

COVID-19 and Monkeypox  
**Situational Report in the  
ASEAN+3 Region**

— ASEAN BioDiaspora Virtual Center (ABVC)



# Table of Contents

<b>COVID-19</b> .....	<b>1</b>
<a href="#">Highlights and Situation Overview</a> .....	1
<a href="#">Global Update</a> .....	1
<a href="#">Regional Update</a> .....	1
<a href="#">Research Update</a> .....	1
<a href="#">Travel Advisories</a> .....	4
<a href="#">Cases and Deaths Table</a> .....	7
<a href="#">Epi curve Among ASEAN Countries</a> .....	8
<a href="#">Vaccination Status in ASEAN</a> .....	9
<a href="#">Outlook Assessment</a> .....	10
<b>Monkeypox</b> .....	<b>11</b>
<a href="#">Monkeypox Cases Global Map</a> .....	12
<a href="#">Highlights and Situation Overview</a> .....	12
<a href="#">Monkeypox Cases in ASEAN+3 Region Table</a> .....	12
<a href="#">Top 5 Countries with Most Cases Globally</a> .....	12
<a href="#">Monkeypox per Region Other than ASEAN+3</a> .....	12
<a href="#">Global Update</a> .....	13
<a href="#">Regional Update</a> .....	13
<a href="#">Research Update</a> .....	13
<b><a href="#">References</a></b> .....	<b>14</b>



## COVID-19: Highlights and Situation Overview

### Global Update

- **Worldwide**, there have been over 633 million cases and over 6 million deaths attributed to COVID-19.
- **World Health Organization:** With more than 2.9 million new cases recorded worldwide, the number of new weekly cases fell by 6% during the week of October 10 to 16 2022 in comparison to the week before. Approximately 8300 fatalities were recorded, a 17% drop in new weekly deaths from the prior week. Globally, 6.5 million fatalities and 621 million confirmed cases had been recorded as of October 16, 2022. [\[Full Report\]](#)
- The **Centers for Disease Control and Prevention (CDC)** allows Novavax Monovalent COVID-19 boosters for adults ages 18 and older. This will give people ages 18 years and older the option to receive a Novavax monovalent booster instead of an updated (bivalent) Pfizer-BioNTech or Moderna booster if they have completed primary series vaccination but have not previously received a COVID-19 booster—and if they cannot or will not receive mRNA vaccines. CDC has also signed a decision memo expanding the use of updated (bivalent) COVID-19 vaccines to children ages 5 through 11 years. This follows the Food and Drug Administration's (FDA) authorization of updated COVID-19 vaccines from Pfizer-BioNTech for children ages 5 through 11 years, and from Moderna for children and adolescents ages 6 through 17 years.

### Regional Update

- **Cambodia:** Hun Sen, the prime minister of Cambodia, stated on October 21 that no Covid-19 fatalities had been reported in the nation since April of this year.<sup>9</sup> Hun Sen noted that after daily infections had been found since late June, the Southeast Asian country reported no COVID-19 cases for the first time on October 21.<sup>9</sup> The Ministry of Health reports that there are currently 53 ongoing cases in Cambodia, therefore it is not yet COVID-19-free (MoH).<sup>9</sup> A research fellow at the Asian Vision Institute in Phnom Penh, Thong Mengdaiv, credited the kingdom's strong leadership and high immunization rates for its success in the pandemic war.<sup>9</sup> [\[Full Article\]](#)
- **Philippines:** The extremely infectious omicron XBB subvariant and XBC variant have been locally transmitted, according to confirmation from the Department of Health on October 21.<sup>10</sup> Dr. Alethea De Guzman, head of the DOH's epidemiology department, asserts that travel is not a factor in the nation's XBB and XBC cases.<sup>10</sup> However, De Guzman pointed out that because the mutations were only found in a few places, the transmission is still "localized."<sup>10</sup> This week, the DOH announced the discovery of the omicron XBB subvariant and XBC variant.<sup>10</sup> The XBB is a recombinant of 2 omicron subvariants and was discovered for the first time in India in August 2022.<sup>10</sup> [\[Full Article\]](#)
- **Singapore's** Ministry of Health (MOH) announced on October 20 (Thursday) that bivalent vaccines will be offered and extended to those aged 18 to 49 late this year. The bivalent vaccines from Moderna/Spikevax were rolled out in Singapore on October 14 to those who have not yet achieved full protection, and to those above 50 as these are the groups that have a higher risk of severe illness from COVID-19.

