



## Dengue Surveillance Update

Dengue fever and the more severe form, dengue hemorrhagic fever, are caused by any of the four serotypes of dengue virus (types 1, 2, 3, and 4). An infected day-biting female Aedes mosquito transmits this viral disease to humans. This report provides data from the period of January 1 to August 31 or Morbidity Weeks 1 – 35.

## PIDSR Case Definition for Dengue Diseases

### Clinical Classification

- **Dengue Without Warning Signs**

A previously well person with acute febrile illness of 2-7 days duration plus two of the following:

- Headache
- Body malaise
- Myalgia
- Arthralgia
- Retro-orbital pain
- Anorexia
- Nausea
- Vomiting
- Diarrhea
- Flushed skin
- Rash (petechial, Herman's sign)

- **Dengue With Warning Signs**

A previously well person with acute febrile illness of 2-7 days duration plus any one of the following:

- Abdominal pain or tenderness
- Persistent vomiting
- Clinical signs of fluid accumulation
- Mucosal bleeding
- Lethargy, restlessness
- Liver enlargement
- Laboratory: increase in Hct and/or decreasing platelet count

- **Severe Dengue**

A previously well person with acute febrile illness of 2-7 days duration and any of the clinical manifestations for dengue with or without warning signs,

Plus any of the following:

**Severe plasma leakage leading to**

- Shock
- Fluid accumulation with respiratory distress

**Severe bleeding**

**Severe organ impairment**

- Liver: AST or ALT  $\geq 1000$
- CNS: e.g. seizures, impaired consciousness
- Heart: e.g. myocarditis
- Kidneys: e.g. renal failure

### Case Classification

- **Suspect**

A previously well person with acute febrile illness of 2-7 days duration with clinical signs and symptoms of dengue

- **Probable**

A suspect case plus:

Laboratory test, at least CBC (leucopenia with or without thrombocytopenia) and/or Dengue NS1, antigen test or dengue IgM antibody test (optional)

- **Confirmed**

- Viral culture isolation,
- Polymerase Chain Reaction

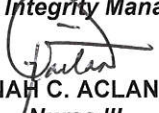
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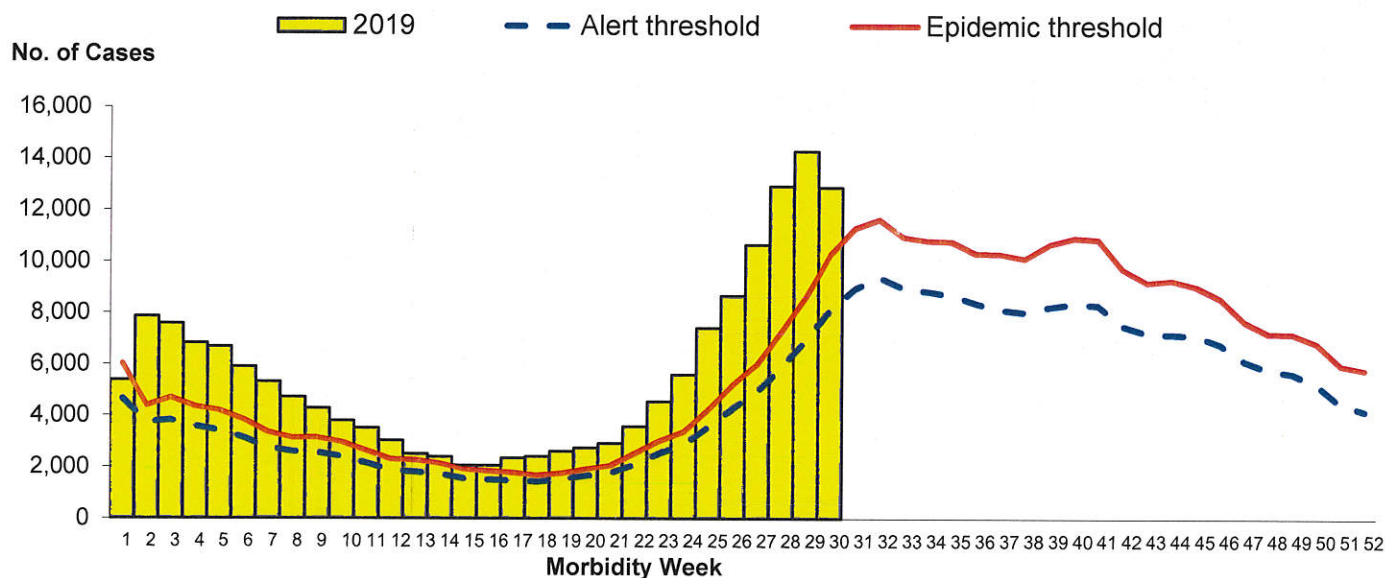




## I. Trend in the Philippines

A total of **271,480** Dengue cases were reported nationwide from January 1 to August 31. This is **95%** higher compared to the same period last year (**85,981**). Figure 1 shows weekly data of reported dengue cases in 2019 compared to alert and epidemic thresholds.

