

COVID-19, Mpox, and Other Infectious Diseases

Situational Report in the ASEAN Region

— ASEAN BioDiaspora Virtual Center (ABVC)



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COVID-19: Highlights and Situation Overview

Global Update

- **Worldwide**, there have been over 685 million cases and over 6 million deaths attributed to COVID-19.
- **India's** Union Health Ministry reported on April 19 (Wednesday) 10,542 new COVID-19 cases within 24 hours.⁷ The active cases in the country have increased to 63,562 according to its data.⁷ In Delhi, the active cases have increased by over 430% with 4,976 cases on April 17 from 932 cases on March 30.⁷ Despite recent increases in cases in the state, the number of hospitalizations has remained low.⁷ Experts have advised the public not to panic and to continue to adhere to COVID-19 precautions and to get vaccinated/boosted.⁷ [\[Full article\]](#)

Vaccine Update

- The **U.S. Food and Drug Administration (FDA)** on April 18 (Tuesday) amended the emergency use authorizations (EUAs) of the Moderna and Pfizer-BioNTech COVID-19 bivalent mRNA vaccines to simplify the vaccination schedule for most individuals.⁸ This action includes authorizing the current bivalent vaccines (original and omicron BA.4/BA.5 strains) to be used for all doses administered to individuals 6 months of age and older, including for an additional dose or doses for certain populations.⁸ The monovalent Moderna and Pfizer-BioNTech COVID-19 vaccines are no longer authorized for use in the United States, although their full licensing remains intact for future supplemental actions.⁸ According to the FDA, this simplified authorization is also meant to encourage more people to be vaccinated.⁸ [\[Full article\]](#)
- The **Philippines' Department of Health (DOH)** on April 18 (Tuesday) issued guidelines for the second COVID-19 booster shot to the general population (excluding children ages 5 to 17).⁹ According to the guidelines, all healthy adults aged 18 and above may now receive their second booster shot six months from their first booster.⁹ Immunocompromised adults may continue to acquire their second booster doses after more than three months from their first booster.⁹ [\[Full article\]](#)

Research Update (Published and peer-reviewed studies)

- The study **Oral Fluvoxamine with Inhaled Budesonide for Treatment of Early-Onset COVID-19** led by the Stanford University team evaluated the use of the oral selective serotonin reuptake inhibitor fluvoxamine plus the inhaled corticosteroid budesonide among non-hospitalized adults with early symptomatic COVID-19 and at least one risk factor for the severe disease at 12 sites in Brazil from January 15 to July 6, 2022.¹⁰ A total of 1,476 patients were randomly assigned in a 1:1 ratio to either 100 milligrams (mg) of fluvoxamine plus 800 micrograms of budesonide or matching placebos twice daily for 10 days.¹⁰ The researchers gathered outcome data in person or via phone call or social media using videoconferencing and collected limited data on vital signs.¹⁰ A lower proportion of patients in the treatment group than in the placebo group were observed in an emergency setting for COVID-19 for more than 6 hours or were hospitalized within 28 days (1.8% vs 3.7%).¹⁰ No differences were noted in the secondary outcomes of time to clinical improvement, number of days with respiratory symptoms, time to hospitalization for any cause or COVID-19 progression, length of hospital stay and receipt of mechanical ventilation, or rate of adverse events.¹⁰ The researchers concluded that treatment with oral fluvoxamine plus inhaled budesonide among high-risk outpatients with early COVID-19 reduced the incidence of severe disease requiring advanced care.¹⁰ [\[Full text\]](#)



- The study ***Safety and Efficacy of Combination SARS-CoV-2 Neutralizing Monoclonal Antibodies Amubarvimab plus Romlusevimab in Non-hospitalized Patients with COVID-19*** by the Weill Cornell Medicine researchers led a phase 2/3 platform trial assessing the safety and efficacy of amubarvimab plus romlusevimab.¹¹ The phase 2 population included 807 non-hospitalized adult COVID-19 patients at high risk for poor outcomes in the United States, Brazil, South Africa, Mexico, Argentina, and the Philippines from January to July 2021.¹¹ The phase 3 population was made up of 221 participants in the United States.¹¹ Participants were assigned to receive either sequential intravenous infusions of 1,000 mg of amubarvimab followed by 1,000 mg of romlusevimab (397 patients) or equivalent volumes of a saline placebo (410 patients) on day 0.¹¹ 53 of 807 participants in the modified intention-to-treat population were hospitalized or died by day 28, including 9 assigned to amubarvimab plus romlusevimab and 44 assigned to placebo.¹¹ The cumulative incidence of hospitalization or death was 79% lower in the amubarvimab plus romlusevimab group (2.3%) than in the placebo group (10.8%).¹¹ The researchers concluded that amubarvimab plus romlusevimab was safe and significantly reduced the risk for hospitalization and/or death among non-hospitalized adults with mild to moderate SARS-CoV-2 infection at high risk for progression to severe disease.¹¹
[\[Full text\]](#)



