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# Morbidity and Mortality Weekly Report in the ASEAN Region

— Infectious Diseases

September 18, 2023 | MMWR 2023-37  
Epidemiological Week 37



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Weekly Issue





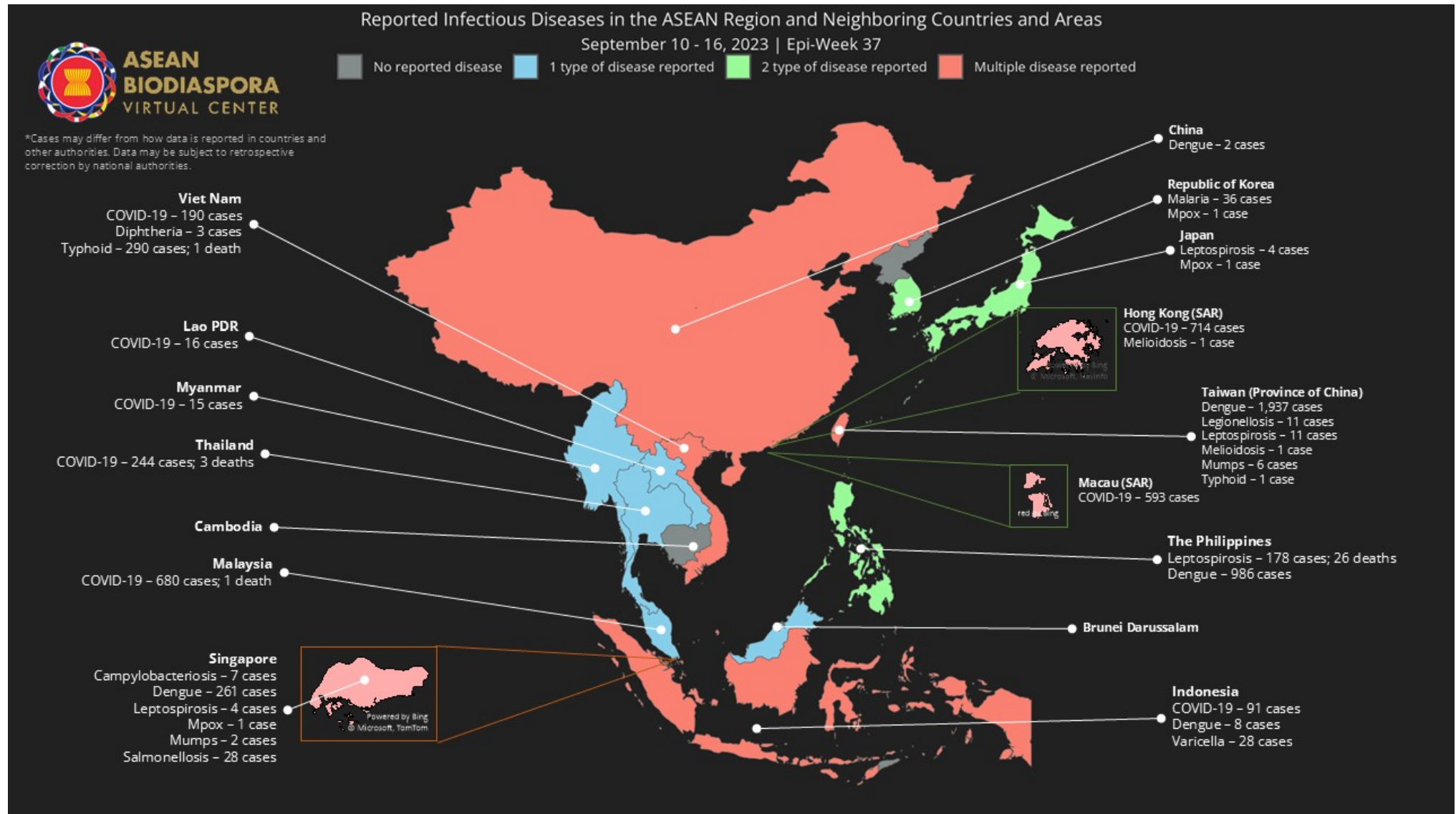
# Table of Contents

<b>Infectious Diseases</b> .....	<b>1</b>
<a href="#">Infectious Diseases Map in ASEAN Region and Neighboring Countries</a> .....	1
<a href="#">Infectious Disease Global Updates</a> .....	2
<a href="#">Nipah</a> .....	2
<a href="#">Measles</a> .....	2
<a href="#">Dengue</a> .....	2
<a href="#">Rabies</a> .....	3
<b>Vector-Borne Diseases</b> .....	<b>4</b>
<b>Dengue</b> .....	<b>5</b>
<a href="#">Dengue Cases in ASEAN Region Map</a> .....	5
<a href="#">Dengue Cases in ASEAN Region Table</a> .....	5
<a href="#">Dengue Narrative Report</a> .....	6
<b>Malaria</b> .....	<b>7</b>
<a href="#">Malaria Cases in ASEAN Region Map</a> .....	7
<a href="#">Malaria Cases in ASEAN Region Table</a> .....	7
<b>Vaccine-Preventable Diseases</b> .....	<b>8</b>
<b>Diphtheria</b> .....	<b>9</b>
<a href="#">Diphtheria Cases in ASEAN Region Map</a> .....	9
<a href="#">Diphtheria Cases in ASEAN Region Table</a> .....	9
<a href="#">Diphtheria Narrative Report</a> .....	10
<b>Measles</b> .....	<b>11</b>
<a href="#">Measles Cases in ASEAN Region Map</a> .....	11
<a href="#">Measles Cases in ASEAN Region Table</a> .....	11
<b>Rabies</b> .....	<b>12</b>
<a href="#">Rabies Cases in ASEAN Region Map</a> .....	12
<a href="#">Rabies Cases in ASEAN Region Table</a> .....	12
<a href="#">Rabies Narrative Report</a> .....	13
<b><a href="#">References</a></b> .....	<b>14</b>



# Reported Infectious Diseases in the ASEAN Region and Neighboring Countries

Epidemiological Week 37 | September 10-16, 2023



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>.



## Reported Infectious Diseases

Epidemiological Week 37 | September 10-16, 2023