### Research Update

- The study **COVID-19 and Acute Neurologic Complications in Children** found that 7.0% of more than 15,000 U.S. children hospitalized with COVID-19 had neurologic complications.<sup>2</sup> A team led by Children's Hospital at Vanderbilt researchers assessed



length of hospital stay, intensive care unit (ICU) admission, 30-day readmission, death, and medical costs of 15,137 COVID-19 patients aged 2 months to 18 years released from 52 children's hospitals from March 2020 to March 2022.<sup>2</sup> A total of 37.1% of the patients had a pre-existing complex chronic condition, and 9.8% had one or more neurologic complex chronic conditions.<sup>2</sup> Seven percent of the children had COVID-related neurologic complications, the most common of which were febrile (fever-related) seizures (3.9%), nonfebrile seizures (2.3%), and encephalopathy (2.2%), a broad term meaning damage or disease to the brain.<sup>2</sup> Patients with neurologic complications had more ICU admissions (29.8 vs 21.8 days) and longer ICU stays (3.2 vs 2.5 days) and were more likely than those without neurologic complications to die in the hospital (1.8% vs 0.6%). They also had more 30-day readmissions, longer hospital stays, and higher hospital costs.<sup>2</sup> Factors tied to lower odds of neurologic complications were younger age, infection during Delta variant predominance, and the presence of a chronic complex non-neurologic condition.<sup>2</sup> The presence of a chronic complex neurologic condition was linked to a higher likelihood of neurologic complications.<sup>2</sup> The study authors noted that neurologic complications also occur in pediatric patients infected with other respiratory viruses, such as respiratory syncytial virus and influenza.<sup>2</sup> [\[Full Text\]](#)

- In the study ***Prevalence of Positive Rapid Antigen Tests After 7-Day Isolation Following SARS-CoV-2 Infection in College Athletes During Omicron Variant Predominance***, 268 collegiate student athletes who tested positive for SARS-CoV-2 underwent rapid antigen testing starting 7 days after the initial positive test.<sup>4</sup> At 7 days, the results of testing were still positive in 27% of the individuals tested, with a higher percent positive in symptomatic individuals and those infected with the Omicron BA.2 variant.<sup>4</sup> The findings of this study suggest that use of rapid antigen testing to aid in the decision to end isolation may be needed to prevent individuals with infection from leaving isolation prematurely.<sup>4</sup> [\[Full Text\]](#)
- In the cohort study ***Comparative Safety of the BNT162b2 Messenger RNA COVID-19 Vaccine vs Other Approved Vaccines in Children Younger Than 5 Years***, based on a survey of guardian-reported safety profiles of BNT162b2 in 7806 children, higher dosages of BNT162b2 were significantly associated with injection site reactions.<sup>5</sup> Compared with approved non-SARS-CoV-2 vaccines, BNT162b2 was associated with significantly more frequent injection-site, musculoskeletal, dermatologic, or otolaryngologic symptoms but fewer general symptoms and fever after vaccination.<sup>5</sup> But the overall frequency of adverse events after vaccination with BNT162b2 was comparable with the frequency of adverse events after vaccination with approved non-SARS-CoV-2 vaccines in children younger than 5 years.<sup>5</sup> [\[Full Text\]](#)
- The study ***Influence of epidemic situation on COVID-19 vaccination between urban and rural residents in China-Vietnam border area: A cross-sectional survey***, in the border areas between China and Vietnam in Yunnan Province, both urban and rural residents had a high willingness (> 90%) to receive the COVID-19 vaccination, with a higher level of willingness in urban than in rural areas and a higher willingness among residents aged  $\geq 56$  years.<sup>6</sup> About 54.8% of urban respondents and 59.2% of rural respondents indicated that their willingness to get COVID-19 vaccine would be affected by new COVID-19 cases.<sup>6</sup> Respondents who were divorced, had an occupation other than farming, had contraindications to vaccination, were concerned about the safety of vaccines and worried about virus mutation, thought that the epidemic situation would not affect their willingness to get vaccinated ( $p < 0.05$ ).<sup>6</sup> [\[Full Text\]](#)
- The study ***COVID-19 vaccine hesitancy in Malaysia: Exploring factors and identifying highly vulnerable groups***, the East Malaysian population's level of vulnerability in facing biohazards, especially the COVID-19 pandemic, varies.<sup>7</sup> The demographic background



of the population influences the difference in the level of vulnerability.<sup>7</sup> Unemployed, self-employed, students, men, single, low education, and/or Muslims are more vulnerable to the COVID-19 virus.<sup>7</sup> These groups are more likely to experience vaccine hesitancy caused by factors of confidence, mainstream media, complacency, convenience, social media, and/or authority.<sup>7</sup> [\[Full Text\]](#)

- This study **COVID-19 vaccine acceptance among healthcare workers in China: A systematic review and meta-analysis** that included 18 studies involved 45,760 subjects, all of which were of medium or high quality.<sup>8</sup> Meta-analysis results represented that, the pooled estimated acceptance rate of COVID-19 vaccine among HCWs in China was 78% (95%CI: 73–83%), and the pooled acceptance rate in 2021 (82%, 95%CI: 78–86%) was significantly higher than that in 2020 (73%, 95%CI: 65%-81%). Subgroup analysis showed different acceptance rates for COVID-19 vaccine among HCWs with different characteristics.<sup>8</sup> [\[Full Text\]](#)



**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
<b>Brunei</b>	September 15, 2022	Yes	No	No	No	No	Minimum coverage: BN\$20,000	No
<b>Cambodia</b>	October 6, 2022	Yes	No	No	No	No	No	No
<b>Indonesia</b>	September 14, 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 <a href="#">PeduliLindungi app</a> before departure.
<b>Laos</b>	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
<b>Malaysia</b>	August 2, 2022	Yes	No	No	No	No	No	No
<b>Myanmar</b>	October 14, 2022	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 <a href="#">Myanmar Insurance</a>	No
<b>Philippines</b>	October 20, 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 <a href="#">One Health Pass app</a> before departure for those without visa.