Cases and Deaths as of 19 April 2023

- As of 19 April 2023 (1PM, GMT+7), worldwide, there were **685,805,434** confirmed cases, including **6,843,490** deaths. Globally, Case Fatality Rate (CFR) was **1.0%**.
- 35,761,841 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	14-Apr-23	284,632	-	225	-	64,053	450,404	445,929	338,987	99.3
	Cambodia	27 Jan 20	04-Apr-23	138,726	-	3,056	-	841	15,244,858	14,609,937	10,433,215	87.1
	Indonesia	02 Mar 20	19-Apr-23	6,759,847	334	161,143	3	2,490	203,657,535	172,693,321	67,952,274	62.7
	Lao PDR	24 Mar 20	10-Apr-23	218,048	-	758	-	3,041	5,888,649	5,222,417		69.4
	Malaysia	25 Jan 20	17-Apr-23	5,062,060	-	37,000	-	15,788	28,125,245	27,536,657	17,056,957	81.1
	Myanmar	23 Mar 20	18-Apr-23	634,174	-	19,490	-	1,173	34,777,314	27,545,329	2,227,351	50.8
	Philippines	30 Jan 20	18-Apr-23	4,086,620	-	66,443	-	3,771	78,369,243	73,937,435	21,341,197	64.0
	Singapore	23 Jan 20	07-Apr-23	2,314,707	-	1,727	-	39,049	5,161,990	5,120,768	4,440,289	90.8
	Thailand	13 Jan 20	15-Apr-23	4,729,402	-	33,940	-	6,791	57,005,497	53,486,086	32,143,431	74.6
	Vietnam	23 Jan 20	18-Apr-23	11,533,625	-	43,186	-	11,950	90,450,881	85,848,363	57,452,750	87.4
ASEAN COUNTRIES				35,761,841	334	366,968	3	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.

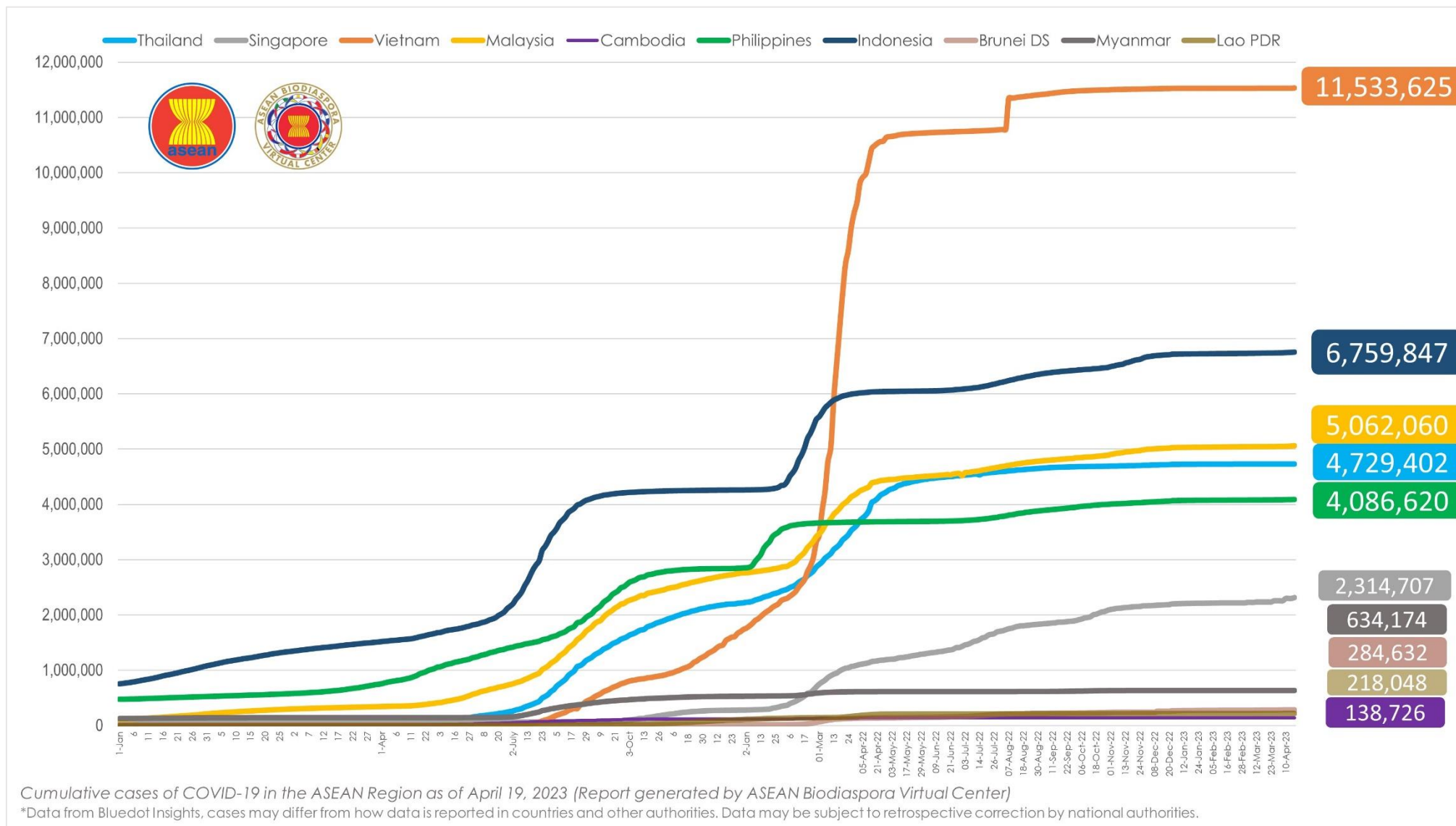
REGION	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS
ASIA	194,386,705	16,539	1,202,941	6
AFRICA	12,816,868	-	258,693	
AMERICAS	194,453,860	-	2,979,402	-
EUROPE	248,386,160	-	2,035,486	-
TOTAL	650,043,593	16,539	6,476,522	6

