

COVID-19 and Monkeypox

Situational Report in the ASEAN+3 Region

— ASEAN BioDiaspora Virtual Center (ABVC)

COVID-19: Highlights and Situation Overview

Global Update

- **Worldwide**, there have been over 613 million cases and over 6 million deaths attributed to COVID-19.
- **World Health Organization:** Globally, there were 12% fewer weekly instances for the week of August 29 to September 4, 2022, than the week before, with slightly under 4.2 million new cases reported. Over 13 700 fatalities were recorded, a 5% drop over the previous week in the number of new deaths. Over 600 million confirmed cases and over 6.4 million fatalities had been reported globally as of September 4, 2022. [[Full Report](#)]

The World Health Organization's (WHO) technical director for COVID-19, Dr. Maria Kherkove, stated on September 7 that it will take some time before the virus that causes COVID-19 "falls into a seasonal rhythm" like Influenza.³ She said that the virus lacks "predictability" and is continually mutating.³ Monkeypox and COVID-19 instances are on the decline throughout the world, but the World Health Organization warns that believing this trend will continue is "hazardous" and advises governments and people to stay watchful.³ According to WHO data, there were little under 4.2 million new cases of COVID-19 recorded globally during the week of August 29 to September 4, a 12% drop from the previous week.³ The WHO claims that too many people are still dying from the virus as it continues to mutate, even if the number of fatalities decreased by 5% during this period and by 80% since February.³ He also emphasized that despite people's growing fatigue with hearing about the coronavirus, the threat it continues to represent to the global community.³ It is "hazardous," according to Tedros, for anybody to presume that the present downward trend will continue.³ [[Full Article](#)]

Research Update

- This randomized clinical study evaluated the effectiveness of high-dose dexamethasone in comparison to the recommended dose, as well as the effectiveness of continuous positive airway pressure (CPAP) or high-flow nasal oxygen (HFNO2) in comparison to the recommended amount of oxygen support (O2SC).⁴ High-dose dexamethasone did not substantially increase 60-day survival in ICU patients with acute hypoxemic respiratory failure (AHRF) brought on by COVID-19.⁴ The 28-day risk of invasive mechanical ventilation (IMV) demand was not significantly changed by the oxygenation techniques used in patients who were not initially receiving IMV.⁴ [[Full Text](#)]
- Through May 1, 2022, an estimated 10 500 000 children will have lost their parents or other primary caregivers, and 7 500 000 children will have experienced orphanhood due to COVID-19.⁵ Bangladesh, India, Indonesia, Myanmar, and Nepal had the greatest percentage of bereaved children among the WHO's most impacted areas, as did the Democratic Republic of the Congo, Ethiopia, Kenya, Nigeria, and South Africa.⁵ Little is being done to care for the children who are left behind, despite the fact that billions of dollars are being spent on avoiding COVID-19-related fatalities.⁵ Only 2 nations, Peru and the US, have taken governmental action to address orphanhood related to COVID-19.⁵ [[Full Text](#)]
- A scientific breakthrough against COVID-19 has been realized by Tel Aviv University. A team of scientists from the university found that antibodies isolated from the immune system of recovered COVID-19 patients are effective in neutralizing all known strains of the virus.⁸ This includes the Delta and the Omicron variants.⁸ This discovery may eliminate the need for repeated booster vaccinations and strengthen the immune system of populations at risk, according to the researchers.⁸ The study **Conformational flexibility in**

neutralization of SARS-CoV-2 by naturally elicited anti-SARS-CoV-2 antibodies which was published in the Nature journal Communications Biology is a continuation of a preliminary study that was conducted in October 2020, at the height of the COVID-19 crisis.⁸ At that time, researchers sequenced all the B immune system cells from the blood of people in Israel who had recovered from the original COVID strain.⁸ They isolated nine antibodies that the patients produced. The scientists have now found that some of these antibodies are exceptionally effective in neutralizing the new coronavirus variants, Delta and Omicron.⁸ Additionally, two antibodies TAU-1109 and TAU-2310, which bind the viral spike protein in a different area from the region where most of the antibodies were concentrated until now (and were, therefore, less effective in neutralizing the original strain) are actually very effective in neutralizing the Delta and Omicron variants.⁸ According to their findings, the effectiveness of the first antibody, TAU-1109, in neutralizing the Omicron strain is 92%, and in neutralizing the Delta strain, 90%. The second antibody, TAU-2310, neutralizes the Omicron variant with an efficacy of 84%, and the Delta variant with an efficacy of 97%.⁸ The infectivity of the virus increased with each variant because each time, it changed the amino acid sequence of the part of the spike protein that binds to the ACE2 receptor, thereby increasing its infectivity and at the same time evading the natural antibodies that were created following vaccinations.⁸ In contrast, the antibodies TAU-1109 and TAU-2310 don't bind to the ACE2 receptor binding site, but to another region of the spike protein – an area of the viral spike that for some reason does not undergo many mutations – and they are therefore effective in neutralizing more viral variants.⁸ For authors, targeted treatment with antibodies and their delivery to the body in high concentrations can serve as an effective substitute for repeated boosters, especially for at-risk populations and those with weakened immune systems.⁸ [\[Full Text\]](#)

