



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 April 27, 2019 or Morbidity Weeks 1 – 17.

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 ≥ 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**

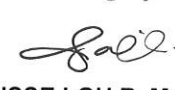
- Viral culture isolation,
- Polymerase Chain Reaction

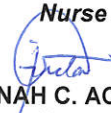
Editorial Board

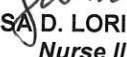

FERCHITO L. AVELINO, MD, MPH, PHSAE
Officer-in-Charge, Epidemiology Bureau


MA. NEMIA L. SUCALDITO, MD, PHSAE
Medical Officer V


HERDIE L. HIZON
Supervising Health Program Officer
Data Integrity Manager


DENISSE LOU B. MANALILI, RN
Nurse II


JEZZA JONAH C. ACLAN, RN, MPH
Nurse III


JOYSA D. LORICO, RN
Nurse II


VAN FARRAH S. IBEA, RN
Nurse II

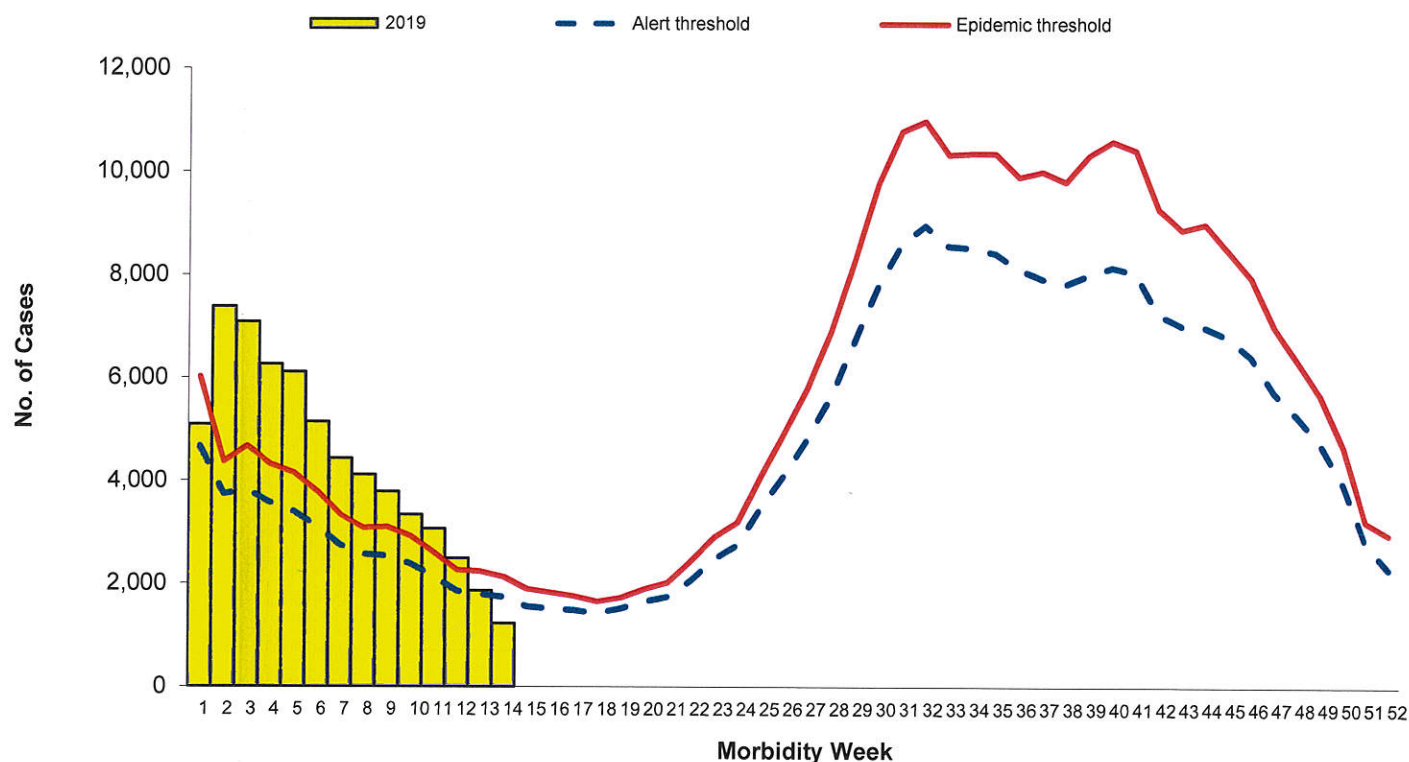

EDRIZ NOELLE E. RUEZO, RN
Nurse II



I. Trend in the Philippines

A total of **69,482** Dengue cases were reported nationwide from January 1 to April 27, 2019. This is **90%** higher compared to the same period last year (**36,618**). Figure 1 shows weekly data of reported dengue cases in 2019 compared to alert and epidemic thresholds.