<b>Singapore</b>	September 27, 2022	Yes	Yes – fully vaccinated* certificate vaccination status on the <a href="#">HealthHub app</a> or <a href="#">TraceTogether app</a> or acceptance letter issued by the <a href="#">Safe Travel Office (STO)</a> or <a href="#">SGAC</a> acknowledgment email.	No	Yes – Negative COVID-19 test within 48 hours before departure for travelers born on or before December 31, 2009.	No	No	Traveler is required to download and register at <a href="#">SG Arrival Card app</a> before departure.
<b>Thailand</b>	October 1, 2022	Yes	No	No	No	No	No	No
<b>Vietnam</b>	May 16, 2022	Yes	No	No	No	No	No	No
<b>China</b>	August 31, 2022	No	-	-	-	-	-	-
<b>Hong Kong</b>	October 12, 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	Yes – Negative rapid antigen test or RT-PCR test within 24 hours before departure and uploaded at <a href="https://www.chp.gov.hk/hdf/">https://www.chp.gov.hk/hdf/</a>	Foreign travelers who are not fully vaccinated are not allowed to enter or transit Hong Kong.	Travelers are subject to medical screening for 3 days.	No	No



		parent/guardian.						
<b>Macao</b>	October 13, 2022	Yes	No	Yes – Negative RT-PCR test within 48 hours before departure.  Subject to COVID-19 test upon arrival.	Yes – Negative RT-PCR test within 48 hours before departure.  Subject to COVID-19 test upon arrival.	Travelers must have a hotel reservation quarantine for 7 days.	No	No
<b>Japan</b>	October 10, 2022	Yes	Yes – fully vaccinated with booster dose* certificate for 18 years old and above.	No	Yes – Negative RT-PCR test within 72 hours before departure for 6 or 7 years old and above, depending on the school starting age in the country where they reside.	No	No	Traveler is required to download and register at <a href="#">MySOS app</a> before departure.
<b>South Korea</b>	October 12, 2022	Yes	No	No	No	No	No	Passengers must present a completed <a href="#">Q-code</a> form upon arrival.
<b>Taiwan</b>	October 13, 2022	Yes	No	No	No	Travelers are subject to medical screening for 7 days.	No	No

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





## Cases and Deaths as of 21 October 2022

- As of 21 October 2022 (2PM, GMT+8), worldwide, there were **633,237,847** confirmed cases, including **6,589,170** deaths. Globally, Case Fatality Rate (CFR) was **1.1%**.
- 91,301,642 confirmed cases** of COVID-19 have been reported in the **ASEAN +3** countries including **34,765,361 cases** in the ASEAN region and **56,536,281 cases** in the PLUS THREE countries.
- The Case Fatality Rate in the **ASEAN +3** region is range between **0.1 to 3.1%**.
- 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	20-Oct-22	234,582	-	225	-	54,140	449,769	444,757	335,738	99.9
	Cambodia	27 Jan 20	20-Oct-22	137,979	3	3,056	-	837	15,195,683	14,549,947	10,184,141	87.7
	Indonesia	02 Mar 20	20-Oct-22	6,464,962	2,307	158,380	19	2,389	204,261,199	170,841,144	63,783,243	62.4
	Lao PDR	24 Mar 20	20-Oct-22	216,158	42	758	-	3,015	5,888,649	5,222,417		70.3
	Malaysia	25 Jan 20	20-Oct-22	4,875,131	2,561	36,437	8	15,259	28,106,650	27,515,843	16,761,066	82.0
	Myanmar	23 Mar 20	20-Oct-22	629,376	-	19,471	-	1,165	34,777,314	27,545,329	2,227,351	51.2
	Philippines	30 Jan 20	20-Oct-22	3,989,556	2,240	63,669	44	3,690	77,705,048	73,122,738	19,588,463	64.2
	Singapore	23 Jan 20	20-Oct-22	2,034,564	8,752	1,654	3	35,672	5,161,984	5,121,802	4,424,546	93.9
	Thailand	13 Jan 20	20-Oct-22	4,687,281	-	32,882	-	6,732	57,005,497	53,486,086	32,143,431	74.7
	Vietnam	23 Jan 20	20-Oct-22	11,495,772	541	43,159	-	11,917	90,034,165	84,374,202	69,805,302	86.6
ASEAN COUNTRIES				<b>34,765,361</b>	<b>16,446</b>	<b>359,691</b>	<b>74</b>	<b>134,816</b>	<b>518,585,958</b>	<b>462,224,265</b>	<b>219,253,281</b>	
ASEAN PLUS THREE	South Korea	20-Jan-20	20-Oct-22	25,219,546	25,369	28,922	23	48,772	45,117,979	44,686,587	41,139,504	86.2
	Japan	16-Jan-20	20-Oct-22	21,858,528	-	46,014	-	17,312	104,252,290	102,897,186	120,588,168	82.6
	China	31-Dec-19	20-Oct-22	9,458,207	45,422	27,666	101	56,207	1,332,038,939	1,299,473,530	834,703,548	88.0
	PLUS THREE COUNTRIES				<b>56,536,281</b>	<b>70,791</b>	<b>102,602</b>	<b>124</b>	<b>122,291</b>	<b>1,481,409,208</b>	<b>1,447,057,303</b>	<b>996,431,220</b>
ASEAN +3				<b>91,301,642</b>	<b>87,237</b>	<b>462,293</b>	<b>198</b>	<b>257,107</b>	<b>1,999,995,166</b>	<b>1,909,281,568</b>	<b>1,215,684,501</b>	

