# **ASEAN Biodiaspora Virtual Center** Morbidity and Mortality Weekly Report Infectious and Emerging Diseases



**ASEAN REGION** 

January 03, 2024 | MMWR 2023-52 Epidemiological Week 52

With Support by:









This report aims to provide the current situation on infectious and emerging diseases in the ASEAN Region. We collate various information from multiple official sources and publicly available sources, and is published every week on Wednesday. For feedback and/or suggestions, please write to <a href="mailto:support@biodiaspora.org">support@biodiaspora.org</a>

### **Editorial**

#### **CONSULTANTS ASEAN SECRETARIAT**

Assistant Director and Head of Health Division Human Development Directorate

Ferdinal Fernando, MDM, MD

Programme Coordinator for Mitigation for Biological Threats (MBT) Phase 2 Michael Glen, MSSc

#### **EDITORIAL TEAM**

Editor-in-Chief

Abdurrahman, MPH

Managing Editor

Aldilas Achmad Nursetyo, MD, MS

Associate Editors

Abdul Haris Ibrahim, MHI

Copy Editor

Nur Ismi Hamid

Interns

Nailul Rizka Novianti Divva Kaamila Natasha Alicia Putri

#### **PUBLISHER**

ASEAN Biodiaspora Virtual Center 2/F Ministry of Health, Jl. H.R. Rasuna Said, Blok X5, Kav. 4-9, Jakarta Selatan, Jakarta, Indonesia

E-mail: support@biodiaspora.org Weekly Issue



# **Table of Contents**

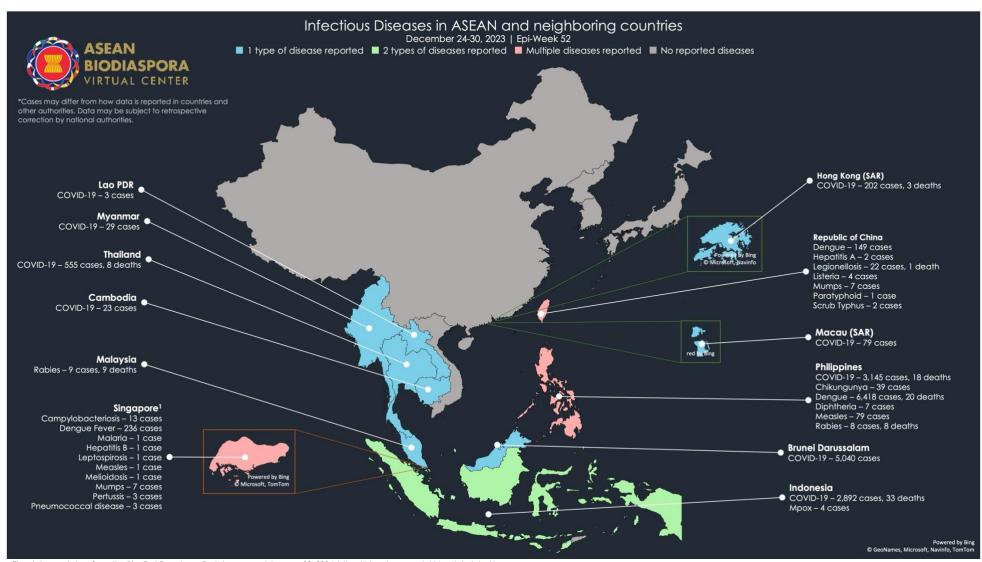
Infectious Diseases1
Reported Infectious Diseases in the ASEAN Region and Neighboring Countries
Key Findings2
Infectious Diseases in the ASEAN Region in 2023 – Summary Table
Emerging Diseases3
COVID-193
COVID-19 Cases and Deaths3
COVID-19 Cases in the ASEAN Region Table3
Epidemic Curve Among the ASEAN Member States
ASEAN Weekly New Cases and Deaths6
Trends of COVID-19 Cases, Deaths, and Vaccine Coverage among AMS5
COVID-19 Variants Frequencies Among the ASEAN Member States
COVID-19 Variants Frequencies in the ASEAN Region6
ASEAN COVID-19 Vaccination Status
7 OLF II CO VID 17 VACCINATION OF THE CONTROL OF TH
Mnox 8
Mpox Cases Reported in the ASEAN Region 8
Mpox Cases Reported in the ASEAN Region8
Mpox Cases Reported in the ASEAN Region8  Highlights and Situation Overview9
Mpox Cases Reported in the ASEAN Region
Mpox Cases Reported in the ASEAN Region
Mpox Cases Reported in the ASEAN Region
Mpox Cases Reported in the ASEAN Region
Mpox Cases Reported in the ASEAN Region
Mpox Cases Reported in the ASEAN Region
Mpox Cases Reported in the ASEAN Region
Mpox Cases Reported in the ASEAN Region
Mpox Cases Reported in the ASEAN Region
Mpox Cases Reported in the ASEAN Region
Mpox Cases Reported in the ASEAN Region

Vector-Borne Diseases	14
Dengue	14
Dengue Cases in the ASEAN Region Map	. 14
Dengue Cases in the ASEAN Region Table	
Malaria	
Malaria Cases in the ASEAN Region Map	. 15
Malaria Cases in the ASEAN Region Table	
Chikungunya	. 16
Chikungunya Cases in the ASEAN Region Map	
Chikungunya Cases in the ASEAN Region Table	
Event Updates for Vector-borne Diseases	
Global Updates	
Regional Updates	
Vaccine-Preventable Diseases	
Diphtheria	
Diphtheria Cases in the ASEAN Region Map	
Diphtheria Cases in the ASEAN Region Table	
Measles	
Measles Cases in the ASEAN Region Map	
Measles Cases in the ASEAN Region Table	
Event Updates for Vaccine-Preventable Diseases	
Global Updates	
Regional Updates	
References	



# Reported Infectious Diseases in the ASEAN Region and Neighboring Countries

Epidemiological Week 52 | December 24 – 30, 2023



The data was taken from the BlueDot Developer Portal, accessed January 02, 2024, https://developer-portal.bluedot.global/.

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



### **Key Findings**

- COVID-19 cases and deaths have increased by **11,687** and **59**, respectively, since the last report in the ASEAN Region.
- There are **four** mpox new cases in the ASEAN Region since last report.
- 17 new rabies cases and 17 new deaths have been found since last report for zoonosis in the ASEAN Region.
- Dengue cases and deaths has increased by **6,723** and **20** since the last report. Meanwhile, **one** new malaria case and **47** new chikungunya cases have been found since the last report for vector-borne diseases in the ASEAN Region.
- There are **seven** new diphtheria cases and **80** new measles cases since last report for vaccine-preventable diseases in the ASEAN Region.

### Infectious Diseases in the ASEAN Region in 2023 – Summary Table

Epidemiological Week 52 | From January 1 to December 30, 2023

Infectious	1	COVID-19			Мрох			Rabies			Dengue	
Diseases	Cum. Cases	Cum. Deaths	CFR	Cum. Cases	Cum. Deaths	CFR	Cum. Cases	Cum. Deaths	CFR	Cum. Cases	Cum. Deaths	CFR
Brunei Darussalam	56,147	77	0.14%	=	-	-	Ro	abies-free C	ountry	-	-	=
Cambodia	540	-	0%	1	0	0	-	-	-	27,908	39	0.14%
Indonesia	103,334	1,342	1.30%	72	0	0	117	117	100%	89,900	690	0.77%
Lao PDR	1,317	87	6.61%	1	0	0	-	-	-	31,261	20	0.06%
Malaysia	127,959	389	0.30%	9	0	0	19	19	100%	121,069	84	0.07%
Myanmar	7,811	5	0.06%	-	-	-	-	-	-	6,685	30	0.45%
Philippines	129,949	1,416	1.09%	2	0	0%	368	368	100%	195,603	657	0.34%
Singapore	584,398	222	0.04%	31	0	0%	Rab	oies-free Co	untry	9,663	0	0.00%
Thailand	41,804	845	2.02%	644	1	0%	6	6	100%	150,808	165	0.11%
Vietnam	100,747	20	0.02%	113	6	5.31%	64	64	100%	149,557	36	0.02%
ASEAN Region	1,154,006	4,403	0.38%	873	7	0.80	574	574	100%	782,454	1,721	0.22%

