

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 615 million cases and over 6 million deaths attributed to COVID-19.

Research Update

- An observational study on **Sociodemographic Characteristics and Comorbidities of Patients with Long COVID and Persistent Olfactory Dysfunction** of 64% had a persistently impaired sense of smell out of the 219 unvaccinated long-COVID patients with neurologic symptoms in the Amazon.⁵ Of the 219 patients, 139 (63.5%) were diagnosed as having some degree of chronic olfactory dysfunction (anosmia/loss of smell or hyposmia/decreased sense of smell).⁵ Patients with an impaired sense of smell had long-COVID symptoms for significantly longer than those with normal olfaction (average days, 242.7 vs 221.0), and a higher proportion had neurologic symptoms for more than 6 months (79.1% vs 63.8%).⁵ The authors noted that most COVID-related olfactory disorders last only 2 or 3 weeks.⁵ But chronic olfactory disorders, they said, have been linked to disturbed eating patterns, depression, and reduced quality of life and can lead to difficulties with cooking, health and nutrition maintenance, personal hygiene, and social relationships.⁵ They described the reduced ability to smell as "one of the most important long-term neurologic symptoms of COVID-19, with the highest prevalence seen among women, adults, and outpatients.⁵ Patients with olfactory dysfunction may experience persistent severe hyposmia or anosmia more than 1 year from the onset of symptoms, suggesting the possibility of the condition becoming a permanent sequela."⁵ [\[Full Text\]](#)
- In the study **COVID-19-Associated Hospitalizations Among Vaccinated and Unvaccinated Adults 18 Years or Older in 13 US States, January 2021 to April 2022**, a team led by US Centers for Disease Control and Prevention (CDC) researchers analyzed data on 192,509 hospitalizations from more than 250 hospitals in 13 states participating in the COVID-19–Associated Hospitalization Surveillance Network from 1 January 2021, to 30 April 2022.⁶ Monthly COVID-19 hospitalization rates were 3.5 to 17.7 times higher in unvaccinated patients than in their vaccinated counterparts, regardless of whether they had received a booster. Hospitalization rates were 10.5 times higher in the unvaccinated and 2.5 times higher in vaccinated patients with no booster than in booster recipients.⁶ Relative to unvaccinated hospitalized patients, hospitalized vaccines were more likely to be older (median age, 70 vs 58 years) and to have at least three underlying conditions (77.8% vs 51.6%).⁶ According to the authors, high hospitalization rates in unvaccinated compared with vaccinated persons with and without a booster dose underscores the importance of COVID-19 vaccinations in preventing hospitalizations and suggests that increasing vaccination coverage, including booster dose coverage, can prevent hospitalizations, serious illness, and death.⁶ [\[Full Text\]](#)
- In the study **Analysis of Gestational Weight Gain During the COVID-19 Pandemic in the US**, weight increase in adults, kids, and teenagers has been linked to the COVID-19 pandemic^{1,2}, but less is known about gestational weight gain (GWG) in pregnant women.⁸ Parental and child health are significantly impacted by gestational weight gain, and high GWG is linked to unfavorable pregnancy outcomes.⁸ In this cross-sectional study, we found an increase in GWG of 0.06 kg (95% CI, 0.04-0.07 kg), with significant increases among pregnant women under the age of 25, non-Hispanic Black people, single people, people who were obese before becoming pregnant, and people who used Medicaid to pay for delivery.⁸ Additionally, the pandemic was linked

to a higher risk of excessive GWG (ratio of odds ratio: 1.01; 95% confidence interval: 1.01–1.02).⁸ [\[Full Text\]](#)

