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Morbidity and Mortality Weekly Report in the ASEAN Region

— Infectious Diseases

September 4, 2023 | MMWR 2023-35
Epidemiological Week 35



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Weekly Issue





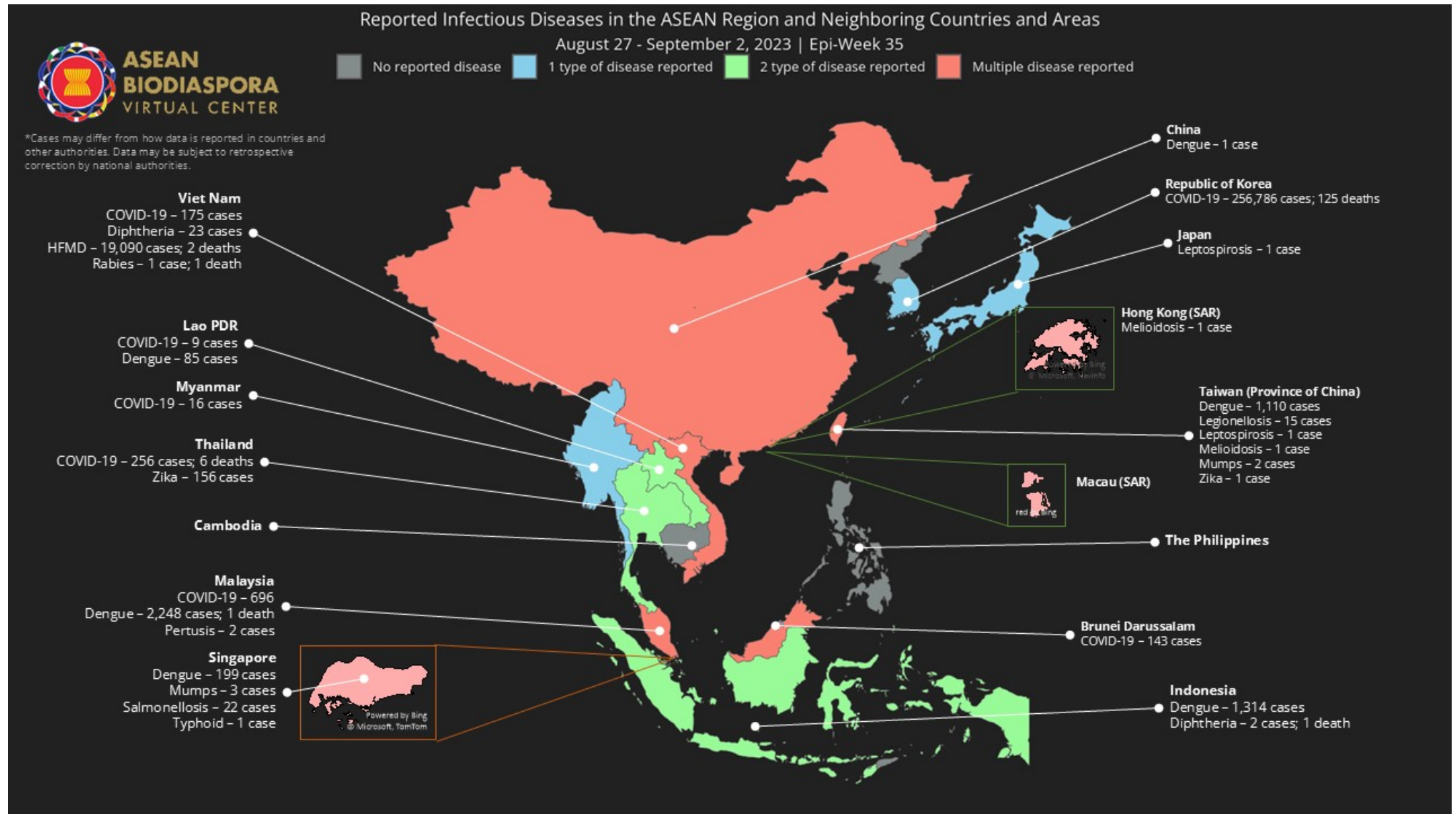
Table of Contents

Infectious Diseases	1
Infectious Diseases Map in ASEAN Region and Neighboring Countries	1
Infectious Disease Global Updates	2
Diphtheria	2
Measles	2
Dengue	2
Rabies	3
Enterovirus	3
Infectious Disease Updates in the ASEAN Region	4
Hand, Foot, and Mouth Disease (HFMD)	4
Vector-Borne Diseases	5
Dengue	6
Dengue Cases in ASEAN Region Map	6
Dengue Cases in ASEAN Region Table	6
Dengue Narrative Report	7
Malaria	8
Malaria Cases in ASEAN Region Map	8
Malaria Cases in ASEAN Region Table	8
Vaccine-Preventable Diseases	9
Diphtheria	10
Diphtheria Cases in ASEAN Region Map	10
Diphtheria Cases in ASEAN Region Table	10
Diphtheria, Tetanus Toxoid and Pertussis Vaccination Coverage in the ASEAN Region	11
Diphtheria Narrative Report	11
Measles	12
Measles Cases in ASEAN Region Map	12
Measles Cases in ASEAN Region Table	12
Measles Vaccination Coverage in the ASEAN Region	13
Rabies	14
Rabies Cases in ASEAN Region Map	14
Rabies Cases in ASEAN Region Table	14
Rabies Narrative Report	15
References	16



Reported Infectious Diseases in the ASEAN Region and Neighboring Countries

Epidemiological Week 35 | August 27 – September 2, 2023



1. Ministry of Health Singapore, "Weekly Infectious Diseases Bulletin," Ministry of Health, August 19, 2023, <https://www.moh.gov.sg/resources-statistics/infectious-disease-statistics/2023/weekly-infectious-diseases-bulletin>.