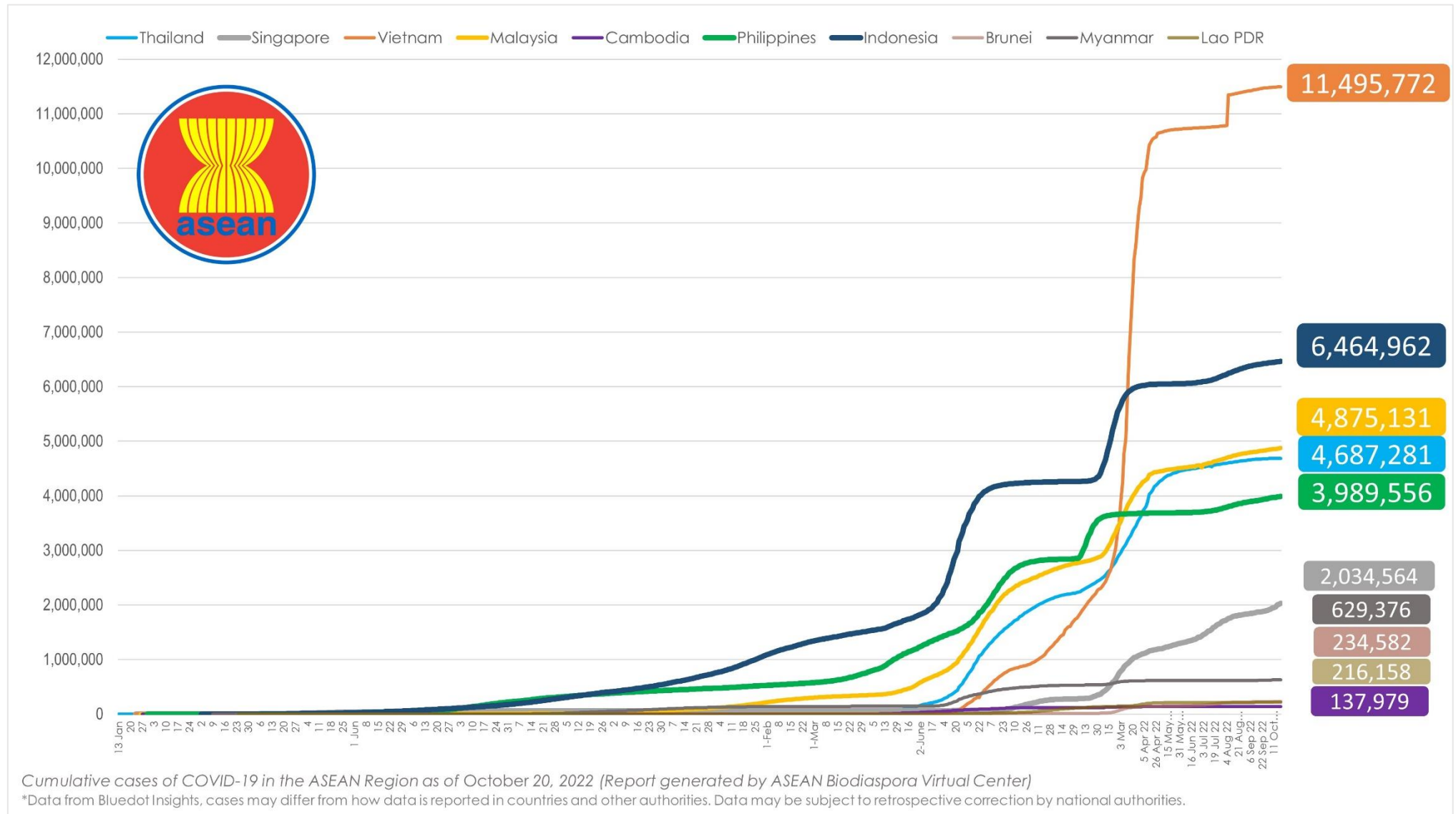
- 541,936,205 confirmed cases** of COVID-19 have been reported in **5 continents** (other than ASEAN +3 countries):

