

COVID-19, Mpox, and Other Infectious Diseases

Situational Report in the ASEAN Region

— ASEAN BioDiaspora Virtual Center (ABVC)

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MINISTRY OF HEALTH
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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.
- **WHO**: Discovering the origins of COVID-19 is a moral imperative and all hypotheses must be explored, the head of the World Health Organization said, in the clearest indication yet that the U.N. body remains committed to finding how the virus arose. A U.S. agency was reported by the Wall Street Journal to have assessed the pandemic had likely been caused by an unintended Chinese laboratory leak, raising pressure on the WHO to come up with answers. Beijing denies the assessment which could soon become public after the U.S. House of Representatives voted this week to declassify it. "Understanding #COVID19's origins and exploring all hypotheses remains: a scientific imperative, to help us prevent future outbreaks (and) a moral imperative, for the sake of the millions of people who died and those who live with #LongCOVID," Tedros Adhanom Ghebreyesus said on Twitter late on Saturday. He was writing to mark three years since the WHO first used the word "pandemic" to describe the global outbreak of COVID-19. Activists, politicians and academics said in an open letter this weekend that the focus of the anniversary should be on preventing a repeat of the unequal COVID-19 vaccine rollout, saying this led to at least 1.3 million preventable deaths. (March 13, 2023).

Regional Update

- **Philippines'** daily average of new COVID-19 cases has increased by 8% from March 5 to 12. In the case bulletin of the Department of Health (DOH), the average new daily infections have increased to 140 in the recent week from 130 recorded from February 27 to March 5. The DOH also reported 983 new cases and 58 verified deaths for the recent week. During the same week, the number of severe and critical infections decreased to 351 from the previous week's 395. In addition, only 13.4% or 265 out of the 1,982 intensive care unit (ICU) beds are in use, while 17.1% or 2,916 of 17,075 non-ICU beds were utilized.

Vaccine Update

- **Moderna**: Despite the backing of the U.S. government, Moderna Inc on Friday failed to persuade a federal judge it should not have to face a patent lawsuit over its COVID-19 vaccine and that the United States should have been sued instead. Warminster Township, Pennsylvania-based Arbutus and Genevant — a joint venture between Arbutus and Roivant Sciences Ltd — sued Cambridge, Massachusetts-based Moderna for patent infringement last year, seeking royalties from Moderna's multibillion-dollar COVID vaccines. Moderna asked the court to dismiss the case last May. It said the United States was the proper target of the claims because the company made its vaccine for the government's nationwide vaccination effort, citing a law that was previously used to keep patent disputes from interfering with the supply of war materials during World War One. U.S. District Judge Mitchell Goldberg ruled for the second time that Moderna had not yet shown that the government was the proper target of a lawsuit by Arbutus Biopharma Corp and Genevant Sciences GmbH. (March 13, 2023).
- The **U.S. Food and Drug Administration** amended on March 14 (Tuesday) the emergency use authorization (EUA) of the Pfizer-BioNTech Bivalent COVID-19 Vaccine to provide for a single booster dose of the vaccine in children 6 months through 4 years of age at least 2 months after completion of primary vaccination with three doses of the monovalent (single strain) Pfizer-BioNTech COVID-19 Vaccine.¹² The FDA said that it has evaluated



immune response data from 60 children in this age group who had completed primary vaccination with three doses of monovalent Pfizer-BioNTech COVID-19 Vaccine and received a booster dose of Pfizer-BioNTech Bivalent COVID-19 Vaccine in a clinical study adding that the study participants demonstrated an immune response to both the original SARS-CoV-2 virus strain and to omicron BA.4/BA.5 one month after receiving the bivalent vaccine.¹² [\[Full report\]](#)

Research Update (Published and peer-reviewed studies)

- Patients hospitalized with COVID-19 have higher rates of venous thromboembolism (VTE), but the risk and predictors of VTE among individuals with less severe COVID-19 managed in outpatient settings are less well understood. This retrospective cohort study, **Assessment of the Risk of Venous Thromboembolism in Nonhospitalized Patients With COVID-19**, assessed the risk of VTE among outpatients with COVID-19 and identify independent predictors of VTE.¹¹ This study used data from the Kaiser Permanente Virtual Data Warehouse and electronic health records.¹¹ Participants included nonhospitalized adults aged 18 years or older with COVID-19 diagnosed between January 1, 2020, and January 31, 2021, with follow-up through February 28, 2021.¹¹ A total of 398,530 outpatients with COVID-19 were identified.¹¹ The mean (SD) age was 43.8 (15.8) years, 53.7% were women, and 54.3% were of self-reported Hispanic ethnicity.¹¹ There were 292 (0.1%) VTE events identified over the follow-up period, for an overall rate of 0.26 (95% CI, 0.24-0.30) per 100 person-years.¹¹ Factors associated with a higher risk of VTE in COVID-19 included age 55 years or older, being male, a history of VTE or thrombophilia, and body mass index greater than or equal to 30.0.¹¹ In this cohort study of outpatients with COVID-19, the absolute risk of VTE was low.¹¹ Several patient-level factors were associated with higher VTE risk; these findings may help identify subsets of patients with COVID-19 who may benefit from more intensive surveillance or VTE preventive strategies.¹¹ [\[Full text\]](#)
- The study on **Estimated Effectiveness of Prior SARS-CoV-2 BA.1 or BA.2 Infection and Booster Vaccination Against Omicron BA.5 Subvariant Infection** found that four COVID-19 booster doses were the most effective way to prevent critical Omicron BA.5, regardless of previous infection status.¹³ Researchers from Korea Disease Control and Prevention Agency and Korea University Anam Hospital utilized the Korea COVID-19 Vaccine Effectiveness data set to estimate the protection conferred by vaccination and previous Omicron BA.1 or BA.2 infection against BA.5 infection and critical illness among 3,415,980 who tested positive for the virus and an equal number of matched controls from August 1 to 31, 2022.¹³ Vaccine effectiveness (VE) of four doses of COVID-19 vaccine against BA.5 infection among COVID-naïve participants was 16.1%, while it was 89.5% and 94.3% among those previously infected with BA.1 and BA.2, respectively.¹³ VE of two doses against critical BA.5 was low in all groups, including COVID-naïve participants (41.5%) and those previously infected with BA.1 (53.1%) and BA.2 (50.0%).¹³ But four-dose VE against critical BA.5 was 90.9% among COVID-naïve participants and 93.9% and 92.9% among those with previous BA.1 and BA.2 cases, respectively.¹³ The authors concluded that their observation on the protection against critical BA.5 infection depends more on a 4-dose booster, rather than previous BA.1 or BA.2 infection, highlighting the importance of booster vaccination.¹³ [\[Full text\]](#)