### Infectious Disease Global Updates

#### Nipah

- India:** The Kerala Health Department has issued an alert following the death of two people suspected to be caused by the Nipah virus in Kozhikode district (News Desk, 2023c). Health Minister Veena George stated that Nipah is a suspect and relatives of one of the victims are receiving intensive care. Samples collected from the deceased and those in isolation have been sent for testing at the National Institute of Virology. Nipah virus disease is an emerging zoonotic disease of public health importance in South East Asia, where Pteropus fruit bats are widespread. It was first identified in Malaysia in 1998 and has since occurred in parts of Asia, including India, Bangladesh, Malaysia, and Singapore. Transmission can occur through direct contact with infected animals, contaminated food products, or close contact with an infected person. [\[Full article\]](#)

Kerala's Kozhikode district has confirmed one more Nipah virus infection case, raising the total to six (Shibimol, 2023). A 39-year-old man was under observation in a hospital after seeking treatment at a private hospital. The contact list of patients has expanded to 950, with 213 in the high-risk category. The health minister has requested police help to trace the contacts of those who tested positive. Restrictions continue in Nipah containment zones and prayers are called off to cooperate with government authorities. [\[Full article\]](#)

#### Measles

- Democratic Republic of Congo:** The head of the Provincial Health Division in Kasai-Oriental, Democratic Republic of the Congo, reports a significant increase in measles cases, despite vaccination days organized last year (News Desk, 2023b). The province has reported over 1,020 cases, including 19 deaths, and only five health zones have been able to vaccinate children. The DRC has reported 204,822 suspected cases and 3,594 measles-related deaths since the beginning of the year. [\[Full article\]](#)