Reported Infectious Diseases

Epidemiological Week 35 | August 27 – September 2, 2023

Infectious Disease Global Updates

Diphtheria

- Europe:** From January 2022 to August 2023, 281 cases of diphtheria were confirmed in EU/EEA countries, with most cases in migrant-related facilities (Press Release, 2023). The ECDC reported most cases in Germany and Switzerland. The cases were caused by *Corynebacterium diphtheriae* and 53 by *Corynebacterium ulcerans*. The age range of cases was 0 to 92 years. Of the 228 cases, 199 had the cutaneous form, 18 had the respiratory form, three had both, and three had the nasal form. Three deaths were attributed to *C. diphtheriae* and one to *C. ulcerans*. [\[Full article\]](#)

Measles

- Congo:** Since the first week of 2023, 15,525 measles cases and 655 deaths have been reported in Kasai province, with Luebo being the most affected (News Desk, 2023b). The health zone of Kanzala has reported 282 cases of death. All notified cases are treated free of charge in nearest health facilities. Measures to prevent the spread include strengthening epidemiological surveillance and routine vaccination. The DPS plans to launch a measles campaign next month and urges parents to get their children vaccinated. The World Health Organization reports 101,833 suspected cases and 1,301 deaths. [\[Full article\]](#)
- United States:** The Texas Department of State Health Services (DSHS) [2023] has confirmed a case of measles in a resident of McCulloch County. The most recent confirmed case of measles in Texas occurred in June 2023 in Hood County, and both cases involved non-school-aged children. Neither of these individuals had traveled to regions where measles is currently spreading, and no other identifiable risk factors for exposure were found. It is important to note that both cases had previously received one dose of the measles-mumps-rubella (MMR) vaccine. At this moment, public health authorities do not suspect any direct connection between these cases. DSHS, in conjunction with the Centers for Disease Control and Prevention (CDC), recommends that children receive their first MMR vaccine dose between the ages of 12 to 15 months and a second dose between 4 to 6 years old. Children who are too young to be vaccinated or individuals who have received only one dose of the vaccine are at higher risk of contracting measles and may face more severe complications if they do contract the disease. [\[Full article\]](#)

Dengue

- Africa:** The Ministry of Health in Chad declared a Dengue fever outbreak on August 15, with 47 suspected cases reported in three provinces (News Desk, 2023a). The epicenter, Ouaddaï Province, is the most affected by the Sudan crisis, accounting for 82.7% of all refugees and facing disease outbreaks, including malaria. [\[Full article\]](#)
- Bangladesh:** Dengue has claimed 634 lives and infected nearly 1,30,302 people in Bangladesh, with 16 more deaths in 24 hours (Star Digital Report, 2023). At least 2,608 patients were hospitalized in the 24-hour period, with 8,845 patients undergoing treatment. Hospitals, particularly in Dhaka, struggle to accommodate the large number of patients. The government has taken initiatives to limit the spread of mosquito-borne diseases, but there is no specific vaccine or drug for dengue. [\[Full article\]](#)
- Guinea:** On August 15, 2023, WHO AFRO was informed about a confirmed case of dengue fever in Guinea (News Desk, 2023c). It is a 37-year-old physician from Abidjan,



Côte d'Ivoire, who arrived in Conakry, Republic of Guinea, on August 3, 2023. The patient had onset of symptoms on 5 August 2023, including fever, headaches, nasal discharge, and general body weakness. A sample collected on 14 August 2023, confirmed the patient's positive for Dengue. [\[Full article\]](#)

- **India:** Lucknow has reported 18 fresh dengue cases, with the highest 10 from the Chandarnagar area (HT Correspondent, 2023). This is the highest number of cases in one day this year. The health department advises people to eliminate mosquito breeding sources at offices, homes, and surrounding areas. They advise removing unused items, using mosquito nets during sleep, and covering feet during morning or evening walks. [\[Full article\]](#)
- **Taiwan (Province of China):** In August, Taiwan reported 892 new local cases of dengue fever, bringing the country's total to 3,026 cases for 2023 (News Desk, 2023e). The cases occurred in Tainan City, Kaohsiung City, Yunlin County, Pingtung County, New Taipei City, Taipei City, Taoyuan City, Hsinchu City, Taichung City, Chiayi County, Hsinchu County, Miaoli County, Changhua County, and Nantou County. The third local dengue fever death case was reported this year. A new case of mother-to-child vertical infection was also reported, involving a preterm newborn living [in a dengue fever-endemic area](#). [\[Full article\]](#)