**Data Reference: [Worldometer](https://www.worldometer.info/)



COVID-19 Epi curve among ASEAN Countries:

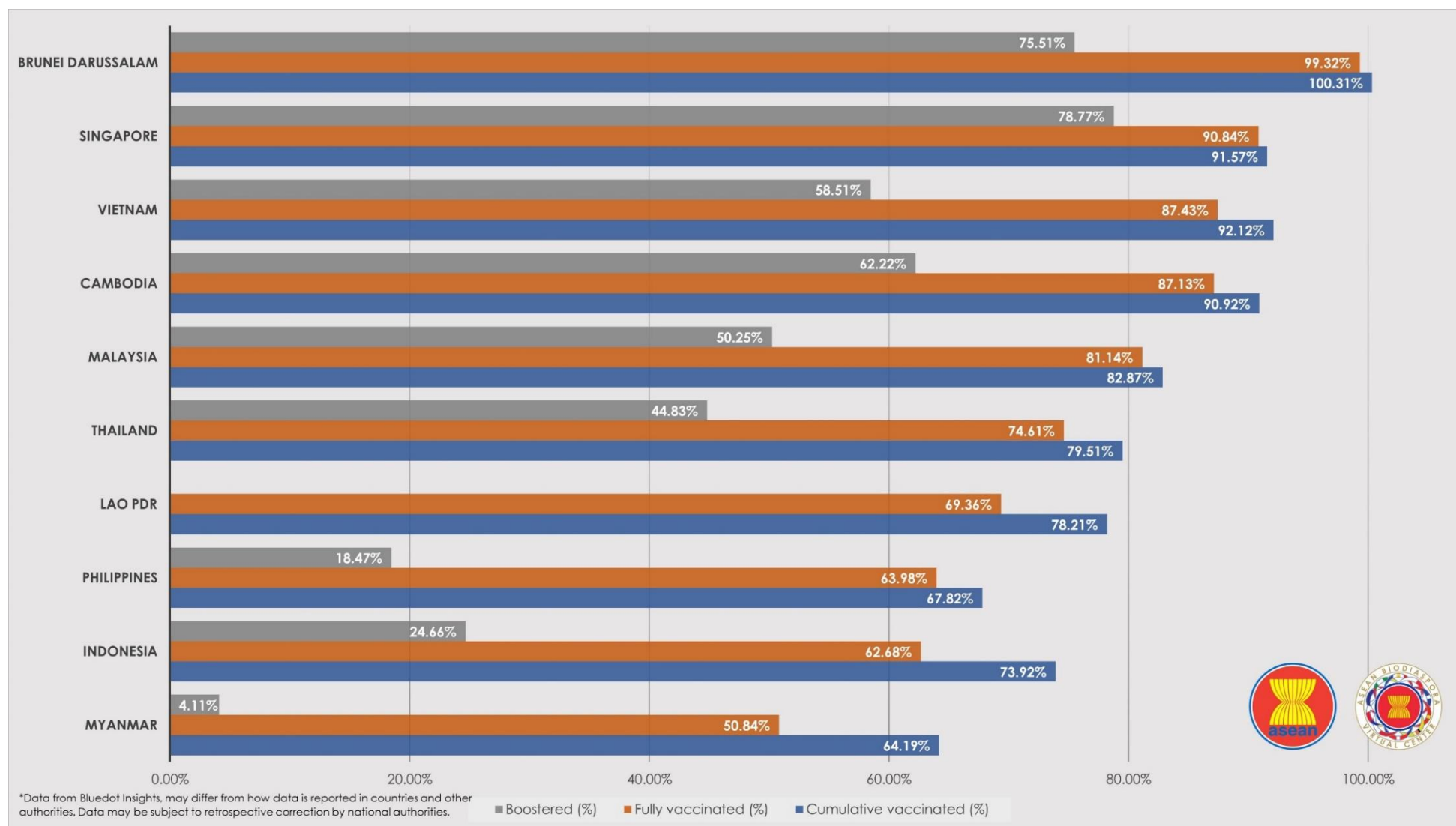
From January 1, 2021 to April 11, 2023





ASEAN COVID-19 Vaccination Status

as of 09 March 2023

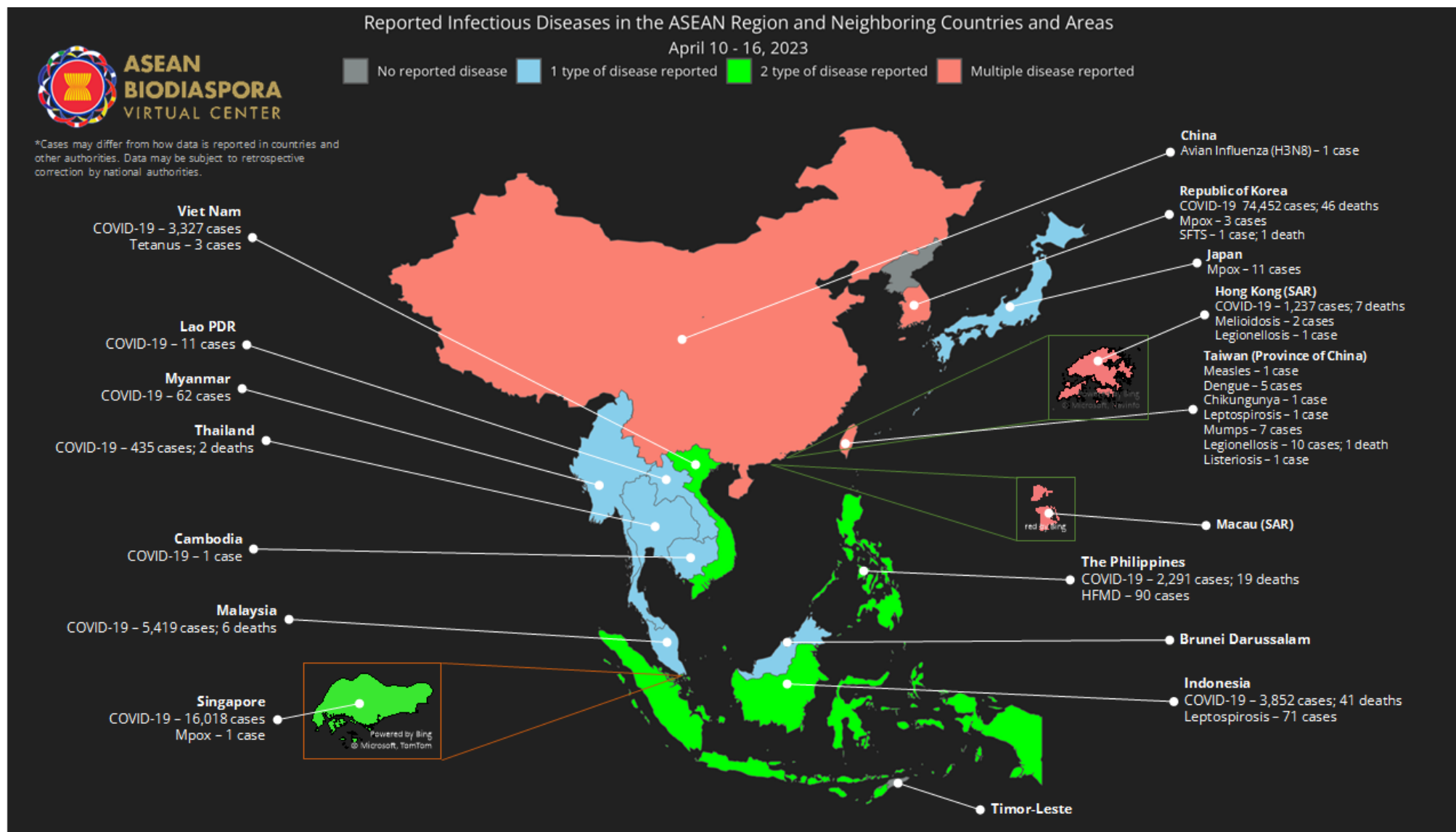


*Last update in COVID-19 vaccination status in ASEAN was on March 9, 2023.



Reported Infectious Diseases in ASEAN Region and Neighboring Countries

From April 10-16, 2023





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

April 10-16, 2023

Infectious Disease Global Updates

Tetanus

- **Australia:** On April 13, 2023, the state of New South Wales (NSW) reported the first death from tetanus. The affected, an 80-year-old woman from Sydney, died on April 1. She reportedly acquired a wound on her leg and the infection was caused by contamination from garden soil. There have been two other cases of tetanus reported in the state so far this year. Two of the cases had no record of tetanus vaccination, while the third case reported the last vaccination more than 30 years ago. Health officials have confirmed that this is the first case of tetanus infection in NSW since 2019 and the first death due to tetanus since 1993. Officials urge the community, particularly older individuals, to ensure they are up-to-date with their vaccinations.

Unknown Illness