#### Dengue

- Brazil:** Blumenau City Hall reports 138 new outbreaks and 65 cases of the Dengue virus in September (News Desk, 2023a). To combat *Aedes Aegypti*, endemic agents are inspecting homes, warehouses, vacant lots, and commercial establishments. Since the first week of 2023, there have been 2,736 mosquito outbreaks and 2,092 confirmed cases in the city of Blumenau, Santa Catarina state, Brazil. [\[Full article\]](#)
- Italy:** Italian officials have reported 19 confirmed cases of locally transmitted dengue fever since August 2023, with all cases recovering or improving (News Desk, 2023d). Additionally, 146 cases of dengue imported from other countries have been reported. The virus's transmission is supported by favorable climatic conditions for the *Aedes albopictus* mosquito, which is present in Europe. Other arboviruses in Italy this year include Zika, Chikungunya, TBE, and Toscana Virus. All cases have recovered or are improving. [\[Full article\]](#)
- Nigeria:** Scientists in Honduras have developed a new strategy to control dengue fever by breeding mosquitoes adapted to carry *Wolbachia* bacteria (CTN News, 2023). The World Mosquito Program, a nonprofit organization, has been testing this strategy in over a dozen countries. The World Health Organization is monitoring the mosquito releases in Honduras and is planning to promote the strategy globally. Doctors Without Borders is partnering with the program to release approximately 9 million mosquitoes carrying *Wolbachia* bacteria over the next six months. Traditional methods of preventing mosquito-borne diseases, such as insecticides and vaccines, have not been as effective



in preventing dengue fever. Climate change and urbanization are expected to make the fight against dengue even more challenging. [\[Full article\]](#)

- **Taiwan (Province of China):** Taiwan's Department of Disease Control and Prevention (CDC) reported three new local dengue fever deaths last week, all male and affecting underlying diseases (News Desk, 2023e). The CDC reported 2,127 new local cases of dengue fever in the country from September 5 to September 11, with 6,464 local cases as of September 11. The public is advised to cooperate with the government in implementing prevention and control measures, such as "patrol, dump, clean, and brush" and reducing stagnant water around homes. People with high-risk groups, such as the elderly, pregnant women, infants, and those with underlying diseases, should also be aware of their health conditions. If symptoms develop, they should seek medical treatment promptly and inform their doctor about their travel and activity history. Infected individuals should follow doctor's recommendations, take medication, replenish fluids, get plenty of rest, and use mosquito nets or repellents to reduce the risk of disease transmission. [\[Full article\]](#)

## Rabies

- **India:** A 14-year-old boy died from rabies in Noida-Ghaziabad, India, after being bitten by a neighbor's dog (Ians, 2023). Over 400 dog bites are reported daily in the two districts, and over 1.25 lakh dogs are seen on the roads daily. India accounts for 36% of total rabies deaths globally, with 30-60% of cases and deaths involving children under 15. Dogs are responsible for 97% of human rabies cases in India, followed by cats, jackals, mongoose, and others. Rabies is a disease caused by a virus that is transmitted to humans through bites of animals. There is no effective treatment for rabies once the infection is established, and some people have managed to survive. The Ghaziabad Municipal Corporation has started sterilization of dogs since 2013, but the number of stray dogs in the area continues to increase. The Noida Authority claims that 40,000-45,000 dogs have been sterilized, but the number of dogs in the area is not decreasing. [\[Full article\]](#)

A woman 53 years old, who was treated for a stray dog bite, died at Thrissur Medical College (Kaumudi Online, 2023). Despite being bitten, she refused to take a preventive vaccination and developed rabies symptoms. The issue of street dogs became a concern after a lawyer's hand was attacked by a dog. Advocate Kunal Chatterjee described the dogs as a menace. [\[Full article\]](#)

# Vector-Borne Diseases



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# Dengue Cases in the ASEAN Region

From January 1 to September 16, 2023 (Epi-Week 37)