Infectious	Malaria		Cł	Chikungunya		Measles			Diphtheria			
Diseases	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%	468	0	0%	9,120	11	0.12%	800	45	5.63%
Lao PDR	-	-	=	-	-	-	-	-	-	-	-	-
Malaysia	1,116	0	0%	193	0	0%	-	-	-	-	-	-
Myanmar	4,510	0	0%	-	-	-	-	-	-	-	-	-
Philippines	31	0	0%	2,889	0	0%	2,576	16	0.62%	198	50	25.25%
Singapore	23	0	0%	13	0	0%	7	0	0%	-	-	-
Thailand	4,949	4	0.08%	1,346	0	0%	337	0	0%	5	0	0.00%
Vietnam	349	0	0%	-	-	-	-	-	-	41	3	7.32%
ASEAN Region	12,877	4	0.03%	4,909	0	0%	12,040	27	0.22%	1,044	98	9.39%



# **EMERGING DISEASES**

### **COVID-19: Highlights and Situation Overview**

- As of 30 December 2023 (5PM, GMT+7), there were **700,703,987** confirmed cases **worldwide**, including **6,961,023 deaths**. Globally, Case Fatality Rate (CFR) was **0.99%**.
- 36,674,614 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	30-Dec-23	326,275	64,835	5,040	225	0	73,249
Cambodia	27-Jan-20	30-Dec-23	139,014	576	23	3,056	0	810
Indonesia	02-Mar-20	30-Dec-23	6,819,830	108,127	2,892	161,954	33	2,443
Lao PDR	24-Mar-20	30-Dec-23	218,906	1,320	3	758	0	2,926
Malaysia	25-Jan-20	25-Dec-23	5,180,812	161,412	0	37,246	0	15,614
Myanmar	23-Mar-20	30-Dec-23	641,422	7,847	29	19,495	0	1,161
Philippines	30-Jan-20	30-Dec-23	4,135,345	136,333	3,145	66,813	18	3,676
Singapore	23-Jan-20	10-Dec-23	2,827,115	640,441	0	1,933	0	47,566
Thailand	13-Jan-20	30-Dec-23	4,761,781	42,873	555	34,514	8	6,795
Vietnam	23-Jan-20	31-Oct-23	11,624,114	100,747	0	43,206	0	11,747
	ASEAN REGION		36,674,614	1,264,511	11,687	369,200	59	5,392

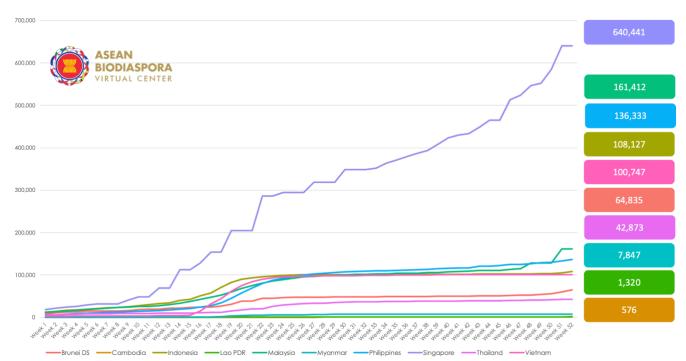
REGIONS	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS
AFRICA	12,857,041	208	258,874	1
AMERICAS	199,513,440	123,744	3,028,293	0
ASEAN	36,674,614	11,687	369,200	59
ASIA & OCEANIA	199,135,001	20,772	1,215,101	210
EUROPE	252,523,891	247,594	2,089,555	0
GLOBAL TOTAL	700,703,987	404,005	6,961,023	270

<sup>\*\*</sup>Data Reference: Worldometer, WHO



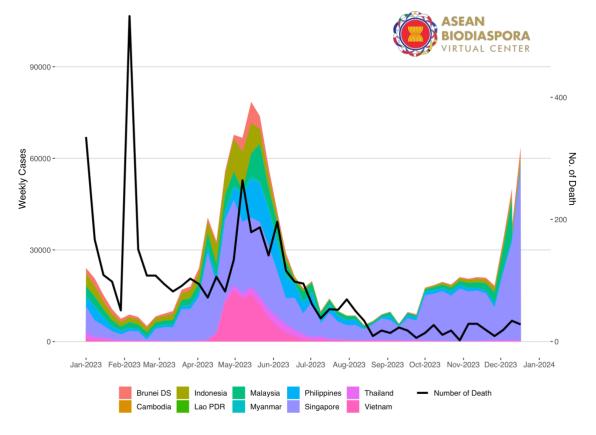
### **COVID-19 Epidemic Curve Among the ASEAN Member States (AMS)**

From January 1 to December 30, 2023



### **ASEAN Weekly COVID-19 New Cases and Deaths**

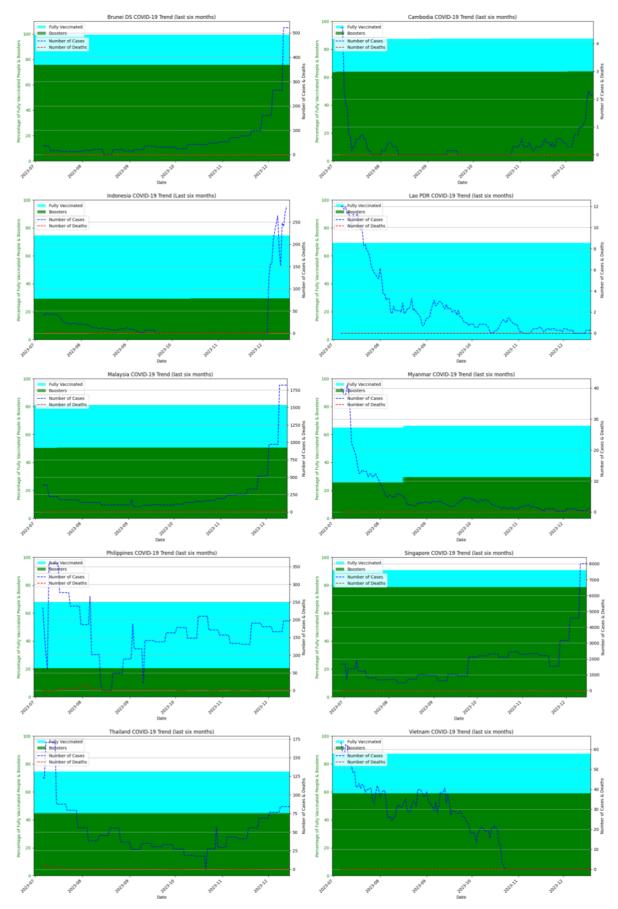
From January 1, 2023 to December 23, 2023



<sup>\*\*</sup>Data References: <u>Singapore Government</u>, <u>Worldometer</u>, and the <u>WHO</u>



# Trends of COVID-19 Cases, Deaths, and Vaccine Coverage among AMS From July 1 to December 30, 2023

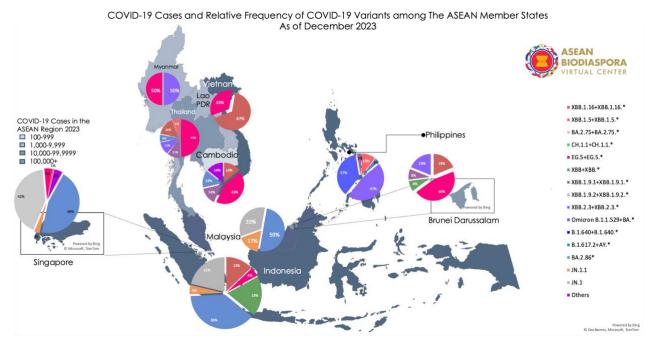


<sup>\*\*</sup>Data References: <u>Singapore Government</u>, <u>Worldometer</u>, <u>OWID</u>, and the <u>WHO</u>