- **Kenya:** On 14-April-2023, the Health Ministry issued an official alert about an outbreak of an unknown illness in Kenya. The official statement indicated that the outbreak may have started on 15-March-2023. Since then, there have been 627 affected individuals and four associated deaths. In addition, the affected, are Mukumu Girls and Butere Boys High Schools in Kakemega County in the Western Province of the country. Presently, there are nineteen students in stable condition at seven health facilities across the country. Official information also indicates that symptoms among the affected individuals include fever, abdominal pain or cramps, vomiting, and diarrhea. Comprehensive investigations are currently underway to determine the cause. The Ministry has taken several water, food, and human samples from affected areas for preliminary laboratory investigations. Health officials have indicated that symptoms among the affected resemble enteric pathogens such as enterotoxigenic *E. coli* and salmonella typhi. Laboratory tests for viral hemorrhagic fevers, including Ebola, Marburg, Leptospirosis, and Crimean-Congo hemorrhagic fever, dengue fever, Rift Valley Fever, and the West Nile virus have been negative. However, the Ministry is conducting further analysis of these samples to ascertain any other potential cause of this illness. Health officials ascertain that the underlying cause is likely a waterborne disease and therefore appeal to the public to be vigilant and requests that any experiencing symptoms seek immediate medical treatment at the nearest health facility. The government has also closed the two affected schools as investigations continue.

