



This Morbidity and Mortality Weekly Report of Infectious and Emerging Diseases aims to provide the current situation in the ASEAN Region. The report uses information from official sources and publicly available sources, and is published every week on Wednesday. For feedback and/or suggestions, please write to support@biodiaspora.org

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Weekly Issue



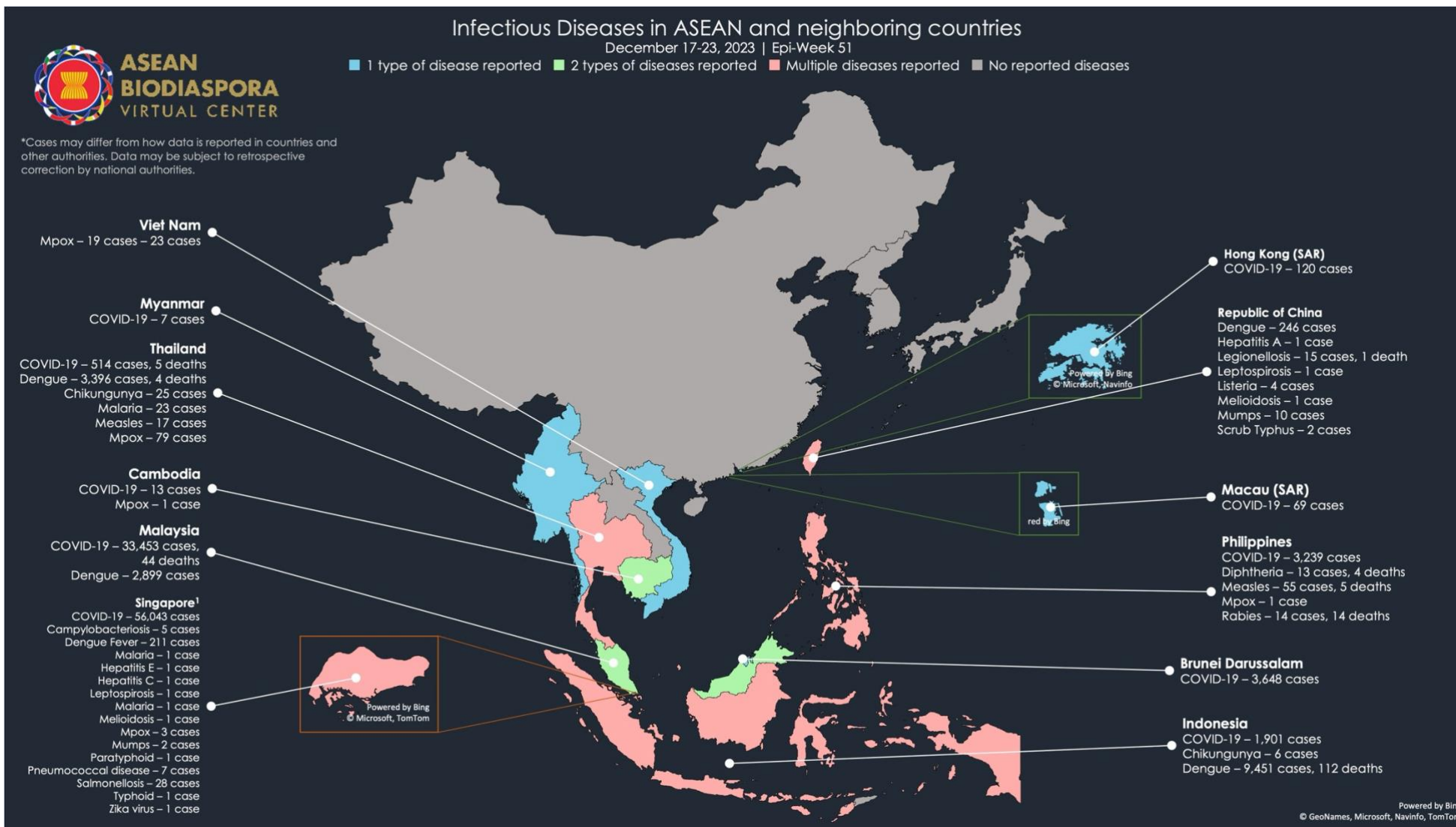
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Reported Infectious Diseases in the ASEAN Region and Neighboring Countries

Epidemiological Week 51 | December 17 – 23, 2023



The data was taken from the BlueDot Developer Portal, accessed December 23, 2023, <https://developer-portal.bluedot.global/>.

1. Ministry of Health Singapore, "Weekly Infectious Diseases Bulletin," Ministry of Health, <https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-diseases-bulletin>.



Key Findings

- COVID-19 cases and deaths has increased by **98,818** and **49**, respectively, since the last report in the ASEAN Region. [Go to page 3 for details](#)
- Per December 2023, JN.1 and JN.1.1 which is descendand lineage of BA.2.86 have been found in several ASEAN Member States (Indonesia, Malaysia, and Singapore). [Go to page 5 for details.](#)
- There are **107** mpox new cases in the ASEAN Region since last report. [Go to page 7 for details](#)
- **14** new rabies cases and **14** new deaths has been found since last report for zoonosis in the ASEAN Region. [Go to page 11 for details.](#)
- Dengue cases and deaths has increased by **8,610** and **21** since the last report. Meanwhile, **24** new malaria cases and **31** new chikungunya cases has been found since the last report for vector-borne diseases in the ASEAN Region. [Go to page 13 for details.](#)
- There are **13** new diphtheria cases and **72** new measles cases since last report for vaccine-preventable diseases in the ASEAN Region. [Go to page 18 for details.](#)

Infectious Diseases in the ASEAN Region in 2023 – Summary Table

Epidemiological Week 51 | From January 1 to December 23, 2023

Infectious Diseases	COVID-19			Mpox			Rabies			Dengue		
	Cum. Cases	Cum. Deaths	CFR	Cum. Cases	Cum. Deaths	CFR	Cum. Cases	Cum. Deaths	CFR	Cum. Cases	Cum. Deaths	CFR
Brunei Darussalam	59,795	77	0.14%	-	-	-	-	-	-	-	-	-
Cambodia	553	0	0.00%	1	0	0.00%	-	-	-	27,908	39	0.14%
Indonesia	105,235	1,309	1.27%	68	0	0.00%	117	117	100.00%	89,900	690	0.77%
Lao PDR	1,317	87	6.61%	1	0	0.00%	-	-	-	30,998	20	0.06%
Malaysia	161,412	389	0.30%	9	0	0.00%	10	10	100.00%	121,069	84	0.07%
Myanmar	7,818	5	0.06%	-	-	-	-	-	-	6,685	30	0.45%
Philippines	133,188	1,398	1.08%	2	0	0.00%	360	360	100.00%	189,185	637	0.34%
Singapore	640,441	222	0.04%	31	0	0.00%	-	-	-	9,621	-	0.00%
Thailand	42,318	837	2.00%	644	1	0.18%	6	6	100.00%	150,808	165	0.11%
Vietnam	100,747	20	0.02%	113	2	2.22%	64	64	100.00%	149,557	36	0.02%
ASEAN Region	1,252,824	4,344	0.38%	869	3	0.40%	557	557	100.00%	775,731	1,701	0.22%

Infectious Diseases	Malaria			Chikungunya			Measles			Diphtheria		
	Cum. Cases	Cum. Deaths	CFR	Cum. Cases	Cum. Deaths	CFR	Cum. Cases	Cum. Deaths	CFR	Cum. Cases	Cum. Deaths	CFR
Brunei Darussalam	-	-	-	-	-	-	-	-	-	-	-	-
Cambodia	-	-	-	-	-	-	-	-	-	-	-	-
Indonesia	1,899	0	0.00%	468	0	0.00%	9,120	11	0.12%	800	45	5.62%
Lao PDR	-	-	-	-	-	-	-	-	-	-	-	-
Malaysia	1,116	0	0.00%	185	0	0.00%	-	-	-	-	-	-
Myanmar	4,510	0	0.00%	-	-	-	-	-	-	-	-	-
Philippines	31	0	0.00%	2,850	0	0.00%	2,497	16	0.64%	191	49	25.70%
Singapore	22	0	0.00%	13	0	0.00%	6	0	0.00%	0	0	0.00%
Thailand	4,949	4	0.08%	1,346	0	0.00%	337	0	0.00%	5	0	0.00%
Vietnam	349	0	0.00%	-	-	-	-	-	-	41	3	7.32%
ASEAN Region	12,822	4	0.03%	4,862	0	0.00%	11,960	27	0.23%	1,037	97	9.08%



EMERGING DISEASES

COVID-19: Highlights and Situation Overview

- As of 23 December 2023 (5PM, GMT+7), there were **700,299,982** confirmed cases **worldwide**, including **6,960,174 deaths**. Globally, Case Fatality Rate (CFR) was **0.99%**.
- **36,662,927 total confirmed cases** of COVID-19 have been reported in the **ASEAN Region**.
- The CFR in the **ASEAN Region** was **1.01%**.