## Dengue cases in the ASEAN region

Country	Epi-Week Reported	Cumulative Dengue Cases	New Cases Since the Previous Report	Deaths	New Deaths	Case Fatality Rate (CFR)
<b>Brunei Darussalam</b>	-	-	-	-	-	-
<b>Cambodia<sup>4</sup></b>	Week 30	11,824	0	32	0	0.27%
<b>Indonesia<sup>5</sup></b>	Week 34	59,198	0	429	0	0.72%
<b>Lao PDR<sup>4</sup></b>	Week 31	16,413	0	12	0	0.07%
<b>Malaysia<sup>4</sup></b>	Week 31	71,193	0	49	0	0.07%
<b>Myanmar<sup>1</sup></b>	Week 28	6,685	0	30	0	0.45%
<b>Philippines<sup>2</sup></b>	Week 32	101,778	6,526	382	25	0.38%
<b>Singapore<sup>3</sup></b>	Week 36	6,428	261	0	0	0.00%
<b>Thailand<sup>1</sup></b>	Week 34	65,552	38,317	58	57	0.09%
<b>Vietnam<sup>4</sup></b>	Week 31	57,698	0	14	0	0.02%
<b>Total</b>		<b>396,769</b>	<b>45,104</b>	<b>1,005</b>	<b>83</b>	<b>0.25%</b>

1. BlueDot Developer Portal, accessed September 18, 2023, <https://developer-portal.bluedot.global/>.  
 2. Department of Health Website, accessed September 18, 2023 "Statistics," August 12, 2023, <https://doh.gov.ph/statistics>.  
 3. National Environment Agency (NEA), accessed September 18, 2023. Dengue cases, September 9, 2023, <https://www.nea.gov.sg/dengue-zika/dengue/dengue-cases>.  
 4. WHO WPRO, "Dengue," World Health Organization, accessed September 18, 2023, <https://www.who.int/westernpacific/emergencies/surveillance/dengue>.  
 5. 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 **45,104** new dengue cases in the Philippines, Singapore, and Thailand since the previous report. The region reported **396,769** total cases and **1,005** total deaths in 2023 with **0.25%** CFR.