Figure 1. Reported Dengue Cases (N=69,482)
Morbidity Weeks 1 - 17 (January 1- April 27, 2019) vs Epidemic and Alert Thresholds



II. Geographic Distribution

Table 1 shows that majority of the cases were from the following regions: **Region IV-A** (7,812 or 11%), **Region VII** (7,452 or 11%), and **NCR** (5,918 or 9%).

The regions with the highest percent increase in the number of reported cases for this year compared to last year were: **CARAGA** (450%), **Region II** (420%), **Region VII** (254%), **Region IX** (216%), and **Region XII** (214%).



Table 1. Reported Dengue Cases by Region
Philippines, January 1 – April 27, 2019 vs January 1 – April 27, 2018

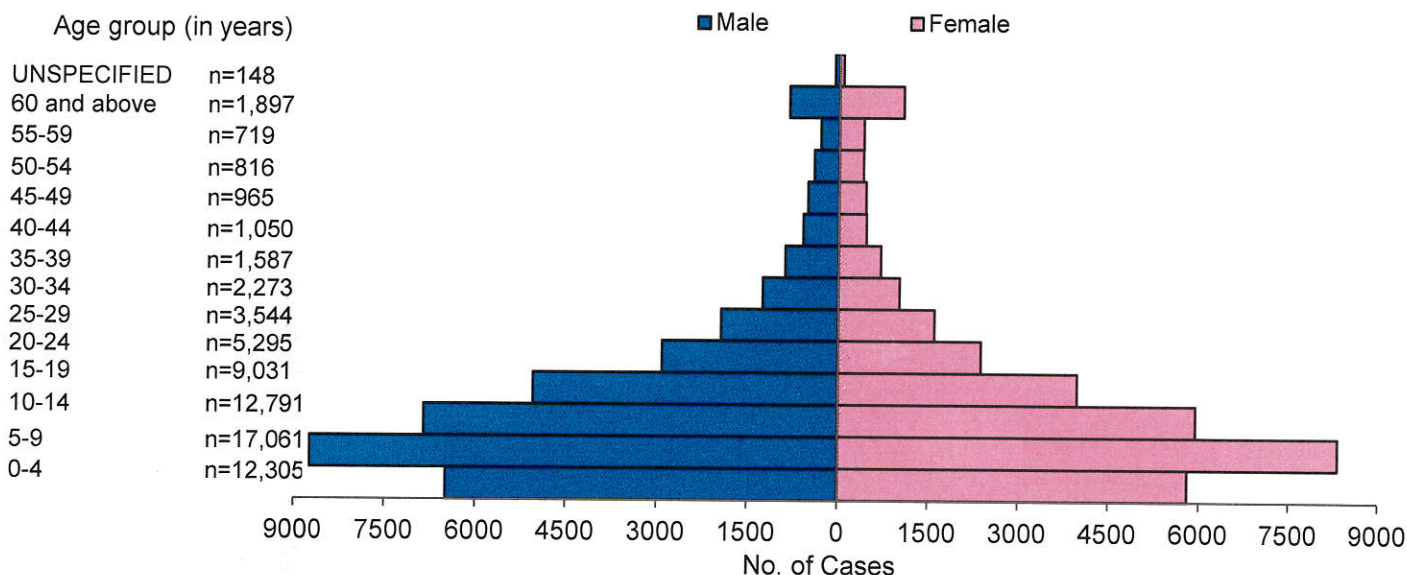
Region	2018		2017		% Change of Reported Cases
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	69,482	294	36,618	201	↑ 90
I	1,426 or 2%	3 or 1%	1,686 or 5%	9 or 4%	↓15
II	5,041 or 7%	21 or 7%	969 or 3%	4 or 2%	↑ 420
III	5,095 or 7%	9 or 3%	6,262 or 17%	12 or 6%	↓19
IV-A	7,812 or 11%	31 or 11%	5,990 or 16%	39 or 19%	↑ 30
MIMAROPA	2,260 or 3%	8 or 3%	824 or 2%	7 or 3%	↑ 174
V	1,359 or 2%	13 or 4%	805 or 2%	6 or 3%	↑ 69
VI	5,878 or 8%	35 or 12%	2,153 or 6%	19 or 9%	↑ 173
VII	7,452 or 11%	42 or 14%	2,105 or 6%	14 or 7%	↑ 254
VIII	2, 945 or 4%	14 or 5%	1,352 or 4%	12 or 6%	↑ 118
IX	3,661 or 5%	30 or 10%	1,158 or 3%	10 or 5%	↑ 216
X	5,309 or 8%	16 or 5%	2,320 or 6%	24 or 12%	↑ 129
XI	2,441 or 4%	5 or 2%	806 or 2%	2 or 1%	↑203
XII	5,060 or 7%	19 or 6%	1,613 or 4%	4 or 2%	↑ 214
ARMM	936 or 1%	9 or 3%	445 or 1%	6 or 3%	↑ 110
CAR	1,353 or 2%	3 or 1%	777 or 2%	3 or 1%	↑ 74
CARAGA	5,536 or 8%	16 or 5%	1,006 or 3%	2 or 1%	↑ 450
NCR	5,918 or 9%	20 or 7%	6,347 or 17%	28 or 14%	↓7