Cases and Deaths as of 14 March 2023

- As of 14 March 2023 (1PM, GMT+7), worldwide, there were **666,337,470** confirmed cases, including **6,789,412** deaths. Globally, Case Fatality Rate (CFR) was **1.2%**.
- 35,623,722 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	13-Mar-23	279,661	758	225	-	64,053	450,404	445,929	338,987	99.3
	Cambodia	27 Jan 20	13-Mar-23	138,720	1	3,056	-	841	15,244,858	14,609,937	10,433,215	87.1
	Indonesia	02 Mar 20	14-Mar-23	6,739,669	380	160,953	3	2,490	203,657,535	172,693,321	67,952,274	62.7
	Lao PDR	24 Mar 20	15-Mar-23	218,024	1	758	-	3,041	5,888,649	5,222,417		69.4
	Malaysia	25 Jan 20	13-Mar-23	5,045,192	-	36,967	-	15,788	28,125,245	27,536,657	17,056,957	81.1
	Myanmar	23 Mar 20	15-Mar-23	633,965	8	19,490	-	1,173	34,777,314	27,545,329	2,227,351	50.8
	Philippines	30 Jan 20	14-Mar-23	4,078,137	110	66,226	-	3,771	78,369,243	73,937,435	21,341,197	64.0
	Singapore	23 Jan 20	13-Mar-23	2,234,996	244	1,722	-	39,049	5,161,990	5,120,768	4,440,289	90.8
	Thailand	13 Jan 20	13-Mar-23	4,728,304	-	33,924	6	6,791	57,005,497	53,486,086	32,143,431	74.6
	Vietnam	23 Jan 20	14-Mar-23	11,527,054	8	43,186	-	11,950	90,450,881	85,848,363	57,452,750	87.4
ASEAN COUNTRIES				35,623,722	1,510	366,507	9	148,946	519,131,616	466,446,242	213,386,451	

*There have been no tests reported in the last 14 days in the **ASEAN Region**.

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
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

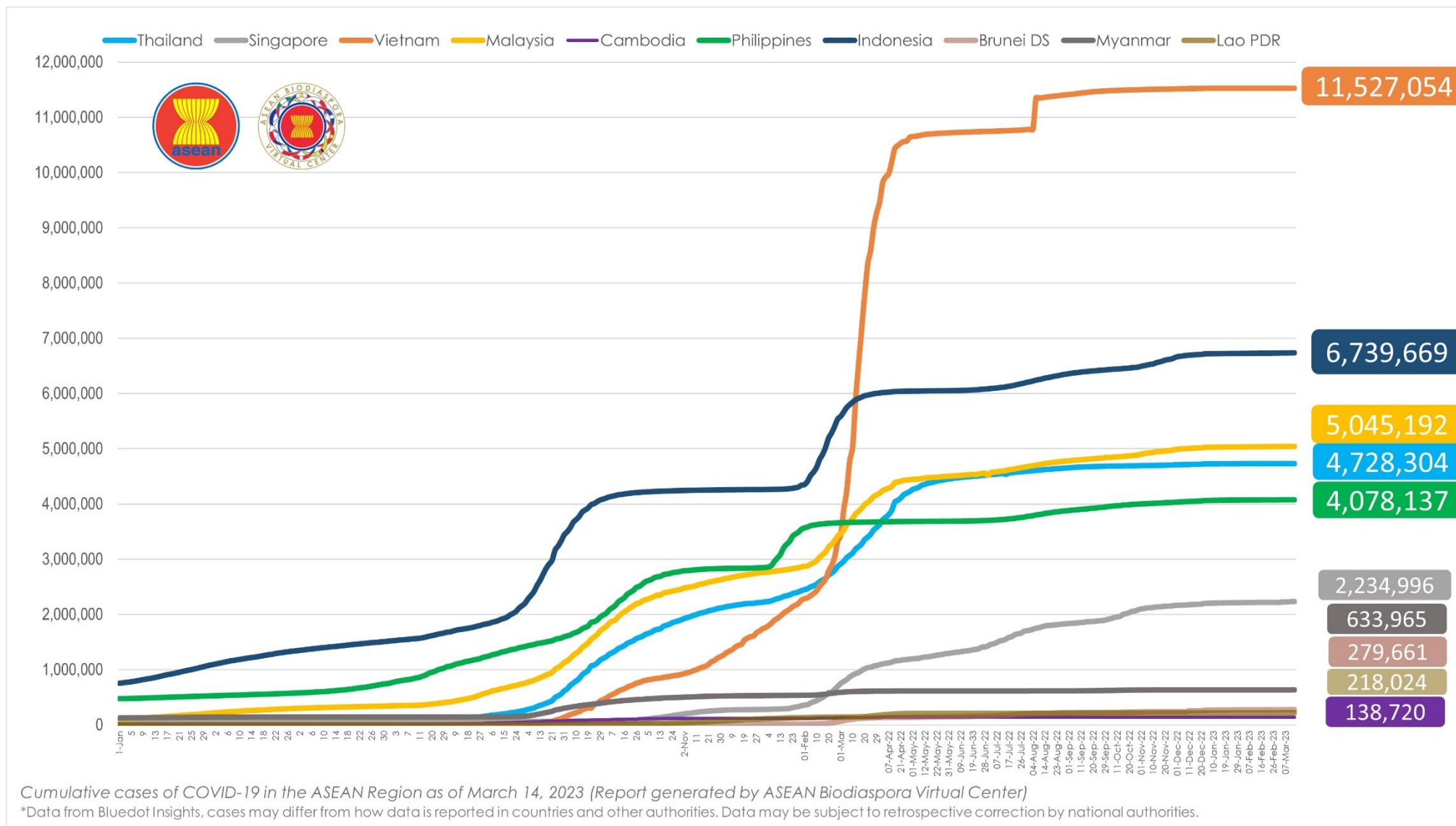
- **482,155,950 confirmed cases** of COVID-19 have been reported in other **4 regions** (other than ASEAN and Asia-Pacific countries):

REGION	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS	CUMULATIVE CASES/ 100,000	CUMULATIVE VACCINATED	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTED
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



COVID-19 Epi curve among ASEAN Countries:

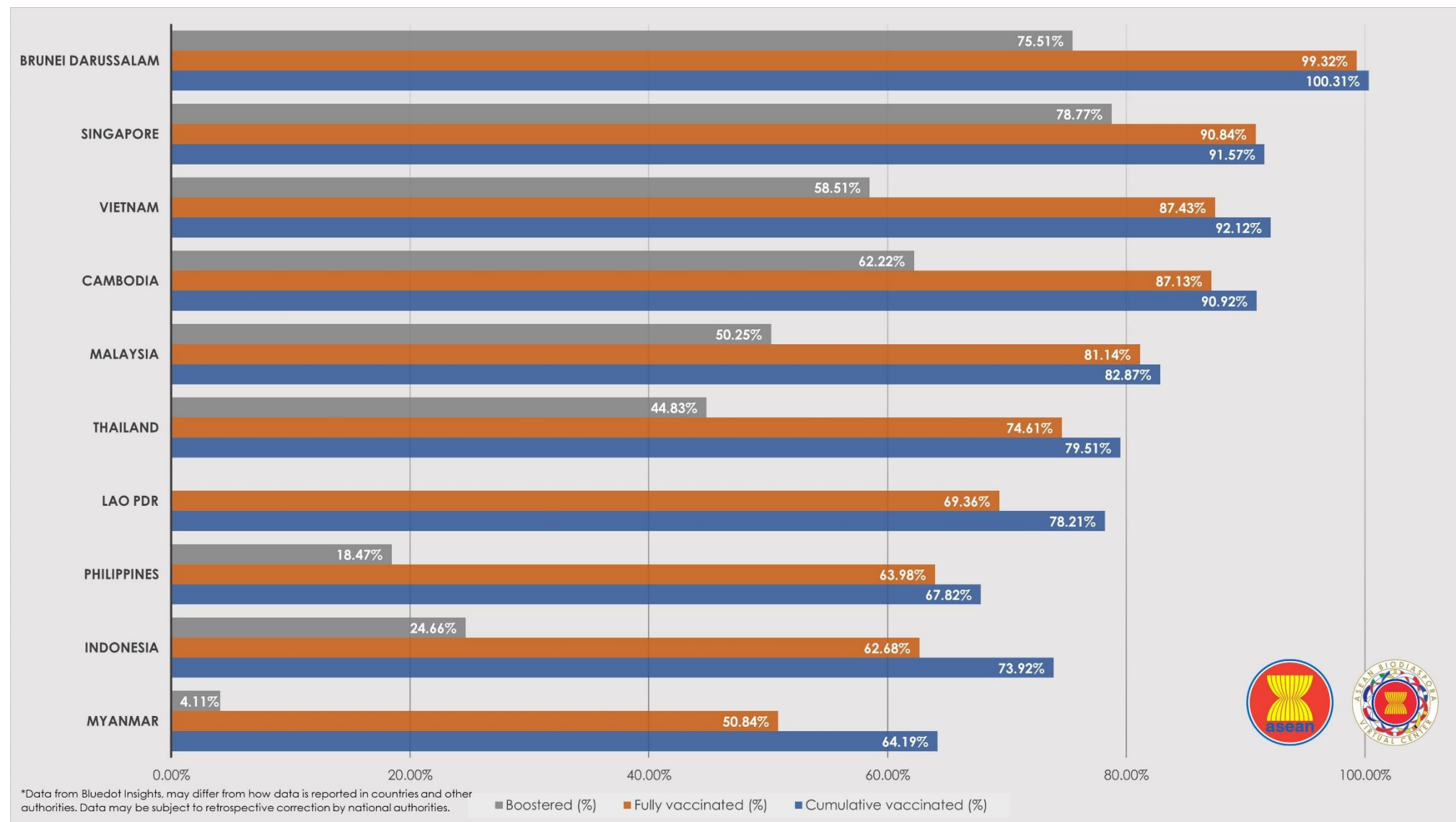
From January 1, 2021 to March 14, 2023





ASEAN COVID-19 Vaccination Status

as of 14 March 2023





ASEAN COVID-19 Outlook Assessment

as of 12 March 2023

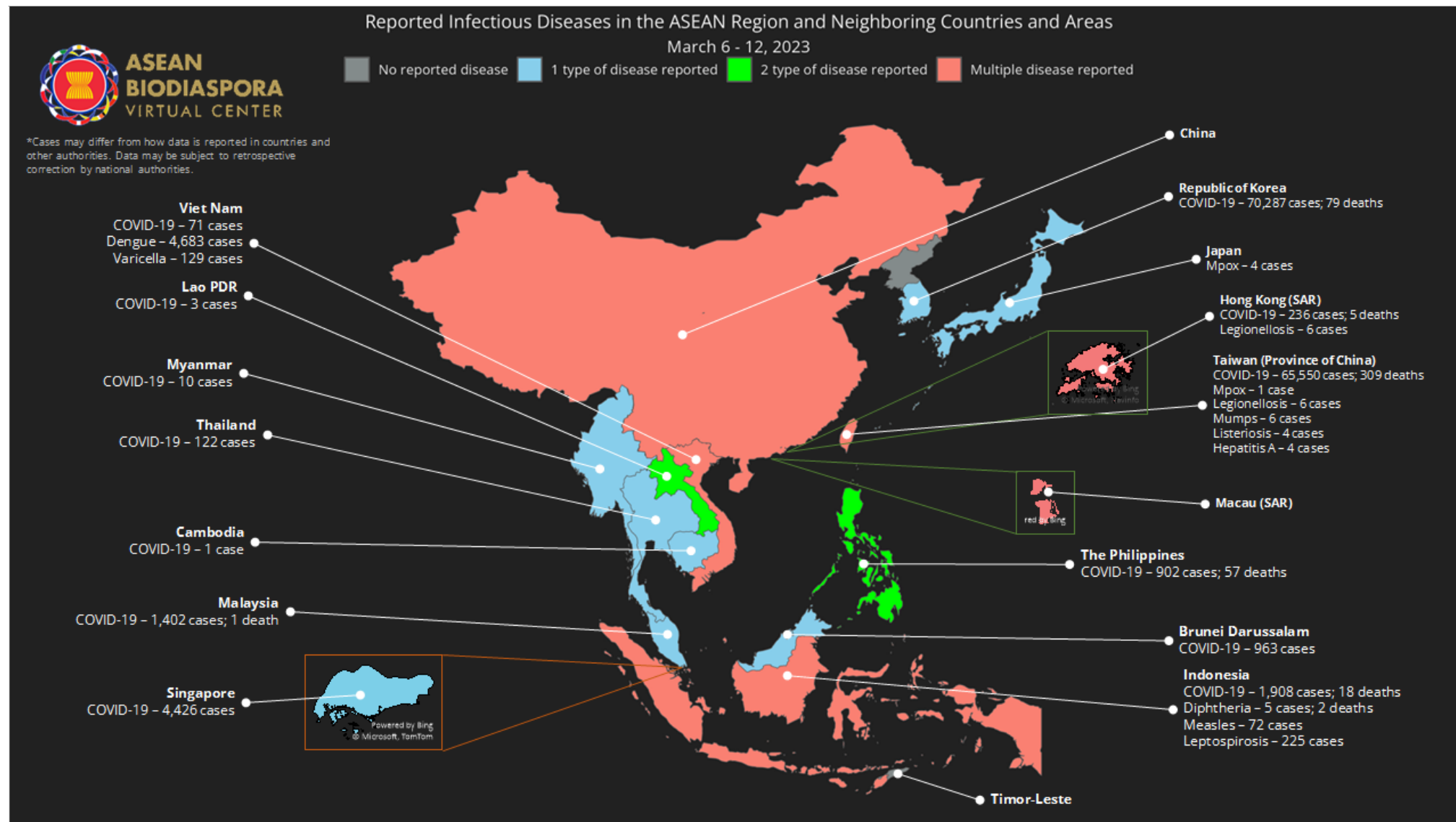
 ASEAN MEMBER STATE	<p>At least 65% of the total population has a level of immunity to COVID-19; either recovered from COVID-19 or have been vaccinated with at least one dose of a COVID-19 vaccine.</p>			<p>Case levels are generally low (a 7-day rolling average number of daily new cases that is <10 cases per 100,000, with each day's past-14-day test positivity is consistently <5%).</p>	<p>Government Policy on containment and health (strictness and comprehensiveness in COVID-19 related government policies)</p>
	% 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		31.75	31.0/100
Cambodia	≥90.0	62.2		0.00	31.5/100
Indonesia	66.1	24.7		0.03	54.2/100
Lao PDR	77.3	ND		0.01	61.6/100
Malaysia	84.5	50.3		0.16	51.8/100
Myanmar	52.1	4.1		0.01	69.1/100
Philippines	71.6	18.5		0.04	55.4/100
Singapore	≥90.0	78.8		0.00	58.9/100
Thailand	77.7	44.8		0.00	31.5/100
Vietnam	≥90.0	58.5		0.01	43.5/100