Regional Update

- **Vietnam's** Ministry of Health has issued a guidance on the wearing of masks in public places for COVID-19 prevention and control. The ministry underlined that wearing face masks in public places is an effective measure to protect people's health, especially those with underlying diseases. Thus, people with symptoms of acute respiratory infection or suspected COVID-19 infection, and all people, except children under five years old going to a public place in an area where the pandemic level is declared at Level 3 or Level 4, must wear masks. Wearing masks is also compulsory in medical facilities and accommodation hosting people undertaking medical quarantine or supervision, and all medical staff. Under the ministry's guidance, people are requested to wear masks in public places including public transportation vehicles, trade centers, supermarkets, traditional markets, closed spaces and poorly ventilated places such as bars, discos, karaoke, beauty salons, gyms, restaurants, cinemas, theaters and studios.
- **Malaysia's** government has removed its mask mandate for indoor settings, with premise owners allowed to decide whether to impose their own face mask requirements. However, mask mandates remain mandatory in public transport, healthcare facilities, and for those with COVID-19 infection. Wearing a mask is also encouraged for high-risk individuals, those who are ill or symptomatic, as well as individuals who interact with vulnerable groups. According to the Ministry of Health, the latest easing of measures comes amid the country's improving COVID-19 situation, adding that collective responsibility is still necessary to ensure the safety of the community.

Vaccine Update

- **Hong Kong's** government announced on September 9 (Thursday) will include children aged five and above in its COVID-19 vaccine pass scheme. From September 30, children aged 5 to 11 will be required to have one dose of COVID-19 vaccine, and two doses by November 30.

Travel Advisories (new update/s)

ASEAN+3 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	August 2, 2022	Yes	Yes – fully vaccinated* with booster dose certificate for 18 years old and above.	No	Yes – Subjected to a rapid antigen test upon arrival and an RT-PCR test on the day 3 at their own expense. Payment shall be done on this link .	Self-quarantine at a private residence or hotel for NOT fully vaccinated until a negative result of RT-PCR is released. No quarantine requirement for fully vaccinated	Minimum coverage: BN\$20,000	Must download and register on the BruHealth app before departure. Passengers must submit an “Arrival Declaration” form on the Travel Portal. The form must be completed online on www.pmo.gov.bn/travel-portal at most 24 hours before departure.
Cambodia	July 21, 2022	Yes	Yes – fully vaccinated* certificate.	No	Yes – Passengers are subject to a COVID-19 rapid antigen test upon arrival at their own expense.	No	No	No
Indonesia	June 16, 2022	Yes	Yes – fully vaccinated* certificate for 18 years old and above.	May be subjected to RT-PCR test upon arrival	May be subjected to RT-PCR test upon arrival	5-day quarantine for NOT fully vaccinated. No quarantine requirement for fully vaccinated	No	Traveler is required to download and register at PeduliLindungi app before departure.
Laos	August 9, 2022	Yes	Yes – fully vaccinated* certificate for 12 years old and above.	No	Yes – Negative rapid antigen test within 48 hours before departure for 12 years old and above.	No	No	No
Malaysia	August 2, 2022	Yes	No	No	No	No	No	No
Myanmar	August 31, 2022	Yes Visa-free travel reimposed	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	Foreign travelers who are not fully vaccinated are not allowed to enter or transit Myanmar.	No	Required to obtain Myanmar Insurance	No