Rabies

- **South Africa** has reported eight confirmed human rabies cases in 2023 due to public awareness, low dog vaccination rates, and inadequate PEP (News Desk, 2023d). Despite fatalities, rabies is preventable after contact with rabid animals. To prevent rabies, wound cleaning, RIG and vaccine doses, community engagement, vaccination, wound care, and prompt PEP intervention are crucial. [\[Full article\]](#)

Enterovirus

- **Taiwan (Province of China):** Taiwan Centers for Disease Control and Prevention reported the first fatality attributed to enterovirus infection (Lee, 2023). This year's first death from enterovirus was confirmed last week, a 10-month-old boy infected with enterovirus D68. According to the CDC, the young boy was discovered unconscious, without a heartbeat, and not breathing shortly after being fed milk at a daycare center on August 8. Following his hospitalization, medical examinations revealed severe brain swelling, ultimately resulting in his tragic demise due to complications arising from enterovirus infection. None of his family members exhibited any symptoms of the virus. Additionally, while another child at the same daycare center had contracted the virus two months prior, none of the children had recently displayed symptoms, leaving the source of infection unclear. The Director of the CDC Epidemic Intelligence Center, reported that last week saw a significant increase in hospital visits related to enterovirus, totaling 12,030 visits, which surpassed the weekly epidemic threshold of 11,000 visits and marked a 4.6% increase compared to the previous week. In the recent four-week period, contracted laboratories have identified a predominant presence of Group A coxsackieviruses among the identified enterovirus infections, although various other types of enteroviruses have also been detected. [\[Full article\]](#)

Infectious Disease Updates in the ASEAN Region

Hand, Foot, and Mouth Disease (HFMD)

- **Lao PDR:** Cases of hand, foot and mouth disease (HFMD) have surged by more than 52% compared to the same period last year (News Desk, 2023f). Recent statistics reveal that during week 33 of 2023, the entire country reported 5,727 cases of HFMD, with no recorded fatalities. This marks a 12.4% decrease from the previous week's count of 6,535



cases and no deaths. Since the start of the year, the entire country has documented 68,096 cases of HFMD, resulting in 18 fatalities. In contrast, during the same period in 2022, there were 44,724 cases and 3 deaths, indicating a 52.3% increase in HFMD infections this year, along with an additional 15 fatalities. To proactively prevent and minimize the impact of HFMD, especially on the health of children and students as the new school year begins, the Department of Preventive Medicine strongly advises people to take preventive measures. These measures include maintaining food hygiene, practicing personal hygiene, cleaning toys and living spaces, proper disposal of children's waste, early detection through monitoring, and prompt isolation and treatment if symptoms arise. [\[Full article\]](#)

Vector-Borne Diseases



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Dengue Cases in the ASEAN Region

From January 1 to September 2, 2023 (Epi-Week 35)



Dengue cases in the ASEAN region

Country	Epi-Week Reported	Cumulative Dengue Cases	New Cases Since the Previous Report	Deaths	Case Fatality Rate (CFR)
Brunei Darussalam	-	-	-	-	-
Cambodia⁵	Week 30	11,824	0	32	0.27%
Indonesia⁶	Week 34	59,198	1,314	429	0.72%
Lao PDR⁵	Week 31	16,413	0	12	0.07%
Malaysia⁵	Week 31	71,193	0	49	0.07%
Myanmar¹	Week 28	6,685	0	30	0.45%
Philippines³	Week 29	85,692	0	324	0.38%
Singapore⁴	Week 34	5,955	196	0	0.00%
Thailand²	Week 27	27,235	0	1	0.003%
Vietnam⁵	Week 31	57,698	0	14	0.02%
Total		341,893	1,510	891	0.26%

1. BlueDot Developer Portal, accessed September 4, 2023, <https://developer-portal.bluedot.global/>.
 2. Asian Dengue Voice and Action, "Asian Dengue Dashboard," accessed September 4, 2023, <https://www.adva.asia/asian-dengue-dashboard/>.
 3. Department of Health Website, accessed September 4, 2023 "Statistics," July 22, 2023, <https://doh.gov.ph/statistics>.
 4. National Environment Agency (NEA), accessed September 4, 2023, Dengue cases, August 26, 2023, <https://www.nea.gov.sg/dengue-zika/dengue/dengue-cases>.
 5. WHO WPRO, "Dengue," World Health Organization, accessed September 4, 2023, <https://www.who.int/westpacific/emergencies/surveillance/dengue>.
 6. Ministry of Health Indonesia

*Data were updated and collected from official sources, which may have a 2-6 weeks delay in reporting. Data must be interpreted cautiously.

- The ASEAN region reported **1,510** new dengue cases in Indonesia and Singapore since the previous report. The region reported **341,893** total cases and **891** total deaths in 2023 with **0.26%** CFR.