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



Reported Infectious Diseases in ASEAN Region and Neighboring Countries

From March 6-12, 2023





Reported Infectious Diseases Other than COVID-19, Mpox, Measles, and Dengue

March 6-12, 2023

Infectious Disease Global Updates

Marburg Disease

- Equatorial Guinea:** Ongoing epi-investigations have indicated that at least eight deaths occurred between 7-Jan and 7-Feb 2023 among individuals who presented with fever, weakness, vomiting, and blood-stained diarrhea. Additional information has indicated that two cases also presented with skin lesions and bleeding from the ear. On 9-Feb 2023, eight blood samples were collected from contacts and sent to the Centre Interdisciplinaire de Recherches Médicales de Franceville (CIRMF) in Gabon, where they tested negative for both Ebola and Marburg viruses by RT-PCR. An additional eight blood samples were collected from other contacts and sent to the Institute Pasteur in Dakar, Senegal, on 12-Feb 2023. One of these samples was confirmed positive for Marburg virus by RT-PCR. This case presented with fever, non-bloody vomiting, bloody diarrhea, and convulsions and died on 10-Feb 2023. The case also had epidemiological links to four deceased cases. After almost two weeks without the detection of any cases, two more deaths were reported on 28-Feb-2023, bringing the toll of fatalities to 11. There are no known cases among healthcare workers: 48 contact cases have been documented, four of whom have developed symptoms, and three have been quarantined in a local hospital. (latest follow up on February 28, 2023).

Poliomyelitis

- Israel:** According to official information from the Global Polio Eradication Initiative (GPEI) the confirmed strain associated with the polio case first reported on February 28, 2023, in Safed, Northern District, Israel has been identified as the circulating vaccine-derived poliomyelitis type 2 (cVDPV-2) and not the wild type. Five (5) additional confirmed cVDPV cases were close contacts of the index case and have remained asymptomatic. In June 2022, a positive sample for cVDPV-2 was detected in sewage in the Jerusalem area. After the strain's detection in Jerusalem, cVDPV-2 was also found in many other areas in Israel, from Ramat HaGolan, in the north, to Beer Sheva, in the south. Further sewage findings have demonstrated the extensive spread of this variant. The completion of a nationwide vaccination campaign with both the inactivated vaccine (IPV) and the live attenuated vaccine (bOPV) halted the further spread of the virus. There have been no cVDPV3-positive sewage samples since those initially found. (as of March 10, 2023 follow up).

Chikungunya

- Paraguay:** Chikungunya disease activity continues to rapidly rise in Paraguay. On 25-Feb-2023, the Ministry of Health issued an epidemiological statement which reported an unusually high number of fatalities; in addition, cases of meningoencephalitis have been reported in newborns as a result of chikungunya. The latest report from the General Directorate of Health Surveillance (26-Feb-2023) reports 12,189 new cases in the last three weeks. On 28-Feb-2023, the Ministry of Health issued an epidemiological statement which reported a total of 29,362 cases and 28 deaths in the country, the latter is unusual as no previous epidemics reported fatalities. Among the reported deaths, there are five children under one year of age and 19 people over 60 years of age. The report also states that there have been 94 cases of chikungunya in newborns (less than 28 days old). Four of the pediatric deaths were infants under 28 days old and one in a 31-day-



old infant. Of the infected neonates, 34 had meningoencephalitis (an acute infection of the central nervous system). It has been recommended for individuals who have recently given birth to remain in the hospital for up to a week to test for chikungunya.

Highly Pathogenic Avian Influenza (H5N1)

- **People's Republic of China:** On 24-Feb-2023, the WHO was notified about a human case of Highly Pathogenic Avian Influenza (HPAI) A(H5N1) in the Jiangsu province of China. The case was a 53-year-old woman with a history of contact with poultry who developed flu like symptoms on 31 January 2023 and was consequently admitted. Genetic sequencing showed that the source of infection was A(H5N1) 2.3.4.4b clade. The patient's status is unknown as of 01 March 2023. A(H5N1) clade 2.3.4.4b viruses have risen in prevalence since 2020 within wild and migratory birds, and notably has been found to spill over into non-avian species including mammals. According to a Rapid Risk Assessment published by the WHO on 21-Dec-2022, since 2020 there have been six spillover cases of A(H5N1) clade 2.3.4.4b into humans: a case in China was fatal, a case in Vietnam was severe but recovered, while three cases in Europe (Spain-2, United Kingdom-1) and one case in the United States were noted to be either mild or asymptomatic in nature. All human spillover cases had known contact with infected poultry, but no sustained human-to-human transmission was reported.