CONTINENT	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS	CUMULATIVE CASES/ 100,000	CUMULATIVE VACCINATED	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTERED
AFRICA	12,920,875	797	258,716	1	241,702	418,687,937	337,415,616	53,276,296
AMERICAS	182,624,894	18,134	2,885,452	88	1,189,351	826,140,889	725,899,473	480,196,901
ASIA PACIFIC	85,654,824	2,764	751,312	24	486,148	1,448,346,203	1,338,518,995	398,947,073
EUROPE	238,241,500	300,379	1,993,160	1,378	2,026,281	566,644,271	537,581,853	361,106,816
MIDDLE EAST	22,494,112	2,672	238,237	10	212,415	144,060,585	129,414,379	59,432,094
TOTAL	<b>541,936,205</b>	<b>324,746</b>	<b>6,126,877</b>	<b>1,501</b>	<b>4,155,896</b>	<b>3,403,879,885</b>	<b>3,068,830,316</b>	<b>1,352,959,180</b>



# COVID-19 Epi curve among ASEAN Countries:

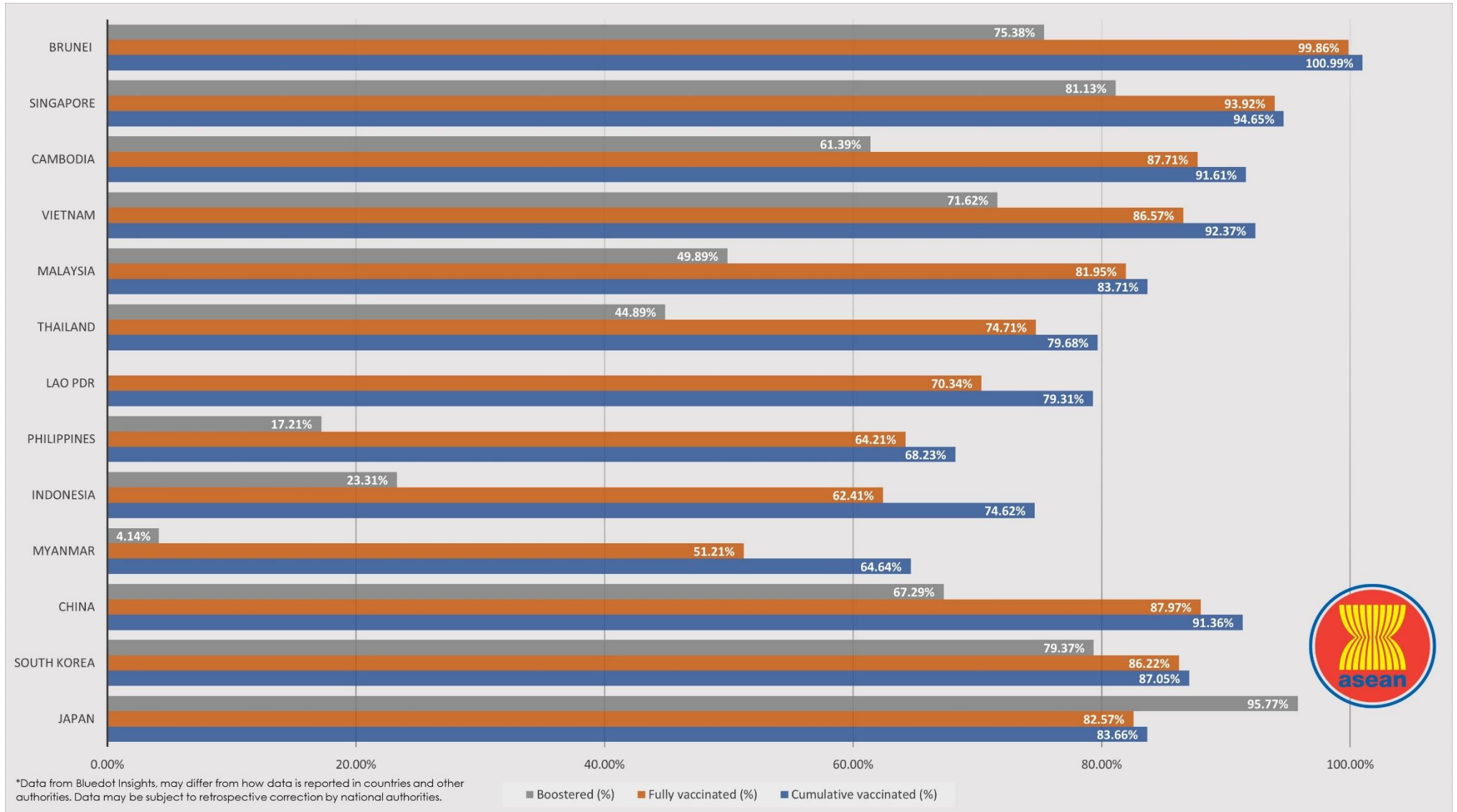
From January 1, 2021 to October 20, 2022