# **COVID-19 Variants Frequencies Among the ASEAN Member States**

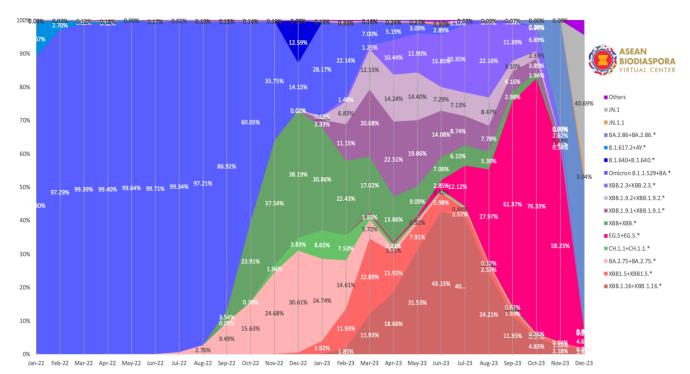
In December 2023



GISAID. "hCoV-19 Variants Dashboard," accessed January 2, 2023, https://gisaid.org/hcov-19-variants-dashboard/.

### **COVID-19 Variants Frequencies in the ASEAN Region**

From January to December 2023



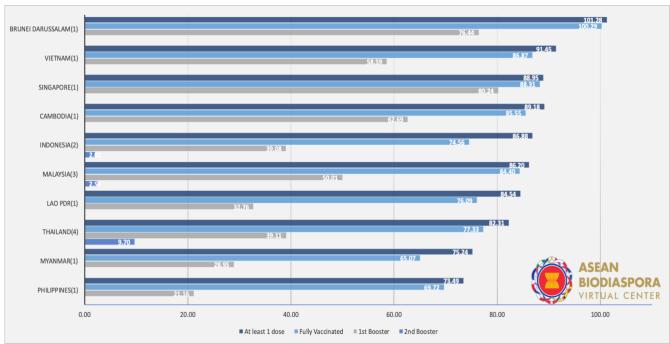
 $GISAID. \ "hCoV-19\ Variants\ Dashboard,"\ accessed\ January\ 2,\ 2024, \\ \underline{https://gisaid.org/hcov-19-variants-dashboard/Lover}.$ 



### **ASEAN COVID-19 Vaccination Status**

### As of 30 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	203,878,842	174,969,323	70,958,894	62.68
Lao PDR	6,324,678	5,691,962	2,451,034	76.09
Malaysia	28,137,594	27,550,625	16,347,532	83.03
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	531,803,338	483,129,653	230,813,380	71.04

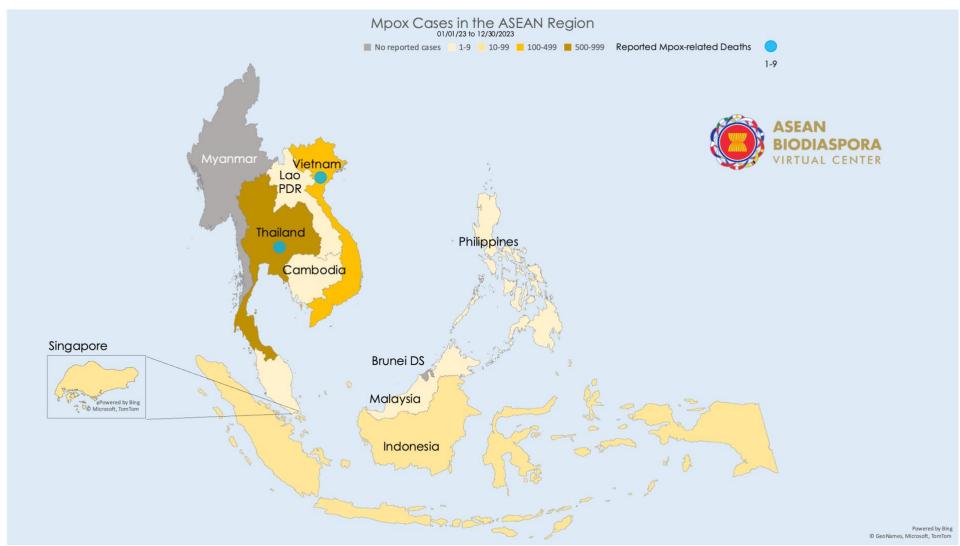


- World Health Organization, Coronavirus (Covid-19) Data, accessed January 2, 2024 <a href="https://covid19.who.int/data">https://covid19.who.int/data</a>
   Ninistry of Health Indonesia, "Vaccine Dashboard, January 2, 2024, <a href="https://alsin.kemkes.go.id/#/vaccines">https://alsin.kemkes.go.id/#/vaccines</a>
   Ministry of Health Maloysia, Covid-19 Vaccination, accessed January 2, 2024, <a href="https://datamoh.gov.my/dashboard/covid-vaccination">https://datamoh.gov.my/dashboard/covid-vaccination</a>
   Ministry of Public Health Thailand, Covid-19 Vaccination Infographic, accessed January 2, 2024, <a href="https://dashboard-vaccine.moph.go.th/">https://dashboard-vaccine.moph.go.th/</a>



# **Mpox Cases Reported in the ASEAN Region**

January 1 – December 30, 2023



Ministry of Health Republic of Indonesia

<sup>2.</sup> EBS Bluedot (Accessed on January 2, 2024)

<sup>3.</sup> Ministry of Health Singapore, accessed January 2, 2024, https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-diseases-bulletin



## **Mpox: Highlights and Situation Overview**

- From 01 January to 30 December 2023, 9,230 confirmed cases worldwide in 2023, including 169 deaths. Globally, the CFR was 1.83%.
- 873 confirmed cases including seven deaths in the ASEAN region in 2023, with a CFR of 0.80%.
- 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. 30, 2023)

ASEAN Member States	Cumulative Cases 2023	New Cases Since Previous Report	Cumulative Deaths 2023	CFR
Cambodia <sup>2</sup>	1	0	0	0.00%
Indonesia <sup>1</sup>	72	4	0	0.00%
Lao PDR <sup>2</sup>	1	0	0	0.00%
Malaysia <sup>2</sup>	9	0	0	0.00%
Philippines <sup>2</sup>	2	0	0	0.00%
Singapore <sup>3</sup>	31	0	0	0.00%
Thailand <sup>2</sup>	644	0	1	0.16%
Vietnam²	113	0	6	5.31%
ASEAN Total	873	4	7	0.80%

### Top 5 countries with the most mpox cases globally (Jan. 1 to Dec. 30, 2023)

Country	Cumulative Cases 2023	New Cases Since Previous Report	Cumulative Deaths 2023	CFR
People's Republic of China <sup>1</sup>	1,614	0	1	0.06%
United States of America <sup>2</sup>	1643	0	35	2.13%
Democratic Republic of Congo <sup>2</sup>	754	0	2	0.27%
Thailand <sup>2</sup>	644	0	1	0.16%
Brazil <sup>2</sup>	456	0	2	0.44%

<sup>2022-23</sup> Mpox Outbreak: Global Trends. Geneva: World Health Organization, 2023. Available online: https://worldhealthorg.shinyapps.io/mpx\_global/ (last cited: January 2, 2024).