		to ASEAN Member States travelers		48 hours before arrival.				
Philippines	August 1, 2022	Yes	Yes – fully vaccinated* with booster dose certificate for 12 years old and above.	No	Yes – Negative RT-PCR test within 48 hours before departure or negative rapid antigen test within 24 hours before departure for 3 years old and above.	No	No	Traveler is required to download and register at One Health Pass app before departure for those without visa.
Singapore	August 31, 2022	Yes	Yes – fully vaccinated* certificate for 13 years old and above and vaccination status on the HealthHub app or TraceTogether app or acceptance letter issued by the Safe Travel Office (STO) or SGAC acknowledgment email.	No	Yes – Negative COVID-19 test within 48 hours before departure for travelers born on or after January 1, 2010.	No	No	Traveler is required to download and register at SG Arrival Card app before departure.
Thailand	July 1, 2022	Yes	Yes – fully vaccinated* certificate or certificate with at least one dose of COVID-19 vaccine for 18 years old and above.	No	Yes – Negative RT-PCR/rapid antigen test within 72 hours before departure for 18 years old above. Does not apply to travelers below 8 years old accompanied by fully vaccinated parents or guardian;	No	No	No

					passengers younger than 18 years with COVID-19 vaccination certificate with at least one dose.			
Vietnam	May 16, 2022	Yes	No	No	No	No	No	No
China	August 31, 2022	No	-	-	-	-	-	-
Hong Kong	August 22, 2022	Yes	Yes – fully vaccinated* certificate for 18 years old and above. Passengers between 12 and 17 years old with COVID-19 vaccination certificate with at least one dose of Pfizer at least 14 days before arrival. Passengers younger than 12 years accompanied by a fully vaccinated parent/guardian.	No	Yes – Negative RT-PCR test within 48 hours before departure.	Travelers are subject to medical screening upon arrival and quarantine for up to 3 nights.	No	No
Macao	August 12, 2022	Yes	Yes – fully vaccinated* certificate for 12 years old and above.	Yes – Negative RT-PCR test within 48 hours before departure.	Foreign travelers who are not fully vaccinated are not allowed to enter or transit Macao.	Travelers are subject to medical screening upon arrival and quarantine for up to 10 days.	No	No
Japan	September 7, 2022	Yes	Yes – fully vaccinated* certificate for	No	Yes – Negative RT-PCR test within 72 hours before departure for 6	Travelers could be subject to quarantine for 5 days.	No	Traveler is required to download and register at MySOS app before departure.

		18 years old and above.		years old and above.				
South Korea	September 3, 2022	Yes	No	Yes – Passengers are subject to a COVID-19 RT-PCR test within 1 day upon arrival.	Yes – Passengers are subject to a COVID-19 RT-PCR test within 1 day upon arrival.	No	No	Upload test result on Q-code website .
Taiwan	August 15, 2022	Yes	No	Travelers are subject to RT-PCR test upon arrival at their own expense.	Travelers are subject to RT-PCR test upon arrival at their own expense.	Travelers are subject to quarantine for 3 days. Travelers must have confirmed booking of quarantine facility or hotel.	No	Traveler is required to download and register at Quarantine System for Entry Form before departure.

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

Cases and Deaths as of 09 September 2022

- As of 09 September 2022 (2PM, GMT+8), worldwide, there were **613,918,447** confirmed cases, including **6,524,845** deaths. Globally, Case Fatality Rate (CFR) was **1.1%**.
- 85,426,878 confirmed cases** of COVID-19 have been reported in the **ASEAN +3** countries including **34,220,266 cases** in the ASEAN region and **51,206,612 cases** in the PLUS THREE countries.
- The Case Fatality Rate in the **ASEAN +3** region is range between **0.1 to 3.2%**.
- There have been no tests reported in the last 14 days in the **ASEAN** Region.