Infectious Disease in ASEAN region and Neighboring Countries Updates

Diphtheria

- **Indonesia:** A nine-year-old child suspected of having diphtheria in Hujung Pekon (Village), Belalau District, West Lampung Regency, Lampung Province, died while undergoing treatment.⁵ Head of the Hujung Village in West Lampung, Ismet Liza, said that on Monday (6/3/2023), his parents brought him to the Belalau Health Center because he was sick.⁵ The health center staff referred him to the Hospital because they suspected diphtheria. He was declared dead at around 02.00am.⁵ According to Director of the Regional General Hospital (RSUD) Alimudin Umardr Iman Hendarman, hospital staff had sent samples taken from the child to be examined in a laboratory to confirm the cause of illness.⁵ But the results are no later than one month after.⁵ He explained that according to the initial diagnosis the patient had tonsillitis or inflammation of the two oval-shaped tissue pads at the back of the throat.⁵ "We have made efforts to anticipate, and when the results are positive, we have also taken preventive measures, because we do not expect unwanted things to happen," he said.⁵ Meanwhile, starting Monday (13/3), the Head of Disease Prevention and Control (P2P) of the Surakarta City Health Service (DKK) Tenny Setyoharini said his party has scheduled immunization for close contacts of diphtheria patients in Solo.⁶ The City Government (Pemkot) of Surakarta, Central Java, found two positive diphtheria patients in February 2023, but one of them died while the other was declared cured.⁶ "We are preparing to immunize close contacts of the diphtheria patients regardless of their previous immunization status.⁶ We have obtained close contacts from the results of tracing these patients," he said.⁶ Previously, the DKK Surakarta had conducted tracing to the patient's close contacts, including his school friends, considering that the disease is transmitted through close contact and droplets.⁶ He said children who were friends of the patients were also given the drug.⁶ As a result, up to seven days there were no symptoms of diphtheria in children of other close contacts.⁶ [Full article [5](#), [6](#)]

Leptospirosis

- **Indonesia:** Based on data from the East Java Provincial Health Office, there were 606 cases of leptospirosis in 2022.⁷ This year, as of March 5 2023, 249 cases have been recorded with 9 deaths.⁷ Of the total 249 cases, the most were in Pacitan, namely 204



cases with 6 deaths.⁷ In addition, in Probolinggo Regency 3 cases and 2 deaths, Gresik 3 cases, Lumajang 8 cases, Probolinggo City 5 cases and 1 death, Sampang 22 cases, and Tulungagung 4 cases.⁷ In addition, in Probolinggo Regency 3 cases and 2 deaths, Gresik 3 cases, Lumajang 8 cases, Probolinggo City 5 cases and 1 death, Sampang 22 cases, and Tulungagung 4 cases.⁷ In Pacitan, East Java Province, the number of cases of leptospirosis continues to grow.⁸ The acting head of the Pacitan District Health Office, Daru Mustiko Aji, said that so far six people have died from the disease, three of them were due to co-morbidities, such as heart disease and dengue fever.⁸ [Full article [7](#), [8](#)]

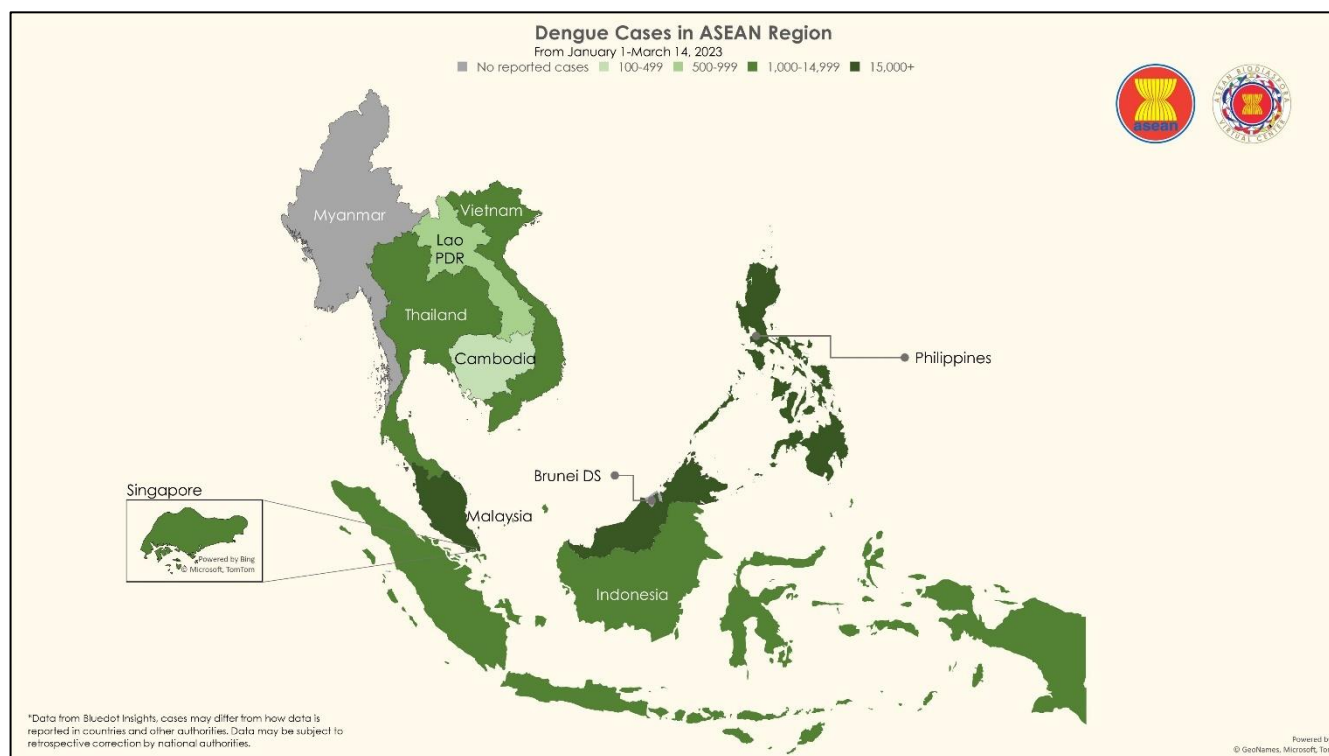
Legionellosis

- Hongkong:** The Centre for Health Protection (CHP) of the Department of Health (March 6) reported the latest number of cases of Legionnaires' disease (LD) and stressed the importance of using and maintaining properly designed man-made water systems, adding that susceptible groups should strictly observe relevant precautions.⁹ From February 26 to March 4, one community-acquired LD case was reported.⁹ The case involved a male patient aged 71 with underlying illnesses, who lives in Ko Shing House, Ko Yee Estate, Yau Tong.⁹ "Epidemiological investigations are ongoing to identify potential sources of infection, high-risk exposure and clusters, if any," a spokesman for the CHP said.⁹ As of March 4, 10 LD cases had been reported this year. In 2022 and 2021, there were 80 and 69 cases respectively.⁹ "Men, people aged over 50, smokers, alcoholics and persons with weakened immunity are more susceptible to LD.⁹ Some situations may also increase the risk of infection, including poor maintenance of water systems leading to stagnant water; living in areas with old water systems, cooling towers or fountains; using electric water heaters, whirlpools and spas or hot water spring spas; and recent stays in hotels or vessels," the spokesman said.⁹ [Full article]