- In the cohort research **Analysis of Vaccine Reactions After COVID-19 Vaccine Booster Doses Among Pregnant and Lactating Individuals** comprising 17,014 participants, it was discovered that after receiving a booster or third dose of the COVID-19 vaccine, the majority of people (82.8%) had a local response and that 67.9% experienced at least 1 systemic symptom.⁹ The majority of women who were pregnant (97.6%) and nursing (96.0%) said they had no obstetric or lactation issues following immunization.⁹ According to this trial, the third or booster dosage of the COVID-19 vaccination was well tolerated by women who were pregnant or nursing.⁹ [\[Full Text\]](#)
- In the study **Comparison of Semen Quality Before and After Inactivated SARS-CoV-2 Vaccination Among Men in China**, worldwide mass vaccination drives have been carried out to contain the COVID-19 pandemic.¹⁰ Vaccine reluctance among people of reproductive age persists high despite positive safety profiles in clinical trials, in part because of worries about fertility.¹⁰ 128 males made up the study's final cohort, with a median (IQR) age of 31.0 (29.0-35.0) years and a median body mass index of 24.2 (determined by dividing weight in kilograms by height in meters squared) (22.5-26.2).¹⁰ Semen quality was assessed both before and after SARS-CoV-2 immunization with inactivated virus.¹⁰ According to the results of this cohort research, males in China who received the inactivated SARS-CoV-2 vaccine did not have any negative effects on their sperm quantity or motility.¹⁰ These findings can reassure male patients who received the SARS-CoV-2 vaccine and add to the growing body of information about the safety of the vaccines for conception.¹⁰ [\[Full Text\]](#)
- In the study **Evaluation of Risk Factors for Postbooster Omicron COVID-19 Deaths in England**, identification of risk factors for COVID-19 mortality in people who have finished their main immunization and received a booster dose of messenger RNA (mRNA) is now crucial due to the introduction of the Omicron variant.¹¹ For this investigation, information from the Public Health Data Asset of the Office for National Statistics, a population-level linked data set including data from the 2011 Census of England and Wales and electronic health records representing 80% of the population of England, was utilized.¹¹ This study pinpointed subpopulations that, even after receiving their booster shot during the Omicron wave, continue to be at higher risk of dying from COVID-19.¹¹ Men were at a larger chance of dying than women, and age remained the characteristic most closely linked to that risk.¹¹ The link with ethnicity was murky and different from other research, although this is probably partly because of the stark variations in immunization uptake between ethnic groups in earlier studies.¹¹ [\[Full Text\]](#)

Regional Update

- **Philippines:** In the Philippines, wearing a face mask when outside is no longer required.¹³ President Ferdinand Marcos Jr. has already signed Executive Order (EO) No. 3, which permits the voluntary wearing of face masks in outdoor settings, according to press secretary Trixie Cruz-Angeles on Monday, September 12.¹³ Health officer-in-charge Maria Rosario Vergeire said the Department of Health (DOH) position was to keep the masking policy.¹³ The top medical experts in the Philippines opposed easing the face mask requirement, saying that it would send a wrong message to the public that they "should not be afraid of COVID-19 anymore."¹³ She did, however, claim that the DOH had received several pieces of information on how to balance the economy and public health.¹³ [\[Full Article\]](#)

Vaccine Update

- **Indonesia:** The manufacture of IndoVac, a Covid-19 vaccine brand that PT Bio Farma, the holding company for state-owned pharmaceutical firms in Indonesia, has been developing since November 2021, has announced a new milestone.¹² In order to create IndoVac, a recombinant protein subunit vaccine made from yeast, the business worked with Baylor College of Medicine, a private, autonomous health sciences institution in Houston, Texas, according to Honesti Baasyir, president director of PT BioFarma.¹² In order to create the primary series vaccinations, or two vaccine doses for everyone 18 years of age and older, PT Bio Farma has finished the Phase I and Phase II stages of clinical trials and is presently in the Phase III stage.¹² Bio Farma is prepared to go to the next phase, which involves mass manufacturing IndoVac's main series vaccines after obtaining all relevant permissions.¹² Prior to increasing production to a maximum of 40 million doses in 2023 when the firm develops its manufacturing facilities, BioFarma expects to initially produce no more than 20 million doses of primary series vaccines.¹² [[Full Article](#)]

Travel Update

- **Japan's** government is planning to waive tourist visa requirements from some countries as part of a further easing of border controls. The country's Prime Minister will decide this week on the easing, which would also allow individual travellers to visit Japan without travel agency bookings.

Cases and Deaths as of 12 September 2022

- As of 12 September 2022 (2PM, GMT+8), worldwide, there were **615,168,760** confirmed cases, including **6,528,932** deaths. Globally, Case Fatality Rate (CFR) was **1.1%**.
- 86,011,199 confirmed cases** of COVID-19 have been reported in the **ASEAN +3** countries including **34,258,710 cases** in the ASEAN region and **51,752,489 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.