COVID-19 cases in the ASEAN region

ASEAN MEMBER STATES	FIRST CONFIRMED CASES	LATEST REPORT ON CONFIRMED	CUMULATIVE CASES	CUMULATIVE CASES IN 2023	NEW CASES SINCE LAST REPORT	CUMULATIVE DEATHS	NEW DEATHS SINCE LAST REPORT	CUMULATIVE CASES/ 100,000
Brunei Darussalam	10-Mar-20	06-Dec-23	321,235	59,795	3,648	225	0	72,118
Cambodia	27-Jan-20	16-Dec-23	138,991	553	13	3,056	0	810
Indonesia	02-Mar-20	16-Dec-23	6,816,938	105,235	1,901	161,921	0	2,442
Lao PDR	24-Mar-20	01-Dec-23	218,903	1,317	0	758	0	2,926
Malaysia	25-Jan-20	01-Dec-23	5,180,812	161,412	33,453	37,246	44	15,614
Myanmar	23-Mar-20	28-Nov-23	641,393	7,818	7	19,495	0	1,161
Philippines	30-Jan-20	16-Dec-23	4,132,200	133,188	3,239	66,795	0	3,673
Singapore	23-Jan-20	03-Dec-23	2,827,115	640,441	56,043	1,933	0	47,566
Thailand	13-Jan-20	04-Dec-23	4,761,226	42,318	514	34,506	5	6,794
Vietnam	23-Jan-20	31-Oct-23	11,624,114	100,747	0	43,206	0	11,747
ASEAN REGION			36,662,927	1,252,824	98,818	369,141	49	5,391

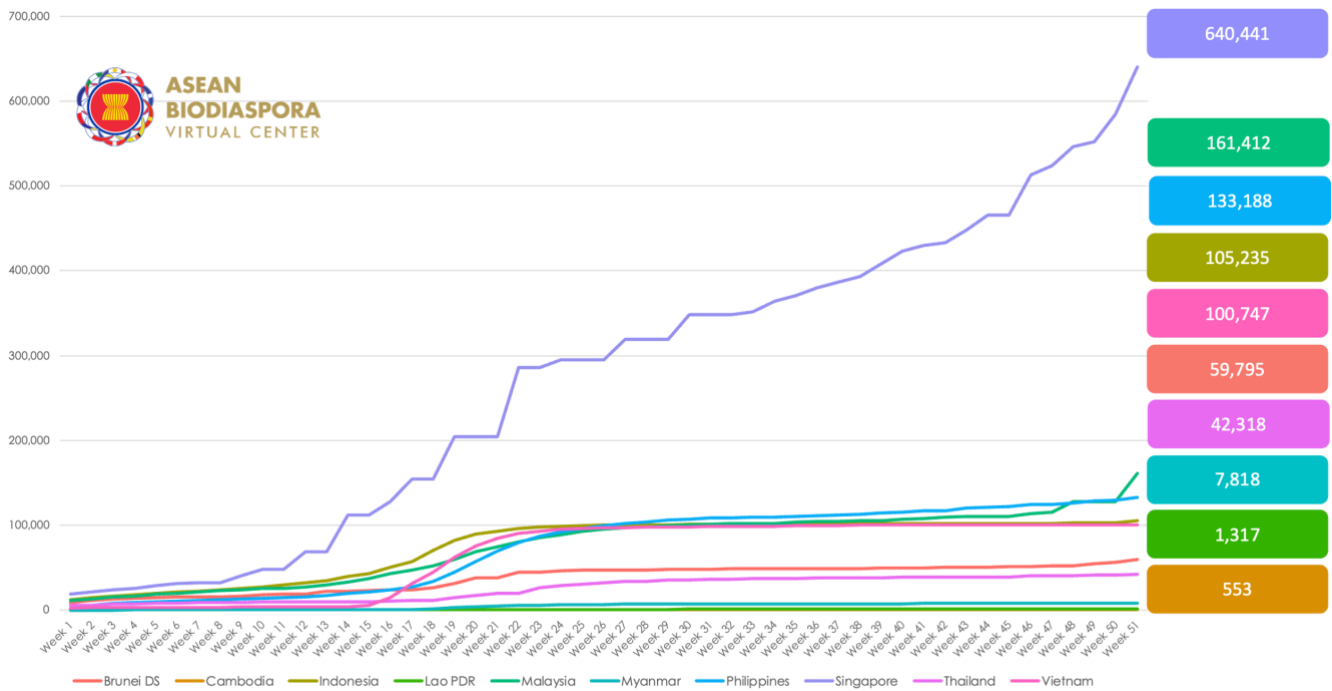
REGIONS	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS
AFRICA	12,856,833	1,456	258,873	15
AMERICAS	199,389,696	1,235,226	3,027,650	0
ASEAN	36,662,927	98,818	369,141	49
ASIA & OCEANIA	199,114,229	25,205	1,214,955	210
EUROPE	252,276,297	200,058	2,089,555	1,259
GLOBAL TOTAL	700,299,982	1,560,763	6,960,174	1,533

**Data Reference: [Worldometer](#), [WHO](#)



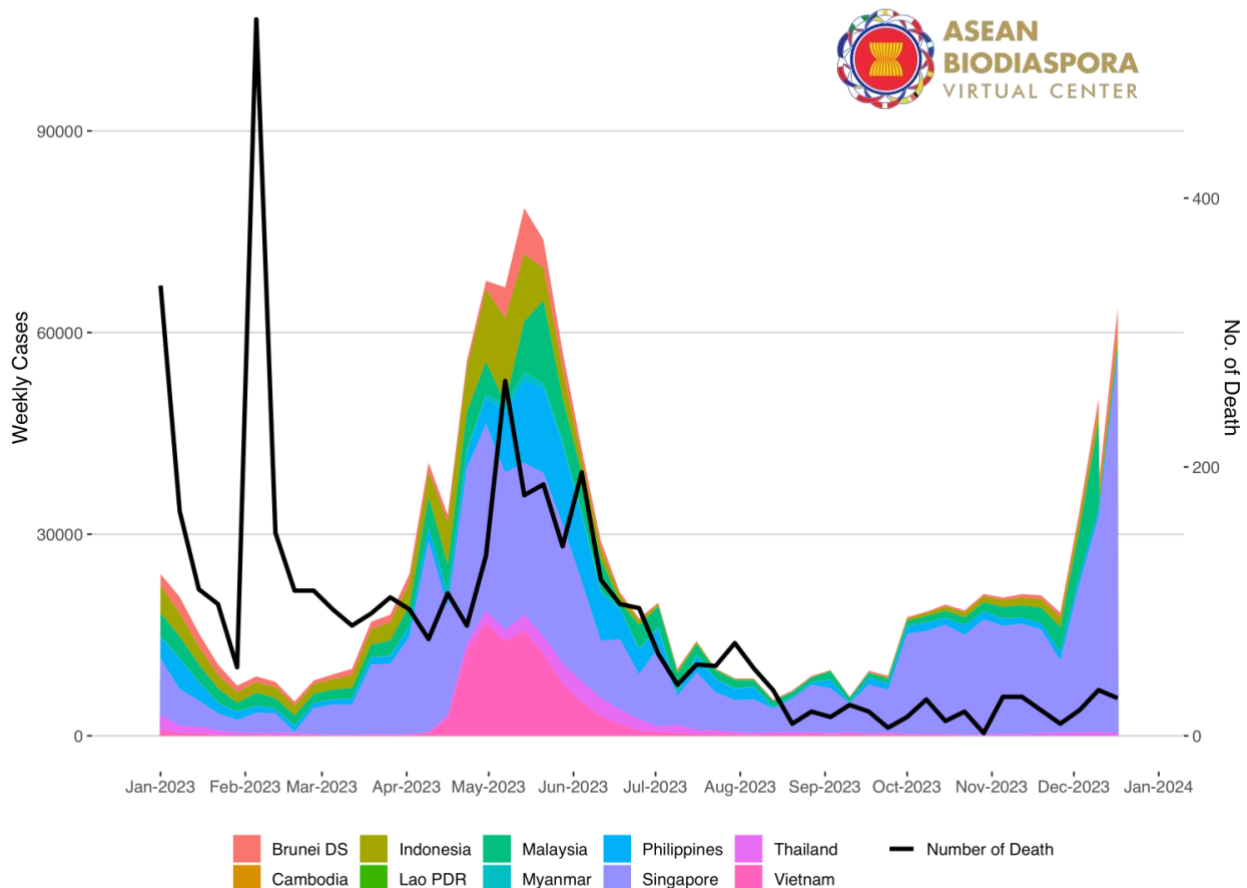
COVID-19 Epidemic Curve Among the ASEAN Member States