**Figure 1. Reported Dengue Cases (N=271,480)**  
**Morbidity Weeks 1 - 35 (January 1- August 31, 2019) vs Epidemic and Alert Thresholds**



## II. Geographic Distribution

Table 1 shows that majority of the cases were from the following regions: **Region VI** (45,436 or 17%), **Region IV-A** (39,810 or 15%), **Region X** (19,925 or 7%), **Region III** (19,088 or 7%) and **NCR** (18,136 or 7%).

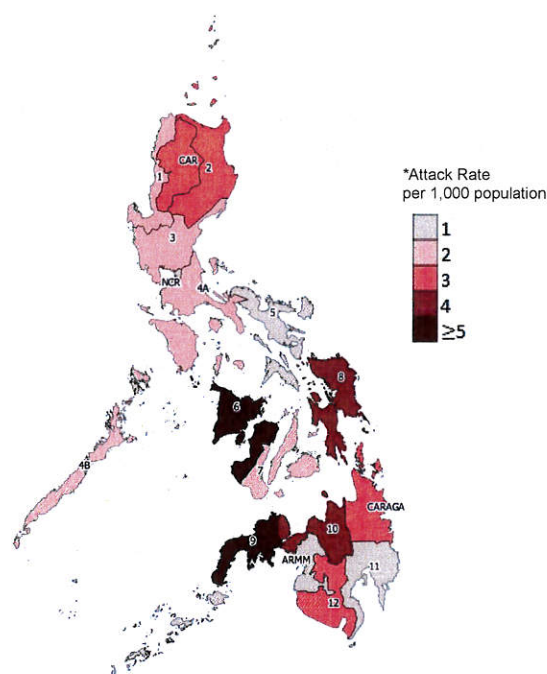
The regions with the highest percent increase in the number of reported cases for this year compared to last year were: Region IX (430%), Region VI (375%), Region VIII (329%), Region V (243%), and Region XII (215%).



Table 1. Reported Dengue Cases by Region  
Philippines, January 1 – August 31, 2019 vs January 1 – August 31, 2018

Region	2019		2018		% Change of Reported Cases	
	Cases	Deaths	Cases	Deaths		
<b>PHILIPPINES</b>	<b>271,480</b>	<b>1,107</b>	<b>127,478</b>	<b>655</b>	<b>↑</b>	<b>113</b>
I	10,892	25	9,988	38	↑	9
II	10,982	59	6,701	18	↑	64
III	19,088	55	19,307	61	↓	1
IVA-CALABARZON	39,810	124	16,005	92	↑	149
IV-B MIMAROPA	7,272	19	4,761	36	↑	53
V	6,976	52	2,033	23	↑	243
VI	45,345	201	9,551	67	↑	375
VII	16,338	97	7,584	39	↑	115
VIII	18,107	52	4,219	26	↑	329
IX	18,505	94	3,493	28	↑	430
X	19,925	76	11,223	71	↑	78
XI	5,975	31	3,371	15	↑	77
XII	16,956	67	5,383	26	↑	215
BARMM	3,456	26	1,601	18	↑	116
CAR	5,272	17	4,332	7	↑	22
Caraga	8,445	19	3,450	13	↑	145
NCR	18,136	93	14,476	77	↑	25

Figure 2. Attack Rate of Reported Dengue Cases by Region Philippines, January 1 – August 31, 2019