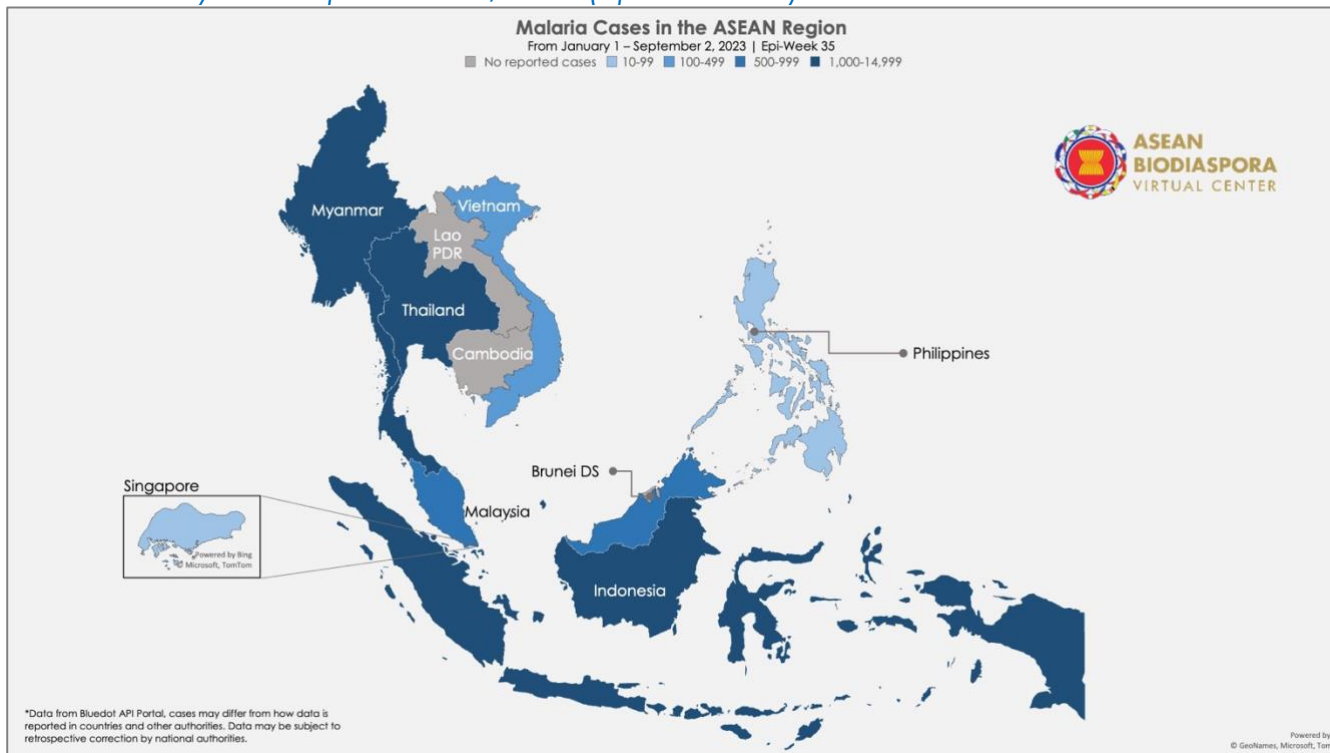
Dengue

- **Indonesia:** El Nino causes droughts and increases Dengue Hemorrhagic Fever (DHF) cases in Indonesia (Sarasam 2023). The Ministry of Health reported 57,884 dengue cases in the 33rd week of 2023, with a death rate of 422 cases. Bandung, West Java, has the highest number of cases, followed by Denpasar, Bekasi, Badung, and Bogor. The increase in DHF cases requires joint efforts from the government, public, and private sectors to tackle the extra ordinary condition. [\[Full article\]](#)
- **Lao PDR:** Dengue fever cases in Laos reached 23,432 on September 3, with 14 deaths reported nationwide (The Star, 2023). Oudomxay province reported the highest number of cases this year at 4,508, followed by Khammouane at 3,330, Vientiane Capital at 2645, Luang Prabang at 2,566, and Savannakhet at 2,396. The number of cases has increased significantly in recent weeks, with the Ministry of Health attributed to factors like the start of the monsoon season and lack of public awareness. People with dengue may experience fever, headache, eye pain, muscle and joint pain, and rash. [\[Full article\]](#)
- **Malaysia:** Dengue cases in Malaysia decreased by 9.6% in the 33rd Epidemiological Week (ME) from August 13 to 19, with one death due to dengue fever complications (Bernama, 2023). The cumulative number of cases was 75,928, up from 35,330 in the previous week. There were 54 deaths due to dengue complications compared to 22 in 2022. 74 hotspots were reported, and two chikungunya cases were recorded. Zika surveillance results were negative. [\[Full article\]](#)



Malaria Cases in the ASEAN Region

From January 1 to September 2, 2023 (Epi-Week 35)



Malaria cases in the ASEAN region

Country	Epi-Week Reported	Cumulative Malaria Cases	New Cases Since the Previous Report	Deaths	Case Fatality Rate (CFR)
Brunei Darussalam	-	-	-	-	-
Cambodia	-	-	-	-	-
Indonesia ¹	Week 30	1,056	0	0	0.00%
Lao PDR	-	-	-	-	-
Malaysia ¹	Week 22	866	0	0	0.00%
Myanmar ¹	Week 23	4,510	0	0	0.00%
Philippines ¹	Week 28	31	0	0	0.00%
Singapore ¹	Week 30	13	0	0	0.00%
Thailand ¹	Week 27	9,300	0	3	0.03%
Vietnam ¹	Week 30	146	0	0	0.00%
Total		15,921	0	3	0.02%

1. BlueDot Developer Portal, accessed September 4, 2023, <https://developer-portal.bluedot.global/>.

- The ASEAN region reported **NO** new malaria cases since the previous report. The region reported **15,921** total cases and **3** total deaths in 2023 with **0.02%** CFR.