Dengue Cases in ASEAN Region

From January 1 to March 14, 2023



Dengue cases in ASEAN region

Country	Dengue Cases	New Cases since previous report	Deaths	Case Fatality Rate (CFR)
Brunei Darussalam	-	-	-	-
Cambodia	400	0	0	-
Indonesia	2,930	0	24	0.82%
Lao PDR	548	118	0	0.00%
Malaysia	19,450	0	15	0.08%
Myanmar	-	-	-	-
Philippines	17,136	0	55	0.32%
Singapore	1,869	112	0	0.00%
Thailand	3,855	0	1	0.03%
Vietnam	5,189	4,683	0	0.00%
Total	51,377	4,913	95	0.18%

*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.

- ASEAN region reported **4,913** new dengue cases since previous report in Lao PDR, Singapore, and Vietnam. The region reported **51,377** total cases and **95** total deaths in 2023 with **0.18%** CFR.



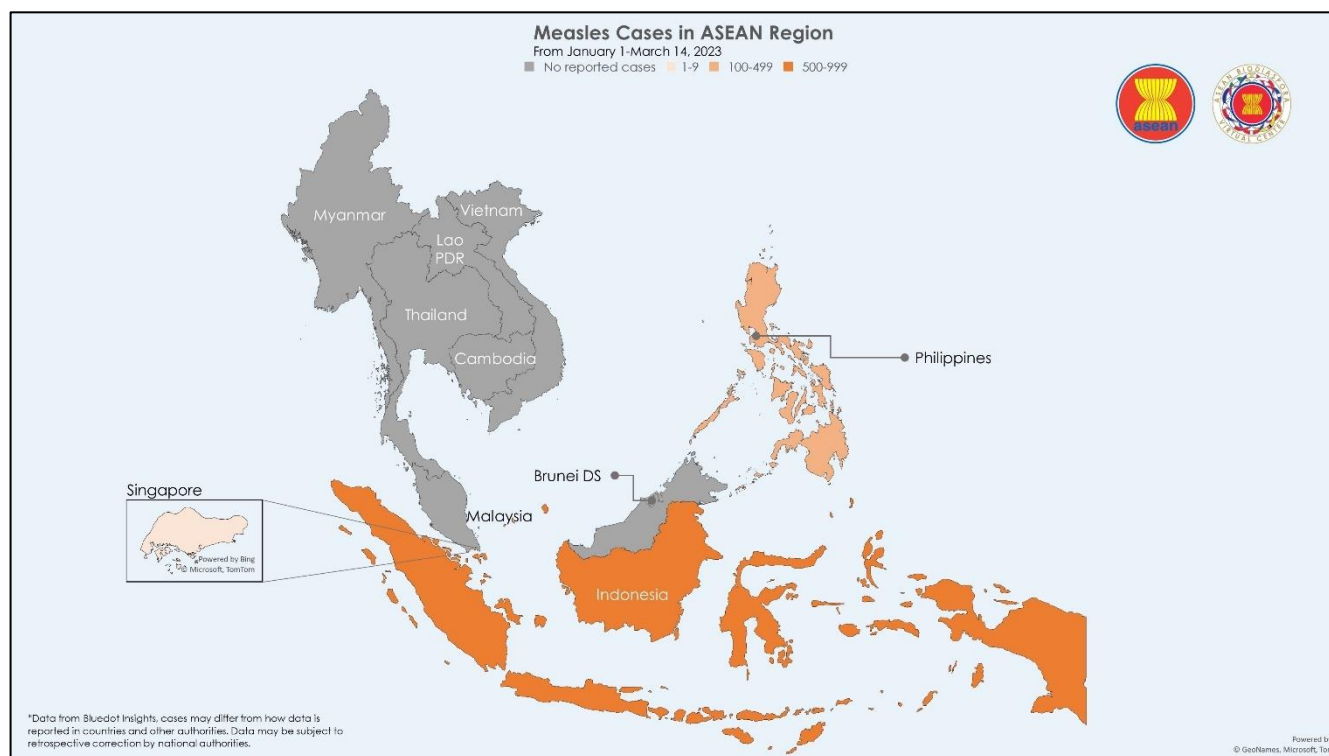
Dengue

- **Lao PDR:** Dengue cases in Laos have risen to 548 since January this year, according to data released by the Lao Ministry of Health on March 9.¹ The Southeast Asian country reported four new cases of dengue fever on March 9, bringing the total number of infections to 548.¹ The highest number of dengue patients was reported in the Lao capital Vientiane at 92, with 91 cases in Oudomxay, and 54 cases in Luang Namtha province.¹ [\[Full article\]](#)
- **Malaysia:** The number of dengue cases reported in the first nine weeks of this year in Negri Sembilan has spiked to 580, says state health exco S. Veerapan.² He said only 197 cases were reported during the same period last year.² "This is an increase of almost 195%. We also have one death caused by dengue this year," he said in a statement.² Seremban had the highest number of cases with 470 followed by Jempol (45), Port Dickson and Tampin (19 each), Jelebu (15), Rembau (seven) and Kuala Pilah (five).² Veerapan said there were 15 active outbreak localities with 13 in Seremban and two in Jempol.² He urged the public to keep their homes clean and conduct weekly checks to destroy potential Aedes breeding grounds.² Households, he said, should spend at least 10 minutes every week to rid their homes of potential Aedes breeding grounds.² "You can also spray insecticide inside your homes and in places where the mosquitoes will hide such as under the tables, beds, behind cupboards and in the store rooms," he added.² The authorities, he said, would continue to take measures to destroy potential Aedes breeding grounds and fogging to check the increase in the number of cases.² [\[Full article\]](#)



Measles Cases in ASEAN Region

From January 1 to March 14, 2023



Measles cases in ASEAN region

Country	Measles Cases	New Cases in the past week	Deaths	Case Fatality Rate (CFR)
Brunei Darussalam	-	-	-	-
Cambodia	-	-	-	-
Indonesia	784	72	15	1.91%
Lao PDR	-	-	-	-
Malaysia	-	-	-	-
Myanmar	-	-	-	-
Philippines	133	33	-	0.00%
Singapore	3	0	-	0.00%
Thailand	-	-	-	-
Vietnam	-	-	-	-
Total	920	105	95	1.63%

*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.

- ASEAN region reported **105** new measles cases in since past week in Indonesia and the Philippines. The region reported **920** total cases and **15** total deaths in 2023 with **1.63%** CFR.