#### Mpox cases per region

REGIONS	CUMULATIVE CASES 2023	NEW CASES SINCE THE PREVIOUS REPORT	CUMULATIVE DEATHS 2023	CFR
AFRICA <sup>5</sup>	883	0	23	0.92%
AMERICAS <sup>5</sup>	3,744	0	136	2.36%
ASEAN	873	0	2	0.40%
ASIA & OCEANIA <sup>5</sup>	2,781	0	1	0.09%
EUROPE <sup>5</sup>	949	0	7	0.29%
TOTAL	9,230	0	169	1.83%

Ministry of Health Republic of Indonesia EBS Bluedot (Accessed on January 2, 2024)

<sup>3.</sup> Ministry of Health Singapore, accessed January 2, 2024, https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-diseases-statistics/2023/weekly-infectious-d

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]



## **Event Updates for Emerging Diseases**

Epidemiological Week 52 | December 24 – 30, 2023

### **Global Updates for Emerging Diseases**

#### COVID-19

- The **United States (US):** The new COVID-19 variant, JN.1, now accounts for 44.1% of COVID-19 cases in the US, according to the Centers for Disease Control (CDC) and Prevention (Tin, 2023). This increase is more than two times larger than the 21.3% that the CDC now estimates the strain made up of infections for the week ending December 9, after Thanksgiving. JN.1's prevalence is largest in the Northeast region, spanning New Jersey and New York, where it is 56.9% of cases. The World Health Organization (WHO) has stepped up the strain's classification to "variant of interest" on Tuesday. Although authorities believe the public health risk from JN.1 is no greater than other recent strains, its unprecedented accumulation of mutations, most inherited from its highly mutated parent BA.2.86, has kept health authorities on guard. The CDC's own variant classifications have not been updated since September. [Full article]
- **Japan's** researchers report a new coronavirus variant, JN.1, is becoming more prevalent, accounting for 31% of all detected cases this week (NHK, 2023). The variant, a subvariant of the Omicron strain, has been spreading rapidly globally and has been designated as a "variant of interest" by the WHO. It has been reported in 41 countries, including France, Singapore, Britain, and Sweden. [Full article]
- India: Kolkata reported ten new COVID-19 cases, increasing the active case count to 30. Experts predict the numbers will rise in the coming days, especially during large gatherings (Yengkhom, 2023). Despite India reporting five COVID-19 deaths, no casualty was reported in the state. Hospitals in Kolkata have started testing symptomatic patients for COVID-19, urging the elderly and immunocompromised to adhere to COVID-19 appropriate behavior. [Full article]

#### Regional Updates for Emerging Diseases

#### COVID-19

- Cambodia: has detected the first four cases of the new COVID-19 JN.1 variant, the descendant of the highly mutated BA.2.86 lineage (MYT, 2023). The health ministry confirmed the results from the Pasteur Institute. All four have received treatment and recovered, but are still required to undergo self-quarantine at home. The JN.1 strain is classified as low-risk for public health. [Full article]
- Indonesia: In late 2023, COVID-19 threat resurfaced in Indonesia, including West Java (Tim detikJabar, 2023). Tasikmalaya City reported five COVID-19 cases, with five experiencing mild symptoms and self-isolation. Sukabumi City, West Java, also experienced more cases, with 10 new cases in December 2023. The Sukabumi City Health Service reported 124 COVID-19 cases, with 118 recovering and six are still self-isolating. Both cities have reported mild symptoms and are undergoing self-isolation efforts. Both cities are working to combat the virus. [Full article]
- Malaysia's Ministry of Health has stated that the COVID-19 situation is not an immediate public health threat, as the virus will continue to be present among the population (Tan, 2023). The admission rate for COVID-19 patients in hospitals is 0.5%, and the death rate is 0.08% for Epidemic Week 51. No new COVID-19 variants have been detected in Malaysia. [Full article]



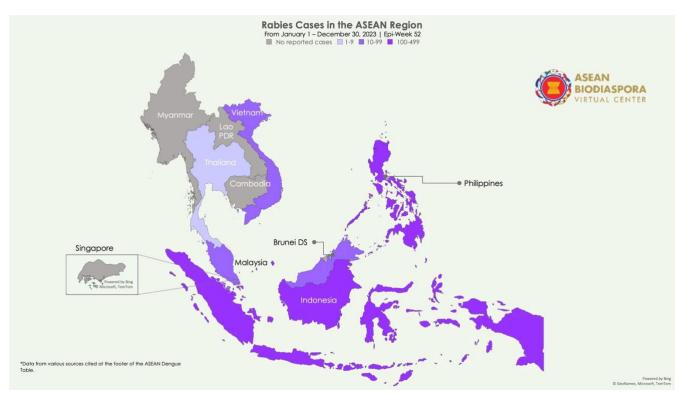
- The Philippines: The Department of Health reported 521 new COVID-19 cases, raising the
  nationwide total to 4,135,345 (GMA Integrated News, 2023). There are 5,757 active
  cases, 816 recoveries, and 66,813 deaths. The National Capital Region had the most
  new cases, followed by Calabarzon, Western Visayas, Central Luzon, and Cagayan
  Valley. [Full article]
- **Singapore's** Health Minister has announced that the current COVID-19 wave may have peaked, as the latest data shows three straight days of falling infection numbers (Khalik, 2023). Despite the strain on Singapore's 10,000-bed-strong healthcare system, there is no need to mandate mask wearing. The seven-day moving average showed 6,060 infections on December 20, down from a high of 7,870 on December 12. The number of people who were seriously ill after being infected with the virus continued to rise, leading to a record number of hospital and ICU admissions for COVID-19 infections for the year. The lowest for 2023 was 53 hospital admissions and zero ICU admissions in a week. [Full article]



# ZOONOSIS

## Rabies Cases in the ASEAN Region

From January 1 to December 30, 2023 (Epi-Week 52)



### 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 cour	ntry	
Cambodia	-	-	-	-	-
Indonesia <sup>1</sup>	Week 50	117	0	117	100%
Lao PDR	-	-	-	-	
Malaysia <sup>2</sup>	Week 51	19	9	19	100%
Myanmar	-	-	-	-	
Philippines <sup>3</sup>	Week 48	368	8	368	100%
Singapore			Rabies-free co	untry	
Thailand <sup>4</sup>	Week 49	6	0	6	100%
Vietnam²	Week 40	64	0	64	100%
Total		574	17	574	100%

- Ministry of Health, Republic of Indonesia
- BlueDot Developer Portal, accessed January 2, 2024, <a href="https://developer-portal.bluedot.global/">https://developer-portal.bluedot.global/</a>.

  Department of Health Website, accessed January 2, 2024 "Statistics," <a href="https://doh.gov.ph/statistics">https://doh.gov.ph/statistics</a>.

  Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health Thailand, accessed January 2, 2024, <a href="http://doe.moph.go.th/surdata/index.php">https://doe.moph.go.th/surdata/index.php</a>
- The ASEAN region reported 17 new rabies cases in Malaysia and the Philippines since the previous report. The region reported 574 total cases and 574 total deaths in 2023 with 100% CFR.



## **Event Updates for Zoonosis**

# Epidemiological Week 52 | December 24 – 30, 2023

### **Global Updates for Zoonosis**

#### **Avian Influenza**

• **US**: A new case of avian influenza has been detected in central Pennsylvania, prompting the US Department of Agriculture (USDA) to urge poultry owners and backyard flocks to protect their flocks (Worden, 2023). Although not the highly pathogenic strain, the disease does not pose an immediate public health concern. The USDA has quarantined the farm and sent samples for confirmation testing. [Full article]

#### **Rabies**

• **South Africa** has confirmed 11 cases of human rabies in 2023, primarily in KwaZulu-Natal and Eastern Cape provinces. The main vectors are canines, which are more likely to transmit the disease due to close contact with the vector. The main target for rabies eradication is to eradicate rabies in the canine population, as per the Department of Agriculture and Rural Development head of Veterinary Services. [Full article]



# **VECTOR-BORNE DISEASES**

### **Dengue Cases in the ASEAN Region**

From January 1 to December 30, 2023 (Epi-Week 52)