Infectious Disease in ASEAN region and Neighboring Countries Updates

Tetanus

- **Vietnam:** The Hanoi Center for Disease Control on April 10 said that the city has just recorded two male patients aged 50 and 63 years old with tetanus.¹ Thus, from the beginning of 2023 until now, the city has had 5 cases of tetanus, of which 1 person died.¹ Tetanus is caused by a very potent toxin produced by the anaerobic bacterium, *Clostridium tetani*.¹ The spores of this organism are very resistant to environmental factors and are found widely distributed in soil and in the intestines and feces of horses, sheep, cattle, dogs, cats, rats, guinea pigs, and chickens.¹ Manure-treated soil may contain large numbers of spores.¹ In agricultural areas, a significant number of human adults may harbor the organism.¹ [\[Full article\]](#)



Leptospirosis

- Indonesia:** From 1 January 2023 to 12 April 2023, there were 33 cases of leptospirosis with a death rate of eight people.³ Leptospirosis is a disease caused by the *Leptospira interrogans* bacteria which is spread through the urine or blood of animals infected with the bacteria.³ Head of the Kulon Progo Health Service Sri Budi Utami said cases of leptospirosis this year have jumped sharply because in 2022 there were only 21 cases with one death.³ "To respond to this, the Kulon Progo Regency Government issued a circular letter (SE) from the Secretary of Kulon Progo regarding the management of leptospirosis for the ranks of the Health Service," said Sri Budi Utami, Sunday (16/4).³ He said the Health Office is also working with the Kulon Progo Agriculture and Food Service to provide education to farmers who are among the vulnerable groups to this disease.³ [\[Full article\]](#)

Hand, Foot, and Mouth Disease (HFMD)

- Philippines:** Cases of hand, foot and mouth disease (HFMD) in Zamboanga City have been increasing.² Dr. Dulce Amor Miravite, city health office chief, said 90 cases were recorded from January to April 15.² Miravite said five of the 15 barangays that reported infections logged an average of 10 cases or higher.² "The cases are alarming because... the number of cases increased and since early this year we had reported cases," Miravite said, adding that more cases may be unreported.² Miravite said health centers in 98 barangays were tasked to locate and provide medical intervention to infected individuals to prevent the spread of the disease.² Health experts said HFMD is common among children aged five and below, although anyone can get infected.² HFMD is contagious, but the illness is not serious.² [\[Full article\]](#)

Melioidosis

- Hongkong:** The Centre for Health Protection (CHP) of the Department of Health (DH) today (April 14) said that two new confirmed melioidosis infection cases had been recorded in the past week (April 8 to 14).⁴ The first case involves a 66-year-old female who lives in Chai Wan. She was found to have decreased conscious level at home on April 10 and was sent to the Accident and Emergency Department of Pamela Youde Nethersole Eastern Hospital, where she was admitted to the Intensive Care Unit for treatment on the same day.⁴ Her blood sample was confirmed positive for *Burkholderia pseudomallei* upon testing.⁴ She was diagnosed with diabetes during hospitalisation and is now in a critical condition.⁴ The second case involves a 74-year-old male who has Parkinson's disease and lives in Sham Shui Po.⁴ He had developed a cough with sputum since mid-February.⁴ He attended the Caritas Medical Centre (CMC) for follow-up medical treatment on April 4 and saved a sputum sample, which was confirmed positive for *Burkholderia pseudomallei* on April 12 upon testing.⁴ He was admitted to the CMC yesterday (April 13) for treatment and is now in a stable condition.⁴ Epidemiological investigations of the cases are ongoing.⁴ A total of six melioidosis infection cases have been recorded in Hong Kong so far this year.⁴ In 2022, 46 melioidosis infection cases were recorded, among which 30 cases living in Sham Shui Po were recorded since August that year.⁴ Melioidosis is a statutorily notifiable infectious disease under Schedule 1 to the Prevention and Control of Disease Ordinance (Cap. 599).⁴ The CHP will work closely with the Hospital Authority to enhance surveillance against melioidosis cases.⁴ Melioidosis is an endemic disease in Hong Kong and melioidosis cases have been recorded in Hong Kong each year.⁴ According to literature, infection cases are more common after typhoons or storms.⁴ [\[Full article\]](#)