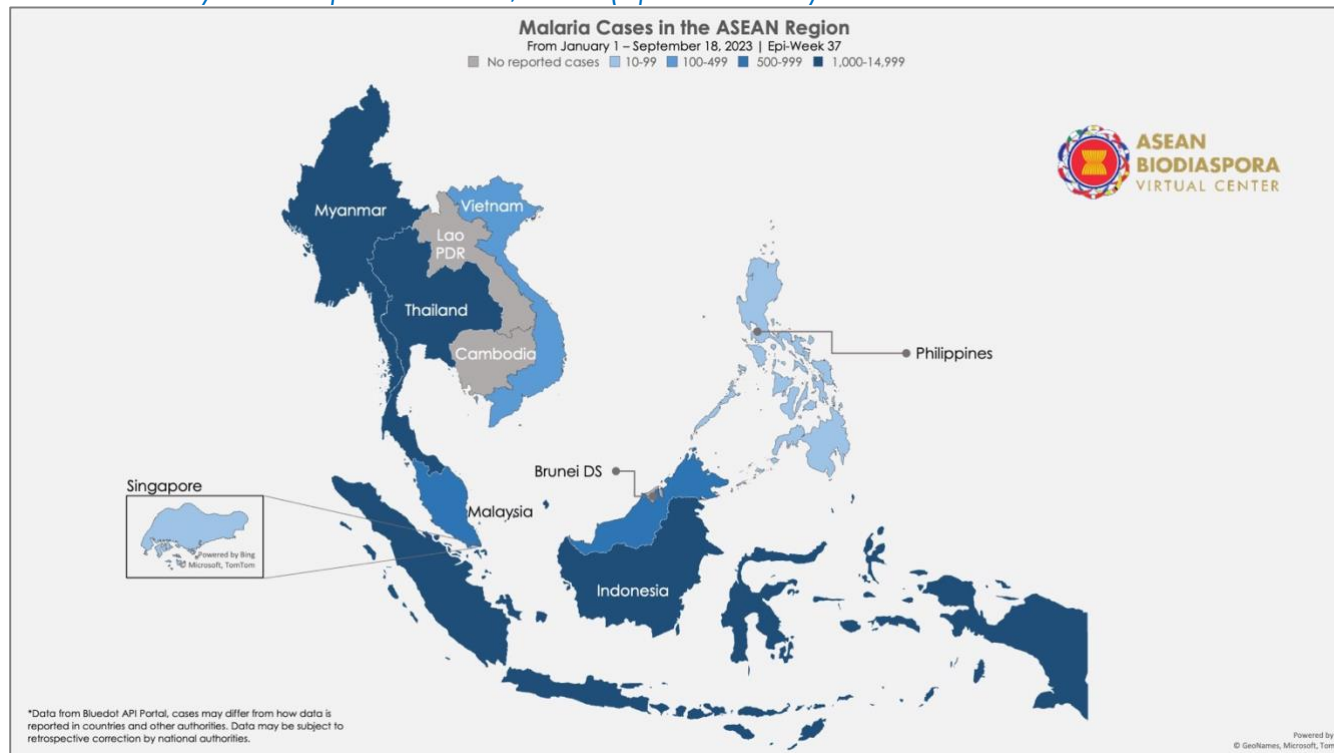
## Dengue

- **Indonesia:** The Mesuji District Health Service reported eight cases of Dengue Hemorrhagic Fever in the last three months, with half occurring in September 2023 (Anas, 2023). The health service predicts an increase in cases due to the prolonged dry season. However, the head of disease prevention and control, Suyono, advises the public to adopt a healthy lifestyle, implement 3M Plus measures, and regularly use Abate powder and anti-mosquito medication to reduce the risk of dengue attacks. [[Full article](#)]
- **The Philippines:** Negros Occidental province and Bacolod City experienced a 76.93 percent decrease in dengue cases from Jan. 1 to Sept. 2, 2023, according to the Provincial Health Office (Guadalquiver, 2023). The top 10 local government units with the highest number of cases were San Carlos City and Bago City. Bacolod City recorded a 52.2% reduction, from 743 cases in 2022 to 355 cases this year. Measures to curb dengue include advocacy campaigns, larvicide application, clustering monitoring, and coordination with the Department of Education and sanitary inspectors. [[Full article](#)]
- **Singapore** has reported 261 dengue cases last week, a 20% increase from the previous week. The National Environment Agency (NEA) has identified 56 active dengue clusters, with 12 coded red (The Star, 2023). Two red zones with high transmission rates are Science Park Drive and Lentor Loop. The Straits Times warns of a potential surge in cases due to the rapid spread of the DenV-1 virus strain. The NEA has noted a rise in DenV-1 cases over the past two months, which has historically been associated with a surge in cases. [[Full article](#)]
- **Vietnam:** The Hanoi Department of Health reported a four-fold increase in dengue fever cases compared to 2022 (News Desk, 2023f). As of last week, nearly 1,700 cases were recorded, with 540 cases compared to the previous week. The number of deaths due to dengue fever has reached three. The Hanoi Center for Disease Control predicts the epidemic will become more complicated in the near future. Doctors warn that this year's dengue fever is becoming more dangerous, with unpredictable developments and potential complications like severe bleeding, acute pneumonia, or multiple organ failure. [[Full article](#)]



# Malaria Cases in the ASEAN Region

From January 1 to September 16, 2023 (Epi-Week 37)



## Malaria cases in the ASEAN region

Country	Epi-Week Reported	Cumulative Malaria Cases	New Cases Since the Previous Report	Cumulative Deaths	Case Fatality Rate (CFR)
Brunei Darussalam	-	-	-	-	-
Cambodia	-	-	-	-	-
Indonesia <sup>1</sup>	Week 30	1,056	0	0	0.00%
Lao PDR	-	-	-	-	-
Malaysia <sup>1</sup>	Week 22	866	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>1</sup>	Week 35	15	0	0	0.00%
Thailand <sup>1</sup>	Week 27	9,300	0	3	0.03%
Vietnam <sup>1</sup>	Week 30	146	0	0	0.00%
<b>Total</b>		<b>15,924</b>	<b>0</b>	<b>3</b>	<b>0.02%</b>

1. BlueDot Developer Portal, accessed September 18, 2023, <https://developer-portal.bluedot.global/>.

- The ASEAN region reported **NO** new malaria cases since the previous report. The region reported **15,924** total cases and **3** total deaths in 2023 with **0.02%** CFR.

