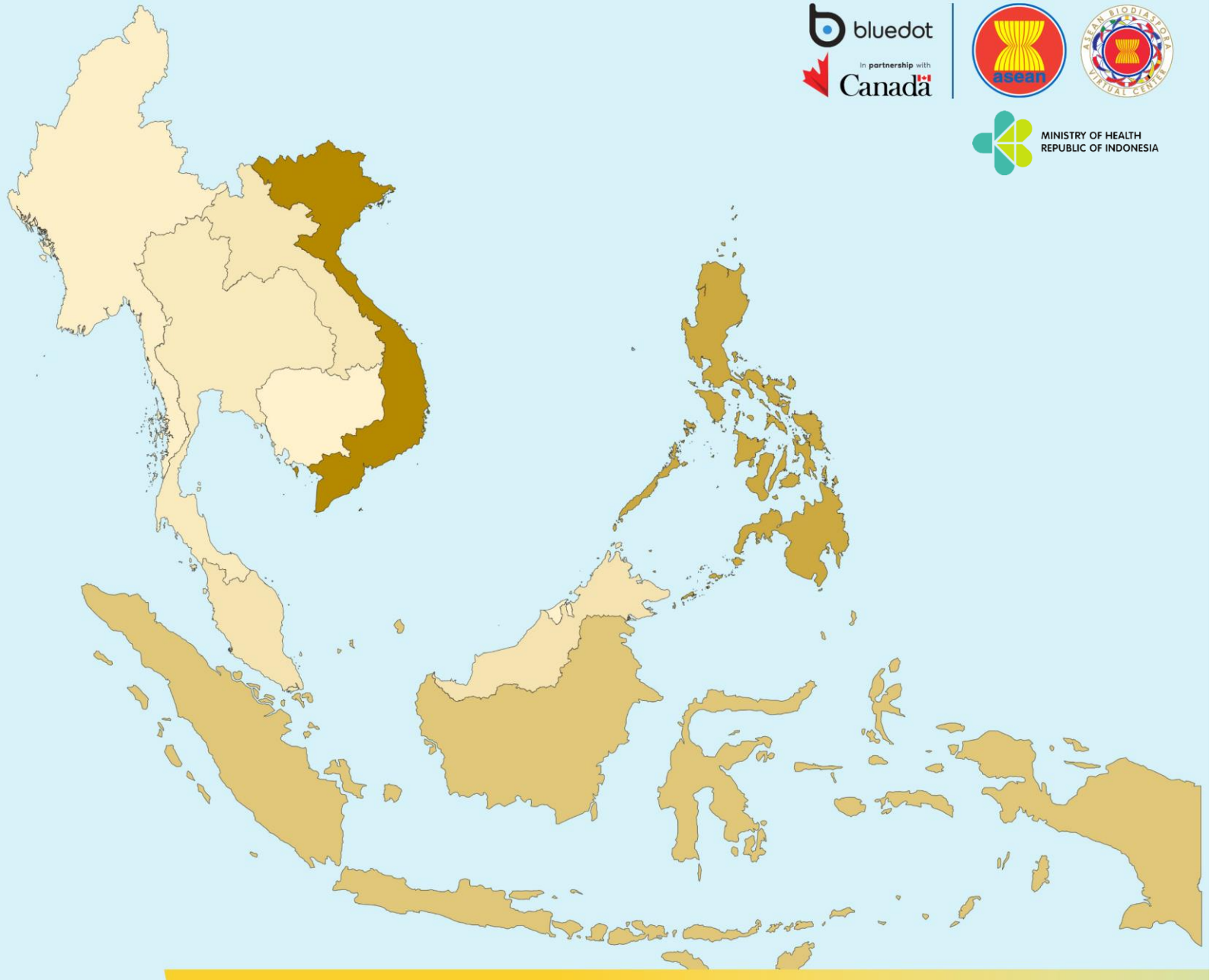


COVID-19, Mpox, and Travel Advisories

Situational Report in the ASEAN Region

ASEAN BioDiaspora Virtual Center (ABVC)

March 10, 2023 | Issue No. 458

ASSOCIATION OF SOUTHEAST ASIAN NATIONS

ASEAN BIODIASPORA VIRTUAL CENTER (ABVC)

MINISTRY OF HEALTH
REPUBLIC OF INDONESIA

GLOBAL PARTNERS

In partnership with Canada

Australian Aid

KDCA

KOHI

World Health Organization
Regional Office for South-East Asia

World Health Organization
Western Pacific Region

Table of Contents

COVID-19: Highlights and Situation Overview

Global Update

- **Worldwide**, there have been over 666 million cases and over 6 million deaths attributed to COVID-19.
- The **World Health Organization (WHO)** reported in its weekly pandemic update that COVID-19 cases declined by 58% over the past 28 days, with deaths down by 65% over the same period. Cases declined in all regions except Europe, where cases were up by 12%. Deaths have decreased in all regions except for the Eastern Mediterranean, where the level rose by 18%. Globally, a total of 43,296 new hospitalizations and 1646 new intensive care unit (ICU) admissions were reported in the past 28 days, suggesting a reduction in new hospitalizations and ICU admissions of 76% and 39%, respectively, compared to the previous 28 day. Meanwhile, the proportion of recombinant Omicron viruses, mainly XBB.1.5, rose to 44.1%, while BA.2 lineage viruses remained stable. [Full article]

Regional Update

- **Singapore** has released a white paper on its COVID-19 response, which said the country did well with early vaccine rollout and boosting healthcare resilience. The White Paper, published by the Prime Minister's Office, also highlighted areas where the Government could have done better, including mask-wearing policies, safe management rules and the outbreak in migrant worker dormitories that could have been a "major disaster". The review also highlighted the national vaccination roll-out, which involved making the vaccines readily available to the population and backing them with clear and sustained communication on the benefits of vaccination.