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 11 years). Majority of the cases (36,809 or 53%) were male. Most of the cases belonged to the 5-9 years age group (17,061 or 25%) (Figure 2).

Figure 2. Reported Dengue Cases by Age Group and Sex (N=69,482)
Philippines, January 1 – April 27, 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.



B. Profile of Confirmed Dengue Cases

Out of 69,482 reported Dengue cases nationwide, **26,173 (38%)** cases were tested. Out of the tested, **334 (1%)** cases were confirmed via PCR.

Figure 3. Confirmed Dengue Cases by Morbidity Week (n=334)
Philippines, January 1 – April 27, 2019

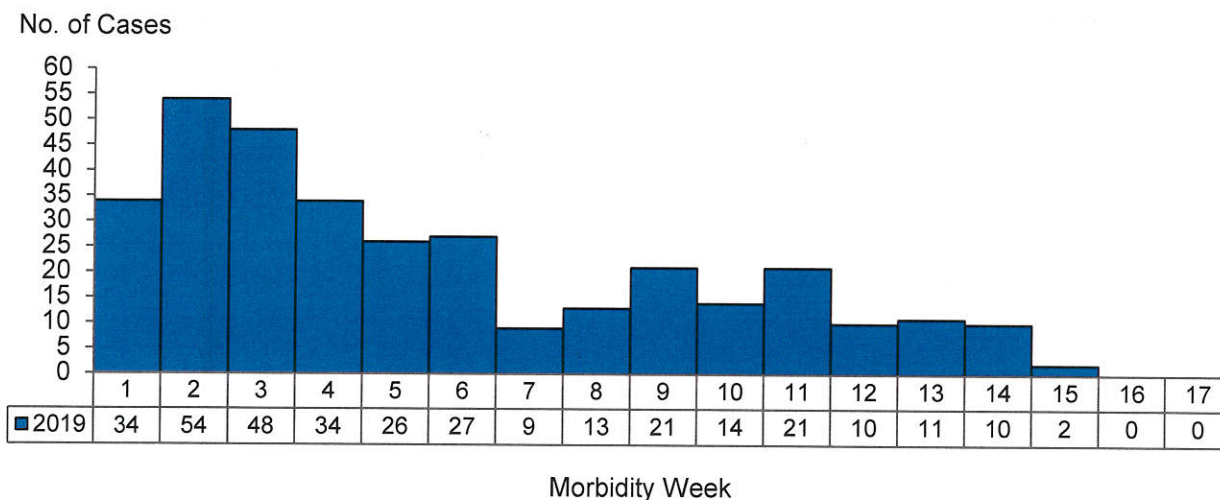


Table 2 shows that majority of the confirmed Dengue cases were from the following regions: **Region IX** (67 or 20%), **Region II** (61 or 18%), **NCR** (42 or 13%), and **Region XI** (36 or 11%). The predominant serotype from January 1 to April 27, 2019 is **DENV3** (214 cases or 64%) followed by **DENV 1** (79 cases or 24%), **DENV 2** (37 cases or 11%), **DENV 4** (3 cases or 1%) and **mixed serotype** (1 case or 0.3%)