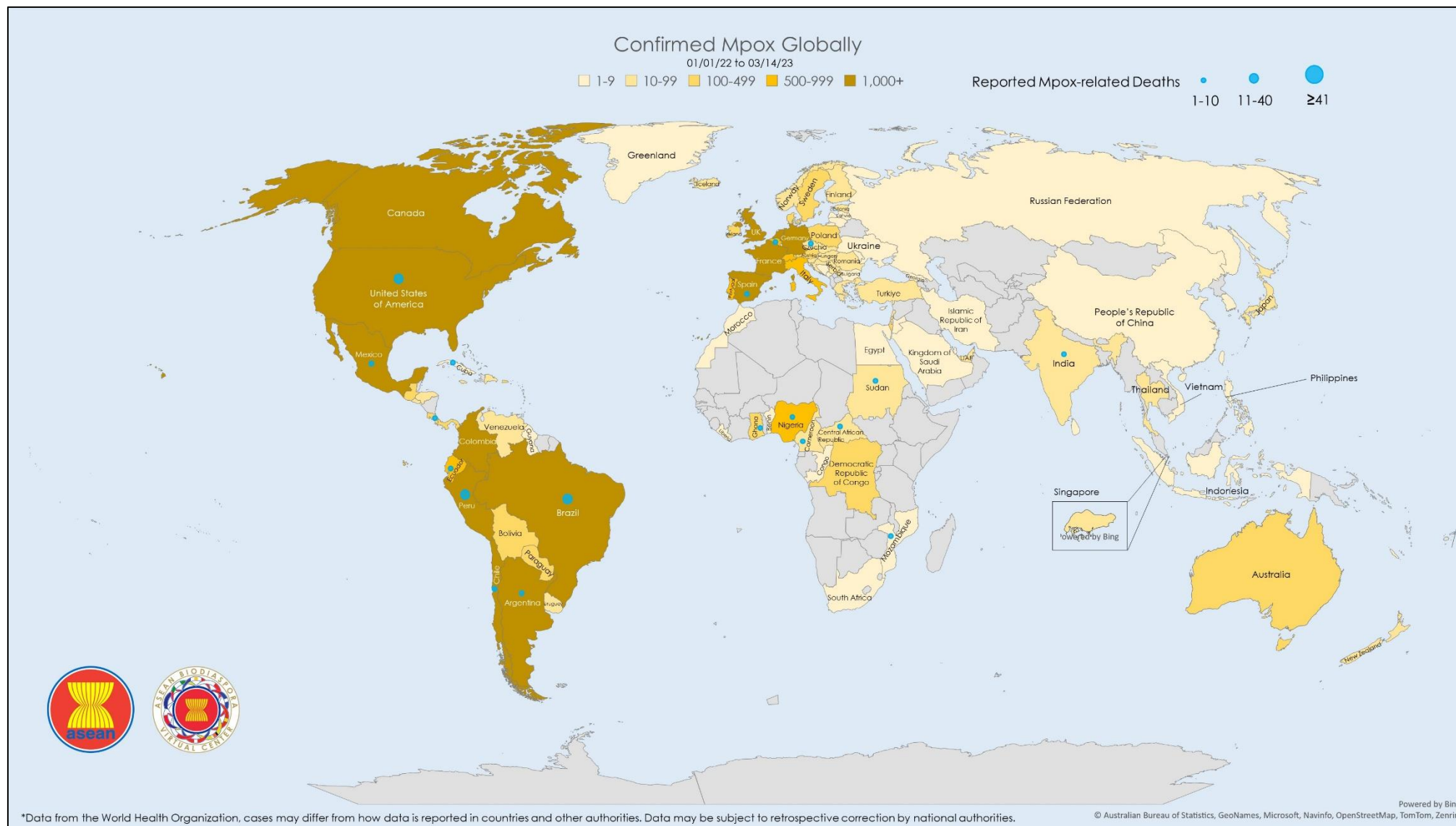
Measles

- Philippine** health officials have reported a 565% increase in measles cases year to date [10 Mar 2023], according to health department data.³ From 1 Jan to 25 Feb 2023, 133 measles cases have been reported, up from the 20 cases reported during the same period in 2022.³ Regions reporting the most cases include the National Capital Region (NCR) (24), Zamboanga Peninsula (24) and Calabarzon (20). No measles deaths have been reported.³ In addition to measles, the Philippines also reports increases in multiple vaccine-preventable diseases during the 1st 2 months of 2023: diphtheria up 233%, rubella cases up 300% and pertussis up 400%.³ [\[Full article\]](#)
- Indonesia:** The Ministry of Health (Kemenkes) reports that cases of measles in Papua have increased to 469 cases.⁴ This was revealed by the Head of the Ministry of Health's Communication and Public Service Bureau, Siti Nadia Tarmizi, Friday (10/3/2023).⁴ And 48 cases of measles and 1 case of rubella were lab confirmed," said Nadia when contacted, March 10.⁴ Even so, Nadia denied the status of an Extraordinary Event (KLB) for measles in Papua.⁴ He said that so far, only a few regions have established outbreak status.⁴ That is, it is not determined in all of Papua province.⁴ "There is no KLB status yet, only Paniai and Mimika," he said.⁴ Previously, Director General of Disease Prevention and Control Maxi Rein Rondonuwu said that the increase in measles cases in Central Papua Province was due to the low coverage of MR immunization for children in 2022.⁴ Based on the Ministry of Health's report, the coverage of MR1 immunization was only 64.1%, then decreased to 48.6% in MR 2 immunization.⁴ Measles cases are also dominated by people who have never received immunization.⁴ "Our findings in the field, 87% of cases that have been reported have never received MR immunization.⁴ This happens in almost all age groups," said Maxi.⁴ [\[Full article\]](#)