Research Update (Published and peer-reviewed studies)

- The study ***Neurocognitive and psychiatric symptoms following infection with COVID-19: Evidence from laboratory and population studies*** examined associations between symptomatic COVID-19 history, neurocognitive function, and psychiatric symptoms using cognitive task performance, functional brain imaging, and a prospective population survey in two studies.[1] Study 1 was a laboratory study conducted between May 2022 and November 2022 involving 120 fully vaccinated community dwelling adults between 18 and 84 years of age.[1] The participants were assessed using the Flanker test, flanker test, a test of executive function in which participants are told to relay information presented in the middle of the screen in front of them, while distracting answers are displayed at the sides of the screen.[1] It's a test to evaluate how well and how quickly the brain can shut out distractions, with both accuracy and speed as measurements.[1] Study 2 was a 2-wave population survey undertaken between September 2021 and March 2022 examining the prospective relationship between symptomatic COVID-19 and self-reported symptoms of cognitive dysfunction, depressive symptoms, anxiety symptoms, and agitation at 6-month follow up.[1] Findings from Study 1 revealed significant effects of symptomatic COVID-19 history on Flanker interference and delay discounting wherein the effects were significantly stronger among older adult women and were accompanied by task-related changes in cerebral oxygenation at the right superior frontal gyrus.[1] Meanwhile in Study 2, the baseline symptomatic COVID-19 history was associated with self-reported cognitive dysfunction and a latent variable reflecting psychiatric symptoms of anxiety, depression, and agitation at follow-up.[1] [Full text]

- The UK was the first country to start national COVID-19 vaccination programmes, initially administering doses 3 weeks apart.[3] However, early evidence of high vaccine effectiveness after the first dose and the emergence of the SARS-CoV-2 alpha variant prompted the UK to extend the interval between doses to 12 weeks.[3] In this study, ***Quantifying the effect of delaying the second COVID-19 vaccine dose in England: a mathematical modelling study***, the effect of delaying the second vaccine dose in England was quantified.[3] A previously described model of SARS-CoV-2 transmission, calibrated to COVID-19 surveillance data from England, including hospital admissions, hospital occupancy, seroprevalence data, and population-level PCR testing data was used.[3] The epidemic trajectories in the counterfactual scenario in which vaccine doses were administered 3 weeks apart against the real reported vaccine roll-out schedule of 12 weeks were compared.[3] In the period from Dec 8, 2020, to Sept 13, 2021, the number of individuals who received a first vaccine dose was higher under the 12-week strategy than the 3-week strategy.[3] For this period, comparing the first and second COVID-19 vaccine doses from 3 to 12 weeks, a median (calculated as the median of the posterior sample) of 58,000 COVID-19 hospital admissions (291,000 cumulative hospitalizations [95% credible interval 275,000–319,000] under the 3-week strategy was averted compared to 233,000 [229 000–238000] under the 12-week strategy) and 10,100 deaths (64,800 deaths [60,200–68,900] vs 54,700 [52,,800–55600]).[3] Across all sensitivity analyses the 3-week strategy resulted in a greater number of hospital admissions.[3] In results by age group, the 12-week strategy led to more hospitalizations and deaths in older people in spring 2021, but fewer following the emergence of the delta variant during summer 2021.[3] England's delayed-second-dose vaccination strategy was confirmed by early real-world data on vaccine effectiveness in the context of limited vaccine supplies in a growing epidemic.[3] This study shows that rapidly providing partial (single-dose) vaccine-induced protection to a larger proportion of the population was successful in reducing the burden of COVID-19 hospitalizations and deaths overall.[3] [Full text]

- An urgent need exists to rapidly screen potential therapeutics for severe COVID-19 or other emerging pathogens associated with high morbidity and mortality.[4] This study, ***Report of the first seven agents in the I-SPY COVID trial: a phase 2, open label, adaptive platform randomized controlled trial***, used an adaptive platform design created to rapidly evaluate investigational agents.[4] Hospitalized patients with severe COVID-19 requiring ≥6 L/min oxygen were randomized to either a backbone regimen of dexamethasone and remdesivir alone (controls) or backbone plus one open-label investigational agent.[4] Patients were enrolled to the arms described between July 30, 2020 and June 11, 2021 in 20 medical centers in the United States.[4] The platform contained up to four potentially available investigational agents and controls available for randomization during a single time-period.[4] The two primary endpoints were time-to-recovery (<6 L/min oxygen for two consecutive days) and mortality.[4] Data were evaluated with an adaptive sample size of 40–125 individuals per agent and a Bayesian analytical approach.[4] The first 7 agents evaluated were cenicriviroc (CCR2/5 antagonist; n = 92), icatibant (bradykinin antagonist; n = 96), apremilast (PDE4 inhibitor; n = 67), celecoxib/famotidine (COX2/histamine blockade; n = 30), IC14 (antiCD14; n = 67), dornase alfa (inhaled DNase; n = 39) and razuprotafib (Tie2 agonist; n = 22).[4] Razuprotafib was dropped from the trial due to feasibility issues.[4] In the modified intention-to-treat analyses, no agent met pre-specified efficacy/ graduation endpoints with posterior probabilities for the hazard ratios [HRs] for recovery ≤1.5 between 0.99 and 1.00.[4] The data monitoring committee stopped Celecoxib/Famotidine for potential harm (median posterior HR for recovery 0.5, 95% credible interval [CrI] 0.28–0.90; median posterior HR for death 1.67, 95% CrI 0.79–3.58).[4] None of the first 7 agents to enter the trial met the prespecified criteria for a large efficacy signal. Celecoxib/Famotidine was stopped early for potential harm.[4] Adaptive platform trials may provide a useful approach to rapidly screen multiple agents during a pandemic.[4] [Full text]