### Dengue cases in the ASEAN region

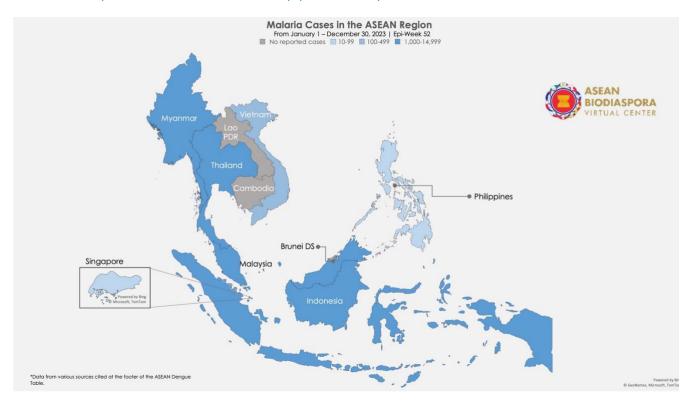
Country	Epi-Week Reported	Cumulative Dengue Cases	New Cases Since the Previous Report	Cumulative Deaths	New Deaths	CFR
Brunei Darussalam	-	-	-	-	-	-
Cambodia <sup>1</sup>	Week 43	27,908	0	39	0	0.14%
Indonesia <sup>2</sup>	Week 49	89,900	0	690	0	0.77%
Lao PDR <sup>1</sup>	Week 49	31,261	263	20	0	0.06%
Malaysia <sup>3</sup>	Week 49	121,069	0	84	0	0.07%
Myanmar <sup>4</sup>	Week 28	6,685	0	30	0	0.45%
Philippines <sup>5</sup>	Week 48	195,603	6,418	657	20	0.34%
Singapore <sup>6</sup>	Week 51	9,663	42	-	0	0.00%
Thailand <sup>7</sup>	Week 50	150,808	0	165	0	0.11%
Vietnam¹	Week 46	149,557	0	36	0	0.02%
Total		782,454	6,723	1,721	20	0.22%

- WHO WPRO, "Dengue," World Health Organization, accessed January 2, 2024, https://www.who.int/westernpacific/emergencies/surveillance/dengue.
- Ministry of Health, Republic of Indonesia
  Disease Control Division, Ministry of Health Malaysia, accessed January 2, 2024. iDengue, <a href="https://idengue.mysa.gov.my/did/">https://idengue.mysa.gov.my/did/</a>
- BlueDot Developer Portal, accessed January 2, 2024, <a href="https://developer-portal.bluedot.global/">https://developer-portal.bluedot.global/</a>. Department of Health Website, accessed January 2, 2024 "Statistics," <a href="https://doh.gov.ph/statistics">https://doh.gov.ph/statistics</a>.
- Ministry of Health. "Weekly Infectious Disease Bulletin", accessed January 2, 2024. https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weeklyinfectious-diseases-bulletin
- 7. Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health Thailand, accessed January 2, 2024, 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 6,723 new dengue cases in Lao PDR, the Philippines, and Singapore – 20 Deaths. The region reported 782,454 total cases and 1,721 total deaths in 2023 with 0.22% CFR.



### Malaria Cases in the ASEAN Region

From January 1 to December 30, 2023 (Epi-Week 52)



### 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 <sup>1</sup>	Week 44	1,899	0	0	0.00%	
Lao PDR	-	-	-	-	-	
Malaysia <sup>1</sup>	Week 45	1,116	0	0	0.00%	
Myanmar <sup>1</sup>	Week 23	4,510	0	0	0.00%	
Philippines <sup>1</sup>	Week 28	31	0	0	0.00%	
Singapore <sup>3</sup>	Week 51	23	1	0	0.00%	
Thailand <sup>2</sup>	Week 50	4,949	0	4	0.08%	
Vietnam <sup>1</sup>	Week 42	349	0	0	0.00%	
Total		12,877	1	4	0.03%	

BlueDot Developer Portal, accessed January 2, 2024, <a href="https://developer-portal.bluedot.global/">https://developer-portal.bluedot.global/</a>.

Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health Thailand, accessed January 2, 2024, <a href="https://doe.moph.go.th/surdata/index.php">https://doe.moph.go.th/surdata/index.php</a>

Ministry of Health Singapore, accessed January 2, 2024, <a href="https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-disease-statistics/2023/weekly-infectious-disease-sbulletin">https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-disease-sbulletin</a>

The ASEAN region reported one new malaria case in Singapore since the previous report. The region reported 12,877 total cases and four total deaths in 2023 with 0.03% CFR.



### Chikungunya Cases in the ASEAN Region

From January 1 to December 30, 2023 (Epi-Week 52)



### 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 <sup>1</sup>	Week 51	468	0	0	-	0.00%
Lao PDR	-	-	-	-	-	-
Malaysia <sup>2</sup>	Week 50	193	8	0	-	0.00%
Myanmar	-	-	-	-	-	-
Philippines <sup>3</sup>	Week 48	2,889	39	0	-	0.00%
Singapore <sup>4</sup>	Week 46	13	0	0	-	0.00%
Thailand <sup>5</sup>	Week 50	1,346	0	0	-	0.00%
Vietnam	-	-	-	-	-	-
Total		4,909	47	0		0.00%

- BlueDot Developer Portal, accessed January 2, 2024, https://developer-portal.bluedot.global/
- Portal Rasmi, Ministry of Health Malaysia, accessed January 2, 2024, https://www.moh.gov.my/index.php/database\_stores/store\_view/17
  Department of Health Website, accessed January 2, 2024 "Statistics," https://doh.gov.ph/statistics.
- 4. Ministry of Health Singapore, accessed January 2, 2024, https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-dis
- Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health Thailand, accessed January 2, 2024, http://doe.moph.go.th/surdata/index.php
- The **ASEAN** region reported **47** new chikungunya cases in Malaysia and the Philippines. The region reported 4,909 total cases and NO deaths in 2023 with 0.00% CFR.



# **Event Updates for Vector-borne Diseases**

# Epidemiological Week 52 | December 24 – 30, 2023

### Global Updates for Vector-borne Diseases

### **Dengue**

- **Bangladesh:** Dengue cases in Bangladesh have surged by 72 to 321,073, with one death reported in the 24 hours to Saturday morning (News Desk, 2023). The disease has caused a record 79,598 cases and 396 deaths in September, followed by 67,769 cases and 359 deaths in October, 71,976 cases in August, and 40,716 new cases in November. Experts attribute the outbreak to a prolonged monsoon, rising temperatures, and inadequate mosquito control measures. [Full article]
- India: Tamil Nadu has reported 8,953 cases of dengue and 10 deaths due to the virus. The health minister, said there is no major surge in dengue cases and deaths (DTNEXT bureau, 2023). The state has recorded over 1,600 cases this month, but no new deaths have been reported. The Union government warned of a large-scale impact of dengue, and precautionary measures have been taken. The 10th monsoon special medical camp was inaugurated, and 43,432 medical camps have been conducted across Tamil Nadu in the last two months. [Full article]
- **US:** The Hawai'i Department of Health has reported a travel-related dengue case in O'ahu, Hawai'i, in an individual who recently traveled to countries where dengue is commonly found (Hawai'i Department of Health, 2023). The disease is not established in Hawai'i, but cases are only seen in travelers. Dengue outbreaks occur in many parts of the world, including Central and South America, Asia, the Middle East, Africa, some Pacific Islands, and popular Caribbean tourist destinations. Travelers are at risk for infection, and the CDC advises travelers to practice usual precautions, including using an Environmental Protection Agency-registered insect repellent, wearing long-sleeved shirts and pants, and sleeping in an air-conditioned room. If symptoms develop within two weeks of return, medical evaluation should be sought. Symptoms typically last two to seven days, and most people recover after about a week. [Full article]
- **Spain:** Health authorities in Madrid, Spain, reported 77 confirmed and 51 probable cases of dengue fever until December 19, 2023 (Fundación iO, 2023). The cases were from various countries, with 51.5% being women. The mean age was 36.6 years. The cases were also reported in Catalonia in November and October 2023. [Full article]