# Vaccine- Preventable Diseases

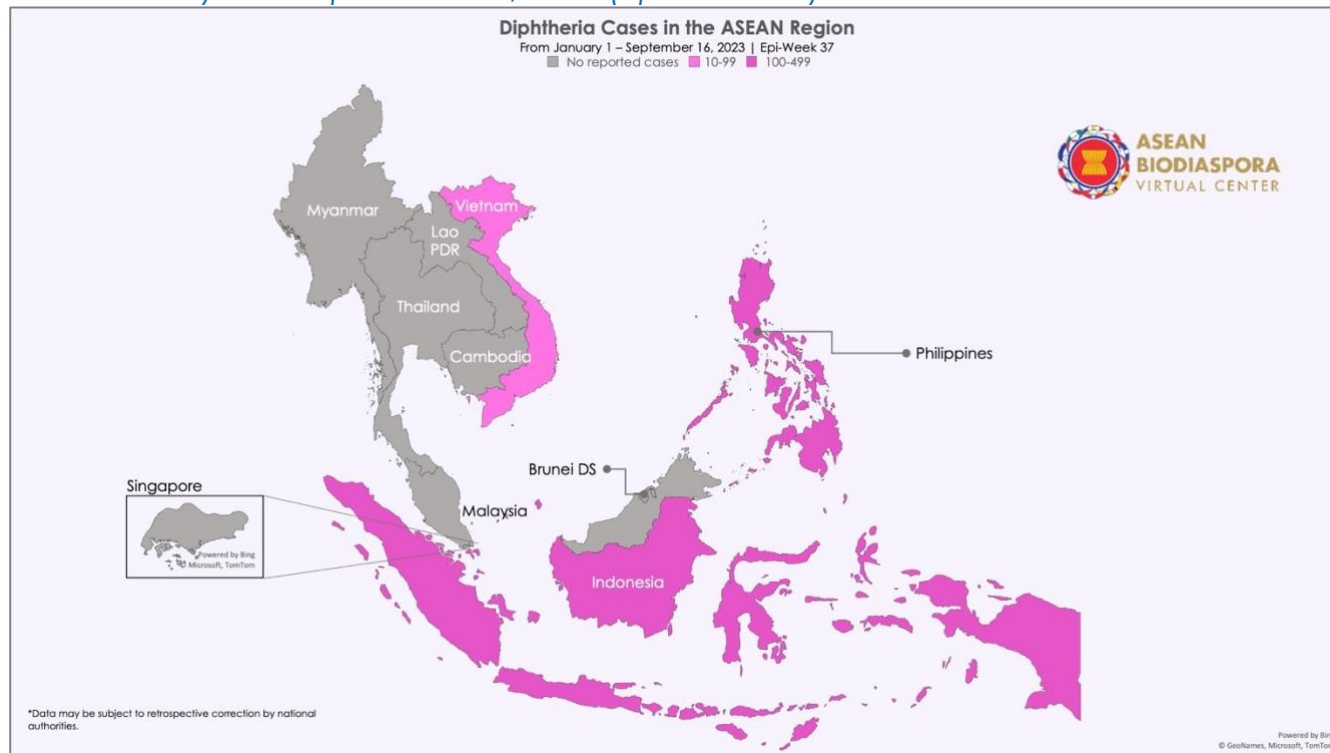


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# Diphtheria Cases in the ASEAN Region

From January 1 to September 16, 2023 (Epi-Week 37)