- Genomic sequencing has an important role in monitoring of the evolution of the COVID19 virus, including the detection of new viral variants.[5] This study, ***Genomic epidemiology of SARS-CoV-2 infections in The Gambia: an analysis of routinely collected surveillance data between March 2020, and January 2022,*** describes the genomic epidemiology of SARS-CoV-2 infections in The Gambia.[5] Nasopharyngeal or oropharyngeal swabs collected from people with suspected cases of COVID-19 and international travellers were tested for SARS-CoV-2 with standard RT-PCR methods.[5] SARS-CoV-2-positive samples were sequenced according to standard library preparation and sequencing protocols.[5] Bioinformatic analysis was done using ARTIC pipelines and Pangolin was used to assign lineages.[5] To construct phylogenetic trees, sequences were first stratified into different COVID-19 waves (waves 1–4) and aligned.[5] Clustering analysis was done, and phylogenetic trees constructed.[5] Findings Between March 2020, and January 2022, 11 911 confirmed cases of COVID-19 were recorded in The Gambia, and 1638 SARS-CoV-2 genomes were sequenced.[5] Cases were broadly distributed into four waves, with more cases during the waves that coincided with the rainy season (July–October).[5] Each wave occurred after the introduction of new viral variants or lineages, or both, generally those already established in Europe or in other African countries.[5] Local transmission was higher during the first and third waves (ie, those that corresponded with the rainy season), in which the B.1.416 lineage and delta (AY.34.1) were dominant, respectively.[5] The second wave was driven by the alpha and beta variants and the B.1.1.420 lineage.[5] The fourth wave was driven by the omicron variant and was predominantly associated with the BA.1.1 lineage.[5] More cases of SARS-CoV-2 infection were recorded in The Gambia during peaks of the pandemic that coincided with the rainy season, in line with transmission patterns for other respiratory viruses.[5] The introduction of new lineages or variants preceded epidemic waves, highlighting the importance of implementing well-structured genomic surveillance at a national level to detect and monitor emerging and circulating variants.[5] [Full text]

Travel Update

- **Taiwan**'s government said on March 9 (Thursday) that it would allow the resumption of more direct flights to China that had been stopped due to the COVID-19 pandemic. Taiwan currently allows direct flights to only four Chinese cities including Beijing, Shanghai, Chengdu, and Xiamen. In the resumption of more flights, ten more cities would be allowed to have regular flights, including Shenzhen, Guangzhou, and Nanjing, while charter flights would be allowed to another 13. Meanwhile, Australia has also announced that a COVID-19 testing requirement for travelers arriving from China will end effective March 11 (Saturday).

ASEAN Travel Advisories (new update/s)

as of 10 March 2023

ASEAN Country	Published	Foreign travelers allowed	COVID-19 vaccination requirement	Required COVID-19 testing for fully vaccinated	Required COVID-19 testing for NOT fully vaccinated	Quarantine upon arrival	Health insurance requirement	Arrival health declaration/ registration/ documents
Brunei Darussalam	December 1, 2022	Yes	No	No	No	No	No	No
Cambodia	October 6, 2022	Yes	No	No	No	No	No	No
Indonesia	March 6, 2022	Yes	Yes – fully vaccinated* certificate for 18 years old and above.	No, but may be subject to RT-PCR upon arrival	Foreign travelers who are not fully vaccinated may not be allowed to enter Indonesia or may be subjected to RT-PCR test upon arrival	No	No	Traveler is required to download and register at SatuSehat app (Android/ iOS) before departure.
Laos	December 29, 2022	Yes	No	No	No	No	No	No
Malaysia	August 2, 2022	Yes	No	No	No	No	No	No
Myanmar	February 22, 2023	Yes	Yes – fully vaccinated* certificate for 12 years old and above.	Yes – printed negative COVID-19 antigen test result for 12 years old and above taken within 48 hours before arrival.	Foreign travelers who are not fully vaccinated are not allowed to enter or transit Myanmar.	No	Required to obtain Myanmar Insurance	No
Philippines	December 1, 2022	Yes	Yes – fully vaccinated* with booster dose certificate for 15 years old and above.	No	Yes – COVID-19 rapid antigen test taken at most 24 hours before departure or subject to a rapid test upon arrival.	No	No	Traveler is required to download and register at E-arrival card at most 3 days before departure for those without visa.
Singapore	February 13, 2023	Yes	No	No	No	No	No	No
Thailand	March 1, 2023	Yes	No	No	No	No	No	No
Vietnam	May 16, 2022	Yes	No	No	No	No	No	No

Return to table of contents

- Reference: IATA Travel Centre
- *Fully vaccinated – at least 14 or 15 days from 2nd dose for two-dose vaccine or 14 or 15 days from a single dose vaccine upon arrival.

COVID-19 Cases and Deaths as of 09 March 2023

- As of 09 March 2023 (1PM, GMT+7), worldwide, there were **666,325,106** confirmed cases, including **6,789,342** deaths. Globally, Case Fatality Rate (CFR) was **1.2%.**
- **35,611,358 confirmed cases** of COVID-19 have been reported in the **ASEAN Region.**
- The Case Fatality Rate in the **ASEAN** Region is range between **0.1 to 3.1%.**

COVID-19 cases in ASEAN region

REGION	COUNTRY	FIRST CONFIRMED CASE(S)	LATEST REPORT ON CONFIRMED CASE(S)	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS	CUMULATIVE CASES/ 100,000	CUMULATIVE VACCINATED	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTERED	FULLY VACCINATED/ 100
ASEAN REGION	Brunei Darussalam	10 Mar 20	09-Mar-23	278,494	963	225	-	64,275	450,404	445,929	338,987	99.3
	Cambodia	27 Jan 20	09-Mar-23	138,718	-	3,056	-	841	15,244,858	14,609,937	10,433,215	87.1
	Indonesia	02 Mar 20	09-Mar-23	6,738,013	307	160,939	4	2,490	203,657,535	172,693,321	67,952,274	62.7
	Lao PDR	24 Mar 20	09-Mar-23	218,021	-	758	-	3,041	5,888,649	5,222,417		69.4
	Malaysia	25 Jan 20	09-Mar-23	5,044,439	-	36,967	-	15,789	28,125,245	27,536,657	17,056,957	81.1
	Myanmar	23 Mar 20	09-Mar-23	633,949	-	19,490	-	1,173	34,777,314	27,545,329	2,227,351	50.8
	Philippines	30 Jan 20	09-Mar-23	4,077,397	150	66,176	12	3,771	78,369,243	73,937,435	21,341,197	64.0
	Singapore	23 Jan 20	09-Mar-23	2,227,187	-	1,722	-	39,049	5,161,990	5,120,768	4,440,289	90.8
	Thailand	13 Jan 20	09-Mar-23	4,728,182	-	33,918	-	6,791	57,005,497	53,486,086	32,143,431	74.6
	Vietnam	23 Jan 20	09-Mar-23	11,526,958	-	43,186	-	11,950	90,450,881	85,848,363	57,452,750	87.4
	ASEAN COUNTRIES			**35,611,358**	**1,420**	**366,437**	**16**	**149,170**	**519,131,616**	**466,446,242**	**213,386,451**	