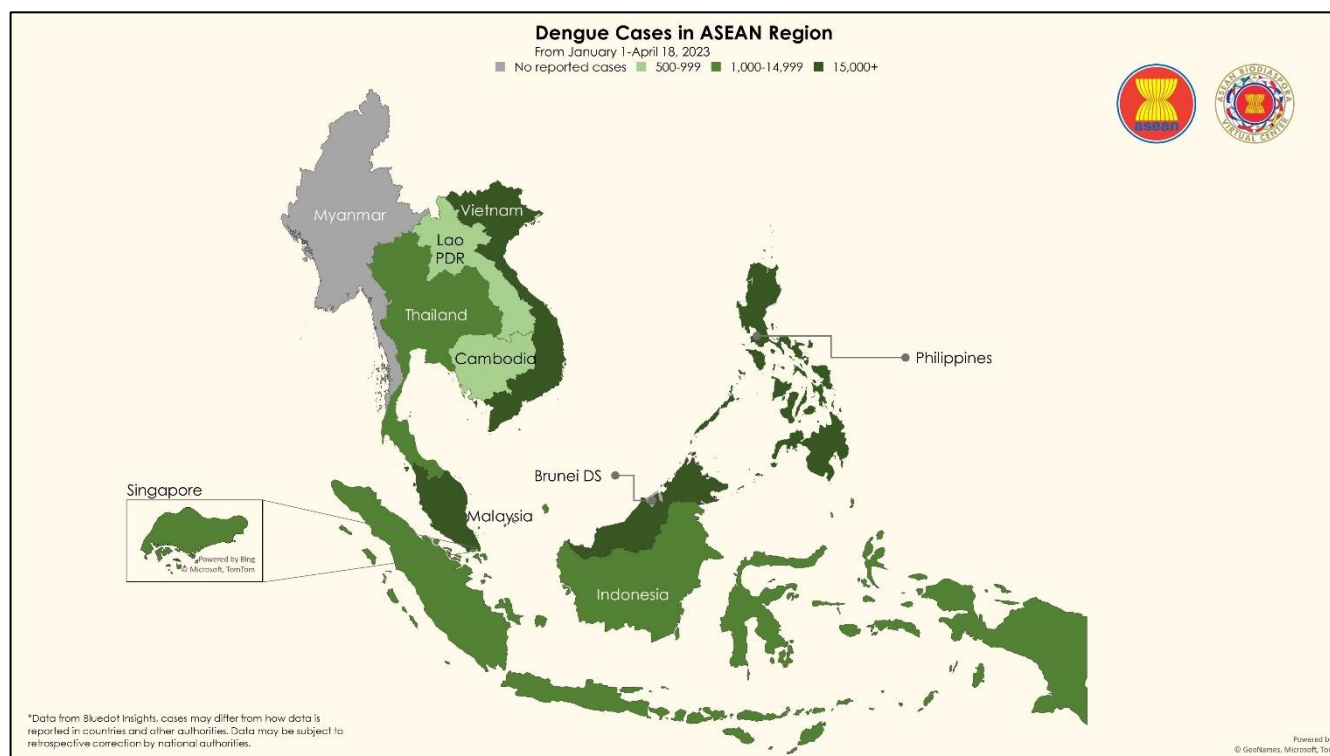
Legionnaire's Disease

- **Hongkong:** The Centre for Health Protection (CHP) of the Department of Health is today (April 17) investigating a case of Legionnaires' disease (LD) in Hong Kong Sanatorium & Hospital (HKSH).⁵ The male patient, aged 74 with underlying illnesses, was admitted to HKSH on March 22.⁵ He developed fever, a drop in blood pressure and oxygen desaturation on April 12.⁵ His clinical diagnosis was septic shock and pneumonia.⁵ He is currently in stable condition.⁵ His sputum specimen tested positive for Legionella species upon laboratory testing.⁵ Initial enquiries revealed that the patient had no travel history during the incubation period.⁵ "Epidemiological investigations with HKSH are ongoing to identify potential sources of infection, high-risk exposure and clusters, if any.⁵ Relevant water samples and environmental swabs will be collected from potential sources for laboratory testing," a spokesman for the CHP said.⁵ Tracing of contacts including staff and in-patients in the relevant ward is ongoing and those identified will be put under medical surveillance.⁵ The CHP has provided health advice against LD to staff and in-patients, including those with weakened immunity who should use sterile or boiled water for drinking, tooth brushing and mouth rinsing.⁵ The water supply system of the subject floor will be disinfected urgently.⁵ An investigation is ongoing.⁵ [\[Full article\]](#)



Dengue Cases in ASEAN Region

From January 1 to April 18, 2023



Dengue cases in ASEAN region

Country	Dengue Cases	New Cases since the previous report	Deaths	Case Fatality Rate (CFR)
Brunei Darussalam	-	-	-	-
Cambodia	750	0	2	0.27%
Indonesia	3,857	0	24	0.62%
Lao PDR	670	0	0	0.00%
Malaysia	29,143	0	18	0.06%
Myanmar	-	-	-	-
Philippines	27,670	0	55	0.20%
Singapore	1,974	0	0	0.00%
Thailand	3,855	0	1	0.03%
Vietnam	20,537	0	0	0.00%
Total	88,456	0	100	0.11%

*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 **NO** new dengue cases since previous report. The region reported **88,456** total cases and **100** total deaths in 2023 with **0.11%** CFR.



Measles Cases in ASEAN Region

From January 1 to April 18, 2023



Measles cases in ASEAN region

Country	Measles Cases	New Cases since the previous report	Deaths	Case Fatality Rate (CFR)
Brunei Darussalam	-	-	-	-
Cambodia	-	-	-	-
Indonesia	947	0	17	1.80%
Lao PDR	-	-	-	-
Malaysia	-	-	-	-
Myanmar	-	-	-	-
Philippines	208	0	-	0.00%
Singapore	3	0	-	0.00%
Thailand	-	-	-	-
Vietnam	-	-	-	-
Total	1,158	0	17	1.47%