From January 1 to December 23, 2023



ASEAN Weekly COVID-19 New Cases and Deaths

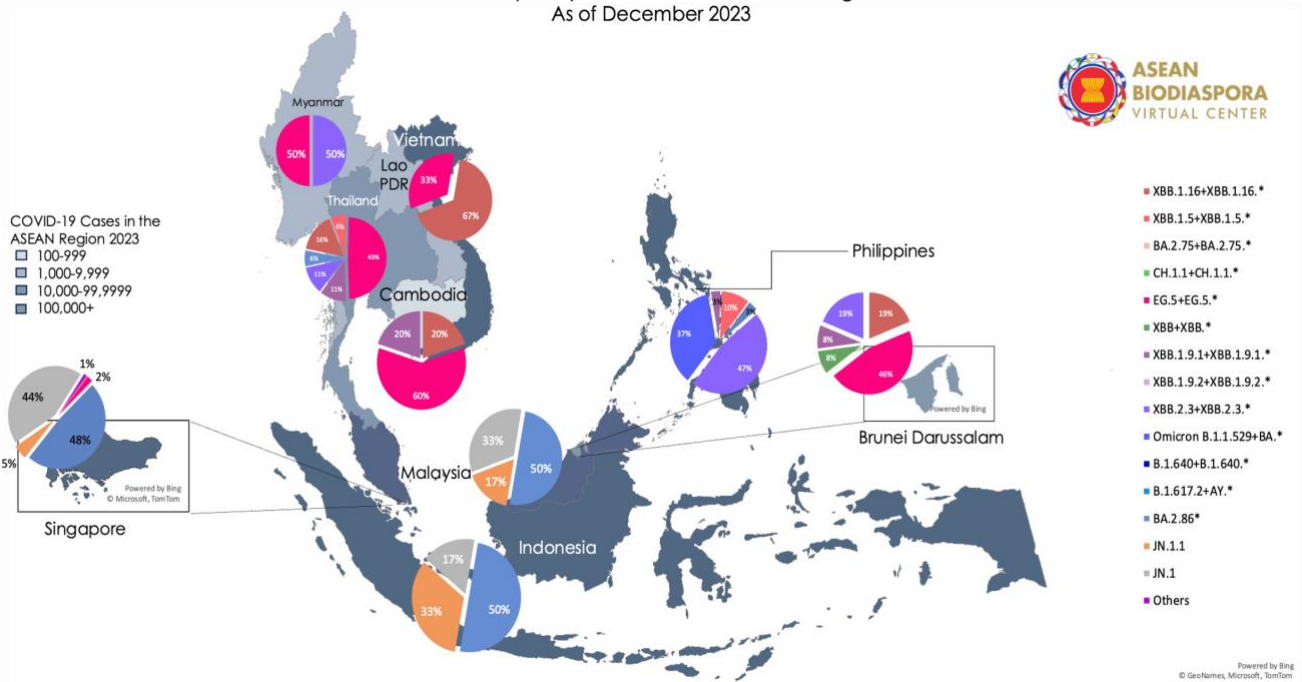
From January 1, 2023 to December 23, 2023



**Data References: [Singapore Government](#), [Worldometer](#), and the [WHO](#)

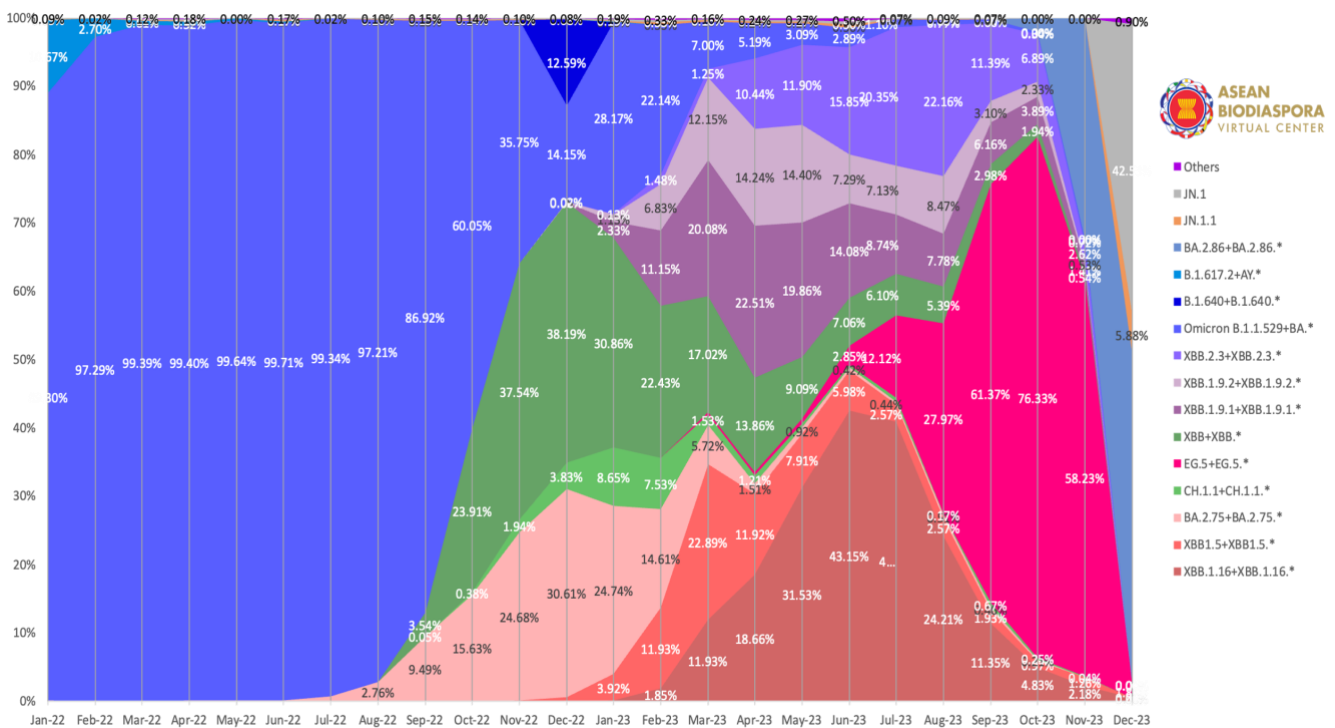
COVID-19 Variants Frequencies Among the ASEAN Member States In December 2023

COVID-19 Cases and Relative Frequency of COVID-19 Variants among The ASEAN Member States
 As of December 2023



GISAID. "hCoV-19 Variants Dashboard," accessed December 26, 2023, <https://gisaid.org/hcov-19-variants-dashboard/>.

COVID-19 Variants Frequencies in the ASEAN Region From January to December 2023



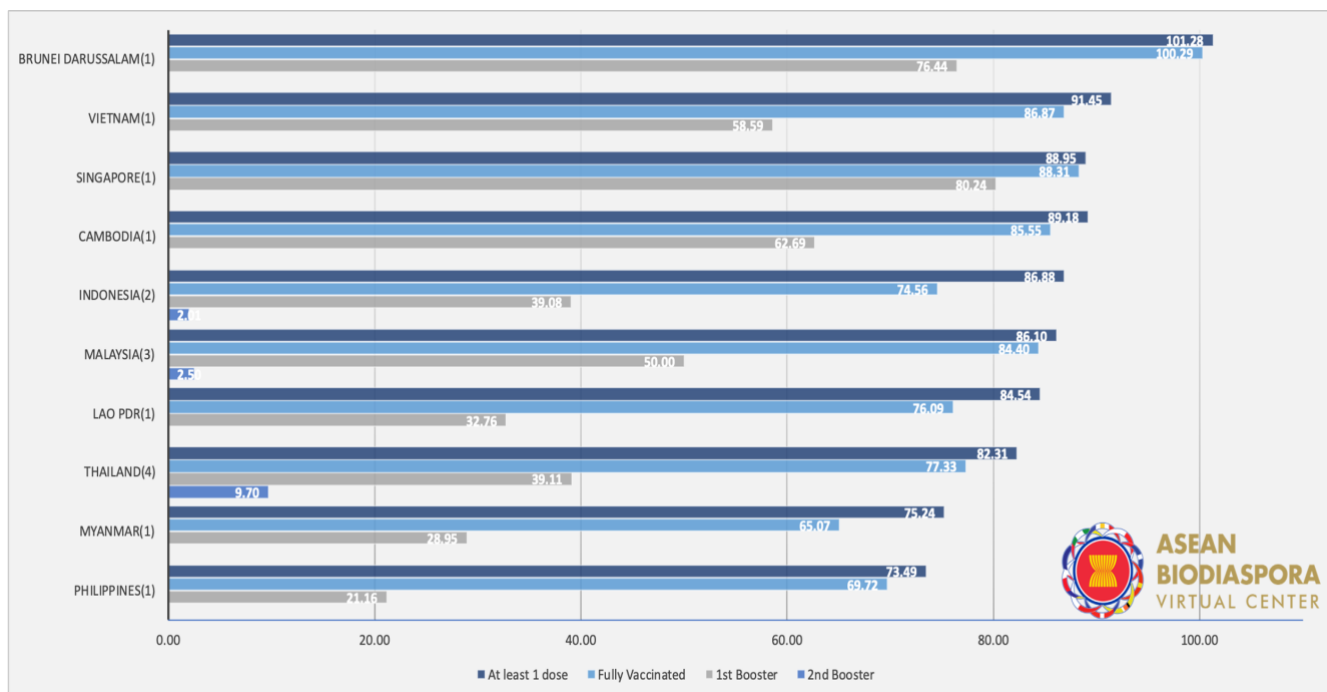
GISAID. "hCoV-19 Variants Dashboard," accessed December 26, 2023, <https://gisaid.org/hcov-19-variants-dashboard/>.