COVID-19 cases in Asia-Pacific region

REGION	COUNTRY/ TERRITORY	FIRST CONFIRMED CASE(S)	LATEST REPORT ON CONFIRMED CASE(S)	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS	CUMULATIVE CASES/ 100,000	CUMULATIVE VACCINATED	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTERED	FULLY VACCINATED/ 100
ASIA-PACIFIC REGION	Afghanistan	24-Feb-20	08-Mar-23	209,417	-	7,896	-	550	11,606,705	10,894,509		26.5
	Australia	25-Jan-20	08-Mar-23	11,385,534	-	19,470	-	44,388	22,236,871	21,655,312	19,762,423	82.7
	Bangladesh	08-Mar-20	09-Mar-23	2,037,836	42	29,445	-	1,250	150,629,515	131,182,263	65,897,152	76.6
	Bhutan	05-Mar-20	09-Mar-23	62,623	7	21	-	8,206	699,116	677,669	634,641	86.6
	People's Republic of China*		09-Mar-23	13,503,322	9,627	37,130	0	82,117	1,339,608,531	1,304,575,996	214,031,616	89.7
	Cook Islands	17-Feb-22	07-Mar-23	7,031	-	2	-	32,874	15,084	14,715	10,209	86.4
	Fiji	18-Mar-20	03-Mar-23	68,897	-	883	-	7,742	711,686	640,712	170,632	68.9
	French Polynesia	12-Mar-20	08-Mar-23	78,055	-	649	-	27,948	190,765	186,059	112,237	60.8
	Guam	15-Mar-20	08-Mar-23	61,006	-	419	-	36,466	158,611	144,042		85.5
	India	30-Jan-20	09-Mar-23	44,688,879	379	530,775	1	3,271	1,027,279,394	951,464,506	224,093,416	67.1
	Japan	16-Jan-20	19-Oct-22	21,858,528	-	46,014	-	17,312	104,612,252	103,222,040	169,610,887	83.3

Return to table of contents

	Kiribati	25-Jan-22	09-Mar-23	5,013	1	18	-	4,263	96,184	73,888	23,419	56.3
	Maldives	07-Mar-20	07-Mar-23	185,738	-	311	-	34,982	399,151	385,081	167,187	73.5
	Marshall Islands	26-Oct-20	09-Mar-23	15,649	31	17	-	26,618	43,310	34,694		44.6
	Micronesia	11-Jan-21	02-Mar-23	23,948	-	61	-	21,041	84,729	71,253		69.6
	Mongolia	10-Mar-20	09-Mar-23	1,007,899	3	2,179	-	31,251	2,272,965	2,175,617	1,044,337	64.0
	Nepal	24-Jan-20	09-Mar-23	1,001,151	4	12,020	-	3,499	27,678,479	24,159,118	8,951,403	79.1
	New Caledonia	17-Mar-20	28-Feb-23	79,881	-	314	-	27,756	192,229	184,660	101,849	63.7
	New Zealand	28-Feb-20	06-Mar-23	2,228,291	-	3,922	-	45,318	4,300,097	4,138,926	3,523,903	79.8
	Niue	03-Sep-21	08-Mar-23	792	-	-	-	36,565	1,636	1,634	1,224	83.7
	Northern Mariana Islands	28-Mar-20	03-Mar-23	13,666	-	41	-	23,885	46,567	43,873		84.6
	Pakistan	26-Feb-20	09-Mar-23	1,577,280	50	30,644	-	728	154,665,740	131,368,973	49,551,181	55.7
	Palau	31-May-21	09-Mar-23	5,991	2	9	-	33,269	20,750	18,497		85.9
	Papua New Guinea	21-Mar-20	08-Mar-23	46,825	-	670	-	534	369,998	310,717	32,384	3.1
	Samoa	18-Nov-20	22-Feb-23	16,607	-	29	-	8,426	191,171	177,741	79,360	79.9
	Solomon Islands	03-Oct-20	24-Nov-22	24,575	-	153	-	3,669	343,821	254,352	27,783	35.1
	Republic of Korea**	20-Jan-20	09-Mar-23	30,594,342	10,890	34,061	16	59,166	44,867,046	44,448,105	41,325,954	85.8
	Sri Lanka	27-Jan-20	08-Mar-23	672,037	-	16,830	-	3,082	17,143,761	14,752,827	8,220,002	67.6
	Timor Leste	21-Mar-20	09-Mar-23	23,419	1	138	-	1,811	878,845	790,466	315,249	58.9
	Tonga	05-Nov-21	09-Mar-23	16,810	3	13	-	16,087	91,949	77,464	38,331	72.5
	Türkiye	10-Mar-20	12-Dec-22	17,041,315	-	101,487	-	20,426	57,941,051	53,176,961	41,425,329	62.3
	Vanuatu	11-Nov-20	06-Jan-23	12,014	-	14	-	4,006	144,824	131,697	16,996	40.3
	Wallis et Futuna	17-Oct-20	31-Dec-22	3,427	-	7	-	21,385	7,150	6,803	3,766	58.7
			ASIA PACIFIC	**148,557,798**	**21,040**	**875,642**	**17**	**689,891**	**2,969,529,983**	**2,801,441,170**	**849,172,870**	

*Includes cases from Hong Kong (SAR), Macau (SAR), and Taiwan (Province of China).
** Republic of Korea – South Korea

