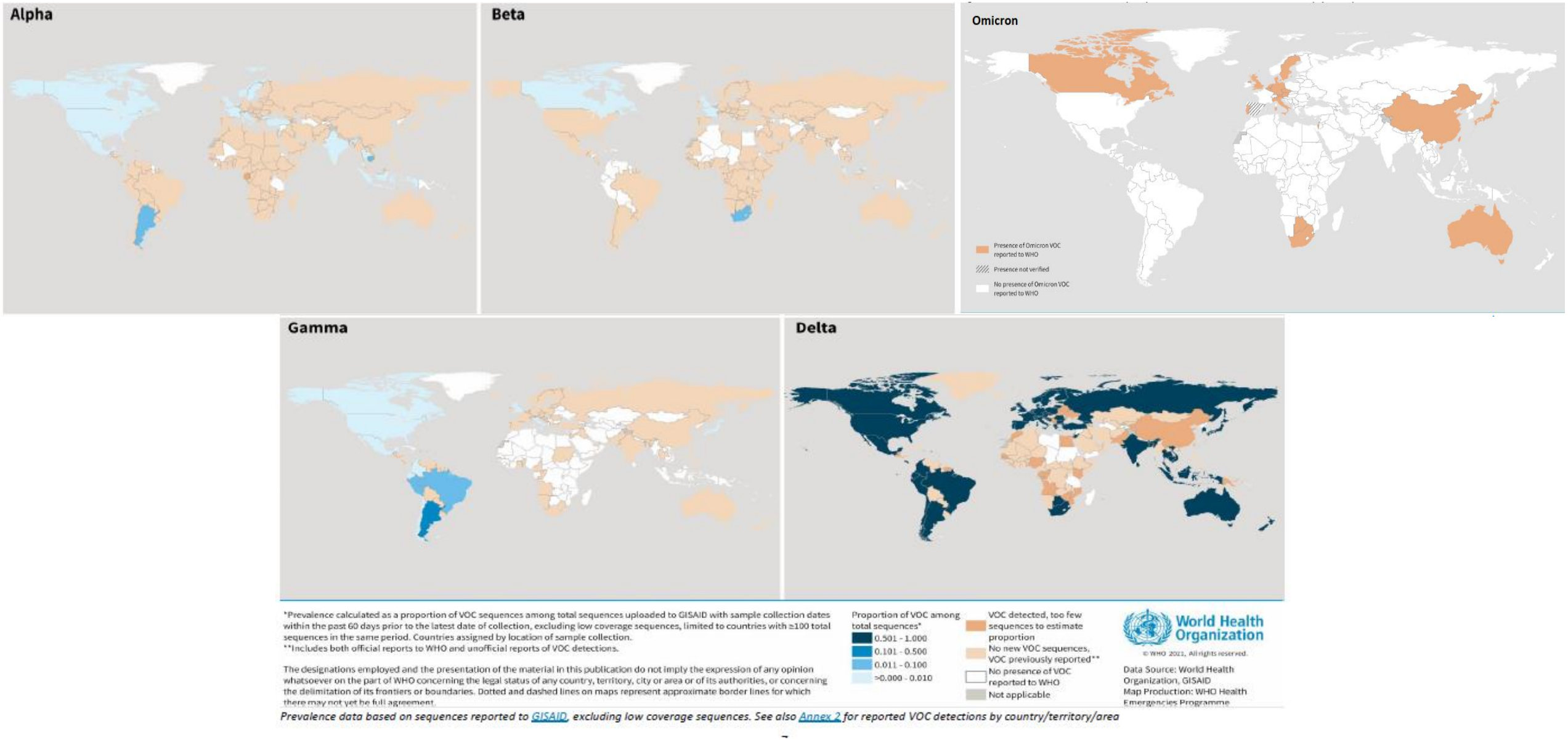
8 sequences from SA, 3 from Botswana and 1 from Hong Kong (SA traveler)