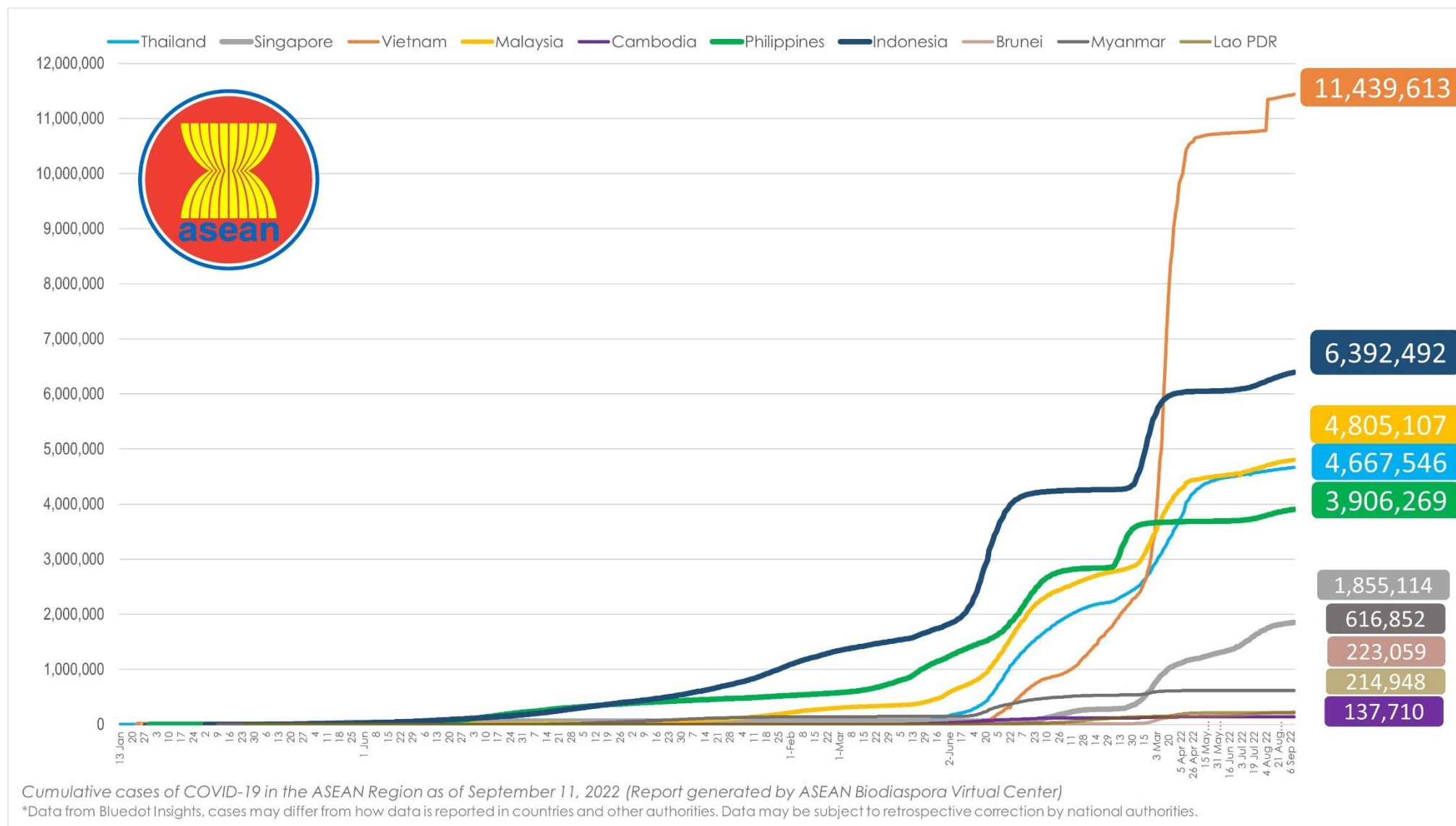
REGION	COUNTRY	FIRST CONFIRMED CASE(S)	LATEST REPORT ON CONFIRMED CASE(S)	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS	CUMULATIVE CASES/ 100,000	CUMULATIVE VACCINATED	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTERED	FULLY VACCINATED/ 100
ASEAN REGION	Brunei	10 Mar 20	11-Sep-22	223,059	-	225	-	51,481	449,149	444,079	330,826	99.7
	Cambodia	27 Jan 20	11-Sep-22	137,710	5	3,056	-	835	15,164,242	14,500,132	9,988,328	87.4
	Indonesia	02 Mar 20	11-Sep-22	6,392,492	1,939	157,770	13	2,362	203,435,374	171,111,977	61,135,788	62.5
	Lao PDR	24 Mar 20	11-Sep-22	214,948	51	757	-	2,998	5,888,649	5,222,417		70.3
	Malaysia	25 Jan 20	11-Sep-22	4,805,107	1,483	36,280	3	15,040	28,096,966	27,500,263	16,708,106	81.9
	Myanmar	23 Mar 20	11-Sep-22	616,852	189	19,442	-	1,141	34,777,314	27,545,329	2,227,351	51.2
	Philippines	30 Jan 20	11-Sep-22	3,906,269	2,136	62,304	16	3,613	77,134,380	72,416,833	17,726,336	63.6