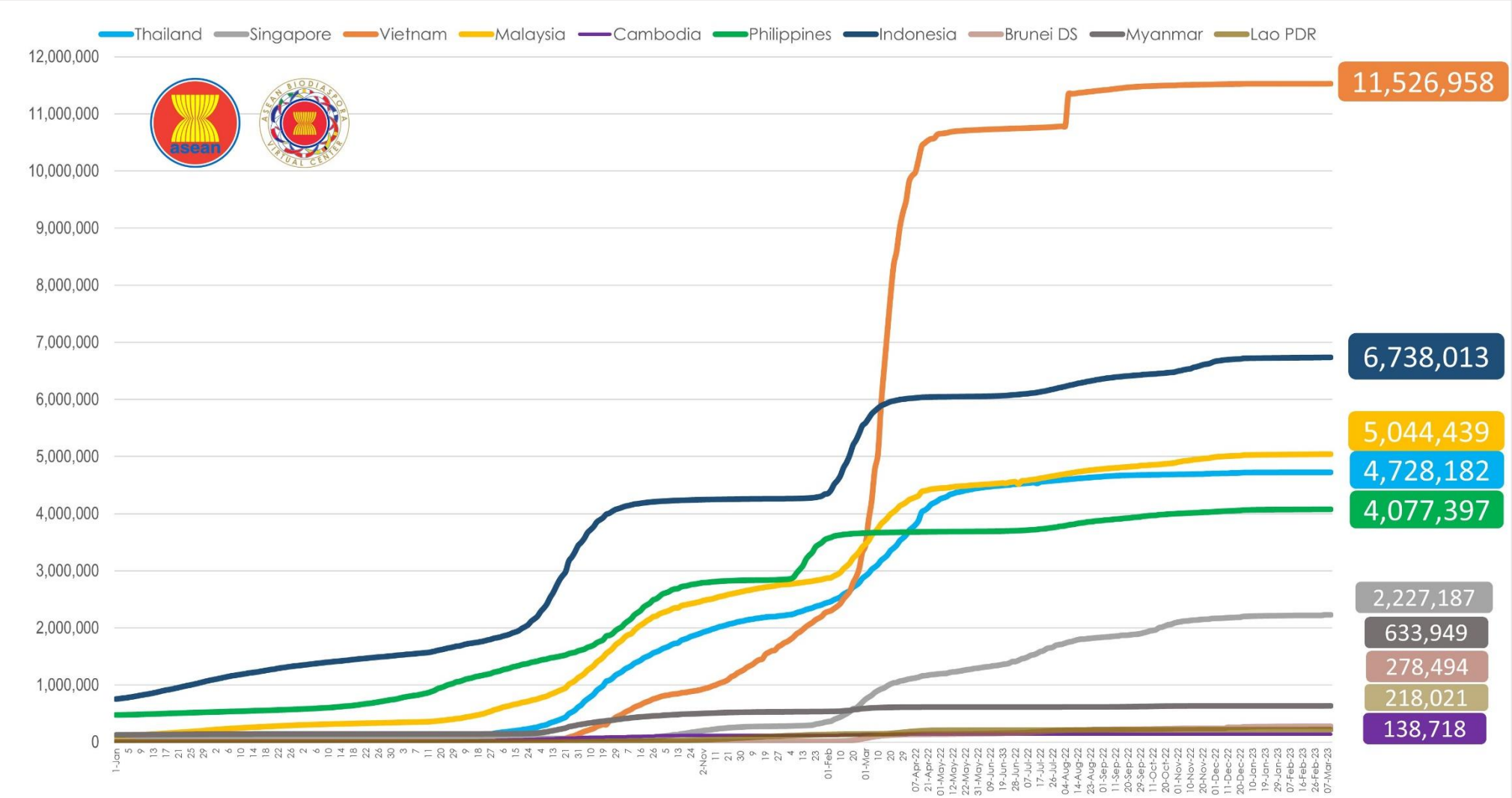
- **482,155,950 confirmed cases** of COVID-19 have been reported in other **4 regions** (other than ASEAN and Asia-Pacific countries):

REGION	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS	CUMULATIVE CASES/ 100,000	CUMULATIVE VACCINATED	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTERED
AFRICA	13,057,668	80	259,541	-	248,964	484,058,451	398,811,838	66,003,692
AMERICAS	193,947,099	8,660	2,969,774	78	1,243,252	835,447,892	731,893,384	495,237,137
EUROPE	252,412,212	25,421	2,077,977	109	2,116,302	569,620,774	541,040,894	383,756,585
MIDDLE EAST	22,738,971	986	239,971	1	216,792	144,725,560	130,012,483	60,203,464
TOTAL	**482,155,950**	**35,147**	**5,547,263**	**188**	**3,825,310**	**2,033,852,677**	**1,801,758,599**	**1,005,200,878**