World Health Organization
Regional Office for South-East Asia

HEALTH EMERGENCIES programme

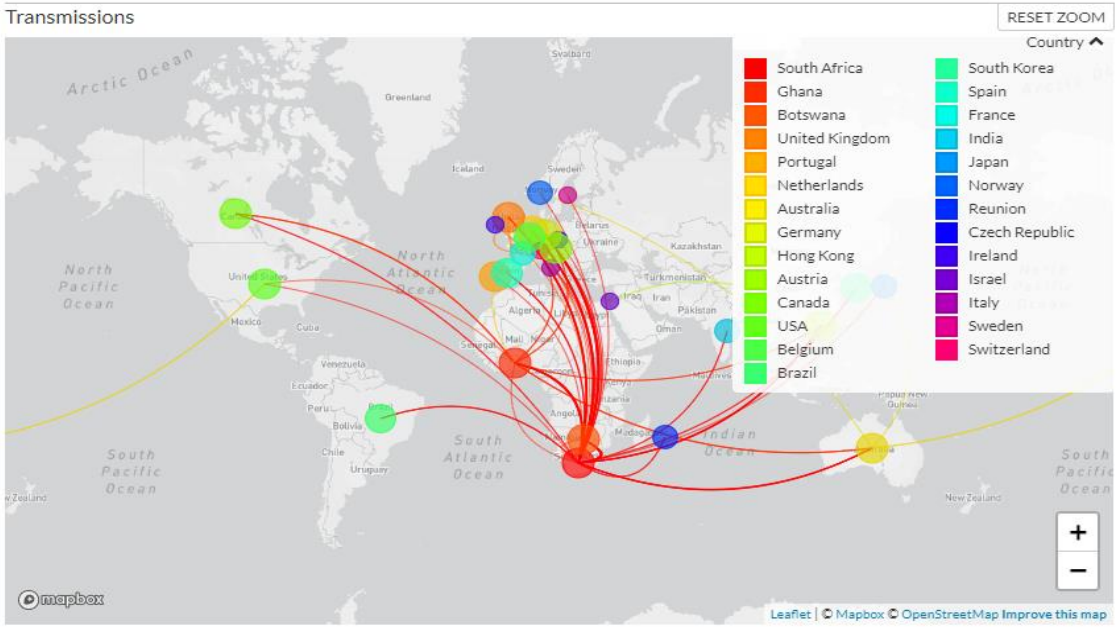
Source: Tulio de Oliveira, Stellenbosch University, South Africa

Persebaran VoC di Berbagai Negara



Gbr. 8. Sebaran *Variant of Concern* (VoC) COVID-19 dalam 60 hari terakhir, data per 30 November 2021. **Global SitRep**

NEGARA-NEGARA YANG MELAPORKAN VARIAN OMICRON (B.1.1.529)



- Mayoritas kasus adalah pelaku perjalanan (tujuan/asal Afrika Selatan atau transit)
- Beberapa negara telah melaporkan penularan komunitas atau rumah tangga/household seperti Jerman, Itali, Portugal, Israel, Inggris
- Sejauh ini belum ada kasus parah dan kematian dilaporkan akibat dari varian ini.

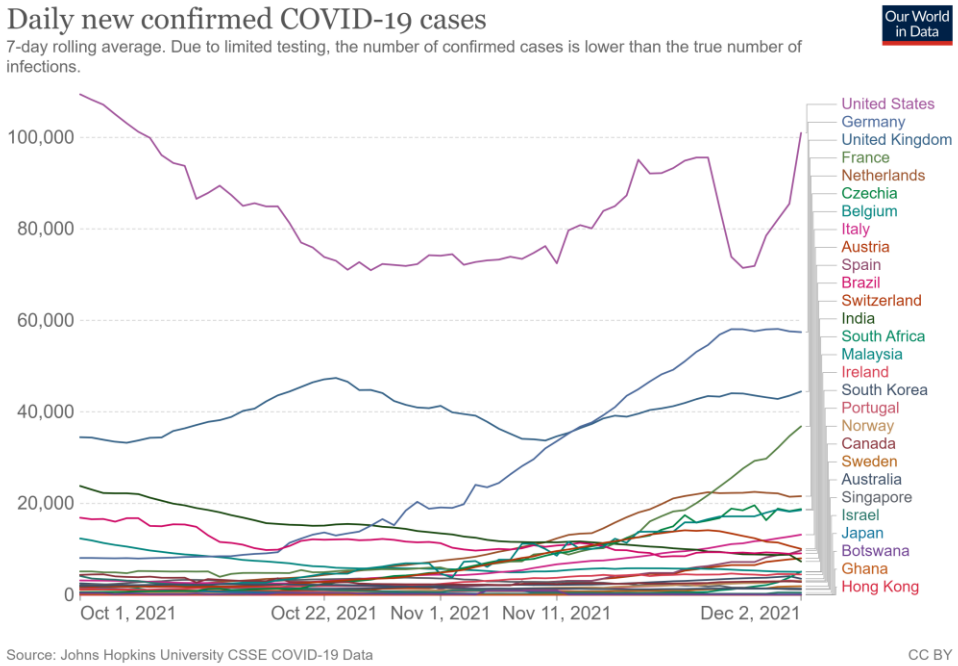
Sumber Data: https://www.who.int/news/; GISAID (3 Desember 2021); *MoH Singapore; **Media Monitoring