# COVID-19 Vaccination Status


as of 20 October 2022





# COVID-19 Outlook Assessment

as of 18 October 2022

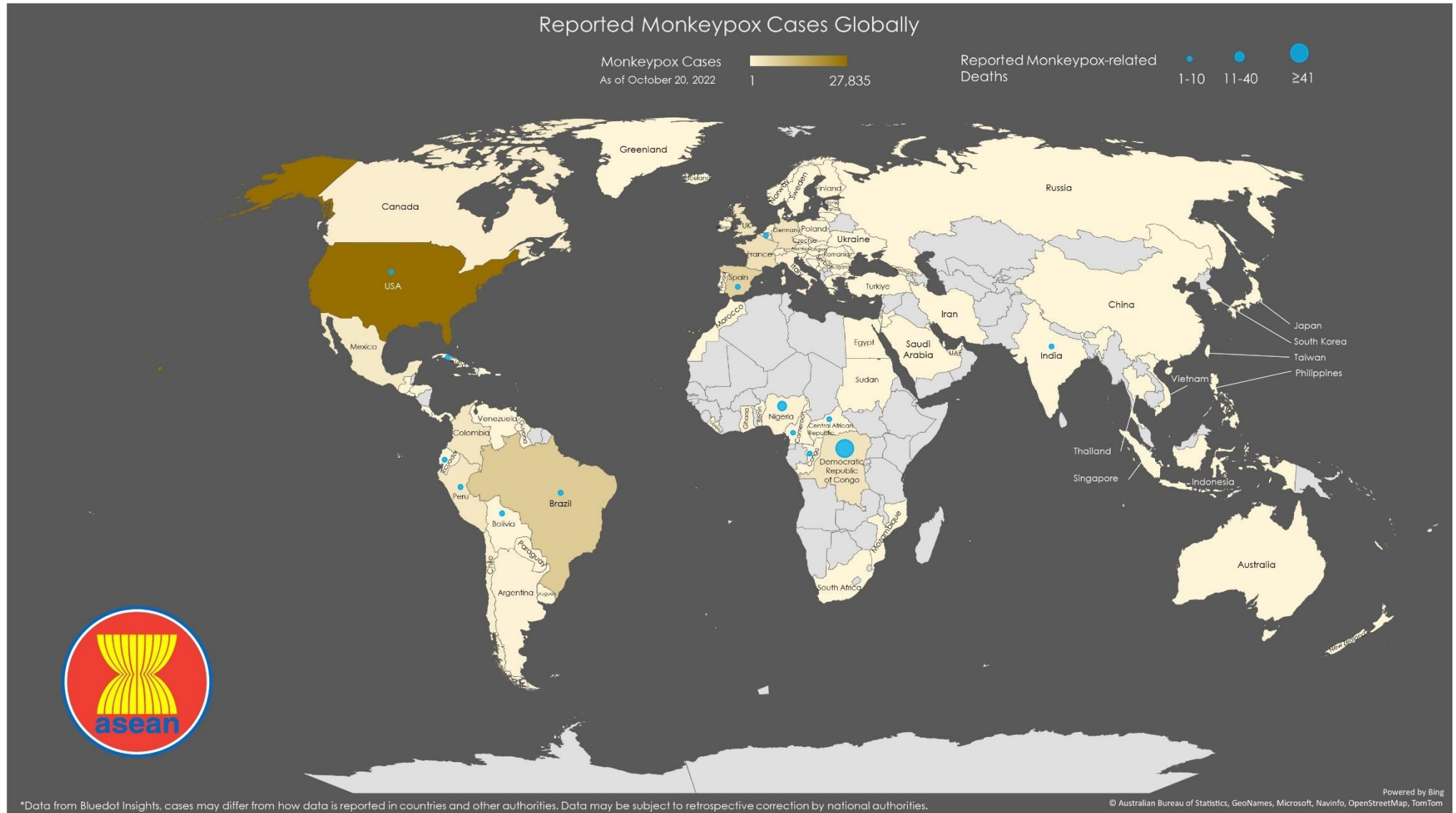
 <b>ASEAN MEMBER STATE</b>	At least <b>65% of the total population has a level of immunity</b> to COVID-19; either recovered from COVID-19 or have been vaccinated with at least one dose of a COVID-19 vaccine.		<b>Case levels are generally low</b> (a 7-day rolling average number of daily new cases that is <10 cases per 100,000, with each day's past-14-day test positivity is consistently <5%).		<b>Government Policy</b> on containment and health (strictness and comprehensiveness in COVID-19 related government policies)
	% of Total population fully vaccinated / boosted	Population vaccinated/ day (7-day average)	Daily cases/ 100,000	Test positivity last 14 days	Containment and health index score -Oxford COVID-19 Government Response Tracker (OxCGRT)
Brunei	≥90.0/75.4	Unknown	90.63	Unknown	31.0/100
Cambodia	≥90.0/61.4	Unknown	0.04	Unknown	31.5/100
Indonesia	65.4/23.3	Unknown	0.77	Unknown	54.2/100
Lao PDR	77.3/ND	Unknown	0.26	Unknown	61.6/100
Malaysia	84.5/49.9	0%/day	6.21	Unknown	51.8/100
Myanmar	52.1/4.1	Unknown	0.63	Unknown	69.1/100
Philippines	70.8/17.2	Unknown	2.18	Unknown	55.4/100
Singapore	≥90.0/81.1	0%/day	171.07	Unknown	58.9/100
Thailand	77.7/44.9	0.01%/day	0.46	Unknown	31.5/100
Vietnam	≥90.0/71.6	Unknown	0.87	Unknown	43.5/100
Japan	81.3/≥96.8	0%/day	78.87	Unknown	42.9/100
South Korea	86.5/79.4	0%/day	53.54	Unknown	38.1/100
China	≥90.0/56.7	Unknown	0.025	Unknown	84.5/100