ASEAN COVID-19 Vaccination Status

As of 23 December 2023

ASEAN MEMBER STATES	CUMULATIVE WITH AT LEAST ONE DOSE	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTED	FULLY VACCINATED PER 100
Brunei Darussalam	451,149	446,714	340,466	100.29
Cambodia	15,311,319	14,688,007	10,762,713	85.55
Indonesia	203,878,845	174,968,545	70,954,701	74.56
Lao PDR	6,324,678	5,691,962	2,451,034	76.09
Malaysia	28,137,474	27,550,584	16,347,169	84.40
Myanmar	41,551,927	35,937,796	15,987,381	65.07
Philippines	82,684,774	78,443,972	23,811,248	69.72
Singapore	5,287,005	5,248,693	4,769,158	88.31
Thailand	57,678,376	54,190,997	27,409,734	77.33
Vietnam	90,497,674	85,961,564	57,975,220	86.87
Total	531,803,221	483,128,834	230,808,824	71.04



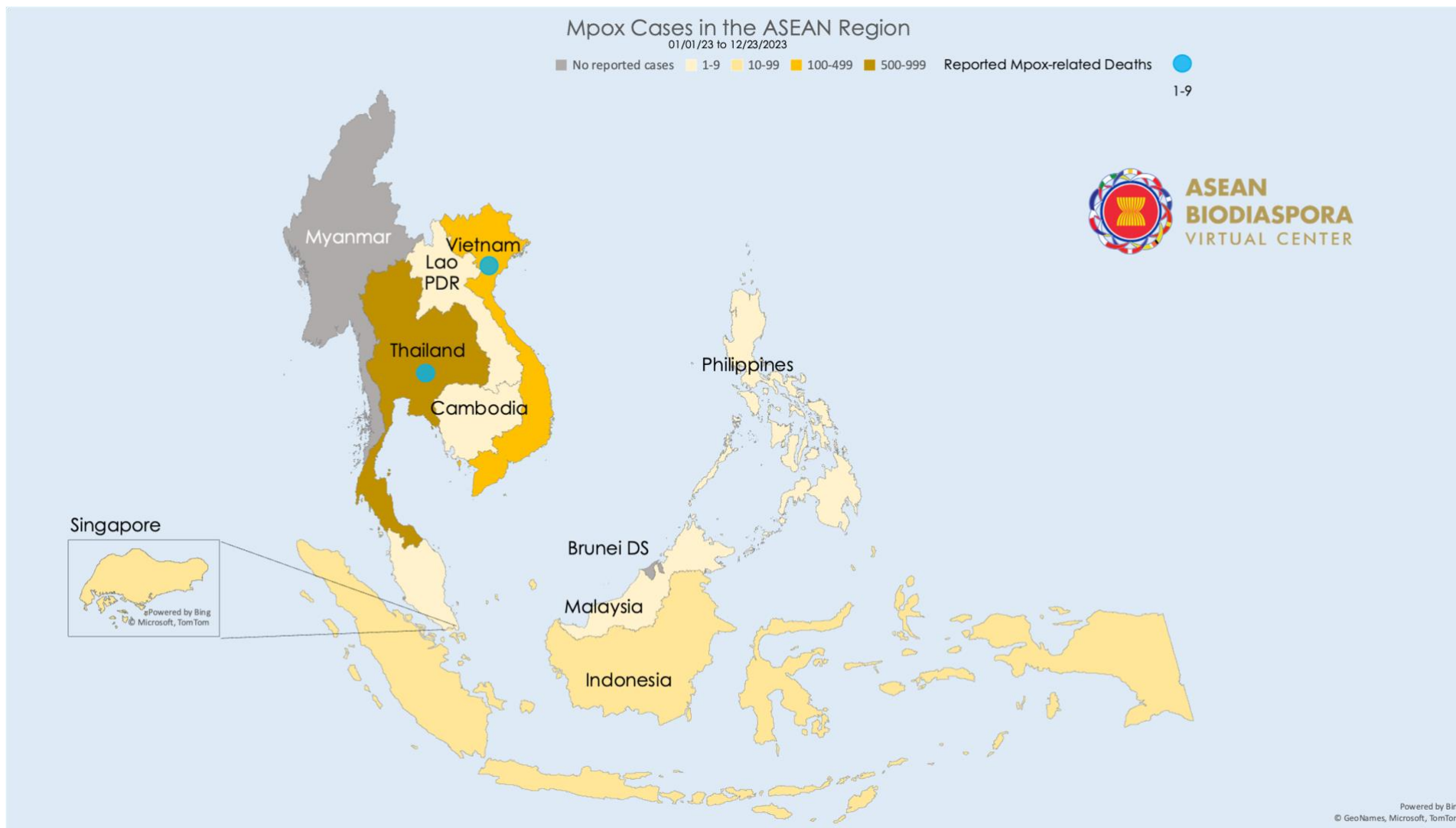
1. World Health Organization, Coronavirus (Covid-19) Data, accessed December 26, 2023 <https://covid19.who.int/data>
 2. Ministry of Health Indonesia, "Vaccine Dashboard, December 26, 2023, <https://vaksin.kemkes.go.id/#/vaccines>
 3. Ministry of Health Malaysia, Covid-19 vaccination, accessed December 26, 2023, <https://data.moh.gov.my/dashboard/covid-vaccination>
 4. Ministry of Public Health Thailand, Covid-19 Vaccination Infographic, accessed December 26, 2023, <https://dashboard-vaccine.moph.go.th/>





Mpox Cases Reported in the ASEAN Region

January 1 – December 23, 2023



1. Ministry of Health Republic of Indonesia
2. EBS BlueDot (Accessed on December 26, 2023)
3. Ministry of Health Singapore, accessed December 26, 2023. <https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-diseases-bulletin>



Mpox: Highlights and Situation Overview

- From 01 January to 23 December 2023, **9,226** confirmed cases worldwide in 2023, including **169** deaths. Globally, the CFR was **1.83%**.
- **869 confirmed cases** including **three deaths** in the **ASEAN** region in 2023, with a CFR of **0.35%**.
- **8,357 confirmed cases** of mpox have been reported in **other regions** in 2023 (other than the **ASEAN** region):

Mpox cases in the ASEAN region (Jan. 1 to Dec. 23, 2023)

ASEAN Member States	Cumulative Cases 2023	New Cases Since Previous Report	Cumulative Deaths 2023	CFR
Cambodia ²	1	1	0	0.00%
Indonesia ¹	68	0	0	0.00%
Lao PDR ²	1	0	0	0.00%
Malaysia ²	9	0	0	0.00%
Philippines ²	2	1	0	0.00%
Singapore ³	31	3	0	0.00%
Thailand ²	644	79	1	0.16%
Vietnam ²	113	23	2	1.77%
ASEAN Total	869	107	3	0.35%

1. Ministry of Health Republic of Indonesia
2. EBS Bluedot (Accessed on December 26, 2023)
3. Ministry of Health Singapore, accessed December 26, 2023, <https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-diseases-bulletin>
4. 2022-23 Mpox Outbreak: Global Trends. Geneva: World Health Organization, 2023. Available online: https://worldhealthorg.shinyapps.io/mpx_global/ (last cited: December 26, 2023).

Top 5 countries with the most mpox cases globally (Jan. 1 to Dec. 23, 2023)

Country	Cumulative Cases 2023	New Cases Since Previous Report	Cumulative Deaths 2023	CFR
People's Republic of China ¹	1,614	0	1	0.06%
United States of America ²	1,643	176	35	2.13%
Democratic Republic of Congo ²	754	144	2	0.27%
Thailand ²	644	79	1	0.16%
Brazil ²	456	0	2	0.44%

1. 2022-23 Mpox Outbreak: Global Trends. Geneva: World Health Organization, 2023. Available online: https://worldhealthorg.shinyapps.io/mpx_global/ (last cited: December 26, 2023).
2. Edouard Mathieu, Fiona Spooner, Saloni Dattani, Hannah Ritchie and Max Roser (2022) - "Mpox (monkeypox)". Published online at OurWorldInData.org. Retrieved from: <https://ourworldindata.org/monkeypox> [Online Resource]

Mpox cases per region

REGIONS	CUMULATIVE CASES 2023	NEW CASES SINCE THE PREVIOUS REPORT	CUMULATIVE DEATHS 2023	CFR
AFRICA ⁵	883	118	23	0.92%
AMERICAS ⁵	3,744	183	136	2.36%
ASEAN	869	107	2	0.40%
ASIA & OCEANIA ⁵	2,781	437	1	0.09%
EUROPE ⁵	949	259	7	0.29%
TOTAL	9,226	1,104	169	1.83%



Event Updates for Emerging Diseases

Epidemiological Week 51 | December 17 – 23, 2023

Global Updates for Emerging Diseases

COVID-19

- **India's** active cases of COVID-19 increased to 2,997 on December 22, with 640 new infections recorded (Moneycontrol, 2023). The country's COVID-19 tally now stands at 45 million, with a total death of 533,328. Active cases also increased in 10 states and one Union Territory. The national recovery rate is 98.8%, with 2206.7 million doses of COVID-19 vaccine administered. However, 16 states and union territories have not reported any cases. The Chandigarh administration has issued advisories and mandatory mask wear in hospitals. [\[Full article\]](#)