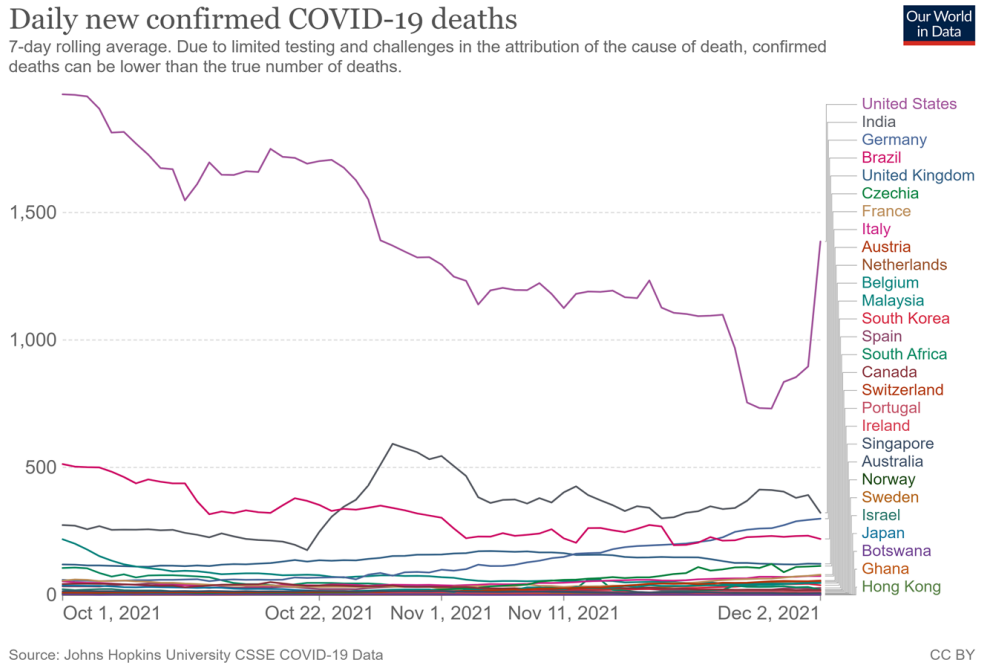
COUNTRY SUBMISSION COUNT

Country	Total # of Omicron	# of Omicron in past 4 weeks	% of Omicron in past 4 weeks
South Africa	217	217	74.3
Ghana	33	33	60
Botswana	19	19	38.8
United Kingdom	18	18	0
Netherlands	13	13	0.8
Portugal	13	13	1.3
Germany	12	12	0.1
Australia	10	10	0.8
Hong Kong	8	8	40
Canada	5	5	1
Austria	5	5	2.6
Italy	4	4	0.1
United States of America	4	4	0
Belgium	3	3	0.1
Brazil	3	3	0.4
South Korea	3	3	100
Spain	3	3	0.2
Norway	2	2	0.4
Japan	2	2	6.7
France	2	2	0.1
Reunion	2	2	2.5
India	2	2	0.7
Singapore*	2	2	N/A
Sweden	1	1	0
Switzerland	1	1	0
Israel	1	1	0
Ireland	1	1	0.3
Czech Republic	1	1	0.2
Malaysia**	1	1	N/A

PERKEMBANGAN KASUS HARIAN DI NEGARA-NEGARA YANG MELAPORKAN VARIAN OMICRON (B.1.1.529)

- Gbr. 9. Kasus konfirmasi harian COVID-19 (7-dma) di negara-negara yang telah melaporkan Varian Omicron. Data 1 Okt – 2 Des 2021: [Sumber data]