Vaccine- Preventable Diseases



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Diphtheria Cases in the ASEAN Region

From January 1 to September 2, 2023 (Epi-Week 35)



Diphtheria cases in the ASEAN region

Country	Epi-Week Reported	Cumulative Diphtheria Cases	New Cases Since the Previous Report	Deaths	Case Fatality Rate (CFR)
Brunei Darussalam	-	-	-	-	-
Cambodia	-	-	-	-	-
Indonesia³	Week 32	416	0	29	6.97%
Lao PDR	-	-	-	-	-
Malaysia	-	-	-	-	-
Myanmar	-	-	-	-	-
Philippines²	Week 29	97	0	19	19.59%
Singapore	-	-	-	-	-
Thailand	-	-	-	-	-
Vietnam¹	Week 35	28	23	2	7.14%
Total		541	23	50	9.24%

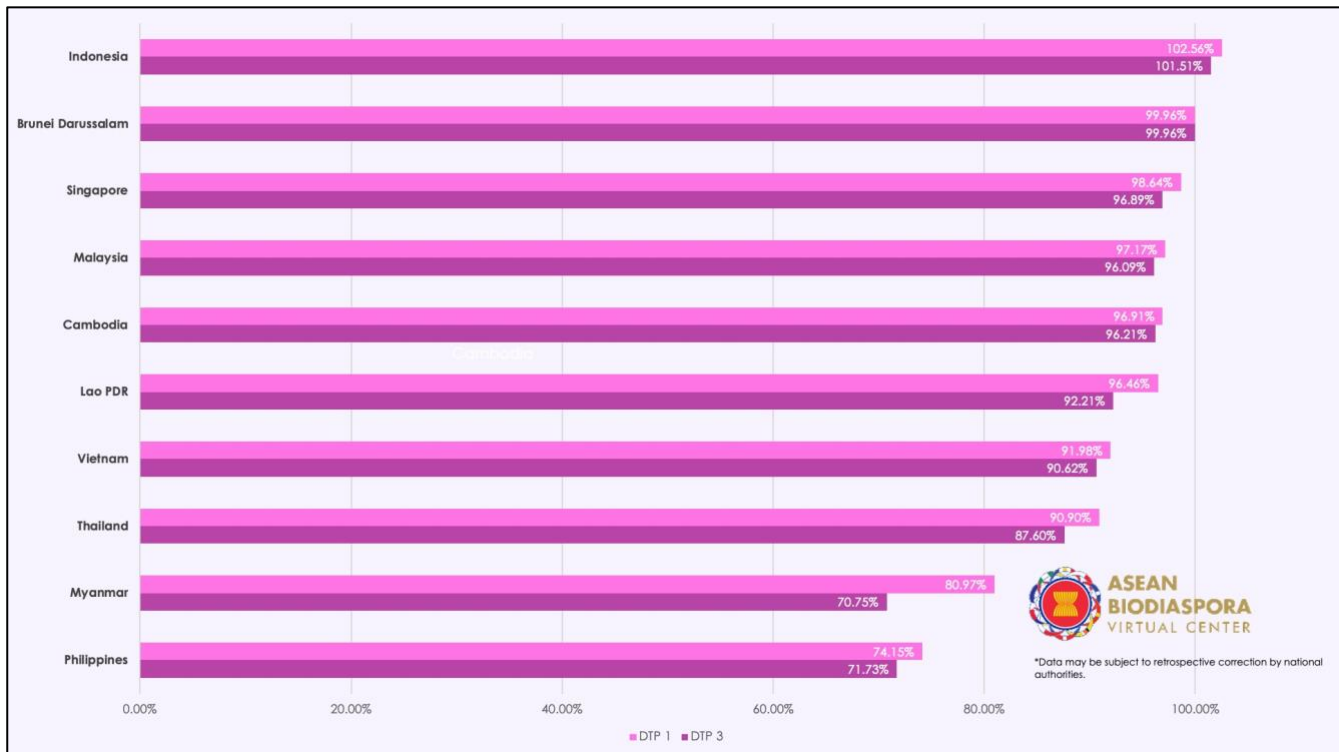
1. BlueDot Developer Portal, accessed September 4, 2023, <https://developer-portal.bluedot.global/>.
2. Department of Health Website, accessed September 4, 2023 "Statistics," July 22, 2023, <https://doh.gov.ph/statistics>.
3. Ministry of Health Indonesia

The ASEAN region reported **23** new diphtheria cases in Vietnam since the previous report. The region reported **541** total cases and **50** total deaths in 2023 with **9.24%** CFR.



Diphtheria, Tetanus Toxoid, and Pertussis Vaccination Coverage in the ASEAN Region

As of 2022



Reference: WHO, "Diphtheria Tetanus Toxoid and Pertussis (DTP) Vaccination Coverage," World Health Organization, 2022, <https://immunizationdata.who.int/pages/coverage/dtp.html?CODE=global>.