Mpox

- **Italy:** A man is currently in isolation due to mpox, a zoonotic infectious disease caused by the mpox virus (Redazione, 2023). Health authorities have alerted families and the Municipality of the risk of low-risk contact, but no children have been infected. Parents are encouraged to evaluate symptoms such as fever, fatigue, swollen lymph nodes, and blisters until January 2. Mpox is a self-limiting disease that typically lasts 2 to 4 weeks and is most at risk in children, pregnant women, and those with compromised immune systems. [\[Full article\]](#)
- **Pakistan:** A 40-year-old patient in Pakistan died from mpox and HIV diseases, who had been under treatment at PIMS Hospital Islamabad for a month (Durrani, 2023). The World Health Organization (WHO) provided experimental drugs for mpox treatment. [\[Full article\]](#)

Regional Updates for Emerging Diseases

COVID-19

- **Indonesia's** Ministry of Health confirmed the detection of the highly transmissible COVID-19 sublineage JN.1 as of Wednesday, with at least 41 confirmed cases (The Jakarta Post, 2023). The new Omicron sublineage, classified as a variant of interest by the WHO, was detected in samples from five cases in November. [\[Full article\]](#)
- The **Malaysian** health authorities reported 102.5 COVID-19 cases per 100,000 population from December 3-16 (Crisis23, 2023). Putrajaya was the most at-risk area, with 907.7 cases per 100,000 population. Melaka, Kuala Lumpur, Labuan, and Selangor were the most affected, with the most complete data available as of December 22. [\[Full article\]](#)
- **The Philippines:** The COVID-19 positivity rate in the Philippines has reached 18.1%, according to Octa Research (Marcelino, 2023). The latest rate is based on the Department of Health's report of 557 new cases on December 22, with 235 from Metro Manila. The newly logged cases have led to a total nationwide case count of 4,132,200, including 5,569 active cases. On December 23, there could be an increase of 500 to 600 new cases. The latest positivity rate is higher than the 16.7% and 15.8% recorded as of December 20 and 19. All recorded positivity rates this week were past the 5% WHO threshold, indicating viral transmission is under control. [\[Full article\]](#)
- **Singapore** has seen a significant increase in COVID-19 cases, with 965 cases reported in the past week, and 32 patients admitted to intensive care units (PTI, 2023). The majority of COVID-19 patients are infected by JN.1, a sublineage of the coronavirus' Omicron subvariant BA.2.86. Winter conditions in the northern hemisphere and more people not



wearing masks have contributed to the increase in cases. The Ministry of Health (MOH) has reported no clear indication that BA.2.86 or JN.1 are more transmissible or cause more severe disease than other circulating variants. The MOH has been working with public hospitals for contingency planning to ensure adequate manpower and maximize bed capacity for urgent cases. [\[Full article\]](#)

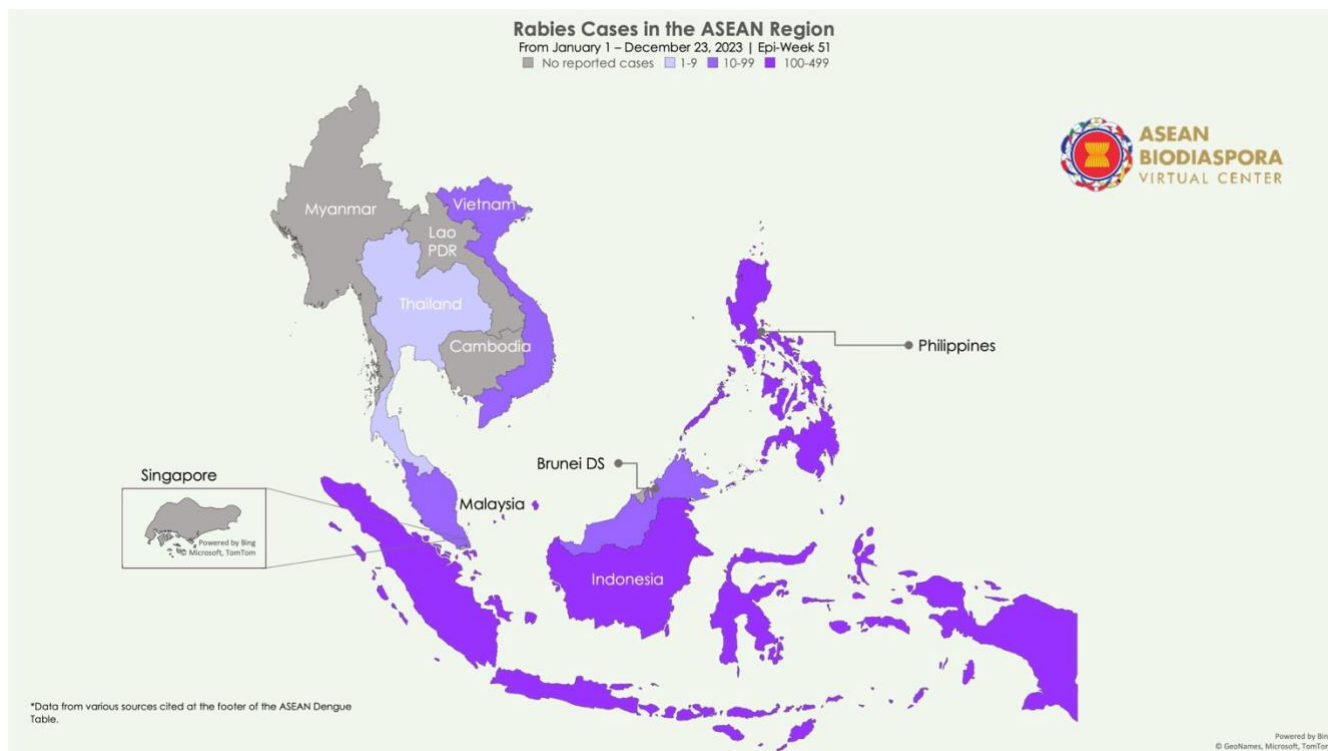
Mpox

- **Vietnam:** Mpox cases in 10 southern Vietnamese provinces and cities have reached 117, including six deaths. The outbreak is expected to continue, with new cases increasing rapidly since November 2023. The majority of patients are young, gay, bisexual men, and those with multiple sexual partners. Other diseases like hand, foot, mouth disease, chickenpox, and diarrhea are expected to increase in 2023. The Vietnam Deputy Ministry of Health praised the efforts of medical units in the southern region to overcome healthcare challenges, promote disease screening and early diagnosis, and conduct preventive medicine to minimize the risk of large-scale outbreaks. [\[Full article\]](#)

ZOONOSIS

Rabies Cases in the ASEAN Region

From January 1 to December 23, 2023 (Epi-Week 51)



Rabies cases in the ASEAN region

Country	Epi-Week Reported	Cumulative Rabies Cases	New Cases Since Previous Report	Cumulative Deaths	CFR
Brunei Darussalam			Rabies-free country		
Cambodia	-	-	-	-	-
Indonesia¹	Week 50	117	0	117	100%
Lao PDR	-	-	-	-	-
Malaysia¹	Week 50	10	0	10	100%
Myanmar	-	-	-	-	-
Philippines²	Week 47	360	14	360	100%
Singapore			Rabies-free country		
Thailand³	Week 49	6	0	6	100%
Vietnam¹	Week 40	64	0	64	100%
Total		557	14	557	100%

1. BlueDot Developer Portal, accessed December 26, 2023, <https://developer-portal.bluedot.global/>.
 2. Department of Health Website, accessed December 26, 2023 "Statistics," <https://doh.gov.ph/statistics>.
 3. Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health Thailand, accessed December 26, 2023, <http://doe.moph.go.th/surdata/index.php>

- The **ASEAN** region reported **14** new rabies cases in the Philippines since the previous report. The region reported **557** total cases and **557** total deaths in 2023 with **100%** CFR.



Event Updates for Zoonosis

Epidemiological Week 51 | December 17 – 23, 2023

Global Updates for Zoonosis

Rabies

- **Israel's** MOH reported an emergency case of rabies in the Jordan Valley, where an eight-year-old Palestinian child died after being scratched and possibly bitten by a stray dog (IsraellInfo, 2023). The child, who lived near Highway 90, developed symptoms a month and a half later and died without any preventive treatment. In 2023, 42 cases of rabies were reported in Israel, with the most recent in Acre. [\[Full article\]](#)