	Singapore	23 Jan 20	11-Sep-22	1,855,114	1,824	1,602	-	32,525	5,024,115	5,003,831	4,285,045	91.8
	Thailand	13 Jan 20	11-Sep-22	4,667,546	1,093	32,542	19	6,704	56,965,601	53,415,340	31,844,511	74.6
	Vietnam	23 Jan 20	11-Sep-22	11,439,613	1,643	43,129	3	11,859	89,255,868	82,993,225	67,031,734	85.2
ASEAN COUNTRIES				34,258,710	10,363	357,107	54	128,559	516,191,658	460,153,426	211,278,025	
ASEAN PLUS THREE	South Korea	20-Jan-20	11-Sep-22	24,004,887	28,214	27,476	47	46,423	45,107,049	44,669,110	40,825,639	86.2
	Japan	16-Jan-20	11-Sep-22	20,165,850	81,491	42,216	104	15,971	104,142,796	102,751,871	111,102,790	82.5
	China	31-Dec-19	11-Sep-22	7,581,752	41,372	25,315	40	46,965	1,331,832,484	1,298,044,383	830,695,402	87.2
	PLUS THREE COUNTRIES				51,752,489	151,077	95,007	191	109,359	1,481,082,329	1,445,465,364	982,623,831
ASEAN +3				86,011,199	161,440	452,114	245	237,918	1,997,273,987	1,905,618,790	1,193,901,856	