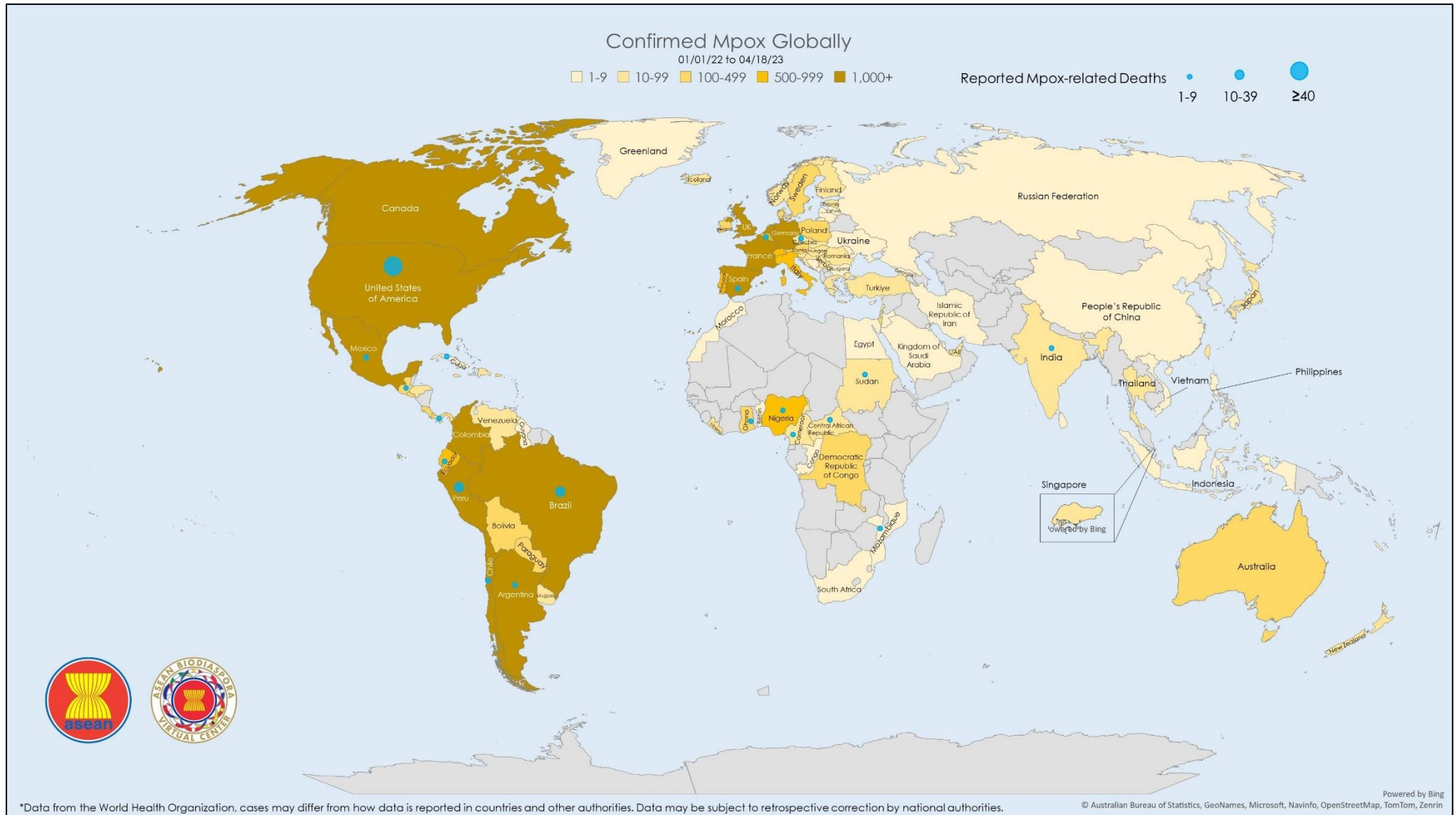
*Data from Bluedot Insights, cases may differ from how data is reported in countries and other authorities. Data may be subject to retrospective correction by national authorities.

- ASEAN region reported **NO** new measles cases in since the previous report. The region reported **1,158** total cases and **17** total deaths in 2023 with **1.47%** CFR.