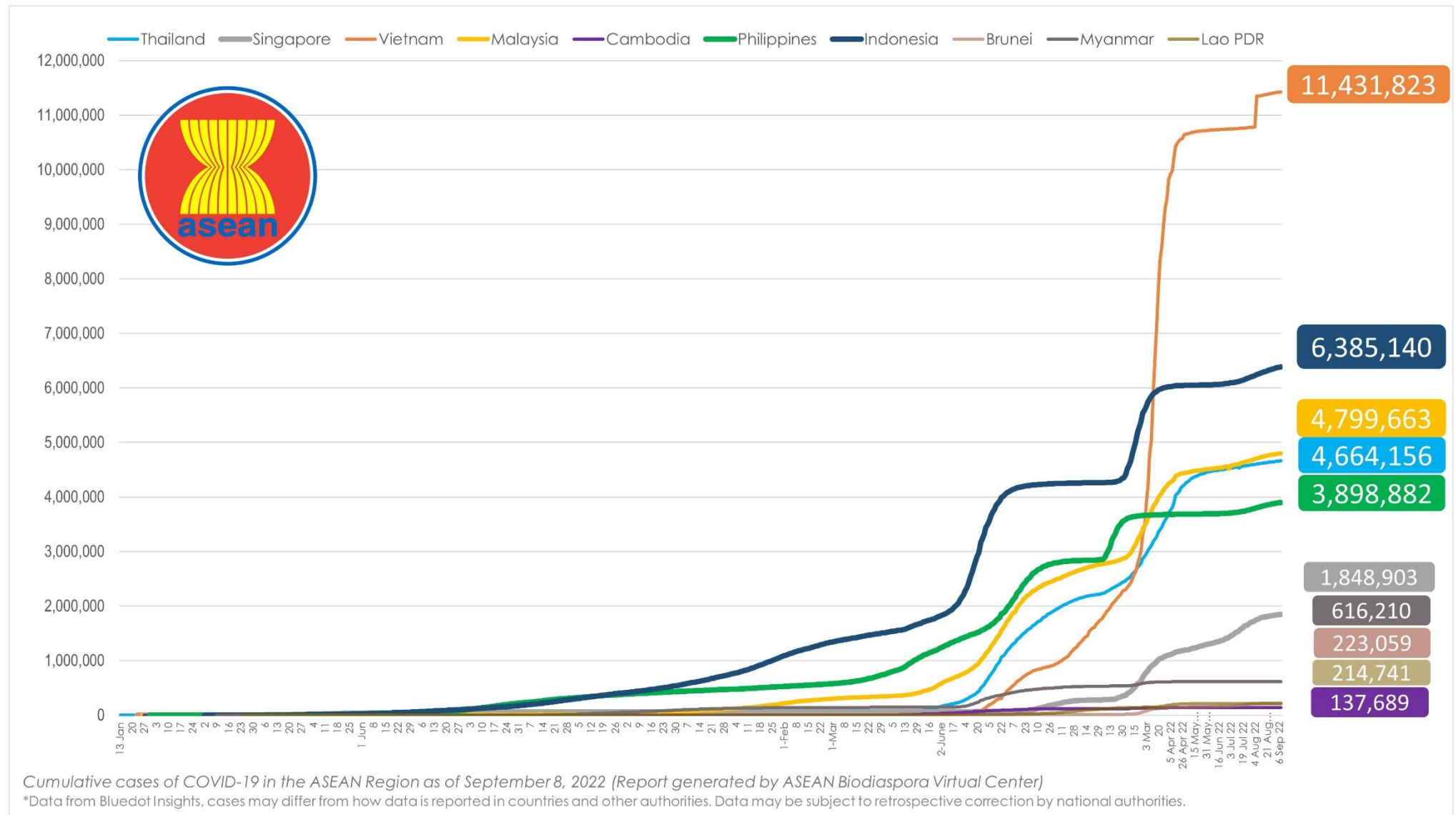
REGION	COUNTRY	FIRST CONFIRMED CASE(S)	LATEST REPORT ON CONFIRMED CASE(S)	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS	CUMULATIVE CASES/ 100,000	CUMULATIVE VACCINATED	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTERED	FULLY VACCINATED/ 100
ASEAN REGION	Brunei	10 Mar 20	08-Sep-22	223,059	-	225	-	51,481	449,149	444,079	330,826	99.7
	Cambodia	27 Jan 20	08-Sep-22	137,689	2	3,056	-	835	15,164,242	14,500,132	9,988,328	87.4
	Indonesia	02 Mar 20	08-Sep-22	6,385,140	3,138	157,729	12	2,359	203,435,374	171,111,977	61,135,788	62.5
	Lao PDR	24 Mar 20	08-Sep-22	214,741	92	757	-	2,995	5,888,649	5,222,417		70.3
	Malaysia	25 Jan 20	08-Sep-22	4,799,663	2,226	36,270	8	15,023	28,095,521	27,497,970	16,699,860	81.9
	Myanmar	23 Mar 20	08-Sep-22	616,210	187	19,442	-	1,140	34,777,314	27,545,329	2,227,351	51.2
	Philippines	30 Jan 20	08-Sep-22	3,898,882	2,341	62,206	39	3,606	77,134,380	72,416,833	17,726,336	63.6