## Diphtheria cases in the ASEAN region

Country	Epi-Week Reported	Cumulative Diphtheria Cases	New Cases Since the Previous Report	Cumulative Deaths	Case Fatality Rate (CFR)
<b>Brunei Darussalam</b>	-	-	-	-	-
<b>Cambodia</b>	-	-	-	-	-
<b>Indonesia<sup>3</sup></b>	Week 32	416	0	29	6.97%
<b>Lao PDR</b>	-	-	-	-	-
<b>Malaysia</b>	-	-	-	-	-
<b>Myanmar</b>	-	-	-	-	-
<b>Philippines<sup>2</sup></b>	Week 32	110	2	25	22.73%
<b>Singapore</b>	-	-	-	-	-
<b>Thailand</b>	-	-	-	-	-
<b>Vietnam<sup>1</sup></b>	Week 36	32	3	3	9.38%
<b>Total</b>		<b>557</b>	<b>5</b>	<b>57</b>	<b>10.23%</b>

1. BlueDot Developer Portal, accessed September 18, 2023, <https://developer-portal.bluedot.global/>.  
 2. Department of Health Website, accessed September 18, 2023 "Statistics," August 12, 2023, <https://doh.gov.ph/statistics>.  
 3. Ministry of Health Indonesia

- The ASEAN region reported **21** new diphtheria cases in the Philippines and Vietnam since the previous report. The region reported **553** total cases and **56** total deaths in 2023 with **10.13%** CFR.



## Diphtheria

- **Vietnam:** Dien Bien province has experienced numerous diphtheria outbreaks, with six cases recorded from 1/5 to 10/9 (Tin Tuc, 2023). The Ministry of Health has established a delegation led by Dr. Vuong Anh Duong to inspect, supervise, and direct the prevention and control of the disease. The delegation visited schools and households with diphtheria in Pa Little village, Huoi Mi commune, Muong Cha district, and worked with Dien Bien General Hospital and the provincial Steering Committee for epidemic prevention and control. The first outbreak began on April 25, and the second started on May 2023. The third outbreak began on August 5, 2023, and the third on August 12, 2023. All three cases are currently in stable health and are being monitored and treated at Muong Cha Medical Center. [\[Full article\]](#)



## Measles Cases in the ASEAN Region

From January 1 to September 16, 2023 (Epi-Week 37)



### 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 <sup>3</sup>	Week 32	3,527	0	17	0.48%
Lao PDR	-	-	-	-	-
Malaysia	-	-	-	-	-
Myanmar	-	-	-	-	-
Philippines <sup>2</sup>	Week 32	1,034	11	4	0.39%
Singapore <sup>1</sup>	Week 24	6	0	0	0.00%
Thailand <sup>1</sup>	Week 16	73	0	0	0.00%
Vietnam	-	-	-	-	-
<b>Total</b>		<b>4,640</b>	<b>11</b>	<b>21</b>	<b>0.45%</b>