Mpox (Monkeypox) Cases Reported Globally

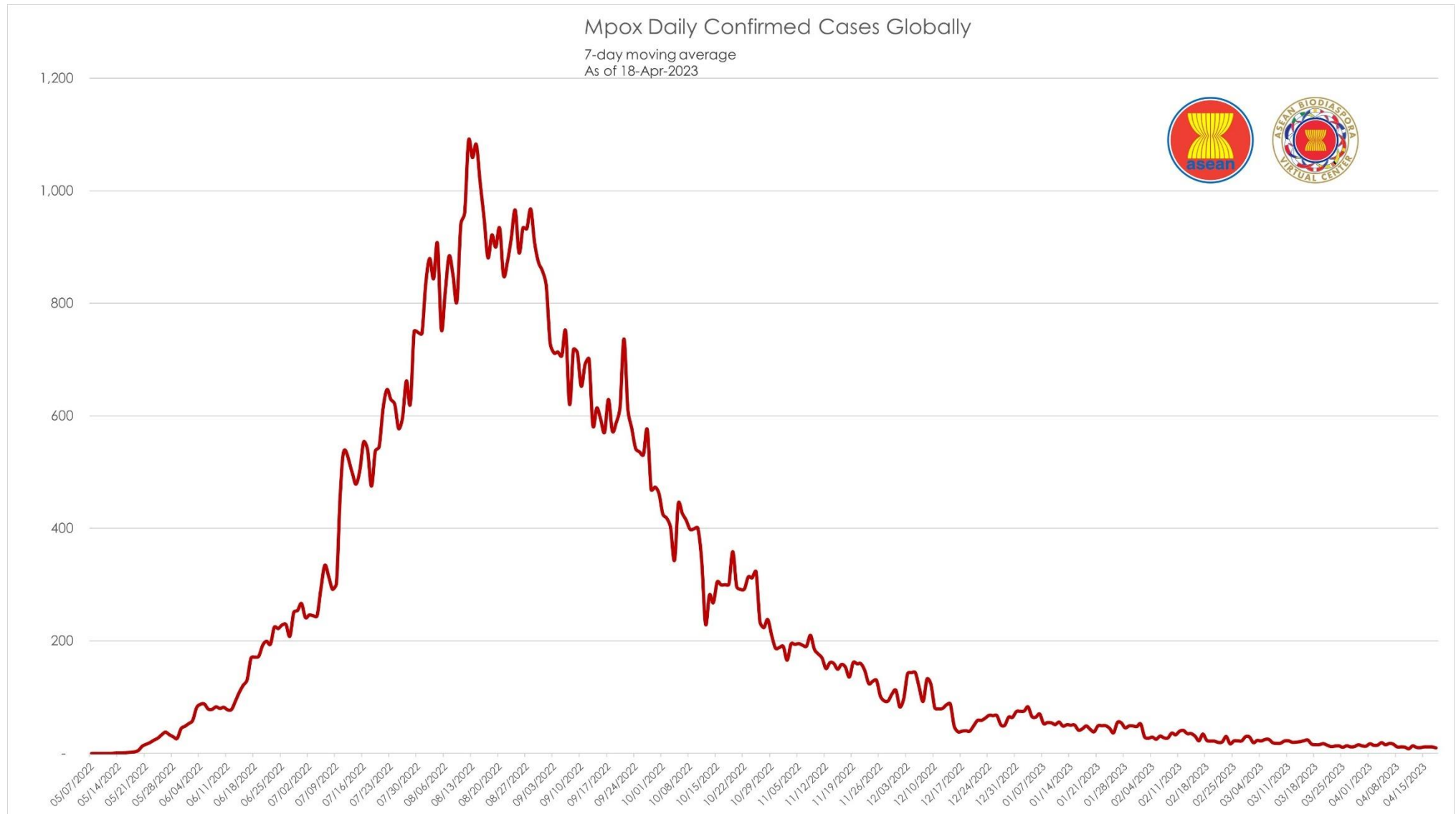
as of April 18, 2023





Mpox Daily Trend Globally

as of April 18, 2023





Mpox: Highlights and Situation Overview

- As of 18 April 2023 (1PM, GMT+7), worldwide, there were **87,000** confirmed cases, including **120** deaths. Globally, Case Fatality Rate (CFR) was **0.14%**.
- 48 confirmed cases** in the ASEAN region, with CFR of **0%**.
- 86,952 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	22	-	-	0.00%
Thailand	19	-	-	0.00%
Vietnam	2	-	-	0.00%
ASEAN Total	48	-	-	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	4.55%
Japan	96	1	-	0.00%
New Caledonia	1	-	-	0.00%
New Zealand	41	-	-	0.00%
People's Republic of China*	25	1	-	0.00%
Republic of Korea	6	1	-	0.00%
Sri Lanka	2	-	-	0.00%
Asia-Pacific Total	337	3	1	0.30%

*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	30,140	49	44	0.15%
Brazil	10,900	3	15	0.14%
Spain	7,549	-	3	0.04%
France	4,144	-	-	0.00%
Colombia	4,090	1	-	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	1,497	-	19	1.27%
AMERICAS	59,194	67	94	0.16%
ASEAN	48	-	-	0.00%
ASIA PACIFIC	337	3	1	0.30%
EUROPE	25,603	-	6	0.02%
MIDDLE EAST	321	-	-	0.00%
TOTAL	87,000	70	120	0.14%

Global Update

- Japan:** The Ministry of Health, Labor and Welfare announced on the 11th that 10 new cases of infection with "monkeypox", an infectious disease similar to smallpox, were confirmed in Japan.⁶ The total number of cases has reached 106, and the number has increased rapidly since the beginning of this year.⁶ The Ministry of Health, Labor and Welfare is urging people to consult a medical institution if they have symptoms that suggest infection.⁶ According to the Ministry of Health, Labor and Welfare, the first infected person was confirmed in Japan on July 25, 2022.⁶ In 2022, eight people were infected with the virus, but this year the number has risen to 98.⁶ This is thought to be due to the increase in person-to-person contact.⁶ All of the infected people are male, and more than 90% of them have no history of traveling abroad.⁶ By age group, 44 people were in their 40s, followed by 36 people in their 30s and 20 people in their 20s.⁶ Initially, the infection was centered in the Kanto region such as Tokyo, but since March, the infection has spread to western Japan such as Osaka Prefecture.⁶ The Ministry of Health, Labor and Welfare plans to change the name to "Empox" in the near future.⁶ Masahiro Ishigane, an infectious disease specialist at the National Center for Global Health and Medicine, said, "Internationally, there are many reports of infection through sexual contact between men.⁶ At the time of contact, there are no symptoms or abnormal physical conditions. It's important for us to check with each other," he said.⁶ [\[Full article\]](#)



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