	Singapore	23 Jan 20	08-Sep-22	1,848,903	2,271	1,601	5	32,417	5,024,115	5,003,831	4,285,045	91.8
	Thailand	13 Jan 20	08-Sep-22	4,664,156	1,587	32,486	19	6,699	56,959,349	53,403,812	31,793,928	74.6
	Vietnam	23 Jan 20	08-Sep-22	11,431,823	3,191	43,126	1	11,851	89,255,868	82,993,225	67,031,734	85.2
ASEAN COUNTRIES				34,220,266	15,035	356,898	84	128,406	516,183,961	460,139,605	211,219,196	
ASEAN PLUS THREE	South Korea	20-Jan-20	08-Sep-22	23,864,560	72,599	27,313	64	46,152	45,107,049	44,669,110	40,825,639	86.2
	Japan	16-Jan-20	08-Sep-22	19,892,127	112,404	41,693	252	15,754	104,142,796	102,751,871	111,102,790	82.5
	China	31-Dec-19	08-Sep-22	7,449,925	46,424	25,171	41	46,134	1,330,430,879	1,295,651,315	827,108,179	87.2
	PLUS THREE COUNTRIES				51,206,612	231,427	94,177	357	108,040	1,479,680,724	1,443,072,296	979,036,608
ASEAN +3				85,426,878	246,462	451,075	441	236,446	1,995,864,685	1,903,211,901	1,190,255,804	