All of the countries have achieved the estimated high-risk population fully vaccinated of ≥90.0% except China with 35.3%.  
All of the countries have achieved the Population vaccinated/ day (7-day average) except Vietnam.



# Monkeypox Cases Reported Globally

as of October 20, 2022



\*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.



## Monkeypox: Highlights and Situation Overview

- As of 19 October 2022 (2PM, GMT+8), worldwide, there were **79,962** confirmed cases, including **178** deaths. Globally, Case Fatality Rate (CFR) was **0.22%**.
- 57 confirmed cases** of Monkeypox have been reported in the **ASEAN+3** region composed of **37 cases** in the ASEAN region and **20 cases** in the PLUS THREE countries, with CFR of **0%**.
- 79,905 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	19	-	-	0.00%
ASEAN	Thailand	11	-	-	0.00%
Plus Three	Japan	7	-	-	0.00%
Plus Three	China	5	-	-	0.00%
ASEAN	Philippines	4	-	-	0.00%
Plus Three	Taiwan	4	-	-	0.00%
Plus Three	South Korea	3	-	-	0.00%
ASEAN	Vietnam	2	1	-	0.00%
ASEAN	Indonesia	1	-	-	0.00%
Plus Three	Hong Kong (SAR)	1	-	-	0.00%
<b>ASEAN+3 Total</b>		<b>57</b>	<b>1</b>	<b>-</b>	<b>0.00%</b>

### Top 5 countries with most monkeypox cases globally

Region	Country	Total Cases	New Cases	Deaths	Case Fatality Rate
Americas	USA	27,835	277	2	0.01%
Americas	Brazil	8,778	157	7	0.08%
Europe	Spain	7,277	38	2	0.03%
Europe	France	4,084	20	-	0.00%
Europe	United Kingdom	3,686	13	-	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	4,795	0	160	3.34%
AMERICAS	49,033	980	13	0.03%
ASIA PACIFIC	184	4	1	0.54%
EUROPE	25,585	792	4	0.02%
MIDDLE EAST	308	3	-	0.00%
<b>TOTAL</b>	<b>79,905</b>	<b>1,779</b>	<b>178</b>	<b>0.22%</b>



## Global Update

- **Bolivia:** A hospital director in the eastern city of Santa Cruz stated on October 20 that Bolivia has reported its second monkeypox fatality since the first case was discovered on August 1.<sup>11</sup> The patient, who was admitted to the hospital on October 10, had around 270 skin lesions in addition to signs of other diseases including Chagas disease and a poor immunological state.<sup>11</sup> The skin lesions produced numerous organ failures including renal, hepatic, and respiratory limitations, which led to the patient's early death on October 20, according to Cuellar.<sup>11</sup> The patient's clinical state deteriorated as a result of the skin lesions. The first monkeypox death to occur in Bolivia was recorded at the same hospital on October 7 by the Santa Cruz departmental health agency.<sup>11</sup> [[Full Article](#)]

## Regional Update

- **Vietnam:** According to the Ho Chi Minh City Department of Health, a lady returning from Dubai tested positive for monkeypox, making her the second instance ever found in Vietnam.<sup>1</sup> The 38-year-old Tuyen Quang resident, who traveled to Dubai between September 29 and October 18, has displayed symptoms including fever, nausea, and blisters since October 11.<sup>1</sup> She slept in the same Dubai lodging as the first monkeypox sufferer in Vietnam who has recovered.<sup>1</sup> When the initial patient learned that her friend was experiencing similar symptoms, she contacted the HCM City Centre for Disease Control (HCDC) for assistance.<sup>1</sup> [[Full Article](#)]