Regional Updates for Zoonosis

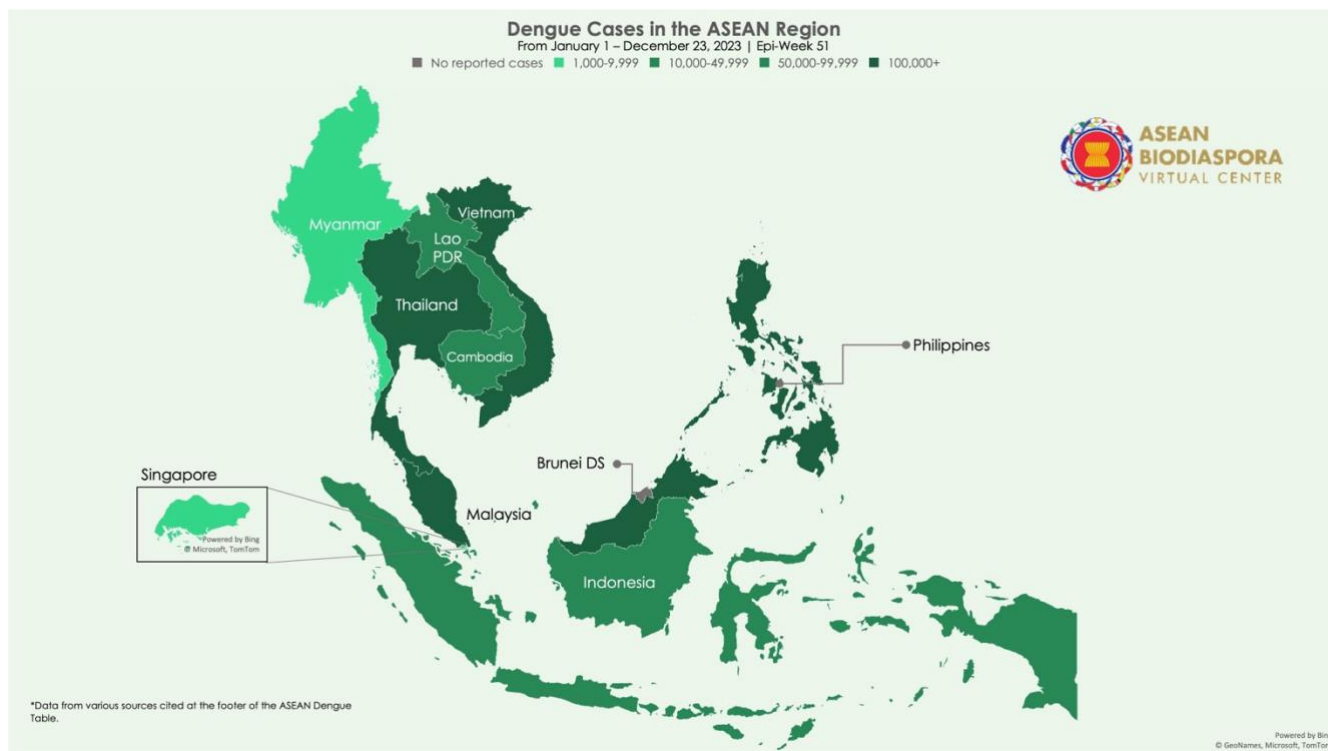
Rabies

- **Indonesia:** A resident in North Timor Tengah, East Nusa Tenggara, died from rabies (Hartik, 2023). A 27 year old was a rabies-positive patient who had been receiving treatment at Kefamenanu Regional General Hospital since December 19, 2023. As his condition worsened, he passed away. This marks the third death from rabies among three North Timor Tengah residents. [\[Full article\]](#)
- **Vietnam:** The CDC reported a 14th rabies death in Gia Lai province, involving a 6-year-old boy who was not vaccinated or had anti-rabies serum when bitten by a domestic dog three months ago (Baotuoitre, 2023). The child started fever on December 20 and had symptoms of rabies, including fatigue, loss of appetite, and seizures. He was taken to Hoang Anh Gia Lai Medical University Hospital on December 21, where he died at home. [\[Full article\]](#)

VECTOR-BORNE DISEASES

Dengue Cases in the ASEAN Region

From January 1 to December 23, 2023 (Epi-Week 51)



Dengue cases in the ASEAN region

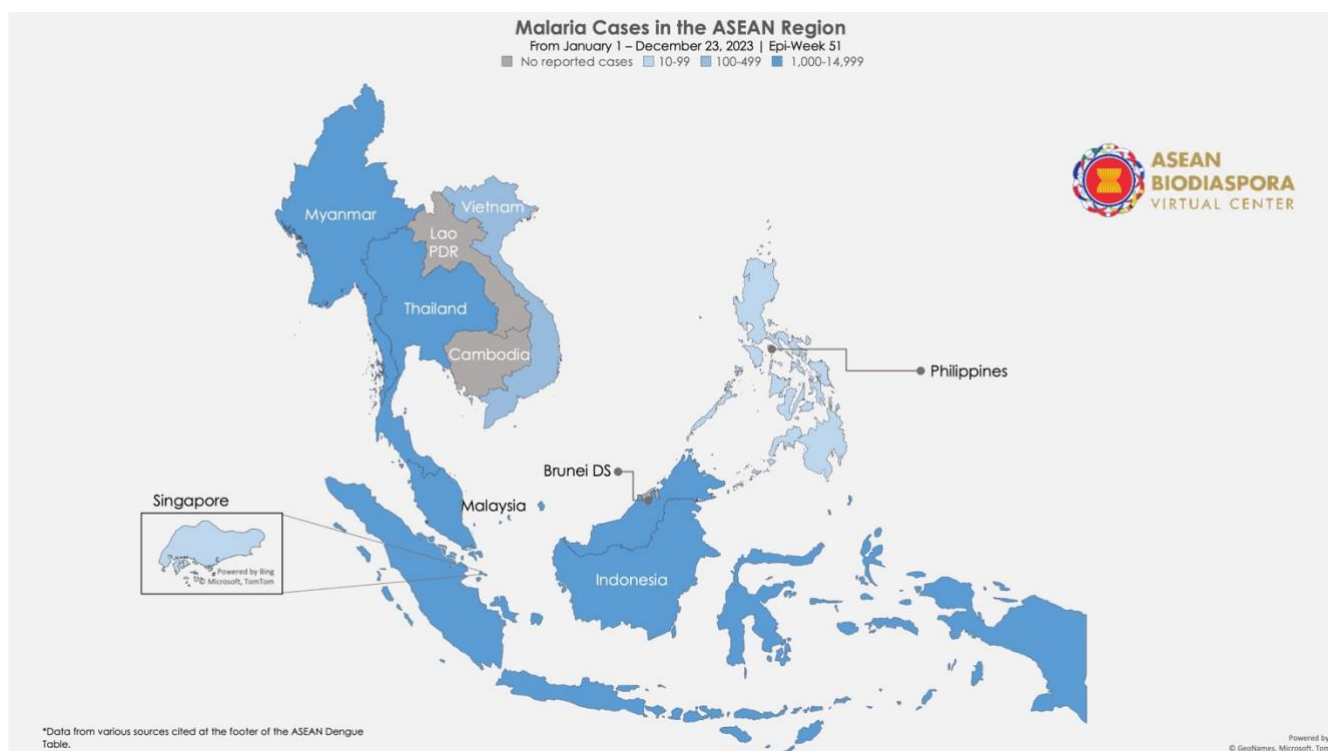
Country	Epi-Week Reported	Cumulative Dengue Cases	New Cases Since the Previous Report	Cumulative Deaths	New Deaths	CFR
Brunei Darussalam	-	-	-	-	-	-
Cambodia¹	Week 43	27,908	0	39	0	0.14%
Indonesia²	Week 50	89,900	2,135	690	17	0.77%
Lao PDR¹	Week 47	30,998	0	20	0	0.06%
Malaysia³	Week 49	121,069	2,899	84	0	0.07%
Myanmar⁴	Week 28	6,685	0	30	0	0.45%
Philippines⁵	Week 47	189,185	0	637	0	0.34%
Singapore⁶	Week 51	9,621	180	-	0	0.00%
Thailand⁷	Week 50	150,808	3,396	165	4	0.11%
Vietnam¹	Week 46	149,557	0	36	0	0.02%
Total		775,731	8,610	1,701	21	0.22%

1. WHO WPRO, "Dengue," World Health Organization, accessed December 26, 2023, <https://www.who.int/westernpacific/emergencies/surveillance/dengue>.
 2. Ministry of Health, Republic of Indonesia
 3. Disease Control Division, Ministry of Health Malaysia, accessed December 26, 2023, iDengue, <https://idengue.mysa.gov.my/did/>
 4. BlueDot Developer Portal, accessed December 26, 2023, <https://developer-portal.blue-dot.global/>.
 5. Department of Health Website, accessed December 26, 2023 "Statistics," <https://doh.gov.ph/statistics>.
 6. National Environment Agency (NEA), accessed December 26, 2023. Dengue cases, <https://www.nea.gov.sg/dengue-zika/dengue/dengue-cases>.
 7. Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health Thailand, accessed December 26, 2023, <http://doe.moph.go.th/surdata/index.php>.
- *Data were updated and collected from official sources, which may have a 2-8 weeks delay in reporting. Data must be interpreted cautiously.

- The **ASEAN** region reported **8,610** new dengue cases in Indonesia, Malaysia, Singapore, and Thailand – 21 Deaths. The region reported **775,731** total cases and **1,701** total deaths in 2023 with **0.22%** CFR.