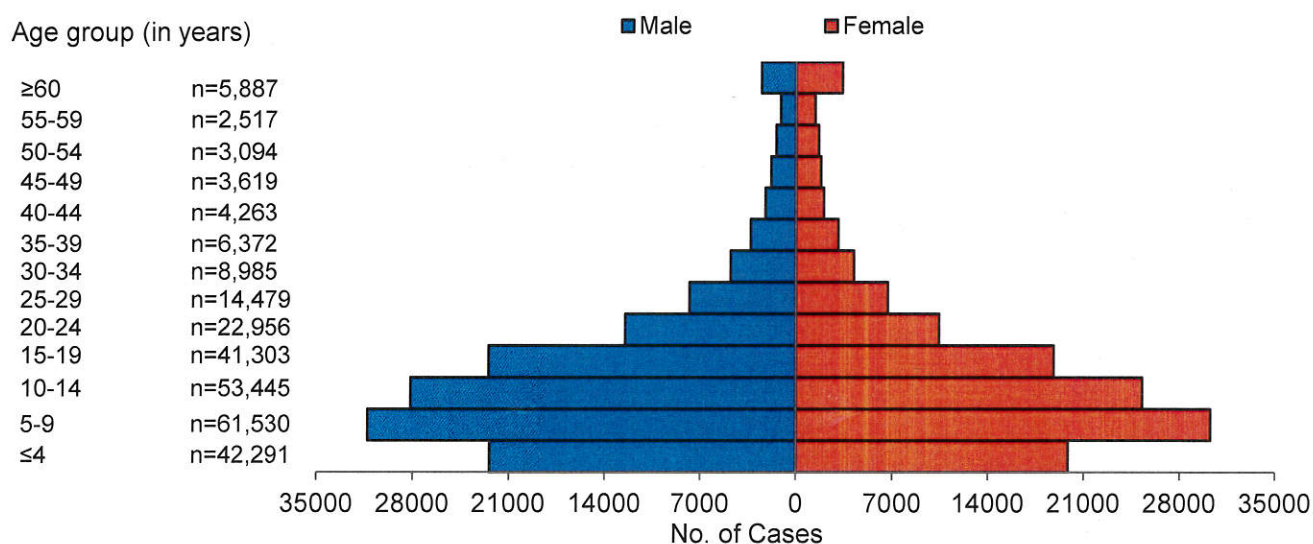


### III. Profile of Cases

#### A. Profile of Reported Dengue Cases

Age of suspect cases ranged from less than 1 month to 100 years (median age of 12 years). Majority of the cases (142,190 or 52%) were male. Most of the cases belonged to the 5-9 years age group (61,530 or 23%) (Figure 3).

Figure 3. Reported Dengue Cases by Age Group and Sex (N=271,480)  
Philippines, January 1 – August 31, 2019



Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases. All 2018 data reflects partial data only of all regions, subject to change once annual 2018 data is completed. Percentages may not equal to 100 due to rounding off of figures. A PDF file of this report is available at [www.doh.gov.ph/statistics](http://www.doh.gov.ph/statistics).

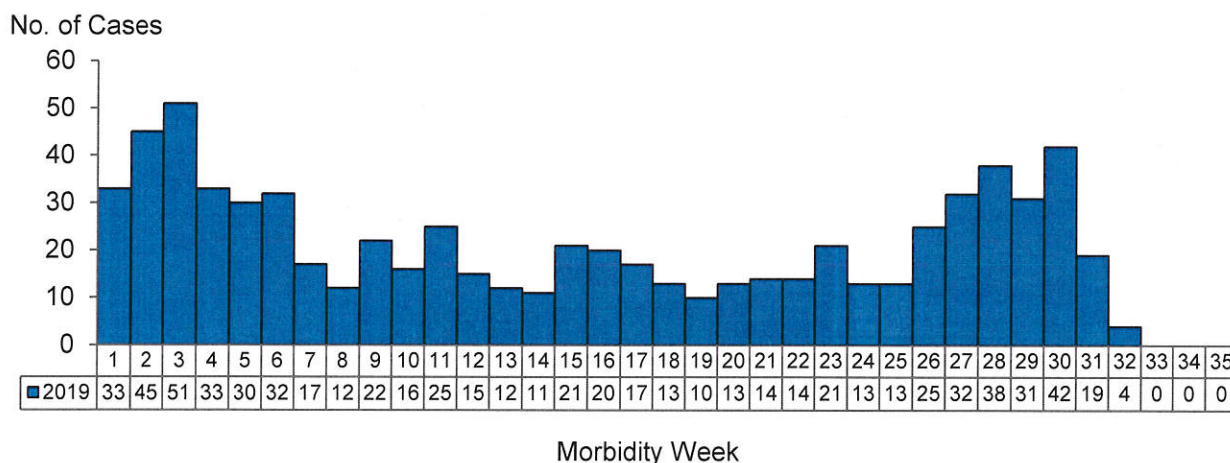




## B. Profile of Confirmed Dengue Cases

Out of 271,480 reported Dengue cases nationwide, **134,213 (49%)** cases were tested. Out of the tested, **714 (0.3%)** cases were confirmed via PCR.

**Figure 4. Confirmed Dengue Cases by Morbidity Week (n=714)**  
Philippines, January 1 – August 31, 2019



The predominant serotype from January 1 to August 31 is **DENV3** (481 cases or 67%) followed by **DENV 1** (122 cases or 17%), **DENV 2** (97 cases or 14%), **DENV 4** (11 cases or 2%) and **mixed serotype** (3 case or 0.4%). Majority of the confirmed Dengue cases were from the following regions: **Region IVA** (127 or 18%), **Region IX** (105 or 15%), **Region II** (97 or 14%), and **Region XI** (73 or 10%) (Table 2).