Diphtheria

- Indonesia:** Malang City Government has designated Kedungkandang District as an area with diphtheria outbreaks due to two cases, one of which was declared dead (Assidiq, 2023). The Malang City Health Service has implemented Outbreak Response Immunization (ORI) in 12 sub-districts targeting children aged 1 to 15 years. The immunization process is ongoing, with 43,854 children targeted in Kedungkandang. The party will monitor and evaluate the results, and conduct home visits for those who did not attend. The government is focusing on Kedungkandang District first before moving to other sub-districts. [\[Full article\]](#)
- Vietnam:** Ha Giang province continues to record diphtheria cases in Meo Vac district, with 8 cases reported as of August 28 (Anh, 2023). The majority of cases are young, with the most cases in Khau Vai commune. The local health department has established a verification investigation team, directed epidemic prevention and control, and disinfected the environment around housing areas. They have also notified authorities, people, and mass organizations, organized investigation and patient sample collection, and monitored health within 14 days. Despite this, diphtheria has not been reported in Ha Giang for many years. [\[Full article\]](#)



Measles Cases in the ASEAN Region

From January 1 to September 2, 2023 (Epi-Week 35)



Measles cases in the ASEAN region

Country	Epi-Week Reported	Cumulative Measles Cases	New Cases Since the Previous Report	Deaths	Case Fatality Rate (CFR)
Brunei Darussalam	-	-	-	-	-
Cambodia	-	-	-	-	-
Indonesia ³	Week 32	3,527	0	17	0.48%
Lao PDR	-	-	-	-	-
Malaysia	-	-	-	-	-
Myanmar	-	-	-	-	-
Philippines ²	Week 29	921	0	3	0.33%
Singapore ¹	Week 24	6	0	0	0.00%
Thailand ¹	Week 16	73	0	0	0.00%
Vietnam	-	-	-	-	-
Total		4,483	0	20	0.45%

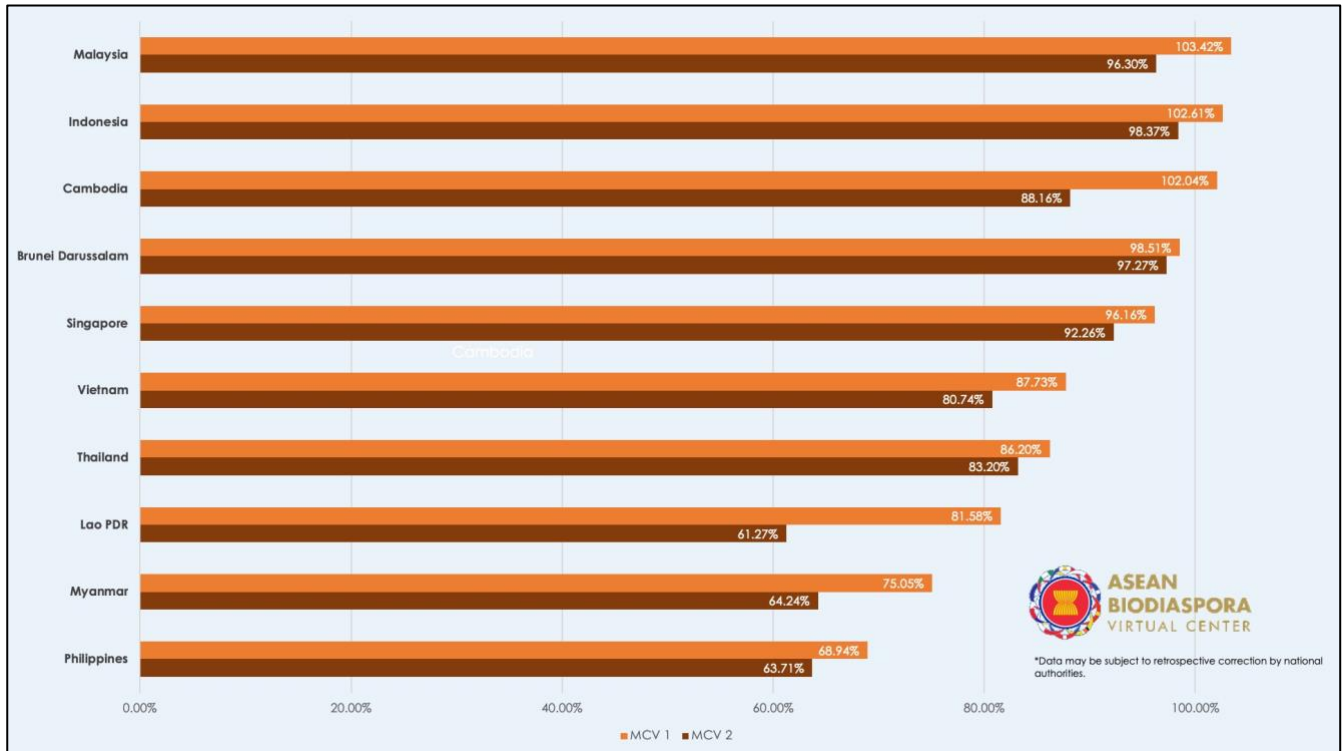
1. BlueDot Developer Portal, accessed September 2, 2023, <https://developer-portal.bluedot.global/>.
2. Department of Health Website, accessed September 2, 2023 "Statistics," July 22, 2023, <https://doh.gov.ph/statistics>.
3. Ministry of Health Indonesia

- The ASEAN region reported **NO** new measles cases since the previous report. The region reported **4,483** total cases and **20** total deaths in 2023 with **0.45%** CFR.