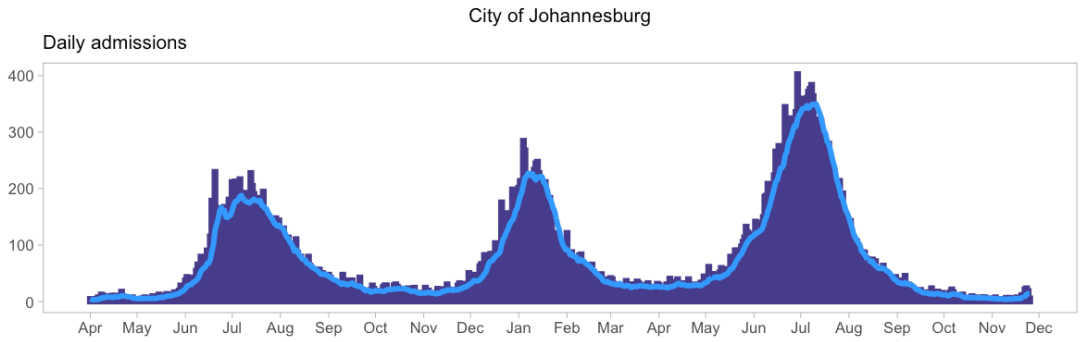


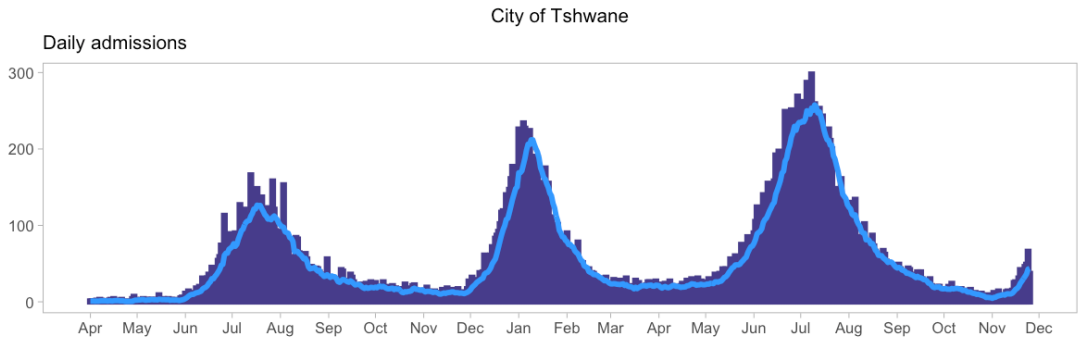
Yang saat ini kita ketahui tentang Omicron

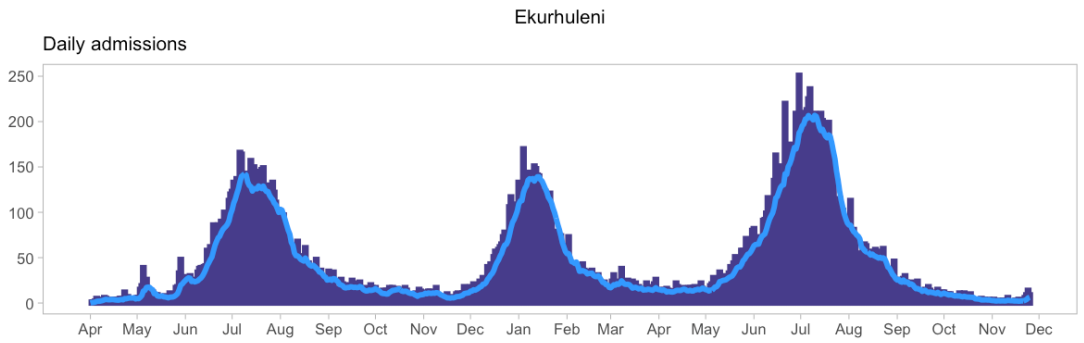
Penularan	• Masih belum jelas, kesan lebih menular daripada varian sebelumnya
Derajat keparahan	• Belum ada informasi terkait perbedaan manifestasi klinis dengan varian lain. • Laporan awal, dimana kasus terjadi pada mahasiswas – kemungkinan memiliki gejala yang ringan. Laporan European CDC, belum ada kematian dilaporkan dari varian ini.
Infection-induced immunity	• Data awal menunjukkan adanya risiko reinfeksi lebih tinggi, tapi data masih terbatas.
Vaccine-induced immunity	• Investigasi sedang dilakukan untuk melihat dampak pada vaksin. • Bukti saat ini, vaksin masih efektif mencegah kasus parah dan kematian.
Diagnostics	• Mesin PCR yang umum digunakan masih dapat mendeteksi adanya infeksi • Perlu melakukan analisis lebih lanjut terkait dampak pada RDT-Antigen.
Treatment	• Corticosteroids and IL6 Receptor Blockers will still be effective for severe COVID-19 • Other treatments will be assessed to see if they are still as effective