Mpox (Monkeypox) Cases Reported Globally

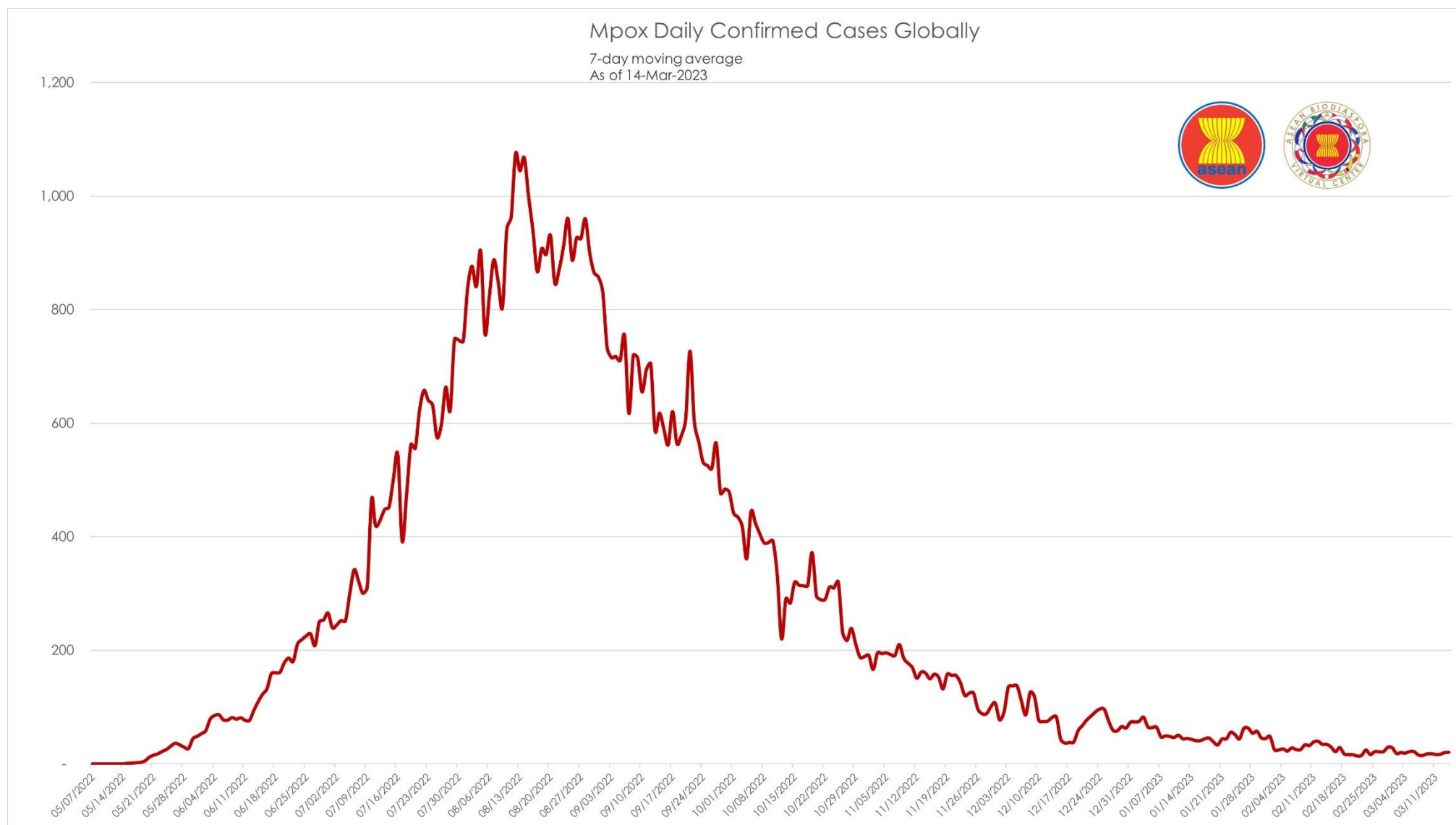
as of March 14, 2023





Mpox Daily Trend Globally

as of March 14, 2023





Mpox: Highlights and Situation Overview

- As of 14 March 2023 (1PM, GMT+7), worldwide, there were **86,516** confirmed cases, including **111** deaths. Globally, Case Fatality Rate (CFR) was **0.13%**.
- 44 confirmed cases** in the ASEAN region, with CFR of **0%**.
- 86,472 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	16	1	-	0.00%
Vietnam	2	-	-	0.00%
ASEAN Total	44	1	-	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	-	-	0.00%
New Caledonia	1	-	-	0.00%
New Zealand	41	-	-	0.00%
People's Republic of China*	11	-	-	0.00%
Republic of Korea*	5	1	-	0.00%
Sri Lanka	2	-	-	0.00%
Asia-Pacific Total	257	2	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	30,039	9	38	0.13%
Brazil	10,878	16	15	0.14%
Spain	7,543	-	3	0.04%
France	4,128	-	-	0.00%
Colombia	4,088	3	-	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	1,453	7	18	1.24%
AMERICAS	58,863	114	86	0.15%
ASEAN	44	1	-	0.00%
ASIA PACIFIC	257	2	1	0.39%
EUROPE	25,578	-	6	0.02%
MIDDLE EAST	321	1	-	0.00%
TOTAL	86,516	125	111	0.13%

Global Update

- Republic of China:** There is another local case of monkeypox in ROC today, March 7, 2023. It is a man in his 30s who lives in Taipei City.¹⁰ He has no history of contact with the previous 2 local cases and 5 overseas cases.¹⁰ It is related to the wave of going abroad when the borders have just been opened.¹⁰ Considering the sporadic occurrence of individual cases and the increased risk in the community, two phases of vaccination are planned, with the first wave of 1,100 doses and a target of 3,000 person-times; the second wave will not expand beyond the six capitals until the arrival of the additional 10,000 vaccines purchased after the Qingming holiday.¹⁰ It is hoped that up to 40,000 people will be vaccinated. In just one week, three cases of local monkeypox sporadic with unknown source of infection broke out in the north, middle and south of the country.¹⁰ Luo Yijun, deputy director of the CDC, said that the previous cases in Hsinchu County and Kaohsiung City are still being hospitalized and isolated, and none of the contacts have developed symptoms.¹⁰ [\[Full article\]](#)

Research Update (Published and peer-reviewed studies)

- The study on **Effectiveness of one dose of MVA-BN smallpox vaccine against mpox in England using the case-coverage method: an observational study** found that estimated vaccine effectiveness (VE) of a single dose of the Jynneos attenuated smallpox/mpox vaccine against symptomatic mpox infection was 78% at least 14 days later.¹⁴ Researchers at the UK Health Security Agency sent questionnaires to men who have sex with men (MSM) in England diagnosed as having mpox from July 4 to October 9, 2022, and linked the answers to the laboratory data and a public health case-management system.¹⁴ By October, 47% of 363 mpox patients had received one dose of the Jynneos vaccine.¹⁴ Eight respondents (2.2%) had breakthrough infections at least 14 days after vaccination, 32 (8.8%) were diagnosed within 13 days after vaccination, and 323 (89.0%) were unvaccinated.¹⁴ The estimated one-dose VE against symptomatic mpox was 78% after at least 14 days, ranging from 71% to 85% in sensitivity analyses.¹⁴ VE was -4% on days 0-13 after vaccination.¹⁴ According to the researchers, a single MVA-BN (Jynneos) dose was highly protective against symptomatic mpox disease among at-risk (MSM), making it a useful tool for mpox outbreak control when rapid protection is needed.¹⁴ [\[Full text\]](#)



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