Return to table of contents

COVID-19 Epi curve among ASEAN Countries

From January 1, 2022 to March 9, 2023



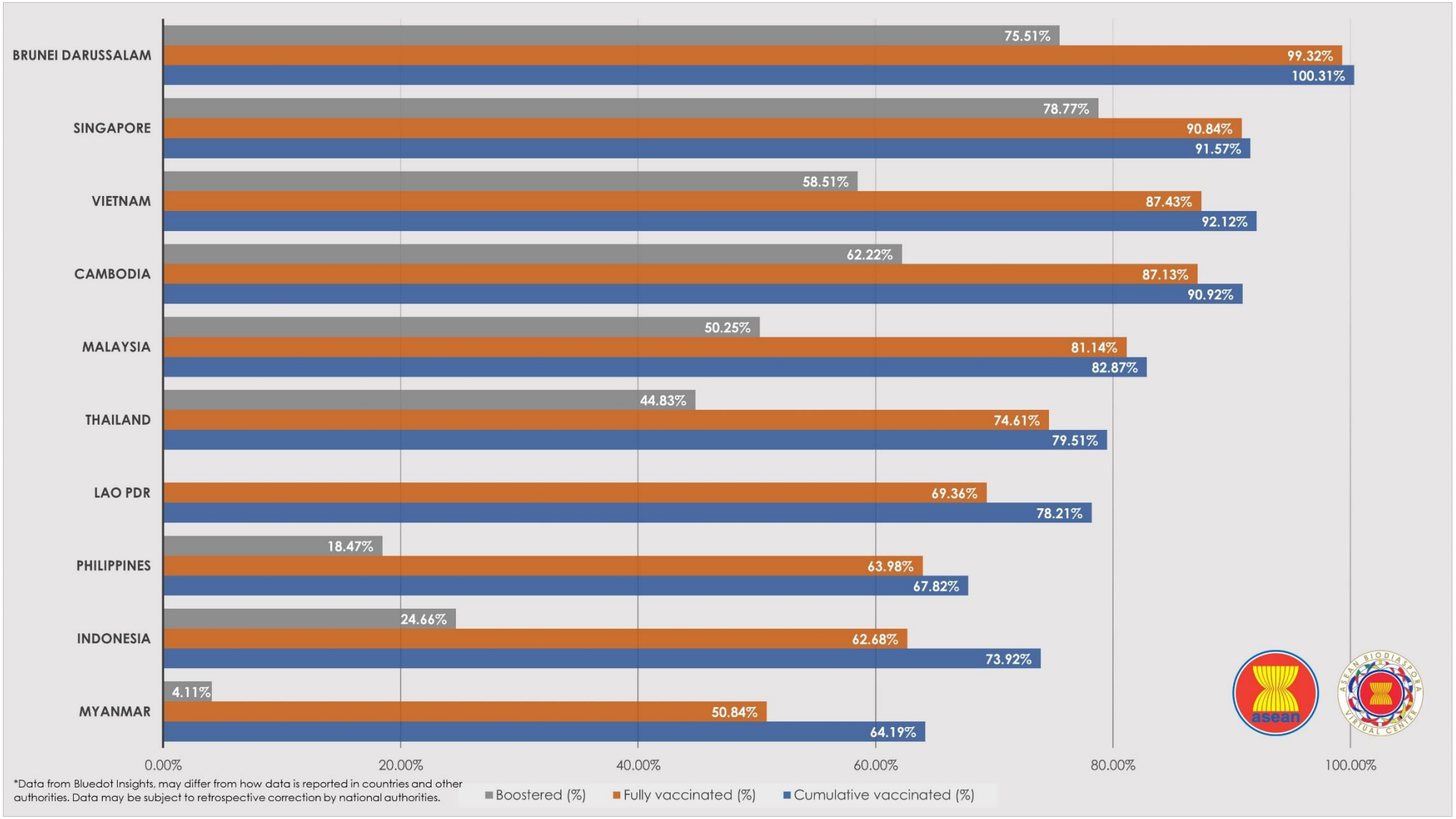
Cumulative cases of COVID-19 in the ASEAN Region as of March 9, 2023 (Report generated by ASEAN Biodiaspora Virtual Center)

*Data from Bluedot Insights, cases may differ from how data is reported in countries and other authorities. Data may be subject to retrospective correction by national authorities.

Return to table of contents

COVID-19 Vaccination Status in ASEAN

as of 09 March 2023



Return to table of contents

ASEAN COVID-19 Outlook Assessment

as of 07 March 2023

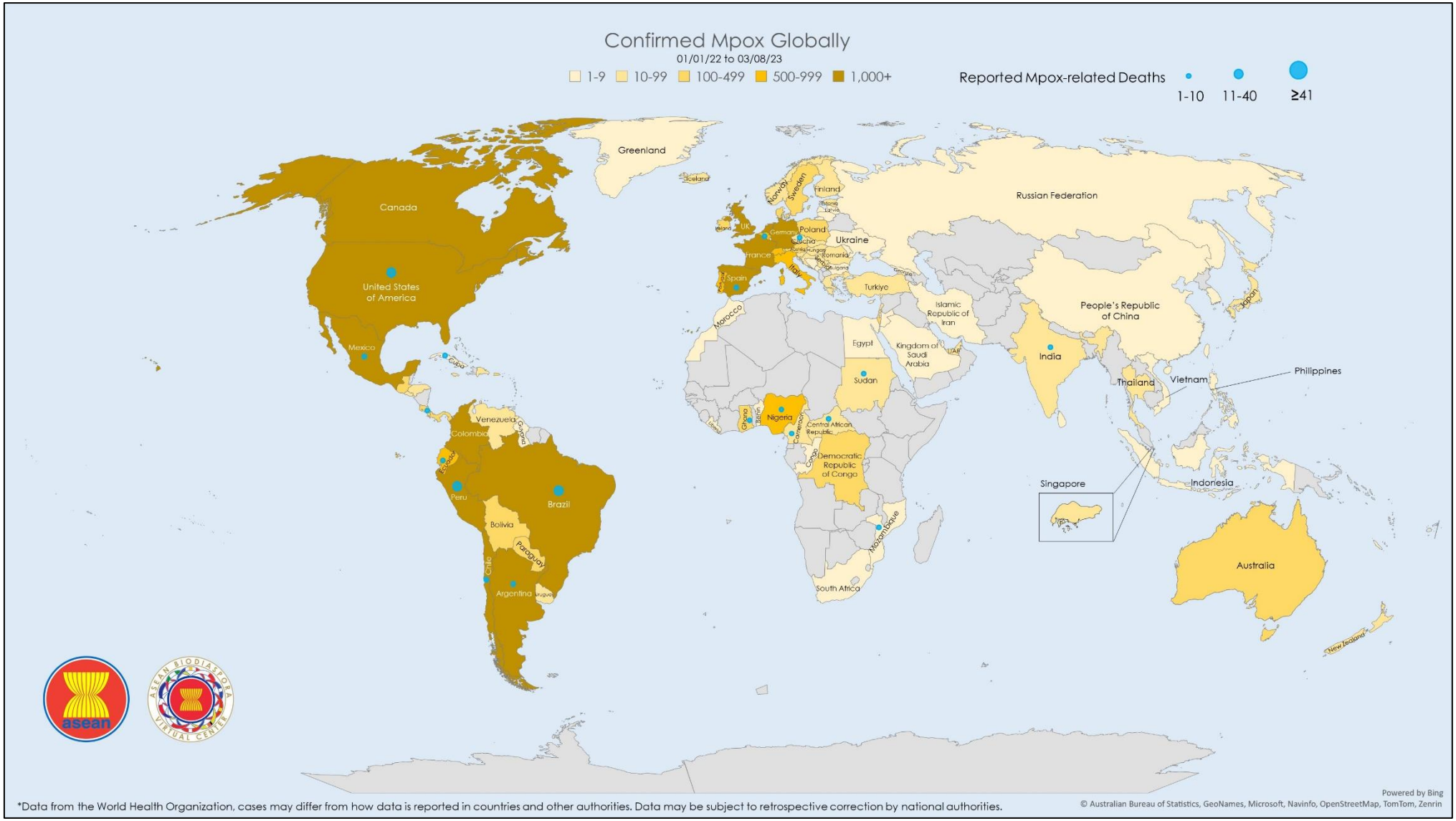
ASEAN MEMBER STATE	At least **65% of the total population has a level of immunity** to COVID-19; either recovered from COVID-19 or have been vaccinated with at least one dose of a COVID-19 vaccine.		**Case levels are generally low** (a 7-day rolling average number of daily new cases that is <10 cases per 100,000, with each day's past-14-day test positivity is consistently <5%).	**Government Policy** on containment and health (strictness and comprehensiveness in COVID-19 related government policies)
	% of Total population fully vaccinated / boosted		Daily cases/ 100,000	Containment and health index score - *Oxford COVID-19 Government Response Tracker (OxCGRT)*
Brunei Darussalam	≥90.0	75.5	23.27	31.0/100
Cambodia	≥90.0	62.2	0.004	31.5/100
Indonesia	66.1	24.7	0.08	54.2/100
Lao PDR	77.3	ND	0.01	61.6/100
Malaysia	84.5	50.3	0.62	51.8/100
Myanmar	52.1	4.1	0.009	69.1/100
Philippines	71.6	18.5	0.16	55.4/100
Singapore	≥90.0	78.8	21.45	58.9/100
Thailand	77.7	44.8	0.03	31.5/100
Vietnam	≥90.0	58.5	0.009	43.5/100