Malaria Cases in the ASEAN Region

From January 1 to December 23, 2023 (Epi-Week 51)



Malaria cases in the ASEAN region

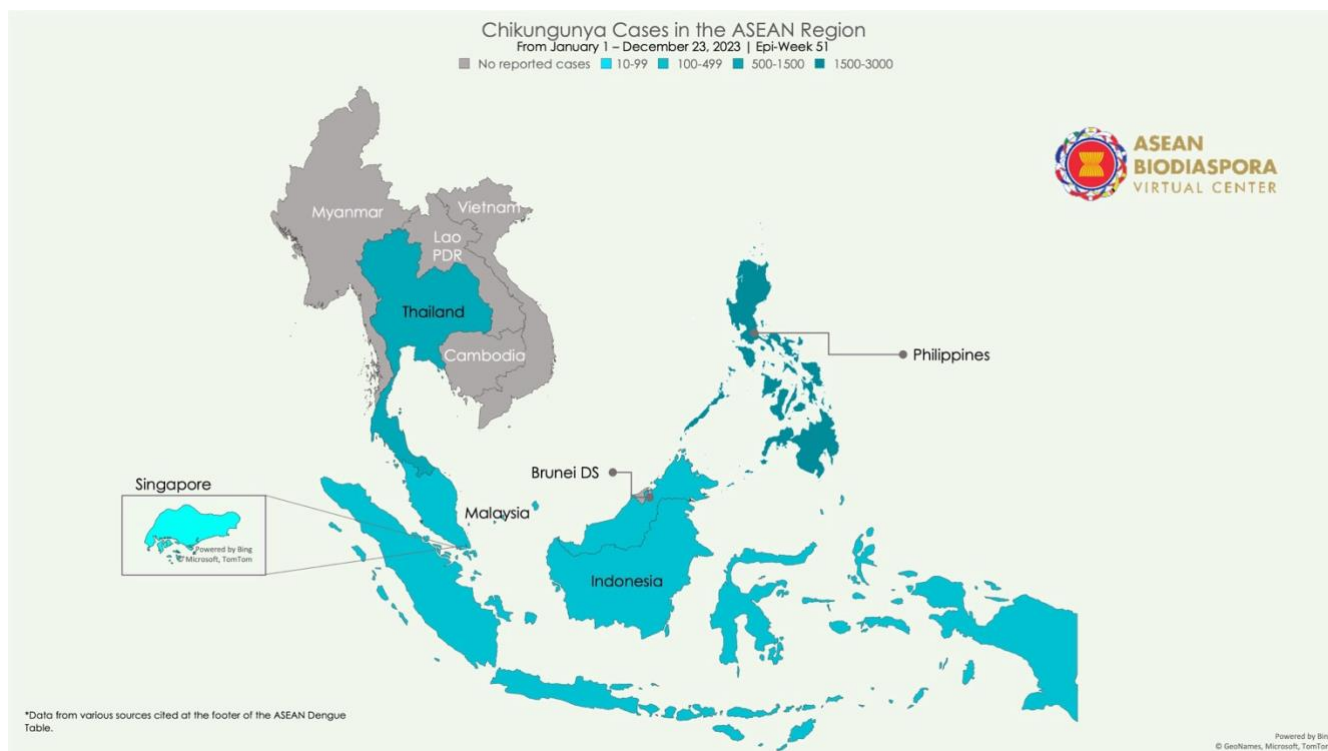
Country	Epi-Week Reported	Cumulative Malaria Cases	New Cases Since the Previous Report	Cumulative Deaths	CFR
Brunei Darussalam	-	-	-	-	-
Cambodia	-	-	-	-	-
Indonesia ¹	Week 44	1,899	0	0	0.00%
Lao PDR	-	-	-	-	-
Malaysia ¹	Week 45	1,116	0	0	0.00%
Myanmar ¹	Week 23	4,510	0	0	0.00%
Philippines ¹	Week 28	31	0	0	0.00%
Singapore ³	Week 50	22	1	0	0.00%
Thailand ²	Week 50	4,949	23	4	0.08%
Vietnam ¹	Week 42	349	0	0	0.00%
Total		12,822	24	4	0.03%

1. BlueDot Developer Portal, accessed December 26, 2023, <https://developer-portal.bluedot.global/>.
2. Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health Thailand, accessed December 26, 2023, <http://doe.moph.go.th/surdata/index.php>
3. Ministry of Health Singapore, accessed December 26, 2023, <https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-diseases-bulletin>

- The **ASEAN** region reported **24** new malaria cases in Singapore and Thailand since the previous report. The region reported **12,822** total cases and **four** total deaths in 2023 with **0.03%** CFR.

Chikungunya Cases in the ASEAN Region

From January 1 to December 23, 2023 (Epi-Week 51)



Chikungunya cases in the ASEAN region

Country	Epi-Week Reported	Cumulative Chikungunya Cases	New Cases Since the Previous Report	Cumulative Deaths	New Deaths	CFR
Brunei Darussalam	-	-	-	-	-	-
Cambodia	-	-	-	-	-	-
Indonesia ¹	Week 51	468	6	0	-	0.00%
Lao PDR	-	-	-	-	-	-
Malaysia ²	Week 44	185	0	0	-	0.00%
Myanmar	-	-	-	-	-	-
Philippines ³	Week 47	2,850	0	0	-	0.00%
Singapore ⁴	Week 46	13	0	0	-	0.00%
Thailand ⁵	Week 50	1,346	25	0	-	0.00%
Vietnam	-	-	-	-	-	-
Total		4,862	31	0		0.00%

1. BlueDot Developer Portal, accessed December 26, 2023, <https://developer-portal.bluedot.global/>
2. Portal Rasmi, Ministry of Health Malaysia, accessed December 26, 2023, https://www.moh.gov.my/index.php/database_stores/store_view/17
3. Department of Health Website, accessed December 26, 2023 "Statistics," <https://doh.gov.ph/statistics>.
4. Ministry of Health Singapore, accessed December 26, 2023, <https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-diseases-bulletin>
5. Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health Thailand, accessed December 26, 2023, <http://doe.moph.go.th/surdata/index.php>

- The **ASEAN** region reported **31** new chikungunya cases in Indonesia and Thailand. The region reported **4,862** total cases and **NO** deaths in 2023 with **0.00%** CFR.



Event Updates for Vector-borne Diseases

Epidemiological Week 51 | December 17 – 23, 2023

Global Updates for Vector-borne Diseases

Dengue

- **Bangladesh:** In the last 24 hours, one person died of dengue in Bangladesh, resulting in 1693 deaths this year (Ahmed, 2023). 114 dengue patients were admitted to hospitals, with 33 in Dhaka and 81 outside. Currently, 1,181 patients are under treatment in public and private hospitals. This year, 320,000 patients have been admitted and treated, with 1,976 in Dhaka and 210,496 outside. 317,398 people have recovered and returned home. [\[Full article\]](#)
- **India:** A student from Malda, died of dengue in Khas Kolkata, despite the virus not yet escaping the city (Huaxia, 2023). She was admitted to Kolkata National Medical College with fever symptoms. [\[Full article\]](#)
- **Pakistan:** On Friday, the Health Department reported 15 new dengue cases in Punjab, with Lahore leading the list with 6,993 cases (Zakaullah, 2023). Lahore reported 10 more cases on Friday, while Multan reported three in the last 24 hours. Currently, 21 patients are undergoing treatment in various hospitals across Punjab, with 14 in Lahore district hospitals. [\[Full article\]](#)
- **Russia:** A tourist from Thailand was diagnosed with Dengue fever in Chita, marking the first imported case in December (Kondratyev, 2023). The disease typically presents as high fever, headache, body aches, nausea, and rash, with most symptoms improving within 1-2 weeks. Severe cases can be fatal. [\[Full article\]](#)
- **Spain:** As of December 19, 2023, Madrid's health authorities reported 77 confirmed and 51 probable cases of imported dengue, with 51.5% women and a mean age of 36.6 years (Fundacionio, 2023). Originating countries included Argentina, Bolivia, Brazil, Burkina Faso, Cambodia, Cameroon, Colombia, Costa Rica, Cuba, Egypt, the Philippines, and Vietnam. [\[Full article\]](#)
- **Sri Lanka** has reported 84,038 dengue cases this year, with 50 deaths, according to the National Dengue Control Unit (Huaxia, 2023). The Colombo district has the highest number of cases, while Gampaha has the second-highest. Health authorities warn of an outbreak during rainy season. [\[Full article\]](#)

Regional Updates for Vector-borne Diseases

Dengue

- **Indonesia:** Dengue fever cases in the South Hulu Sungai District Health Office have increased significantly from October to December 2023, with two deaths reported recently (Hanani, 2023). The increase began in October and has since spread to 21 public health center in South Hulu Sungai district, with dengue-prone areas including Kandangan, Angkinang, Sungai Raya, Padang Batung, South Daha, and North Daha. To combat the spread, fogging is carried out in affected areas and larvae control powder is available at public health center. Prevention efforts include mosquito nest eradication and increased community counseling on dengue fever dangers and prevention. The South Hulu Sungai District has also provided guidance on prevention through a circular letter. [\[Full article\]](#)