Measles Vaccination Coverage in the ASEAN Region

As of 2022

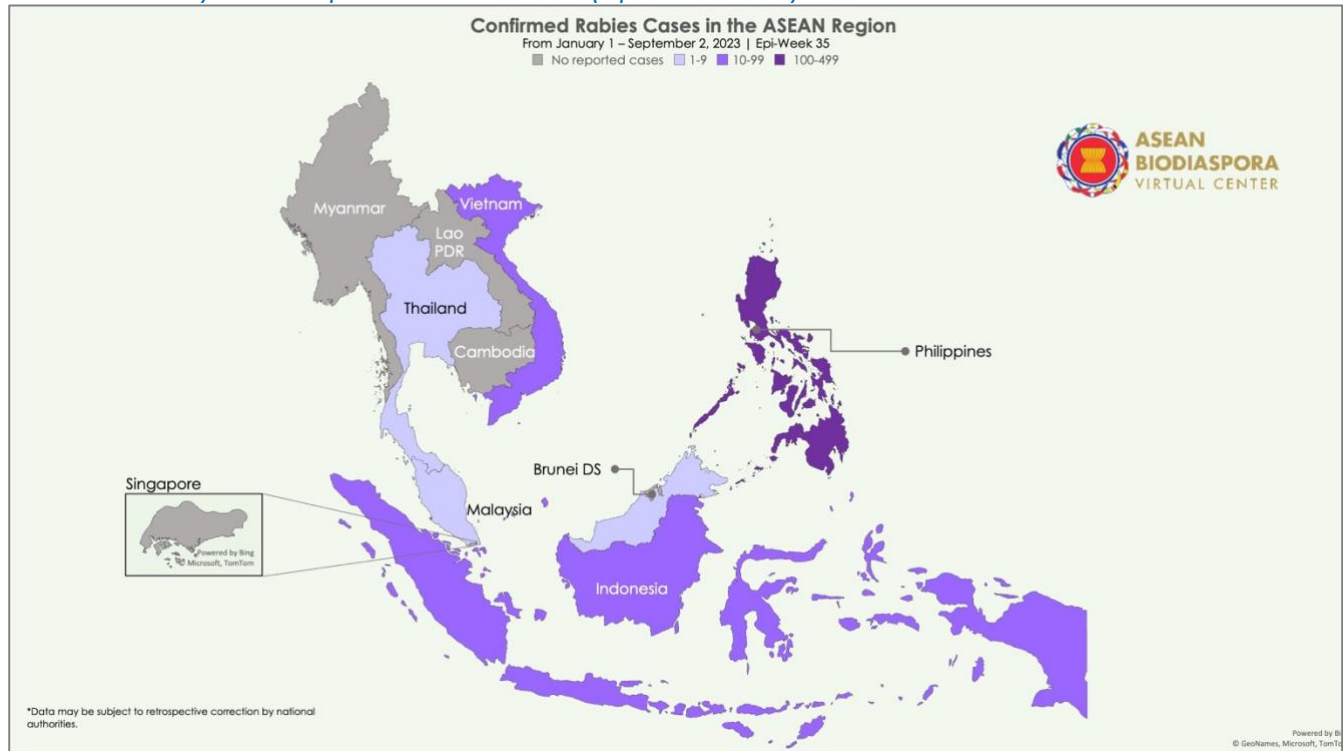


Reference: WHO, "Measles Vaccination Coverage," World Health Organization, 2022, <https://immunizationdata.who.int/pages/coverage/mcv.html?CODE=global>.



Rabies Cases in the ASEAN Region

From January 1 to September 2, 2023 (Epi-Week 35)



Rabies cases in the ASEAN region

Country	Epi-Week Reported	Reported Rabies Cases	Confirmed Rabies Cases	Rabies-Related Deaths
Brunei Darussalam	-	-	-	-
Cambodia	-	-	-	-
Indonesia¹	Week 34	315	17	47
Lao PDR	-	-	-	-
Malaysia¹	Week 32	19	9	17
Myanmar	-	-	-	-
Philippines²	Week 29	211	211	211
Singapore	-	-	-	-
Thailand¹	Week 21	3	3	3
Vietnam¹	Week 31	11	10	8
Total		559	251	282

1. BlueDot Developer Portal, accessed September 2, 2023, <https://developer-portal.bluedot.global/>.
2. Department of Health Website, accessed September 2, 2023 "Statistics," July 22, 2023, <https://doh.gov.ph/statistics>.

- The ASEAN region reported **559** rabies cases, **251** confirmed rabies cases, and **282** rabies-related deaths.