All of the countries have achieved the Population vaccinated/ day (7-day average) except Vietnam.

Return to table of contents

Mpox (Monkeypox) Cases Reported Globally

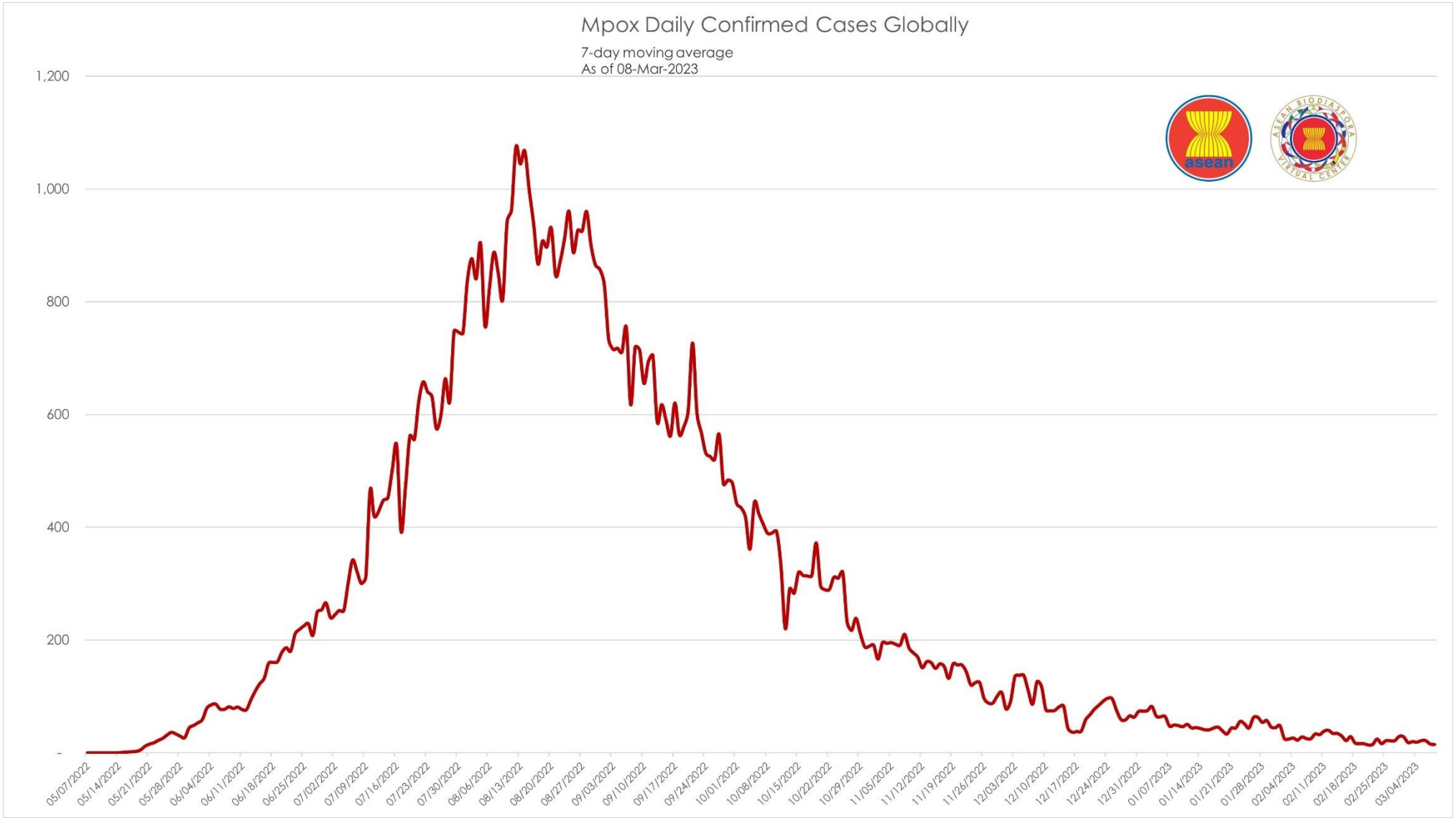
as of March 8, 2023



Return to table of contents

Mpox Daily Trend Globally

as of March 8, 2023



Return to table of contents

Mpox: Highlights and Situation Overview

- As of 09 March 2023 (1PM, GMT+7), worldwide, there were **86,391** confirmed cases, including **111** deaths. Globally, Case Fatality Rate (CFR) was **0.13%.**
- **43 confirmed cases** in the ASEAN region, with CFR of **0%.**
- **86,348 confirmed cases** of Mpox have been reported in other **5 regions** (other than ASEAN region):