- 529,157,561 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	12,882,812	243	258,459	-	250,200	391,065,032	308,988,951	47,949,007
AMERICAS	179,942,485	9,187	2,861,692	39	1,168,709	821,138,432	720,794,792	468,216,481
ASIA PACIFIC	85,064,307	6,933	748,462	21	469,626	1,441,094,037	1,329,084,836	341,214,543
EUROPE	228,904,877	95,250	1,970,558	162	1,973,300	564,593,234	536,664,427	348,023,808
MIDDLE EAST	22,363,080	3,064	237,647	34	209,806	143,615,519	128,977,387	58,919,576
TOTAL	529,157,561	114,677	6,076,818	256	4,071,641	3,361,506,254	3,024,510,393	1,264,323,415

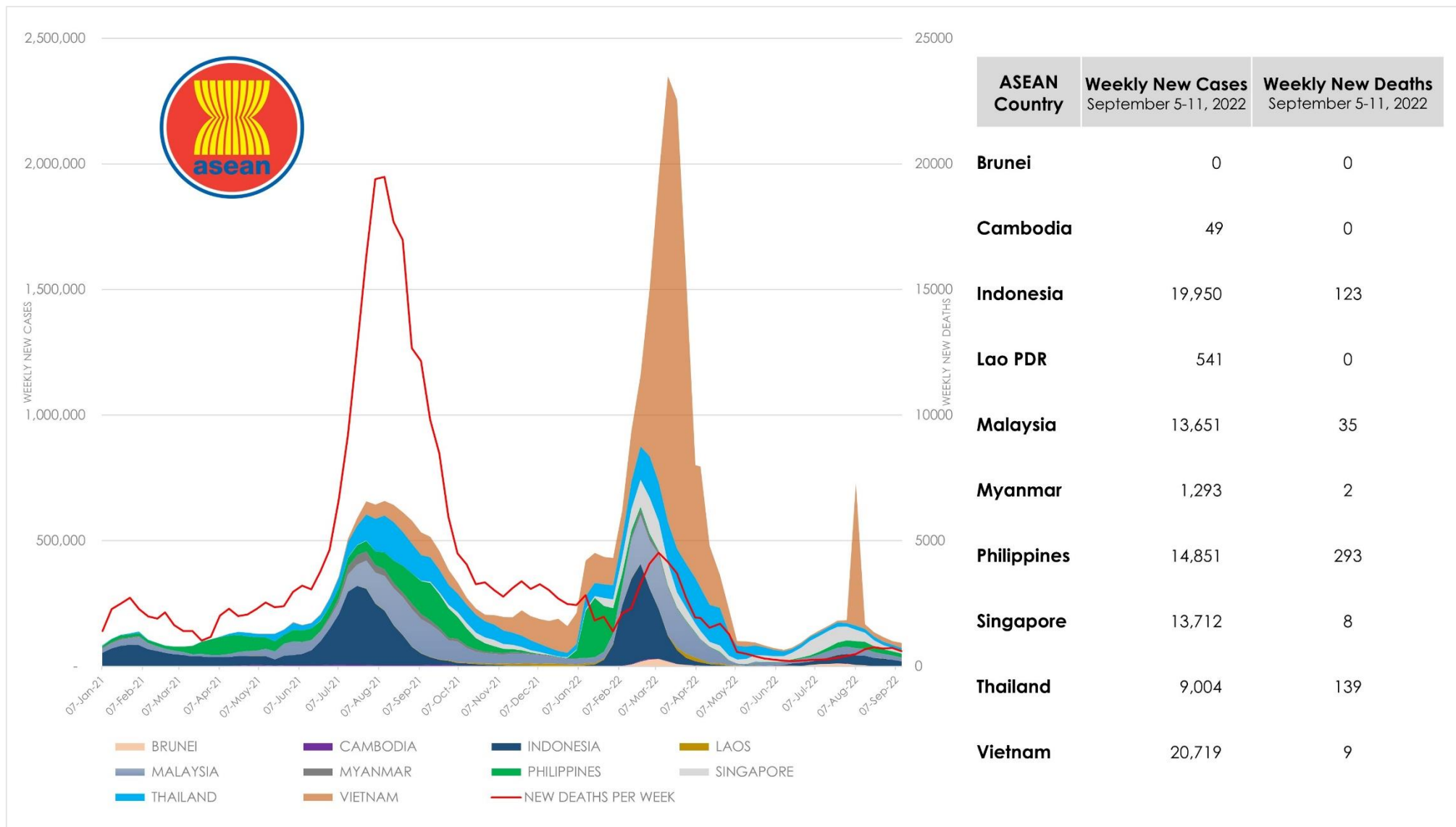
COVID-19 Epi curve among ASEAN Countries:

From January 1, 2021 to September 11, 2022



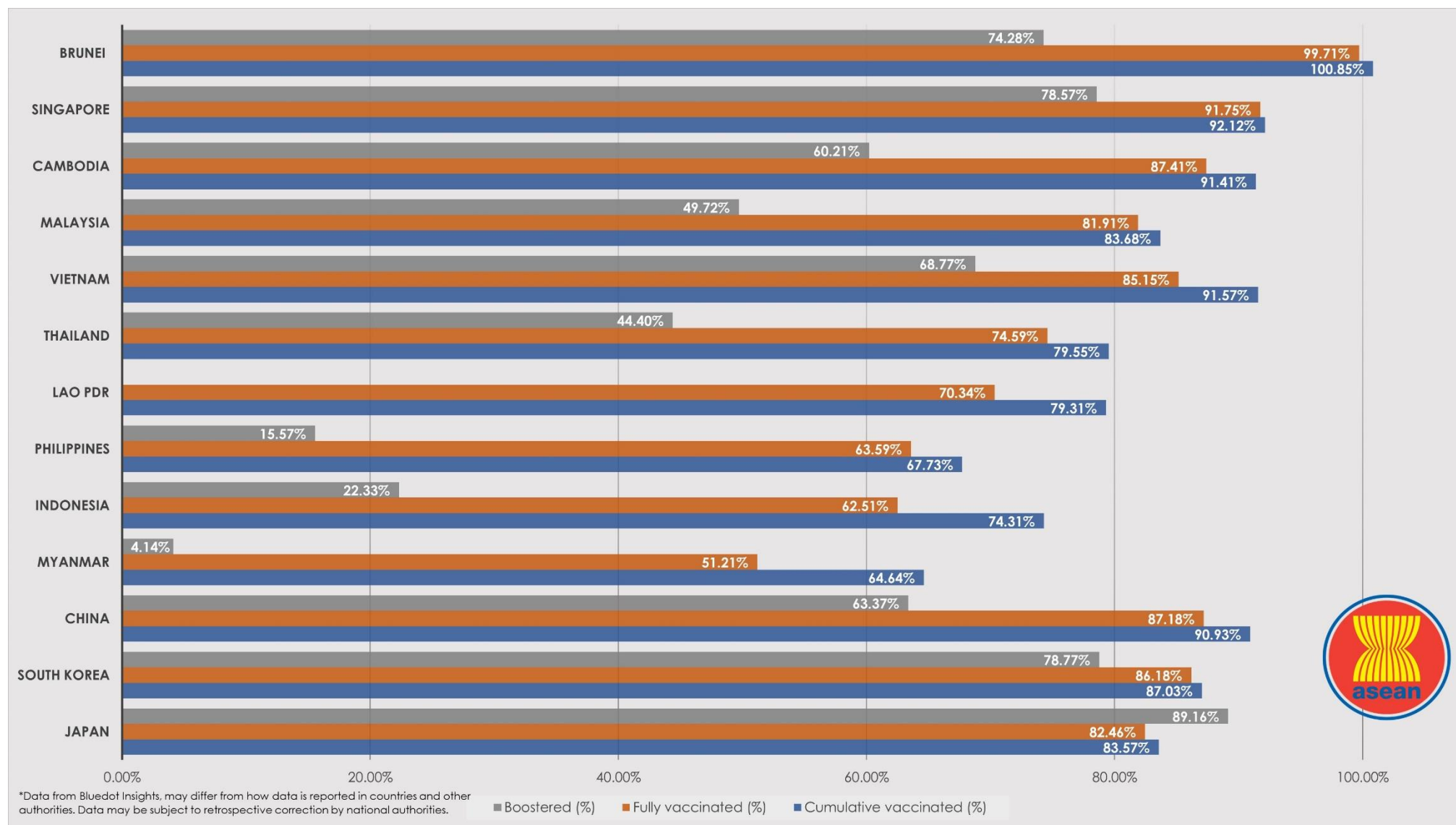
Weekly COVID-19 New Cases and New Deaths