**Table 2. Confirmed Dengue Cases by Region and Serotype (n=714)**  
Philippines, January 1 – August 31, 2019

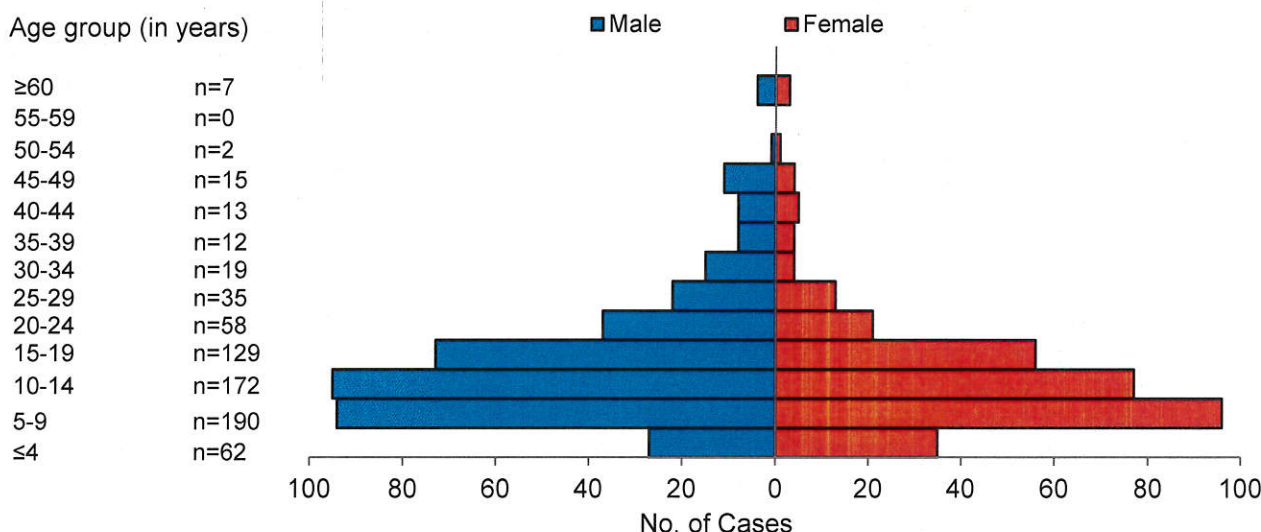
Region	Serotype					Total
	Dengue 1	Dengue 2	Dengue 3	Dengue 4	Mixed Serotype	
<b>PHILIPPINES</b>	122	97	481	11	3	714
<b>I</b>	9	12	28	1	0	50
<b>II</b>	0	2	94	1	0	97
<b>III</b>	25	14	25	1	0	65
<b>IV-A CALABARZON</b>	20	6	98	1	2	127
<b>IV-B MIMAROPA</b>	0	0	13	0	0	13
<b>V</b>	2	1	8	1	0	12
<b>VI</b>	0	1	10	0	0	11
<b>VII</b>	0	5	9	0	0	14
<b>VIII</b>	2	3	7	0	0	12
<b>IX</b>	4	22	76	3	0	105
<b>X</b>	2	0	0	0	0	2
<b>XI</b>	37	16	20	0	0	73
<b>XII</b>	4	5	28	2	0	39
<b>BARMM</b>	5	4	10	0	0	19
<b>CAR</b>	2	3	14	0	0	19
<b>CARAGA</b>	5	1	6	0	0	12
<b>NCR</b>	5	2	35	1	1	44

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Age of confirmed Dengue cases ranged from less than 1 year old to 80 years old (median age of 13 years). Majority of the confirmed cases (395 or 55%) were male. One hundred ninety or 27% of the confirmed cases belonged to the 5-9 years age group (Figure 5).

**Figure 5. Confirmed Dengue Cases by Age Group and Sex (n=714)**  
Philippines, January 1 – August 31, 2019



### C. Profile of Reported Dengue Deaths

There were 1,107 deaths (CFR = 0.41%) reported from January 1 to August 31. The case fatality rate is lower compared to the same period last year, 655 deaths (CFR=0.51%). The provinces or city with the highest number of deaths were: **Iloilo** (84 or 8%), **Negros Occidental** (60 or 5%), **Cebu** (56 or 5%), **Zamboanga del Sur** (50 or 5%), and **Cavite** (43 or 4%).

**Table 3. Top Provinces/Cities with Highest Reported Dengue Deaths (n=1,107)**  
Philippines January 1 – August 31, 2019

Province	Deaths	% among Deaths
Iloilo	84	8
Negros Occidental	60	5
Cebu	56	5
Zamboanga Del Sur	50	5
Cavite	43	4





Age of deaths ranged from less than 1 year old to 88 years old (median age of 8 years). Most of the reported deaths (587 or 53%) were female. Majority belonged to 5-9 years age group (430 deaths or 39%) (Figure 6).

**Figure 6. Reported Dengue Deaths by Age Group and Sex (n=1,107)**  
Philippines, January 1 – August 31, 2019