Mpox cases in ASEAN region

Country	Total Cases	New Cases	Deaths	Case Fatality Rate (CFR)
Indonesia	1	-	-	0.00%
Philippines	4	-	-	0.00%
Singapore	21	-	-	0.00%
Thailand	15	-	-	0.00%
Vietnam	2	-	-	0.00%
ASEAN Total	**43**	**-**	**-**	**0.00%**

Mpox cases in Asia-Pacific region

Country/Territory	Total Cases	New Cases	Deaths	Case Fatality Rate (CFR)
Australia	144	-	-	0.00%
India	22	-	1	5.00%
Japan	31	4	-	0.00%
New Caledonia	1	-	-	0.00%
New Zealand	41	-	-	0.00%
People's Republic of China*	10	-	-	0.00%
Republic of Korea*	4	-	-	0.00%
Sri Lanka	2	-	-	0.00%
Asia-Pacific Total	**255**	**4**	**1**	**0.39%**

*People's Republic of China – including Hong Kong (SAR), Macao (SAR), and Taiwan (Province of China).

Top 5 countries with most mpox cases globally

Country	Total Cases	New Cases	Deaths	Case Fatality Rate (CFR)
United States of America	30,030	2	38	0.13%
Brazil	10,862	-	15	0.14%
Spain	7,543	-	3	0.04%
France	4,128	-	-	0.00%
Colombia	4,085	-	-	0.00%

Mpox cases per region

REGION	TOTAL CONFIRMED CASES SINCE JANUARY 1, 2022	NEW CASES SINCE THE PREVIOUS REPORT	TOTAL DEATHS	CASE FATALITY RATE
AFRICA	1,446	-	18	1.24%
AMERICAS	58,749	75	86	0.15%
ASEAN	43	-	-	0.00%
ASIA PACIFIC	255	4	1	0.39%
EUROPE	25,578	6	6	0.02%
MIDDLE EAST	320	-	-	0.00%
TOTAL	**86,391**	**85**	**111**	**0.13%**

Research Update (Published and peer-reviewed studies)

- Ocular involvement seems rare in mpox infections with mainly periocular vesicles, blepharitis, and ulcerative conjunctivitis.[2] This paper, ***Severe Corneal Involvement Associated with Mpox Infection***, reports 2 cases of severe corneal involvement during mpox infection.[2] Case 1 was a 34-year-old immunocompetent mpox-confirmed male who developed unilateral red, painful right eye after 3 weeks and was unsuccessfully treated.[22] Vision was 20/20 OU.[2] Right eye examination showed inferior lid cutaneous ulceration, hyperemic swollen conjunctiva, and inferior limbus, and 2 inferior arcuate epithelial corneal infiltrates that stained with fluorescein.[2] Left eye was normal. Corneal PCR test returned positive for mpox.[2] Because of ocular pain, the patient self-administered oral prednisone.[2] The cornea healed after 3 weeks without visible scars but with mild limbal neovascularization and thickening. Vision remained normal.[2] Case 2 was a 30-year-old immunocompetent male with fever, vesicles on the penis and the right eyelids, and a red right eye.[2] Skin mpox PCR test result was positive.[2] Nine days later, ocular symptoms worsened with intense pain, photophobia, and mucous discharge in the right eye, despite treatment.[2] Vision was 20/25 OD and 20/20 OS.[2] Left eye examination results were normal.[2] Right eye examination disclosed vesicles on both eyelids, major conjunctival inflammation with ulcerations and pseudo membranes, and superior and inferior limbal swelling.[2] After 2 months of treatment, ocular infection had resolved, leaving an inferior linear subepithelial corneal scar and superior and inferior limbal stem-cell deficiency with corneal neovascularization.[2] Central corneal epithelium was hazy and visual acuity was 20/32.[2] Only 4 cases have been reported in the literature:1 geographic ulcer, 1 serpiginous linear centripetal keratitis, and 2 undescribed cases. These 2 cases suggest that arcuate serpiginous centripetal epithelial keratitis, as described by Finamor et al, is specific to mpox.[2] This has not been observed in other viral diseases. Delayed infection of the cornea may be caused by initial lid margin infection.[2] Pain was intense and resolved in association with use of corticosteroids.[2] [Full text]

References

1. Hall, Peter A., et al. "Neurocognitive and Psychiatric Symptoms Following Infection with COVID-19: Evidence from Laboratory and Population Studies." *Brain, Behavior, & Immunity - Health*, vol. 28, Mar. 2023, p. 100595., https://doi.org/10.1016/j.bbih.2023.100595.

2. Doan, Serge, et al. "Severe Corneal Involvement Associated with Mpox Infection." *JAMA Ophthalmology*, 9 Mar. 2023, https://doi.org/10.1001/jamaophthalmol.2023.0022.

3. Imai, Natsuko, et al. "Quantifying the Effect of Delaying the Second COVID-19 Vaccine Dose in England: A Mathematical Modelling Study." *The Lancet Public Health*, vol. 8, no. 3, 9 Feb. 2023, https://doi.org/10.1016/s2468-2667(22)00337-1.

4. Files, D. Clark, et al. "Report of the First Seven Agents in the I-Spy Covid Trial: A Phase 2, Open Label, Adaptive Platform Randomised Controlled Trial." *EClinicalMedicine*, vol. 58, 2 Mar. 2023, p. 101889., https://doi.org/10.1016/j.eclinm.2023.101889.

5. Kanteh, Abdoulie, et al. "Genomic Epidemiology of SARS-COV-2 Infections in the Gambia: An Analysis of Routinely Collected Surveillance Data between March, 2020, and January, 2022." *The Lancet Global Health*, vol. 11, no. 3, Mar. 2023, https://doi.org/10.1016/s2214-109x(22)00553-8.

Report generated by
ASEAN Biodiaspora Virtual Center (ABVC)
in collaboration with **Bluedot Inc.**
Email: support@biodiaspora.org
Facebook: https://facebook.com/ASEANBiodiaspora
Instagram: https://instagram.com/ASEANBiodiaspora

In partnership with Canada