#### Malaria

• Ethiopia: The region faces increased risk of disease outbreaks due to worsening drought, floods, and insecurity (OCHA, 2023). Over 616,000 people have been displaced and health facilities damaged. Sexual and gender-based violence persists in conflict-affected areas. Measles cases have increased by 157%, malaria cases have increased by almost 500,000, and cholera cases have increased by 11%. The first two health cluster co-coordinators for Ethiopia have been appointed in Gambella and Benishangul Gumuz. [Full article]



- India: The health department team organized health camps in various villages in Amdapara block area, conducting health check-ups and identifying 21 malaria cases (Khabar, 2023). Medicines were provided to those infected, and 78 people have been found infected. A meeting with village heads was held to spread awareness about malaria prevention. The medical officer appealed for cooperation in malaria prevention, blood testing, treatment, and addressing issues related to malaria and kala-azar. [Full article]
- **Pakistan:** Sindh reported 559,515 malaria cases this year, with two deaths (Irshad, 2023). No patient deaths were reported in 2,852 dengue cases in 2023. In 2022, 24 out of 417,213 malaria cases died, 64 from 23,274 dengue cases, and 7 deaths from Naegleria. CCHF Congo virus caused 7 of 8 deaths in 2022. [Full article]

#### Zika

• **Netherlands:** A 33-year-old woman presented with acute symptomatic Zika virus infection after a 2-week trip to Thailand (Goorhuis, 2023). Symptoms included a headache, sub-febrile temperature, and jet-lag feeling. The patient had a facial rash, a generalized rash, and tender lymph nodes. Blood tests showed lymphocytopenia, but normal liver tests, ESR, and thrombocytes were normal. Zika virus RT-PCR was positive, but IgG and IgM were negative, suggesting a previous dengue infection. Zika virus serology was not performed, and other recent infections were excluded. The case highlights the importance of raising awareness among travelers of child-bearing age when traveling to Thailand, especially Koh Samui. Both women and men should be aware of risks related to Zika virus infection before traveling to endemic countries. Laboratory support is essential for differential diagnosis of illnesses similar to dengue and Zika virus infections. [Full article]

### **Regional Updates for Vector-borne Diseases**

#### **Dengue**

• Indonesia: Lebak District in Indonesia is urging residents to be aware of the Aedes aegypti mosquito that causes Dengue Hemorrhagic Fever (DHF) due to the rainy season. The Lebak District Health Office is working to prevent the spread of DHF by optimizing socialization about Aedes aegypti Mosquito Nest Eradication and Clean and Healthy Lifestyle. The rainy season makes mosquito breeding easier, so people are encouraged to clean the surrounding environment by burying, draining, and closing places that can become mosquito nests. From January to mid-December 2023, 602 residents were affected by DHF, with four dying. The Lebak District Health Office is working to eradicate the disease and monitor its development through epidemiological research. [Full article]

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 centers in South Hulu Sungai, 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 infected areas and abate 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 Government has also anticipated prevention through a circular letter. [Full article]



• **Vietnam:** Between January 1, 2023, and December 7, 2023, over 500,000 dengue cases and 750 deaths were reported in the WHO Western Pacific Region, with the Philippines (167,355 cases, 575 deaths) and Vietnam (149,557 cases, 36 deaths) being the most affected. Dengue is endemic in several countries in the region. In Pacific Island countries/territories, dengue-like illness cases increased by 28% in 2023, with Fiji reporting a significant rise from 8,418 cases in 2022 to 11,522 cases in 2023. [Full article]

### Chikungunya

• **Philippines.** Chikungunya cases in the Philippines increased by 382% in 2023, with 2,889 cases recorded compared to 600 in 2022 (Villalba, 2023). The disease causes fever, joint pain, and rash. The Cordillera administrative region saw the most cases, followed by Imaropa and Cagayan Valley. Ilocos, Zamboanga Peninsula, and northern Mindanao reported the most cases. Dengue cases nationwide decreased by 23% this year, with 195,603 cases recorded compared to 252,700 in 2022. [Full article]

#### **Leptospirosis**

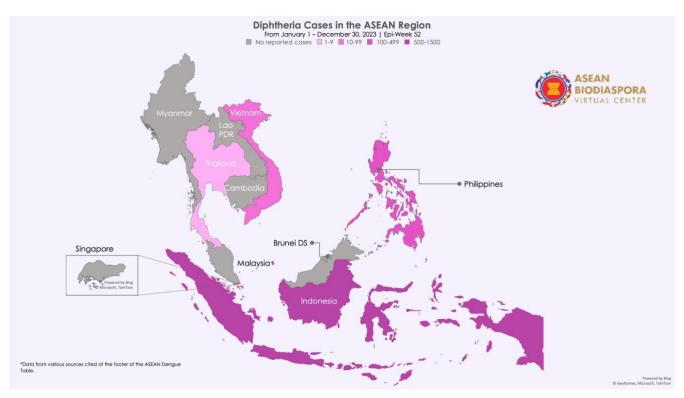
• The **Philippines:** Leptospirosis cases in the city of Manila have surged by 100% from January to mid-December 2022, largely due to exposure to risk factors, particularly in populated villages. The City Health Office (CHO) reported 88 cases, including 16 deaths, from January to mid-December, with the latest fatality being a construction worker. The most common causes of complications and deaths are delayed health-seeking behavior and denial of leptospirosis infection. The CHO advised public to take leptospirosis prophylaxis immediately after exposure or consult a health center. [Full article]



# VACCINE-PREVENTABLE DISEASES

### Diphtheria Cases in the ASEAN Region

From January 1 to December 30, 2023 (Epi-Week 52)



### 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 <sup>1</sup>	Week 49	800	0	45	5.63%	
Lao PDR	-	-	-	-	-	
Malaysia	-	-	-	-	-	
Myanmar	-	-	-	-	-	
Philippines <sup>2</sup>	Week 48	198	7	50	25.25%	
Singapore <sup>3</sup>	-	0	0	0	0.00%	
Thailand <sup>4</sup>	Week 46	5	0	0	0.00%	
Vietnam <sup>5</sup>	Week 38	41	0	3	7.32%	
Total		1,044	7	98	9.39%	

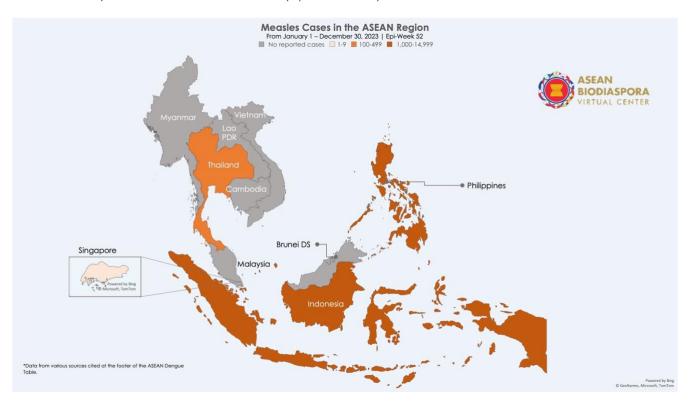
- Ministry of Health, Republic of Indonesia.
- Department of Health Website, accessed January 2, 2024 "Statistics," https://doh.gov.ph/statistics.
- Ministry of Health Singapore, accessed January 2, 2024, <a href="https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infec

- The ASEAN region reported **7** diphtheria cases in **the Philippines** since the previous report. The region reported 1,044 total cases and 98 total deaths in 2023 with 9.39% CFR.



## Measles Cases in the ASEAN Region

From January 1 to December 30, 2023 (Epi-Week 52)



### 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 <sup>1</sup>	Week 49	9,120	0	11	0.12%	
Lao PDR	-	-	-	-	-	
Malaysia	-	-	-	-	-	
Myanmar	-	-	-	-	-	
Philippines <sup>2</sup>	Week 48	2,576	79	16	0.62%	
Singapore <sup>3</sup>	Week 49	7	1	0	0.00%	
Thailand <sup>4</sup>	Week 50	337	0	0	0.00%	
Vietnam	-	-	-	-		
Total		12,040	80	27	0.22%	

- Ministry of Health, Republic of Indonesia
- Department of Health Website, accessed January 2, 2024 "Statistics," <a href="https://doh.gov.ph/statistics">https://doh.gov.ph/statistics</a>.

  Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health Thailand, accessed January 2, 2024, <a href="http://doe.moph.go.th/surdata/index.php">https://doe.moph.go.th/surdata/index.php</a>
- Ministry of Health Singapore, accessed January 2, 2024, https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-diseases-bulletin
- The ASEAN region reported 80 new measles cases in the Philippines and Singapore since the previous report. The region reported 12,040 total cases and 27 total deaths in 2023 with 0.22% CFR.



# **Event Updates for Vaccine-Preventable Diseases**

## Epidemiological Week 52 | December 24 – 30, 2023

### Global Updates for Vaccine-Preventable Diseases

#### **Diphtheria**

• India: Diphtheria cases are increasing in Deoghar district, so far three cases of diphtheria have been found in Madhupur and Sarath. [Full article]

#### **Measles**

- **Sri Lanka** is set to give an extra dose of the measles, mumps, and rubella (MMR) vaccine to infants aged 6-8 months in nine of the country's 25 districts due to the resurfacing of measles cases. The health ministry will establish 1600 clinics across the country to access the vaccine. The COVID-19 pandemic has led to a drop in immunization coverage, allowing the resurgence of measles cases in the country. [Full article]
- Russia: 59 measles cases have been registered in the Balakovo region, with 49 confirmed laboratory cases (Nversia.ru, 2023). The district has 8 adults and 51 children, with 57 recovered and two inpatients. The Balakovo district accounts for a quarter of the total 207 cases, with all contacts examined and under 21-day medical supervision. [Full article]

#### **Pertussis**

- **Kazakhstan:** The incidence of whooping cough in Kazakhstan has risen to 393 cases in 2023, with 90% of cases involving unvaccinated children (Azattyq, 2023). The increase is linked to missed routine vaccinations and refusals to vaccinate, which can lead to a decrease in herd immunity. The measles outbreak in Kazakhstan has also been linked to refusal to vaccinate, with over 26,000 cases registered and two children dying in Astana and East Kazakhstan. The Sanitary and Epidemiological Control Committee's response explains the cyclical increase in whooping cough incidence. [Full article]
- **Spain:** The Ministry of Health has reported 13 cases of whooping cough in 2023, a convulsive respiratory disease caused by *Bordetella pertussis* (EOG, 2023). Despite being considered extinct, it is now re-emerging and can be fatal. Doctors must declare the disease under suspicion and notify the Prevention, Promotion, and Health Surveillance area. The action protocol includes respiratory isolation for up to five days after antibiotic treatment, epidemiological surveys, and health alerts. The government's vaccination schedule includes multiple doses for whooping cough, diphtheria, tetanus, and inactivated poliomyelitis. [Full article]
- Russia: Over 25 students in Gorno-Altaisk gymnasium No. 3 have been ill with whooping cough, according to Rospotrebnadzor of the Altai Republic (Amic.ru, 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]



### Regional Updates for Vaccine-Preventable Diseases

#### **Pertussis**

• **Thailand:** The Department of Disease Control (DDC) in southern Thailand has reported a whooping cough epidemic, with three fatalities confirmed (BNN Correspondents, 2023). The disease, often mistaken for a common cold, has led to delays in seeking medical treatment and deaths. The DDC is ensuring the availability of whooping cough vaccinations and treating those infected to prevent further spread. The WHO is monitoring the situation and urging public awareness and vaccination for young children who lack immunity. The Ministry of Health is urging the public to take precautions to prevent the disease's spread. [Full article]



#### References

Amic.ru (2023) More than 25 students of the Altai gymnasium fell ill with whooping cough | Новости Барнаула и Алтайского края - на сайте amic.ru ИА Амител. Available at: <a href="https://www.amic.ru/news/bolee-25-uchenikov-altayskoy-gimnazii-zaboleli-koklyushem-535521">https://www.amic.ru/news/bolee-25-uchenikov-altayskoy-gimnazii-zaboleli-koklyushem-535521</a> (Accessed: 02 January 2024).

Azattyq (2023) Минздрав: В Казахстане растёт заболеваемость коклюшем (2023) Радио Азаттык. Available at: <a href="https://rus.azattyq.org/a/32752214.html">https://rus.azattyq.org/a/32752214.html</a> (Accessed: 02 January 2024).

BNN Correspondents (2023) Whooping cough epidemic in southern Thailand: An urgent call for public awareness and vaccination, BNN Breaking. Available at: <a href="https://bnnbreaking.com/breaking-news/health/whooping-cough-epidemic-in-southern-thailand-an-urgent-call-for-public-awareness-and-vaccination/">https://bnnbreaking.com/breaking-news/health/whooping-cough-epidemic-in-southern-thailand-an-urgent-call-for-public-awareness-and-vaccination/</a> (Accessed: 02 January 2024).

DTNEXT Bureau (2023) TN Records 8,953 Dengue cases This Year, dtnext. Available at: https://www.dtnext.in/news/tamilnadu/tn-records-8953-dengue-cases-this-year-757744 (Accessed: 02 January 2024).

EOG (2023) Detectats 13 casos de tos ferina el 2023. Available at: <a href="https://www.bondia.ad/comment/reply/1065">https://www.bondia.ad/comment/reply/1065</a> 07 (Accessed: 02 January 2024).

Fundación iO (2023) 23 Diciembre 2023. Casos de Dengue. Available at: <a href="https://fundacionio.com/casos-de-dengue-importado-en-madrid-en-2023/">https://fundacionio.com/casos-de-dengue-importado-en-madrid-en-2023/</a> (Accessed: 02 January 2024).

GeoTV News (2023) Diphtheria cases are increasing in deoghar district, so far three cases of diphtheria have been found in Madhupur and Sarath. Available at: <a href="https://geotvnews.com/diphtheria-cases-are-increasing-in-deoghar-district-so-far-three-cases-of-diphtheria-have-been-found-in-madhupur-and-sarath-geotv-news/">https://geotvnews.com/diphtheria-cases-are-increasing-in-deoghar-district-so-far-three-cases-of-diphtheria-have-been-found-in-madhupur-and-sarath-geotv-news/</a> (Accessed: 02 January 2024).

GMA Integrated News (2023) Doh logs 521 new COVID-19 cases, GMA News Online. Available at: <a href="https://www.gmanetwork.com/news/topstories/nation/892619/doh-logs-521-new-covid-19-cases/story/">https://www.gmanetwork.com/news/topstories/nation/892619/doh-logs-521-new-covid-19-cases/story/</a> (Accessed: 02 January 2024).

Goorhuis, A. (2021) ZIKA VIRUS (12): EUROPE (NETHERLANDS ex THAILAND) – *ProMED*. Available at: <a href="https://promedmail.org/promed-post/?id=8713924">https://promedmail.org/promed-post/?id=8713924</a> (Accessed: 02 January 2024).

Guadalquiver, N (2023) Leptospirosis cases double in Bacolod City, 16 deaths recorded (no date) Philippine News Agency. Available at: <a href="https://www.pna.gov.ph/articles/1215999">https://www.pna.gov.ph/articles/1215999</a> (Accessed: 02 January 2024).

Hanani (2023) Kasus dbd di HSS Meningkat Sejak Oktober 2023, Dua Orang Meninggal ... Available at: https://banjarmasin.tribunnews.com/2023/12/21/kasus-dbd-di-hss-meningkat-sejak-oktober-2023-dua-orang-meninggal-terinfeksi-virus-dengue (Accessed: 02 January 2024).

Hawai'i Department of Health (2023) DOH News Release – DOH Reports Travel-Related Dengue Virus Case in Hawai'i. Available at: https://governor.hawaii.gov/newsroom/dohnews-release-doh-reports-travel-related-dengue-virus-case-in-hawaii/ (Accessed: 02 January 2024).