From January 1, 2021 to September 11, 2022




COVID-19 Vaccination Status

as of 11 September 2022



COVID-19 Outlook Assessment

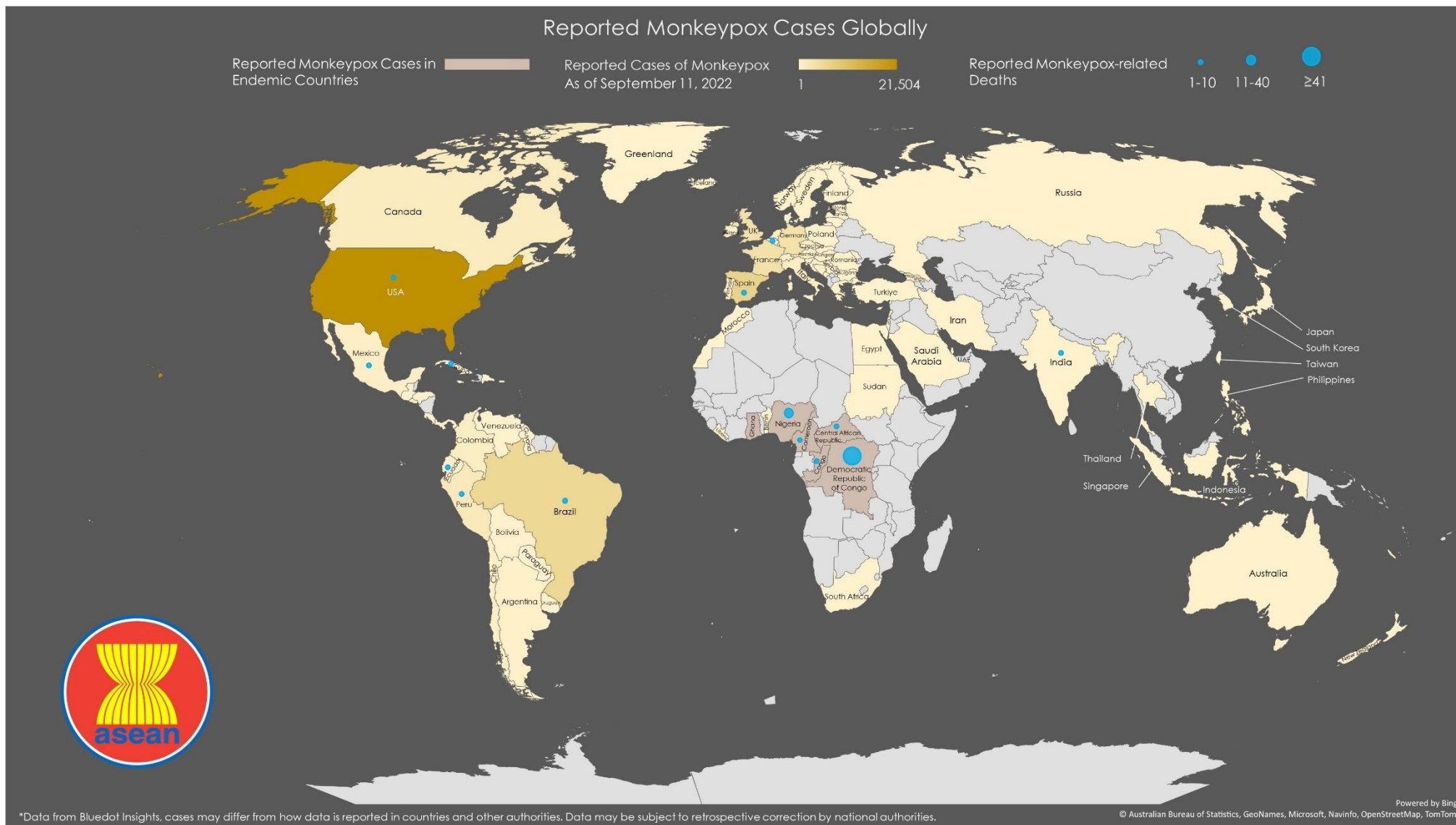
as of 09 September 2022

 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 (7-day average)	% 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	0%/day	≥90.0/74.3	Unknown	0.00	Unknown	31.0/100	undefined
Cambodia	0%/day	≥90.0/60.2	Unknown	0.05	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 11, 2022



Monkeypox: Highlights and Situation Overview

- As of 12 September 2022 (2PM, GMT+8), worldwide, there were **59,825** 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%**.
- 59,785 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	-	-	0.00%
Plus Three	South Korea	3	-	-	0.00%
ASEAN	Indonesia	1	-	-	0.00%
Plus Three	Hong Kong (SAR)	1	-	-	0.00%
ASEAN+3 Total		40	-	-	0.00%

Top 5 countries with most monkeypox cases globally

Region	Country	Total Cases	New Cases	Deaths	Case Fatality Rate
Americas	USA	21,504	230	2	0.01%
Europe	Spain	6,884	135	2	0.03%
Americas	Brazil	5,726	0	1	0.02%
Europe	France	3,720	74	-	0.00%
Europe	Germany	3,530	19	-	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	0	77	2.65%
AMERICAS	33,178	378	7	0.02%
ASIA PACIFIC	146	4	1	0.68%
EUROPE	23,280	285	3	0.01%
MIDDLE EAST	279	0	-	0.00%
TOTAL	59,785	667	88	0.15%