Rabies

- **Vietnam:** A rabid dog bite in Minh Hoa district resulted in the death of an 8-year-old boy, who was not treated for wounds or vaccinated against rabies (Bao Dien Tu VTV, 2023). The dog had been in custody for a few days and had been given male medicine by family members. The patient showed symptoms of rabies and was admitted to Hue Central Hospital for treatment. He died on the way home. [\[Full article\]](#)



References

- Anh, L. (2023) *Ha Giang recorded many more cases of diphtheria*, [giaoducthoidai.vn](https://giaoducthoidai.vn/ha-giang-ghi-nhan-them-nhieu-ca-benh-bach-hau-post652390.html). Available at: <https://giaoducthoidai.vn/ha-giang-ghi-nhan-them-nhieu-ca-benh-bach-hau-post652390.html> (Accessed: 04 September 2023).
- Assidiq, Y. (2023) *Seorang Anak meninggal, Kedungkandang Kota Malang KLB differi*, *Republika Online*. Available at: <https://rejogja.republika.co.id/berita/s07183399/seorang-anak-meninggal-kedungkandang-kota-malang-klb-differi> (Accessed: 04 September 2023).
- Bao Dien Tu VTV. (2023) *Taking only traditional medicine after being bitten by a dog, an 8-year-old boy died after 4 months of rabies*, *BAO DIEN TU VTV*. Available at: <https://vtv.vn/xahoi/chi-uong-thuoc-nam-sau-khi-bi-cho-can-be-8-tuoi-tu-vong-sau-4-thang-vi-benh-dai-20230829213032135.htm> (Accessed: 04 September 2023).
- Bernama. (2023) *Health Ministry: 2,248 dengue cases recorded from August 13 to 19*, *Malay Mail*. Available at: <https://www.malaymail.com/news/malaysia/2023/08/30/health-ministry-2248-dengue-cases-recorded-from-august-13-to-19/88136> (Accessed: 04 September 2023).
- HT Correspondent. (2023) *Lucknow reports 18 dengue cases; highest one-day spike this year*, *Hindustan Times*. Available at: <https://www.hindustantimes.com/cities/lucknow-news/state-capital-reports-18-fresh-dengue-cases-highest-in-chandarnagar-health-department-issues-advisory-101693766664987.html> (Accessed: 04 September 2023).
- Lee, I. (2023, August 30). *Infant first to die of enterovirus in 2023*. *Taipei Times*. <https://www.taipeitimes.com/News/taiwan/archives/2023/08/30/2003805494>
- News Desk. (2023a) *Africa: Dengue outbreak declared in Chad*, *Outbreak News Today*. Available at: <https://outbreaknewstoday.com/africa-dengue-outbreak-declared-in-chad-97641/> (Accessed: 04 September 2023).
- News Desk. (2023b) *DR Congo: 15,525 cases of measles including 655 deaths reported in Kasai Province year to date*, *Outbreak News Today*. Available at: <https://outbreaknewstoday.com/dr-congo-15525-cases-of-measles-including-655-deaths-reported-in-kasai-province-year-to-date-41216/> (Accessed: 04 September 2023).
- News Desk. (2023c) *Guinea reports confirmed dengue case*, *Outbreak News Today*. Available at: <https://outbreaknewstoday.com/guinea-reports-confirmed-dengue-case-60162/> (Accessed: 04 September 2023).
- News Desk. (2023d) *South Africa human rabies cases rise to 8*, *Outbreak News Today*. Available at: <https://outbreaknewstoday.com/south-africa-human-rabies-cases-rise-to-8-18252/> (Accessed: 04 September 2023).
- News Desk. (2023e) *Taiwan: Local dengue cases top 3,000, 1st Death due to enterovirus D68*, *Outbreak News Today*. Available at: <https://outbreaknewstoday.com/taiwan-local-dengue-cases-top-3000-1st-death-due-to-enterovirus-d68-31060/> (Accessed: 04 September 2023).
- News Desk. (2023f, August 30). *Vietnam: Hand, foot and mouth disease cases up 52% in 2023*. *Outbreak News Today*. <https://outbreaknewstoday.com/vietnam-hand-foot-and-mouth-disease-cases-up-52-in-2023/>
- Press Release. (2023) *Diphtheria in Europe: ECDC Update 8/18/2023*, *Outbreak News Today*. Available at: <https://outbreaknewstoday.com/diphtheria-in-europe-ecdc-update-8-18-2023/> (Accessed: 04 September 2023).
- Sarasa, A. B. (2023) *Kasus DBD Tinggi, Yerry Tawaluja: Perindo rutin lakukan fogging berantas DBD*: *Okezone Nasional*, <https://nasional.okezone.com/>. Available at:



<https://nasional.okezone.com/read/2023/09/02/337/2875874/kasus-dbd-tinggi-yerry-tawalujan-perindo-rutin-lakukan-fogging-berantas-dbd> (Accessed: 04 September 2023).

Star Digital Report. (2023) *Dengue: 16 die, 2,608 hospitalised in a day*, *The Daily Star*. Available at: <https://www.thedailystar.net/health/disease/news/dengue-16-die-2608-hospitalised-day-3410171> (Accessed: 04 September 2023).

Texas DSHS. (2023, August 29). *Health alert: Confirmed case of measles - August 2023*. Texas Department of State Health Services. <https://www.dshs.texas.gov/news-alerts/health-alert-confirmed-case-measles-august-2023>

The Star. (2023) *Dengue fever in Laos surpass 23,000 cases, 14 deaths reported; number of new cases still rising fast*, *The Star*. Available at: <https://www.thestar.com.my/aseanplus/aseanplus-news/2023/09/03/dengue-fever-in-laos-surpass-23000-cases-14-deaths-reported-number-of-new-cases-still-rising-fast> (Accessed: 04 September 2023).



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