- 528,491,569 confirmed cases** of COVID-19 have been reported in **5 continents** (other than ASEAN +3 countries):

CONTINENT	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS	CUMULATIVE CASES/ 100,000	CUMULATIVE VACCINATED	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTERED
AFRICA	12,875,955	750	258,420	2	249,589	391,048,487	308,971,224	47,935,991
AMERICAS	179,672,408	43,440	2,859,534	283	1,166,673	820,787,847	720,377,993	467,210,449
ASIA PACIFIC	85,041,113	9,158	748,363	50	469,151	1,440,523,006	1,328,162,826	333,033,832
EUROPE	228,547,659	123,095	1,969,893	524	1,971,738	564,565,698	536,608,076	347,665,480
MIDDLE EAST	22,354,434	3,486	237,560	30	209,653	143,615,365	128,977,099	58,919,052
TOTAL	528,491,569	179,929	6,073,770	889	4,066,804	3,360,540,403	3,023,097,218	1,254,764,804

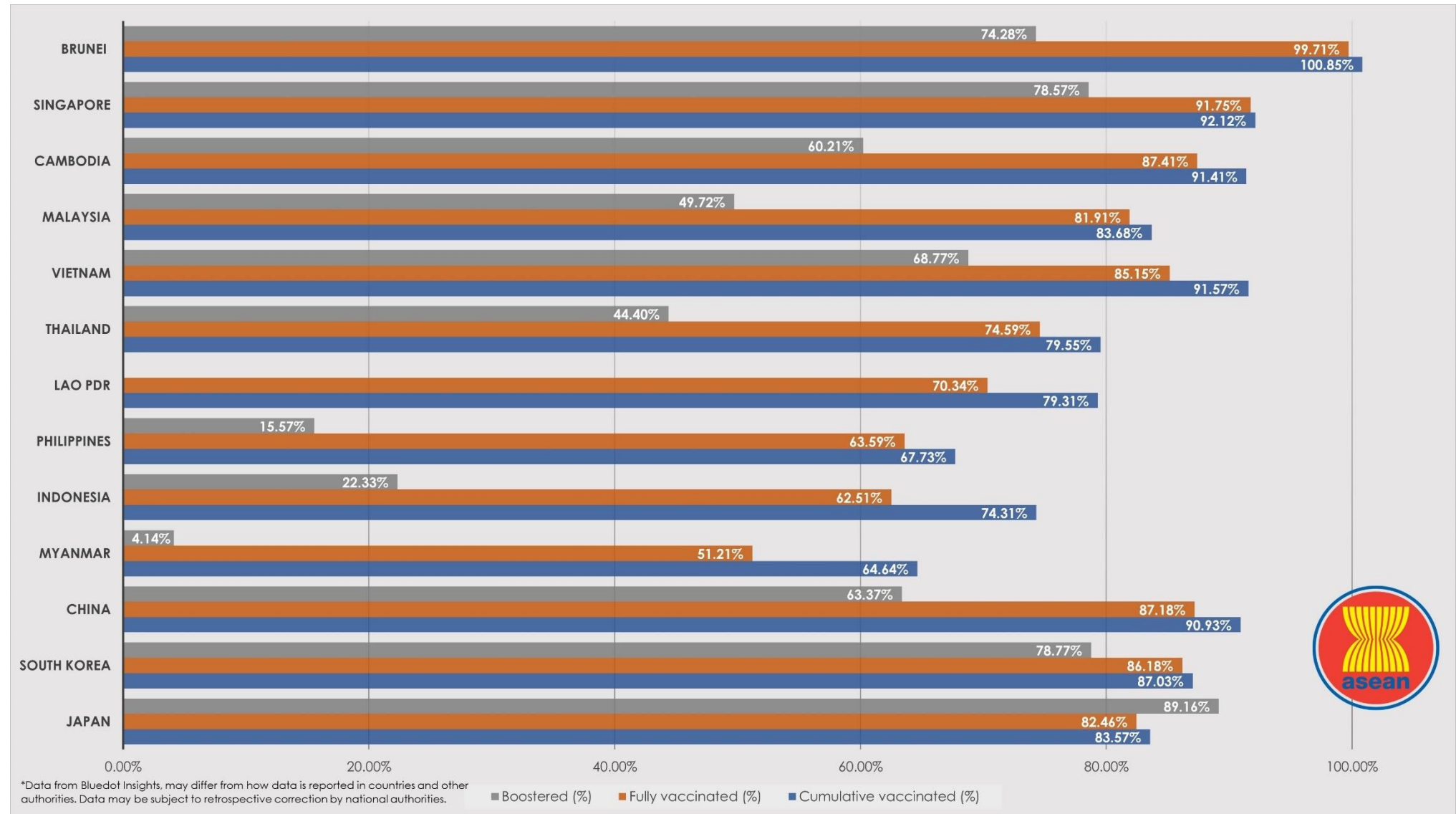
COVID-19 Epi curve among ASEAN Countries:

From January 1, 2021 to September 8, 2022




COVID-19 Vaccination Status

as of 08 September 2022



COVID-19 Outlook Assessment

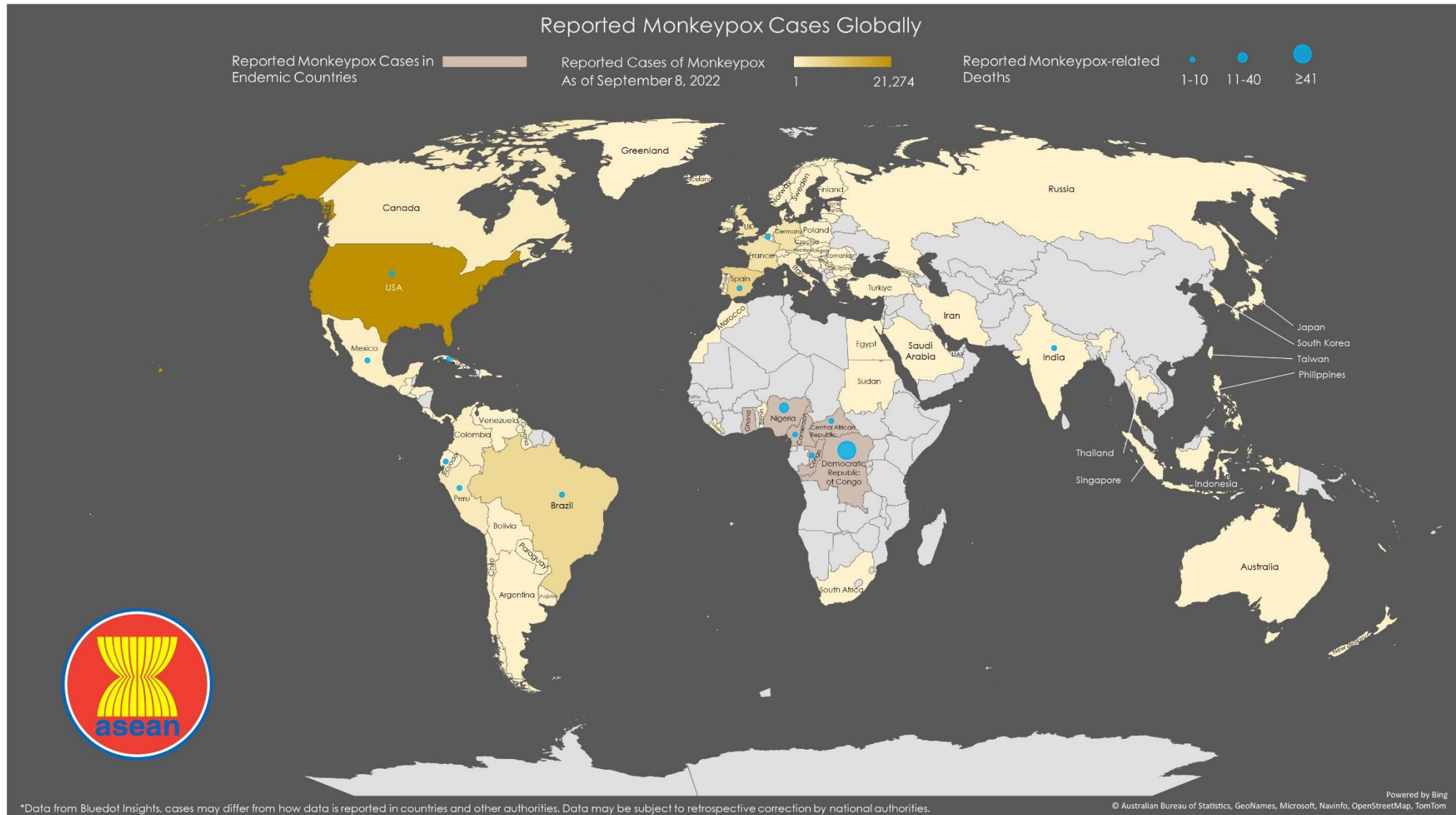
as of 06 September 2022

 ASEAN MEMBER STATE	REQUIREMENT						
	At least 80% of the high-risk population has been vaccinated with at least one dose of a COVID-19 vaccine.	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)	
		Population vaccinated/ day <i>(7-day average)</i>	% of Total population fully vaccinated / boosted	Population vaccinated/ day <i>(7-day average)</i>	Daily cases/ 100,000	Test positivity last 14 days	Containment and health index score - <i>Oxford COVID-19 Government Response Tracker (OxCGRT)</i>
Brunei	0%/day	≥90.0/74.3	Unknown	0.00	Unknown	31.0/100	undefined
Cambodia	0%/day	≥90.0/60.2	Unknown	0.06	Unknown	31.5/100	undefined
Indonesia	0%/day	65.3/21.5	Unknown	1.23	Unknown	54.2/100	undefined
Lao PDR	0%/day	77.3/ND	Unknown	1.22	Unknown	61.6/100	undefined
Malaysia	0%/day	84.4/49.7	0.01%/day	6.63	Unknown	51.8/100	undefined
Myanmar	0%/day	52.1/4.1	Unknown	0.24	Unknown	69.1/100	undefined
Philippines	0%/day	70.1/15.6	Unknown	2.15	Unknown	55.4/100	undefined
Singapore	0%/day	88.7/78.6	0.01%/day	32.37	Unknown	58.9/100	undefined
Thailand	0%/day	77.5/44.4	0.01%/day	2.39	Unknown	31.5/100	undefined
Vietnam	Unknown	89.5/68.8	Unknown	2.51	Unknown	43.5/100	undefined
Japan	0%/day	81.2/89.2	0%/day	93.60	Unknown	42.9/100	undefined
South Korea	0%/day	86.5/78.8	0%/day	150.72	Unknown	38.1/100	undefined
China	Unknown	≥90.0/56.3	Unknown	0.027	Unknown	84.5/100	undefined

All of the countries have achieved the estimated high-risk population fully vaccinated of ≥90.0% except China with 35.1%.