Irshad (2023) More than 5.5 million cases of malaria have been reported in Sindh this year, data continues PIPA News, PiPa News. Available at: <a href="https://pipanews.com/more-than-5-5-million-cases-of-malaria-have-been-reported-in-sindh-this-year-data-continues-pipa-news/">https://pipanews.com/more-than-5-5-million-cases-of-malaria-have-been-reported-in-sindh-this-year-data-continues-pipa-news/</a> (Accessed: 02 January 2024).

Khabar, P (2023) पाकुइ: अमझपाझ प्रखंड क्षेत्र में मलेरिया के 21 मरीजों की हुई पहचान (2023). Available at:

https://www.prabhatkhabar.com/state/jharkhand/pakur/21-malaria-patients-identified-in-amdapara-block-area-pakur-kkk (Accessed: 02 January 2024).

Khalik, S. (2023) Singapore covid-19 wave probably peaked, but slight surge possible, says health minister, The Star. Available at: <a href="https://www.thestar.com.my/aseanplus/aseanplus-news/2023/12/23/singapore-covid-19-wave-probably-peaked-but-slight-surge-possible-says-health-minister">https://www.thestar.com.my/aseanplus/aseanplus-news/2023/12/23/singapore-covid-19-wave-probably-peaked-but-slight-surge-possible-says-health-minister</a> (Accessed: 02 January 2024).

Kubheka, A. (2023) 11th human rabies patient dies in Sa – NICD, Independent Online. Available at: <a href="https://www.iol.co.za/dailynews/news/11th-human-rabies-patient-dies-in-sa-nicd-">https://www.iol.co.za/dailynews/news/11th-human-rabies-patient-dies-in-sa-nicd-</a>



<u>e01d6216-0a31-40dc-8ee4-136c060881ed</u> (Accessed: 02 January 2024).

Lubis, R.U. (2023) Sejumlah Warga kabupaten lebak meninggal dunia akibat DBD, Waspada ... Available at: <a href="https://zonabanten.pikiran-rakyat.com/banten/pr-237532489/sejumlah-warga-kabupaten-lebak-meninggal-dunia-akibat-dbd-waspada-nyamuk-aedes-aegypti">https://zonabanten.pikiran-rakyat.com/banten/pr-237532489/sejumlah-warga-kabupaten-lebak-meninggal-dunia-akibat-dbd-waspada-nyamuk-aedes-aegypti</a> (Accessed: 02 January 2024).

MYT (2023) Cambodia confirms first four cases of new covid-19 variant JN.1, The Star. Available at: <a href="https://www.thestar.com.my/aseanplus/aseanplus-news/2023/12/29/cambodia-confirms-first-four-cases-of-new-covid-19-variant-jn1">https://www.thestar.com.my/aseanplus/aseanplus-news/2023/12/29/cambodia-confirms-first-four-cases-of-new-covid-19-variant-jn1</a> (Accessed: 02 January 2024).

News Desk (2023) Bangladesh registers 72 dengue cases, 1 death in a day, bdnews24.com. Available at: <a href="https://bdnews24.com/health/clc10ucw1e">https://bdnews24.com/health/clc10ucw1e</a> (Accessed: 02 January 2024).

NHK (2023) New jn.1 coronavirus variant taking root across Japan: NHK World-Japan News. Available at: <a href="https://www3.nhk.or.jp/nhkworld/en/news/20">https://www3.nhk.or.jp/nhkworld/en/news/20</a> 231228 22/ (Accessed: 02 January 2024).

Nversia.ru (2023) Четверть заболевших корью приходится на Балаковский район (2023) ИА 'Версия-Саратов'. Available at: <a href="https://nversia.ru/news/chetvert-zabolevshih-koryu-prihoditsya-na-balakovskiy-rayon/">https://nversia.ru/news/chetvert-zabolevshih-koryu-prihoditsya-na-balakovskiy-rayon/</a> (Accessed: 02 January 2024).

OCHA (2023) Ethiopia Health Cluster Bulletin (December 2023) – ethiopia. Available at: https://reliefweb.int/report/ethiopia/ethiopia-health-cluster-bulletin-december-2023 (Accessed: 02 January 2024).

OCHA (2023) Pacific Syndromic Surveillance System Weekly Bulletin / système de surveillance syndromique dans le pacifique - bulletin hebdomadaire: W51 2023 (Dec 17 - Dec 23) - fiji (2023) ReliefWeb. Available at: https://reliefweb.int/report/fiji/pacific-syndromic-surveillance-system-weekly-bulletin-systeme-de-surveillance-syndromique-dans-le-pacifique-bulletin-hebdomadaire-w51-2023-dec-17-dec-23 (Accessed: 02 January 2024).

Tan, B. (2023) Covid-19 situation in Malaysia under control, majority of cases have mild symptoms, says health minister, Malay Mail. Available at: https://www.malaymail.com/news/malaysia/

2023/12/29/covid-19-situation-in-malaysiaunder-control-majority-of-cases-have-mildsymptoms-says-health-minister/109707 (Accessed: 02 January 2024).

Tim detikJabar (2023) Covid-19 Kembali Mengintai warga jabar di akhir tahun 2023, detikjabar. Available at: <a href="https://www.detik.com/jabar/berita/d-7115311/covid-19-kembali-mengintai-warga-jabar-di-akhir-tahun-2023">https://www.detik.com/jabar/berita/d-7115311/covid-19-kembali-mengintai-warga-jabar-di-akhir-tahun-2023</a> (Accessed: 02 January 2024).

Tin, A. (2023) New covid variant JN.1 surges to 44% of cases, CDC estimates - even higher in New York, New Jersey, CBS News. Available at: <a href="https://www.cbsnews.com/news/new-covid-variant-jn-1-cases-cdc-new-york-new-jersey/">https://www.cbsnews.com/news/new-covid-variant-jn-1-cases-cdc-new-york-new-jersey/</a> (Accessed: 02 January 2024).

Villalba, T. (2023) Los Casos de Chikungunya Aumentaron un 382 por ciento en 2023 - doh, ArrobaJuarez. Available at: <a href="https://arrobajuarez.com/2023/12/27/los-casos-de-chikungunya-aumentaron-un-382-por-ciento-en-2023-doh/">https://arrobajuarez.com/2023/12/27/los-casos-de-chikungunya-aumentaron-un-382-por-ciento-en-2023-doh/</a> (Accessed: 02 January 2024).

Worden, A. (2023) New case of avian flu detected in Central PA.., pennlive. Available at:

https://www.pennlive.com/news/2023/12/new-case-of-avian-flu-detected-in-central-pa.html (Accessed: 02 January 2024).

Xinhua (2023) Sri Lanka to administer extra vaccine dose to infants as measles resurfaces. Available at: <a href="https://english.news.cn/20231228/a91b45b75f">https://english.news.cn/20231228/a91b45b75f</a> d14324b966a408d4f4e5a8/c.html (Accessed: 02 January 2024).

Yengkhom, S. (2023) 10 new covid cases in state, most from Kol: Kolkata news - times of India, The Times of India. Available at: <a href="https://timesofindia.indiatimes.com/city/kolkata/10-new-covid-cases-in-state-most-from-kol/articleshow/106392721.cms">https://timesofindia.indiatimes.com/city/kolkata/10-new-covid-cases-in-state-most-from-kol/articleshow/106392721.cms</a> (Accessed: 02 January 2024).



Report generated by

ASEAN Biodiaspora Virtual Center (ABVC) in collaboration with Bluedot Inc.

Email: <a href="mailto:support@biodiaspora.org">support@biodiaspora.org</a>
Facebook: <a href="mailto:https://facebook.com/ASEANBiodiaspora">https://facebook.com/ASEANBiodiaspora</a>
Instagram: <a href="mailto:https://instagram.com/ASEANBiodiaspora">https://instagram.com/ASEANBiodiaspora</a>