SITUASI DI AFRIKA SELATAN

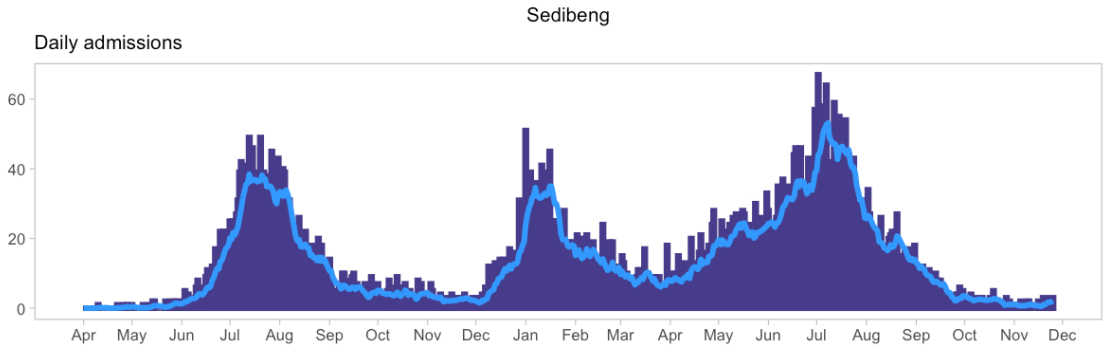
Gauteng – hospital admissions by subregion