## Research Update

- The study ***Low levels of monkeypox virus neutralizing antibodies after MVA-BN vaccination in healthy individuals*** by a group of researchers at Erasmus University Medical Center in the Netherlands showed a low antibody response to the two-dose Jynneos monkeypox vaccine in non-primed individuals or those who had not previously received a smallpox vaccine.<sup>3</sup> The researchers first collected sera from individuals born before 1974 and found more than 70% of the time, the participants had measurable smallpox antibodies.<sup>3</sup> Only 3% of participants born after 1974 had smallpox antibodies.<sup>3</sup> 30 individuals from the group born before 1974 and 30 individuals born after 1975 were then randomly selected to see if their sera produced neutralizing antibodies to monkeypox after infection with the virus.<sup>3</sup> Monkeypox-neutralizing antibodies were detected across individuals after infection, although the researchers detected monkeypox-reactive antibodies in only 5 of 19 monkeypox-infected individuals born after 1974.<sup>3</sup> The authors then tested vaccine-induced antibodies in sera from both age groups who were both negative and positive for monkeypox.<sup>3</sup> Only in five of eight serum samples (63%) from people born after 1974 were monkeypox-neutralizing antibodies detected 4 weeks after the first and second vaccinations, administered 28 days apart.<sup>3</sup> Antibody levels in some individuals increased after the second shot but still, there's a little increase in MPXV neutralization was observed after the second dose.<sup>3</sup> The authors conclude that the role of neutralizing antibodies in preventing disease and transmission is currently unknown, and more cohort studies following vaccinated individuals are needed to assess vaccine efficacy.<sup>3</sup> [[Full Text](#)]



## References

1. Second Monkeypox case reported in HCM City: Health. VietnamPlus. <https://en.vietnamplus.vn/second-monkeypox-case-reported-in-hcm-city/240382.vnp>. Published October 20, 2022. Accessed October 21, 2022.
2. Antoon JW, Hall M, Howard LM, et al. Covid-19 and acute neurologic complications in children. *Pediatrics*. 2022. doi:10.1542/peds.2022-058167.
3. Zaeck LM, Lamers MM, Verstrepen BE, et al. Low levels of monkeypox virus neutralizing antibodies after MVA-BN vaccination in healthy individuals. *Nature Medicine*. 2022. doi:10.1038/s41591-022-02090-w
4. Tsao J, Kussman A, Segovia NA, Abrams GD, Boehm AB, Hwang CE. Prevalence of positive rapid antigen tests after 7-day isolation following SARS-COV-2 infection in college athletes during Omicron variant predominance. *JAMA Network Open*. 2022;5(10). doi:10.1001/jamanetworkopen.2022.37149
5. Toepfner N, von Meißner WC, Strumann C, et al. Comparative safety of the BNT162B2 messenger RNA COVID-19 vaccine vs other approved vaccines in children younger than 5 years. *JAMA Network Open*. 2022;5(10). doi:10.1001/jamanetworkopen.2022.37140
6. Liu B, Zhang M, Li X, et al. Influence of epidemic situation on covid-19 vaccination between urban and rural residents in China-vietnam border area: A cross-sectional survey. *PLOS ONE*. 2022;17(7). doi:10.1371/journal.pone.0270345
7. Jafar A, Dambul R, Dollah R, Sakke N, Mapa MT, Joko EP. Covid-19 vaccine hesitancy in Malaysia: Exploring factors and identifying highly vulnerable groups. *PLOS ONE*. 2022;17(7). doi:10.1371/journal.pone.0270868
8. Shui X, Wang F, Li L, Liang Q. Covid-19 vaccine acceptance among healthcare workers in China: A systematic review and meta-analysis. *PLOS ONE*. 2022;17(8). doi:10.1371/journal.pone.0273112
9. No covid deaths in Cambodia since April: PM Canindia News. CanIndia News. <https://www.canindia.com/no-covid-deaths-in-cambodia-since-april-pm/>. Published October 21, 2022. Accessed October 21, 2022.
10. Maru D. Doh confirms local transmission of Omicron XBB subvariant, XBC variant. ABS-CBN News. <https://news.abs-cbn.com/news/10/21/22/doh-confirms-local-transmission-of-omicron-xbb-subvariant-xbc-variant>. Published October 21, 2022. Accessed October 21, 2022.
11. Bolivia registers 2nd Monkeypox death. Bolivia registers 2nd monkeypox death. [http://www.china.org.cn/world/Off\\_the\\_Wire/2022-10/21/content\\_78478230.htm](http://www.china.org.cn/world/Off_the_Wire/2022-10/21/content_78478230.htm). Accessed October 21, 2022.





Report generated by

**ASEAN Biodiaspora Virtual Center (ABVC)**

in collaboration with **Bluedot Inc.**

Email: [support@biodiaspora.org](mailto:support@biodiaspora.org)

Facebook: <https://facebook.com/ASEANBiodiaspora>



In partnership with

**Canada**