Global Update

- Wastewater-Based Epidemiology has the potential to monitor monkeypox, according to a study.¹ The lack of available clinical tests for monkeypox and the time it takes for symptoms to appear imply that wastewater-based epidemiology may be useful for tracking the disease's incidence and transmission at the community level. In a recent study, researchers showed how wastewater epidemiology, which is frequently used to track the spread of SARS-CoV-2, might be improved to identify monkeypox infections, which could occur as infrequently as seven per 100,000 individuals.¹ The monkeypox virus may be spread from infected individuals through their feces, urine, and saliva, similar to SARS-CoV-2.¹ Recently, scientists have used polymerase chain reaction (PCR) techniques to find its DNA in wastewater.¹ Despite its usefulness in tracking community-level SARS-CoV-2 incidence, wastewater-based epidemiology has had minimal success in monitoring contemporary monkeypox outbreaks in the United States.¹ Further research is necessary about the survival of monkeypox DNA in wastewater and the DNA shedding from humans.¹ Nevertheless, this computer model might serve as a helpful basis for creating effective community monitoring systems.¹ [\[Full Article\]](#)
- **USA:** A second individual in the United States afflicted with monkeypox has died in California.⁴ Public health authorities are looking into whether the virus may have contributed to the death of this second patient, as they did in the first Texas instance.⁴ "We will be performing an autopsy.⁴ So, it does take time for those findings to get back.⁴ So, it may be as soon as a few days, or it may take a few weeks," Los Angeles County's Rita Singhal, M.D., told reporters on September 8.⁴ On September 9, there was a scheduled autopsy.⁴ [\[Full Article\]](#)
- **Guam:** The Office of the Governor and the Department of Public Health and Social Services confirmed Monday that an arriving tourist had the first incidence of monkeypox on Guam.³ The visitor, who is being kept in isolation, landed on Guam on September 11, and the U.S. confirmed the diagnosis on September 12.³ The governor's office quotes the Centers for Disease Control and Prevention.³ The person said they don't need medical care, and their condition is being watched for any changes.³ In order to determine the isolation duration and determine when the symptoms first appeared, Public Health is coordinating with the patient's medical professional.³ An inquiry has been started by public health to find and alert any potential close relationships.³ [\[Full Article\]](#)

Research Update

- Researchers from the Centers for Disease Control and Prevention (CDC) provided data in its Morbidity and Mortality Weekly Report on the **safety outcomes of 369 patients who received the monkeypox antiviral drug tecovirimat (Tpoxx)** has reported few adverse events.² Tpoxx was developed and tested for treating smallpox, but it is currently widely used in the United States to treat monkeypox patients under a Food and Drug Administration Expanded Access Investigational New Drug (EA-IND) ruling.² Of the 369 patients in the study who were administered Tpoxx orally, adverse events were reported in 3.5% of patients, with only one adverse event classified as serious.² Roughly half of those administered the drug had HIV, and the median interval from initiation of tecovirimat to subjective improvement was 3 days and did not differ by HIV infection status, the authors said.² Tecovirimat was taken for a prescribed 14-day regimen.² In related news, a study spotlighted neurologic complications such as encephalitis and seizures in monkeypox patients, Los Angeles County is investigating the death of an infected person, and federal officials are considering widening the vaccine pool to include people with HIV.² [\[Full Text\]](#)
- New research from the University College London (UCL) on **Neurological and psychiatric presentations associated with human monkeypox virus infection** shows some monkeypox patients develop significant neurological complications, including encephalitis (brain inflammation), seizures, and confusion.⁷ The meta-analysis combined 19 cohort studies that

included a total of 1,512 monkeypox patients.⁷ The investigators found that 2.7% of patients experienced seizures, confusion 2.4%, and encephalitis 2.0%.⁷ The patients were seen in outbreaks in the United States, Nigeria, the Democratic Republic of Congo, and the United Kingdom.⁷ The authors found that severe neurological complications such as encephalitis and seizures, while rare, have been seen in enough monkeypox cases to warrant concern.⁷ [\[Full Text\]](#)

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