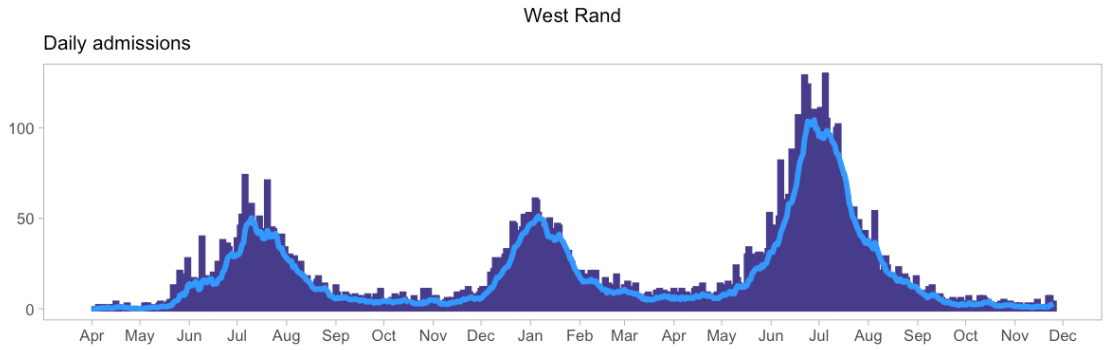






Increase in hospitalisations most prominent in city of Tshwane

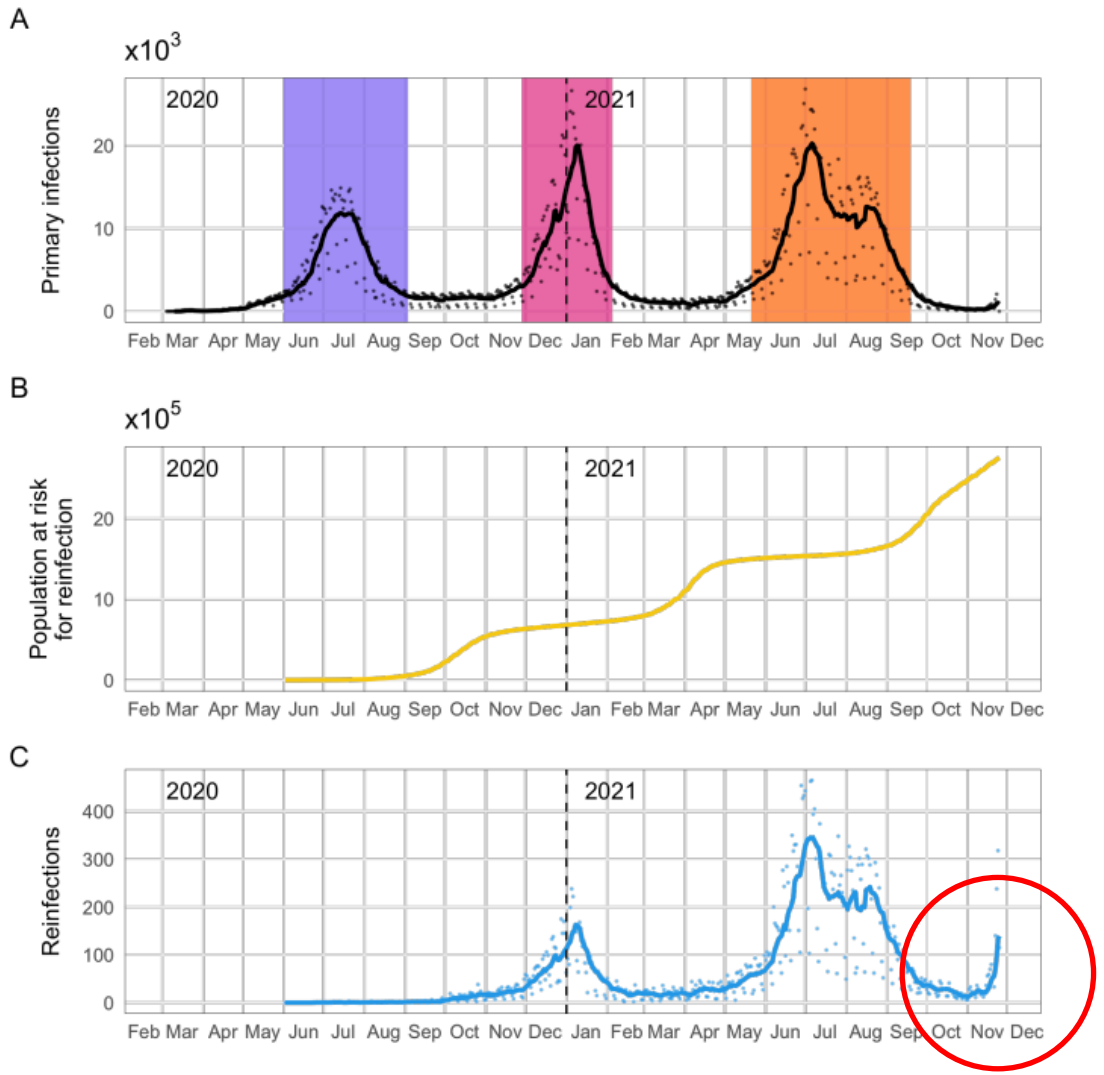




Source: https://www.sacmcepidemicexplorer.co.za/ (as of 25 Nov 2021)