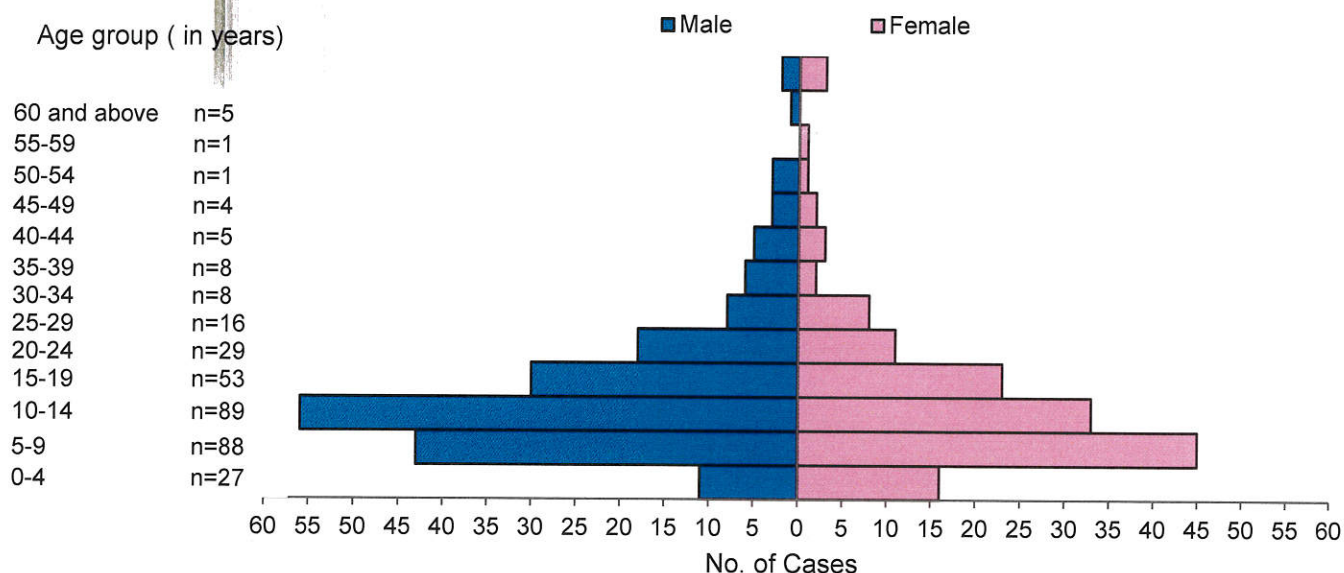
Table 2. Confirmed Dengue Cases by Region and Serotype (n=334)
Philippines, January 1 – April 27, 2019

Region	Serotype					Total
	Dengue 1	Dengue 2	Dengue 3	Dengue 4	Mixed Serotype	
PHILIPPINES	79	37	214	3	1	334
I	0	0	8	0	0	8
II	0	2	59	0	0	61
III	3	3	9	0	0	15
IV-A	2	0	23	0	0	25
MIMAROPA	0	0	2	0	0	2
V	1	1	7	1	0	10
VI	0	0	0	0	0	0
VII	0	7	9	0	0	16
VIII	0	0	0	0	0	0
IX	39	8	20	0	0	67
X	0	0	0	0	0	0
XI	17	9	10	0	0	36
XII	2	2	16	1	0	21
ARMM	5	2	9	0	0	16
CAR	0	0	3	0	0	3
CARAGA	5	1	6	0	0	12
NCR	5	2	33	1	1	42



Age of confirmed Dengue cases ranged from less than 1 year old to 80 years old (median age of 12 years). Majority of the confirmed cases (186 or 56%) were male. Eighty-nine or 27% of the confirmed cases belonged to the 10-14 years age group (Figure 4).

Figure 4. Confirmed Dengue Cases by Age Group and Sex (n=334)
Philippines, January 1 – April 27, 2019



C. Profile of Reported Dengue Deaths

There were 294 deaths (CFR = 0.42%) reported from January 1 to April 27, 2019. The case fatality rate is lower compared to the same period last year, 201 deaths (CFR=0.55%). The provinces or city with the highest number of deaths were: **Cebu** (30 or 10%), **Negros Occidental** (16 or 6%), **Zamboanga Del Sur** (16 or 6%), and **Cagayan** (14 or 5%).

Table 3. Top Provinces/Cities with Highest Reported Dengue Deaths (n=294)
Philippines January 1 – April 27, 2019

Province	Deaths	% among Deaths
Cebu	30	10
Negros Occidental	16	5
Zamboanga Del Sur	16	5
Cagayan	14	5



Age of deaths ranged from less than 1 year old to 88 years old (median age of 8 years). Most of the reported deaths (154 or 52%) were female. Majority belonged to 5-9 years age group (113 deaths or 38%) (Figure 5).

Figure 5. Reported Dengue Deaths by Age Group and Sex (n=294)
Philippines, January 1 – April 27, 2019