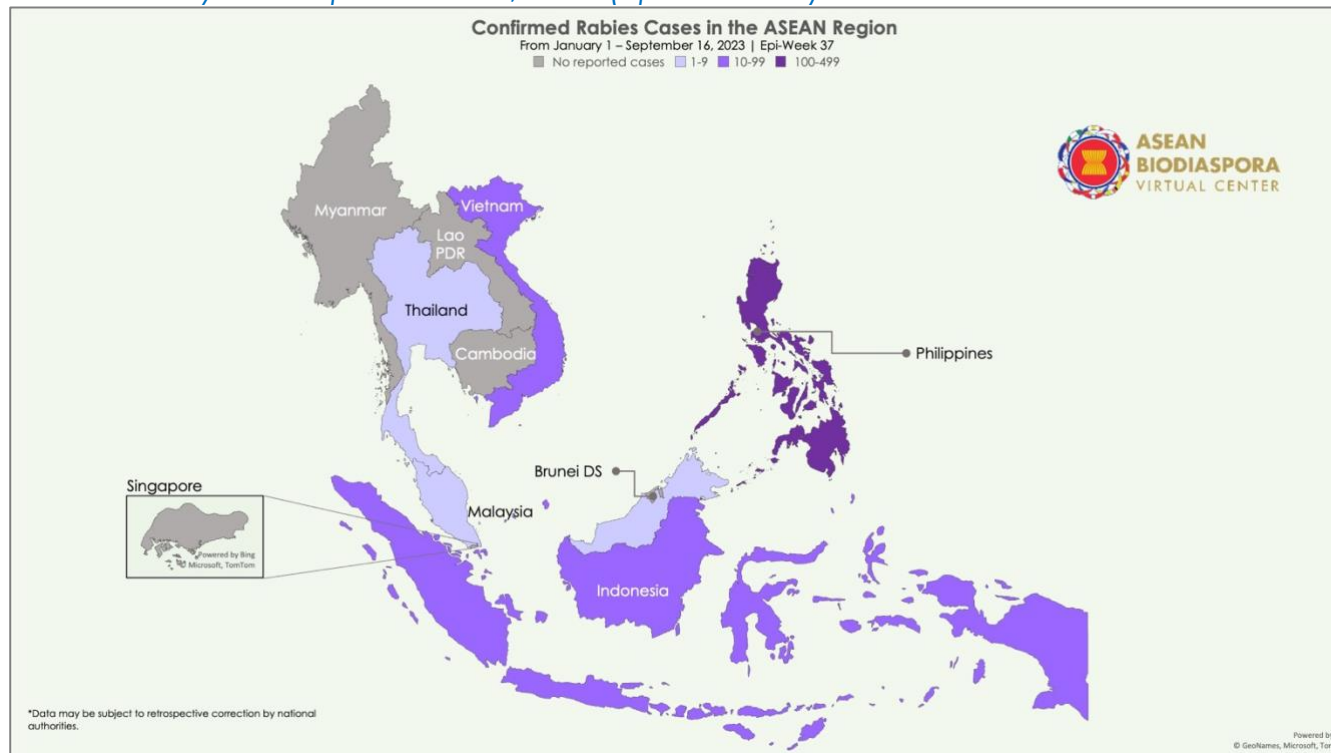
1. BlueDot Developer Portal, accessed September 18, 2023, <https://developer-portal.bluedot.global/>.  
 2. Department of Health Website, accessed September 18, 2023 "Statistics," August 12, 2023, <https://doh.gov.ph/statistics>.  
 3. Ministry of Health Indonesia

- The ASEAN region reported **11** new measles cases in the Philippines since the previous report. The region reported **4,640** total cases and **21** total deaths in 2023 with **0.45%** CFR.



## Rabies Cases in the ASEAN Region

From January 1 to September 16, 2023 (Epi-Week 37)



### Rabies cases in the ASEAN region

Country	Epi-Week Reported	Cumulative Reported Rabies Cases	Laboratory-Confirmed Rabies Cases	Rabies-Related Deaths
<b>Brunei Darussalam</b>	-	-	-	-
<b>Cambodia</b>	-	-	-	-
<b>Indonesia<sup>1</sup></b>	Week 34	315	17	47
<b>Lao PDR</b>	-	-	-	-
<b>Malaysia<sup>1</sup></b>	Week 32	19	9	17
<b>Myanmar</b>	-	-	-	-
<b>Philippines<sup>2</sup></b>	Week 32	230	230	230
<b>Singapore</b>	-	-	-	-
<b>Thailand<sup>1</sup></b>	Week 21	3	3	3
<b>Vietnam<sup>1</sup></b>	Week 36	34	33	33
<b>Total</b>		<b>601</b>	<b>292</b>	<b>330</b>

1. BlueDot Developer Portal, accessed September 18, 2023, <https://developer-portal.bluedot.global/>.  
 2. Department of Health Website, accessed September 18, 2023 "Statistics," August 12, 2023, <https://doh.gov.ph/statistics>.

- The ASEAN region reported **601** rabies cases, **292** confirmed rabies cases, and **330** rabies-related deaths.





## Rabies

- **The Philippines:** The Albay Provincial Health Office (PHO) has advised against traditional or "tambal" treatment for rabies, as four deaths have been reported from January to September this year (Calipay, 2023). All fatalities did not seek proper treatment, and two chose the "tambal" method, which involves incision of carabao horn into the wound to extract rabies. The best treatment for animal bites is vaccination, and the PHO conducted a provincewide information campaign to raise awareness about the importance of vaccination. [[Full article](#)]



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