Reinfection trends, South Africa

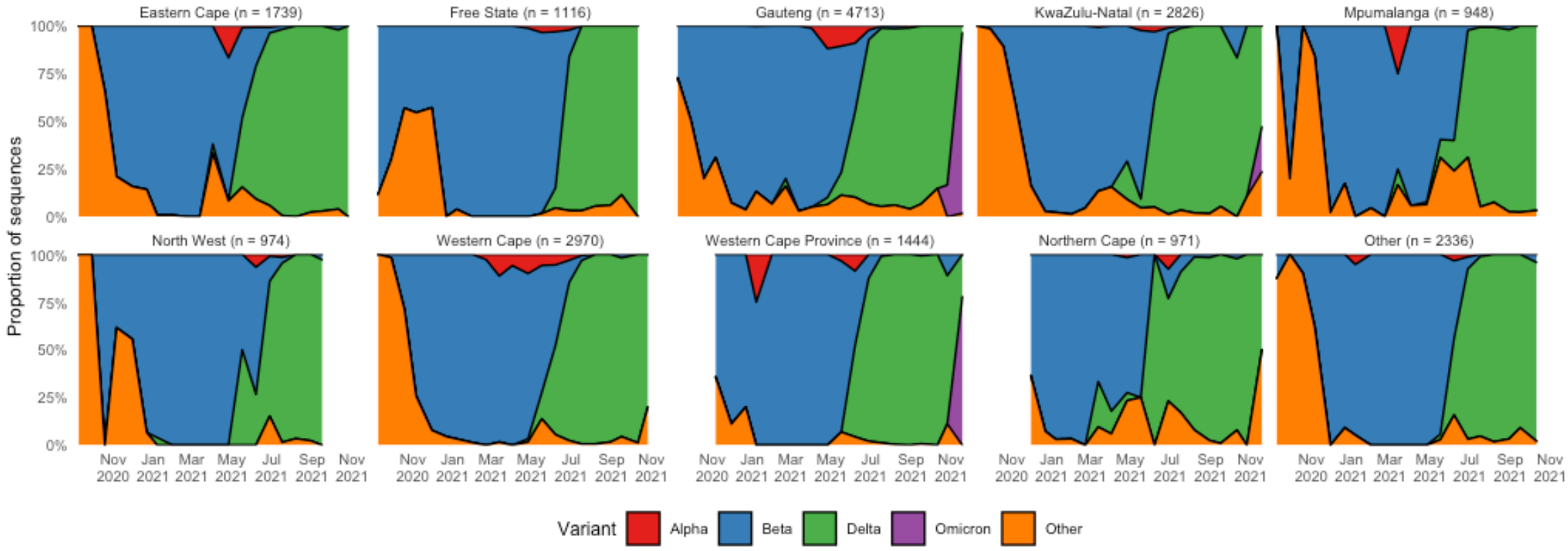
Data



Based on data through 2021-11-24

Report: Analysis of SARS-CoV-2 reinfection trends in South Africa

Raw proportions of sequences by province in South Africa



Source: Analysis by WHO HQ COVID-19 analytics team | Data downloaded from GISAID on 30 Nov 2021 | Latest date of collected Omicron sample in dataset 28 Nov 2021

REKOMENDASI

SKENARIO

Ada 4 scenario yang bisa digunakan untuk melakukan perencanaan dan penguatan kesiapan risiko masuk dan meluasnya varian Omicron,

1. Omicron belum terdeteksi
2. Omicron terdeteksi berasal dari pelaku perjalanan
3. Omicron terdeteksi di masyarakat, kasus sporadic atau dalam bentuk kluster kecil
4. Omicron sudah meluas di masyarakat

Rekomendasi

- Tingkatkan cakupan vaksinasi, terutama untuk populasi rentan dan berisiko tinggi
  - Vaksin masih memberikan proteksi terhadap keparahan dan kematian
- Menerapkan *risk-based approach* terhadap para pelaku perjalanan internasional dengan tetap mengedepankan keadilan dan keterbukaan– pembatasan, tes, sekuensing, karantina
- Melanjutkan penerapan protocol Kesehatan (penggunaan masker, jaga jarak, cuci tangan, dan ventilasi yang baik), dan pembatasan pergerakan jika diperlukan (berdasarkan analisis epidemiologi)
- Upaya penemuan kasus, pelacakan kontak, karantina, isolasi, dan **investigasi kluster-kluster dilanjutkan dengan** sekuensing untuk memantau persebaran varian
- Komunikasi risiko (secara regular, prinsip keterbukaan, lawan hoax dan misinformasi
- Mempersiapkan sistem Kesehatan dan melanjutkan pelayanan Kesehatan esensial

Beberapa kebijakan bagi pelaku perjalanan internasional di negara-negara Regional Asia Tenggara – 29 Nov 2021

Member State	Countries / Regions measures are addressed towards	Type of measures
Bangladesh	South Africa	Travel suspension
India	Europe including The United Kingdom, South Africa, Brazil, Bangladesh, Botswana, China, Mauritius, New Zealand, Zimbabwe, Singapore, Hongkong, Israel	Home quarantine 7 days & self-monitoring 7 days
Indonesia	People staying in Hongkong, South Africa, Angola, Zambia, Malawi, Eswatini, Botswana, Namibia, Zimbabwe, Lesotho or Mozambique for last 14 days Indonesian citizen coming from those countries	Entry restriction - Arrival PCR and 13 day - Facility quarantine 14 days
Maldives	South Africa, Namibia, Mozambique, Lesotho, Botswana, Zimbabwe, Eswatini	Entry restriction
Sri Lanka	South Africa, Botswana, Zimbabwe, Namibia, Lesotho, Eswatini 28 November onwards Travelers of 12 years and above from those countries arrived on 26, 27 November	Entry restriction 14 days facility quarantine
Thailand	Botsawana, Eswatini, Lesotho, Malawi, Mozambique, Namibia, South Africa, Zimbabwe (Entry restriction) Other African countries	Entry restriction 14 days quarantine; 15 Dec onwards