- **Lao PDRs'** MOH reports an increase in dengue fever cases, with 35,128 reported as of December 20 (VNA, 2023). The largest cases were in Vientiane and northern Lao PDR. Despite this, Lao PDR has managed to reduce deaths through improved diagnosis, treatment, and public awareness efforts. Dengue fever occurs year-round in Lao PDR. [\[Full article\]](#)
- **Malaysia:** Dengue fever cases in Malaysia decreased by 1.3% to 2,948 cases in the 49th epidemiological week from December 3 to December 9, compared to 2,988 cases in the previous week (Malay Mail, 2023). The cumulative number of dengue cases this year up to 49th epidemiological week was 114,365, an increase of 54,255 cases or 93.3%. The number of hotspot localities reported in 48th epidemiological week was 101, with 78 in Selangor, followed by Kuala Lumpur, Putrajaya, Perak, Sabah, and Kelantan and Sarawak. Three fatal cases occurred in the same week, bringing the total number of deaths to 87 as of 49th epidemiological week. [\[Full article\]](#)
- The **Philippines** is the most affected country in the Western Pacific Region by dengue, with 167,355 cases and 575 deaths recorded (Bosano, 2023). The disease is endemic in the Philippines, leading to longer seasonal epidemics and geographic spread. Globally, dengue infections have increased over the past few decades, posing a significant challenge to public health. From 2000 to 2019, the disease saw a ten-fold surge in reported cases, from 500,000 to 5.2 million. From 2020 to 2022, the disease saw a decline due to lack of surveillance. However, in 2023, an upsurge in dengue cases has been observed globally, characterized by a significant increase in the number, scale, and simultaneous occurrence of multiple outbreaks, spreading into previously unaffected regions. Climate change, El Niño, and fragile health systems contribute to the increasing risk of dengue spread. The WHO is working on preparedness and response, vector control activities, multisectoral collaboration, vector control activities, case management guidelines, and capacity building to support member states. [\[Full article\]](#)
- **Vietnam:** Dengue epidemics have been recorded in 29 districts and towns in Hanoi, with 14 outbreaks in eight districts and towns (BaodientuvTV, 2023). The city has recorded 39,343 cases and four deaths since the beginning of 2023. Units with the most patients include Ha Dong, Thanh Oai, Hoang Mai, Phu Xuyen, and Dong Da. There are currently 41 active outbreaks in 14 districts and towns. The city has recorded 1,964 outbreaks, with 41 active cases in 14 districts and towns. In the past week, 15 cases of hand, foot, and mouth disease were recorded, with no deaths. The city has recorded 2,710 cases, an increase from 2022. [\[Full article\]](#)

Leptospirosis

- The **Philippines:** The Department of Health - Eastern Visayas (DOH-8) reported a surge in leptospirosis cases in Northern Samar, following a massive flooding event (Mark, 2023). The number of cases increased from eight cases in January to 22 in the second week of December. The DOH has already sent antibiotics to combat the illness as part of its post-disaster response. There were no reported leptospirosis-linked deaths in the province. To prevent further infection, DOH advised people in flood-prone areas to avoid contact with animal urine, wear protective clothing, avoid swimming in muddy ponds, and control rat populations. [\[Full article\]](#)

VACCINE-PREVENTABLE DISEASES

Diphtheria Cases in the ASEAN Region

From January 1 to December 23, 2023 (Epi-Week 51)



Diphtheria cases in the ASEAN region

Country	Epi-Week Reported	Cumulative Diphtheria Cases	New Cases Since the Previous Report	Cumulative Deaths	CFR
Brunei Darussalam	-	-	-	-	-
Cambodia	-	-	-	-	-
Indonesia ¹	Week 49	800	0	45	5.62%
Lao PDR	-	-	-	-	-
Malaysia	-	-	-	-	-
Myanmar	-	-	-	-	-
Philippines ²	Week 47	191	13	49	25.70%
Singapore ³	-	0	0	0	0.00%
Thailand ⁴	Week 46	5	0	0	0.00%
Vietnam ⁵	Week 38	41	0	3	7.32%
Total		1,037	13	97	9.40%

1. Ministry of Health, Republic of Indonesia.
2. Department of Health Website, accessed December 26, 2023 "Statistics," <https://doh.gov.ph/statistics>.
3. Ministry of Health Singapore, accessed December 26, 2023, <https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-diseases-bulletin>
4. Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health Thailand, accessed December 26, 2023, <http://doe.moph.go.th/surdata/index.php>
5. BlueDot Developer Portal, accessed December 26, 2023, <https://developer-portal.bluedot.global/>

- The ASEAN region reported **13** diphtheria cases in **the Philippines** since the previous report. The region reported **1,037** total cases and **97** total deaths in 2023 with **9.40%** CFR.

Measles Cases in the ASEAN Region

From January 1 to December 23, 2023 (Epi-Week 51)



Measles cases in the ASEAN region

Country	Epi-Week Reported	Cumulative Measles Cases	New Cases Since the Previous Report	Cumulative Deaths	CFR
Brunei Darussalam	-	-	-	-	-
Cambodia	-	-	-	-	-
Indonesia ¹	Week 49	9,120	0	11	0.12%
Lao PDR	-	-	-	-	-
Malaysia	-	-	-	-	-
Myanmar	-	-	-	-	-
Philippines ²	Week 47	2,497	55	16	0.64%
Singapore ³	Week 49	6	0	0	0.00%
Thailand ⁴	Week 50	337	17	0	0.00%
Vietnam	-	-	-	-	-
Total		11,960	72	27	0.23%

1. Ministry of Health, Republic of Indonesia
 2. Department of Health Website, accessed December 26, 2023 "Statistics," <https://doh.gov.ph/statistics>.
 3. Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health Thailand, accessed December 26, 2023, <http://doe.moph.go.th/surdata/index.php>
 4. Ministry of Health Singapore, accessed December 26, 2023, <https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-diseases-bulletin>

- The **ASEAN** region reported **72** new measles cases in the Philippines and Thailand since the previous report. The region reported **11,960** total cases and **27** total deaths in 2023 with **0.23%** CFR.



Event Updates for Vaccine-Preventable Diseases

Epidemiological Week 51 | December 17 – 23, 2023

Global Updates for Vaccine-Preventable Diseases

Measles

- **Kazakhstan:** From February to December 2023, 598 measles cases were recorded in the Karaganda region, with 86% not vaccinated (Caravan.kz, 2023). As of December 18, 16,775 people were vaccinated, with 4,186 children and 9,657 adults. The current measles-containing vaccine (MCV) has proven safe and effective globally, including in Kazakhstan. [\[Full article\]](#)

Pavlodar health doctors reported that 28 children were not vaccinated for whooping cough, with two not completing the vaccination course (Zinchenko, 2023). Young children are most susceptible to the disease, which can cause complications such as pneumonia, acute laryngitis, bronchiolitis, nosebleeds, respiratory arrest, umbilical and inguinal hernia, and encephalopathy. As of December 19, 30 children in the Pavlodar region were registered with whooping cough, with 18 cases due to parents' refusal to vaccinate, seven due to medical withdrawal, three due to underage, and two unfinished vaccinations. The disease is contagious and can cause severe coughing, rib fractures, and deafness or epileptic seizures. [\[Full article\]](#)

- The **United States:** Colorado has confirmed the first measles case in a state resident in five years, with the patient being an adolescent who returned to Denver International Airport on December 13 (Brown and Ingold, 2023). The virus is highly contagious and can remain airborne for up to two hours. Symptoms typically start one or two weeks after exposure and can take three weeks. Health officials warned unvaccinated people at Denver International Airport or Children's Hospital Colorado's emergency room. The state has struggled to maintain high vaccination rates for measles, with 86.8% of kindergarteners vaccinated against measles last year, the lowest measure since 2017. Achieving "herd immunity" requires a measles vaccination rate of 95% or above, meaning there are growing pockets of children in Colorado who could be at risk for a measles outbreak if an infection popped up in the wrong place. [\[Full article\]](#)
- **Russia** has registered over 10,000 measles cases this year, according to Rospotrebnadzor head (Interfax.ru, 2023). Out of the 145 million population, 10,000 need confirmation. 1.5 million contacts were tested to prevent measles spread, with prompt measures preventing 95% of identified foci within one incubation. [\[Full article\]](#)

Pertussis

- **Canada:** Whooping cough, a respiratory infection, has resurfaced in the Chaudière-Appalaches region of Quebec, with the highest number of new cases reported in all of the country (Gagne, 2023). The cough, which initially appears like a cold, can lead to vomiting and difficulty breathing. In 2021 and 2022, no cases were reported due to reduced social contacts and mask wear during the pandemic. However, in recent weeks, nearly 30 cases have been confirmed in the region, indicating a significant increase in cases compared to previous years. [\[Full article\]](#)
- **Russia:** Over 25 students in Gorno-Altai Gymnasium No. 3 have been ill with whooping cough, according to Rospotrebnadzor of the Altai Republic (Amitel, 2023). The management failed to suspend unvaccinated students and teachers, and did not take measures to localize the epidemic. The disease, which can infect up to 17 people, has increased in incidence since November, with 131 people diagnosed in the region over a month. [\[Full article\]](#)



- **Spain:** Eleven cases of whooping cough have been diagnosed at the secondary school of Alpicat, Spain, with the first detected on November 30 (Ramirez, 2023). Since then, a dozen more infected people have appeared, and a protocol has been put in place to prevent the spread of the respiratory disease. Physicians at the Alpicat CAP are investigating whether children and adolescents with symptoms compatible with whooping cough may have been in contact with those infected at the institute. The town council has no record of whooping cough cases in the town. Additionally, fourteen users of the DomusVi Terraferma social and health center underwent treatment to cure and avoid scabies. [\[Full article\]](#)
- The **United States:** The first whooping cough case of the year has been reported in Garfield County, urging residents to stay healthy this winter and be cautious of young children (Livingstone, 2023). [\[Full article\]](#)



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