Monkeypox Cases Reported Globally

as of September 8, 2022



Monkeypox: Highlights and Situation Overview

- As of 09 September 2022 (2PM, GMT+8), worldwide, there were **59,158** confirmed cases, including **87** deaths. Globally, Case Fatality Rate (CFR) was **0.15%**.
- 40 confirmed cases** of Monkeypox have been reported in the **ASEAN+3** region composed of **28 cases** in the ASEAN region and **12 cases** in the PLUS THREE countries, with CFR of **0%**.
- 59,118 confirmed cases** of Monkeypox have been reported in other **5 regions** (other than ASEAN +3 countries):

Monkeypox cases in ASEAN+3 region

Region	Country	Total Cases	New Cases	Deaths	Case Fatality Rate
ASEAN	Singapore	16	-	-	0.00%
ASEAN	Thailand	7	-	-	0.00%
ASEAN	Philippines	4	-	-	0.00%
Plus Three	Japan	4	-	-	0.00%
Plus Three	Taiwan	4	1	-	0.00%
Plus Three	South Korea	3	1	-	0.00%
ASEAN	Indonesia	1	-	-	0.00%
Plus Three	Hong Kong (SAR)	1	-	-	0.00%
ASEAN+3 Total		40	2	-	0.00%

Top 5 countries with most monkeypox cases globally

Region	Country	Total Cases	New Cases	Deaths	Case Fatality Rate
Americas	USA	21,274	1,809	1	0.005%
Europe	Spain	6,749	104	2	0.03%
Americas	Brazil	5,726	689	1	0.02%
Europe	France	3,646	100	-	0.00%
Europe	Germany	3,511	44	-	0.00%

Monkeypox cases per region other than ASEAN+3

REGION	TOTAL CONFIRMED CASES SINCE JANUARY 1, 2022	NEW CASES SINCE THE PREVIOUS REPORT	TOTAL DEATHS	CASE FATALITY RATE
AFRICA*	2,902	22	77	2.65%
AMERICAS	32,800	3,292	6	0.02%
ASIA PACIFIC	142	4	1	0.70%
EUROPE	22,995	502	3	0.01%
MIDDLE EAST	279	5	-	0.00%
TOTAL	59,118	3,825	87	0.15%

Global Update

- **Egypt:** The health ministry said on September 7 that an Egyptian male who maintains residence in a European nation has been diagnosed with the nation's first case of monkeypox.¹ The 42-year-old was segregated at a hospital and listed as having a stable condition.¹
- **USA:** Officials in California said on September 8 that health authorities are now looking into the potential contribution that monkeypox may have made to the passing of a person who had the illness.² This is the second known case of a virus-related death in the United States during the current pandemic.² The news was made less than a month after Texas authorities said they were looking into a possible virus-related fatality.² More cases of monkeypox have been reported in California (4,140) than in any other state in the union.² [\[Full Article\]](#)

Research Update

- The sole FDA-approved vaccine for preventing monkeypox, JYNNEOS, was given an Emergency Use Authorization (EUA) that permits intradermal injection as opposed to subcutaneous.⁶ As a result, the number of patients who can be treated with the current vaccination supply can effectively be increased by up to five times by using lower doses for adults.⁶ The organization cited 2015 clinical research in support of their choice, which discovered comparable immune responses in individuals who had intradermal or subcutaneous vaccinations (beneath the skin) (between the layers of the skin).⁶ The EUA also permits individuals under the age of 18 who have a high risk of contracting monkeypox to take JYNNEOS via subcutaneous injection.⁶ [\[Full Text\]](#)

Regional Update

- **Philippines:** For a coordinated reaction against the potential introduction of monkeypox here, the City Health Office (CHO) has joined forces with the Overseas Workers Welfare Administration (OWWA) and the Bureau of Quarantine (BOQ).⁷ Dr. Ashley Lopez, the head of the Davao City Health Office, claimed that starting last month, OWWA and BOC have been charged with monitoring visitors entering the city from outside.⁷ While there are four confirmed cases of monkeypox in the National Capital Region (NCR), Lopez highlighted that there have been no cases of the disease reported in the Visayas and Mindanao as of yet.⁷ He insisted that the city has the necessary resources to deal with cases of monkeypox.⁷ He said that a patient at the Southern Philippines Medical Center here was placed in isolation last week after being suspected of having monkeypox. In tests, the patient came back free of the illness.⁷

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