THANK YOU

Beberapa Update Studi

TABLE 2. Adjusted odds ratios* of laboratory-confirmed COVID-19 among hospitalizations in adults with COVID-19–like illness comparing unvaccinated adults with a SARS-CoV-2 infection occurring 90–179 days before the index test date and adults who were fully vaccinated 90–179 days before the index test date without a previous documented SARS-CoV-2 infection — nine states, January–September 2021

Outcome	Total no.	No. (row %) of SARS-CoV-2 positive test results	Adjusted odds ratio (95% CI)
All adults (aged ≥18 years), any COVID-19 mRNA vaccine			
Any mRNA vaccine			
Fully vaccinated† without previous documented infection	**6,328**	324 (5.1)	Ref
Unvaccinated with a previous SARS-CoV-2 infection	**1,020**	89 (8.7)	5.49 (2.75–10.99)
Any mRNA vaccine, no restriction of time since previous infection or completion of vaccination			
Fully vaccinated† without previous documented infection (range of time since vaccination = 0–213 days before hospitalization)	**18,397**	542 (3.0)	Ref
Unvaccinated with a previous SARS-CoV-2 infection (range of time since previous infection = 90–494 days before hospitalization)	**2,085**	130 (6.2)	2.75 (1.90–3.98)
Any mRNA vaccine, examining the potential influence of time since previous infection or completion of vaccination			
Fully vaccinated† without previous documented infection, limited to those with longest period since vaccination (range of time since vaccination = 45–213 days before hospitalization)	**12,231**	458 (3.7)	Ref
Unvaccinated with a previous SARS-CoV-2 infection, limited to those with more recent infections (range of time since previous infection = 90–225 days before hospitalization)	**1,389**	107 (7.7)	3.98 (2.49–6.35)
Any mRNA vaccine, adjusting for time since previous infection or completion of vaccination in model			
Fully vaccinated† without previous documented infection	**6,328**	324 (5.1)	Ref
Unvaccinated with a previous SARS-CoV-2 infection	**1,020**	89 (8.7)	3.22 (1.68–6.20)
By time relative to SARS-CoV-2 B.1.617.2 (Delta) variant predominance			
Before Delta predominance (January–June 2021)			
Fully vaccinated† without previous documented infection	**1,115**	18 (1.6)	Ref
Unvaccinated with a previous SARS-CoV-2 infection	**831**	70 (8.4)	6.11 (2.83–13.16)
During Delta predominance (June–September 2021)**			
Fully vaccinated† without previous documented infection	**5,213**	306 (5.9)	Ref
Unvaccinated with a previous SARS-CoV-2 infection	**189**	19 (10.1)	7.55 (3.45–16.52)
By mRNA vaccine product§			
Pfizer-BioNTech (BNT162b2)			
Fully vaccinated† without previous documented infection	**3,736**	215 (5.8)	Ref
Unvaccinated with a previous SARS-CoV-2 infection	**1,020**	89 (8.7)	5.11 (2.53–10.29)
Moderna (mRNA-1273)			
Fully vaccinated† without previous documented infection	**2,592**	109 (4.2)	Ref
Unvaccinated with a previous SARS-CoV-2 infection	**1,020**	89 (8.7)	7.30 (3.40–15.60)
By age group, yrs¶			
18–64			
Fully vaccinated† without previous documented infection	**1,425**	71 (5.0)	Ref
Unvaccinated with a previous SARS-CoV-2 infection	**556**	49 (8.8)	2.57 (1.42–4.65)
≥65			
Fully vaccinated† without previous documented infection	**4,903**	253 (5.2)	Ref
Unvaccinated with a previous SARS-CoV-2 infection	**464**	40 (8.6)	19.57 (8.34–45.91)

- Israel, menganalisis gelombang ke-4, kematian pada *fully vaccinated* lebih rendah daripada yang belum lengkap (0.1 vs 0.7 er 100.000)
- Studi oleh CDC, vaccine-induced immunity lebih besar memberikan perlindungan daripada infection-induced immunity (5.49 kali berisiko terinfeksi COVID-19)