



Introduction

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 the viral disease to humans.

In the Philippines, *Aedes aegypti* and *Aedes albopictus* are the primary and secondary mosquito vectors, respectively. The mosquito vectors breed in the small amount of water collected in such as storages such as tanks, cisterns, flower vases, plant axils and backyard litter.

The incubation period is from 3 to 14 days, commonly 4-7 days.

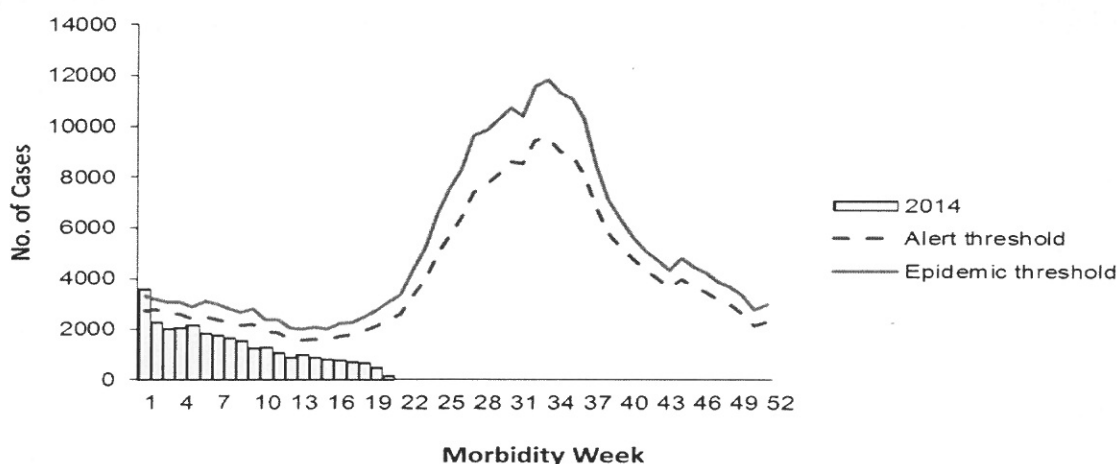
Signs and Symptoms

- Sudden onset of high fever which may last from 2 to 7 days.
- Joint and muscle pain and pain behind the eyes.
- Weakness
- Skin rashes
- Nosebleeding when fever starts to subside
- Abdominal pain
- Vomiting of coffee-colored matter
- Dark-colored stools
- Difficulty breathing.

Trend in the Philippines

A total of **28,600** suspect dengue cases was reported nationwide from January 1 to May 30, 2015. This is **6.33%** higher compared to the same time period last year (**26,897**).

**Fig. 1 Distribution of Suspect Dengue Cases by Morbidity Week
Philippines, as of May 30, 2015**



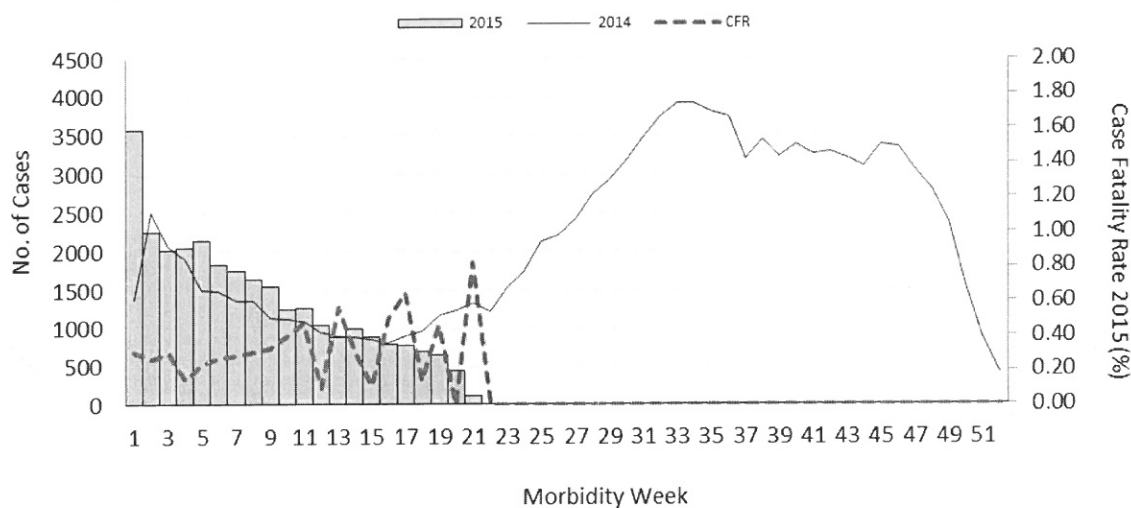
**NOTE: Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases.*



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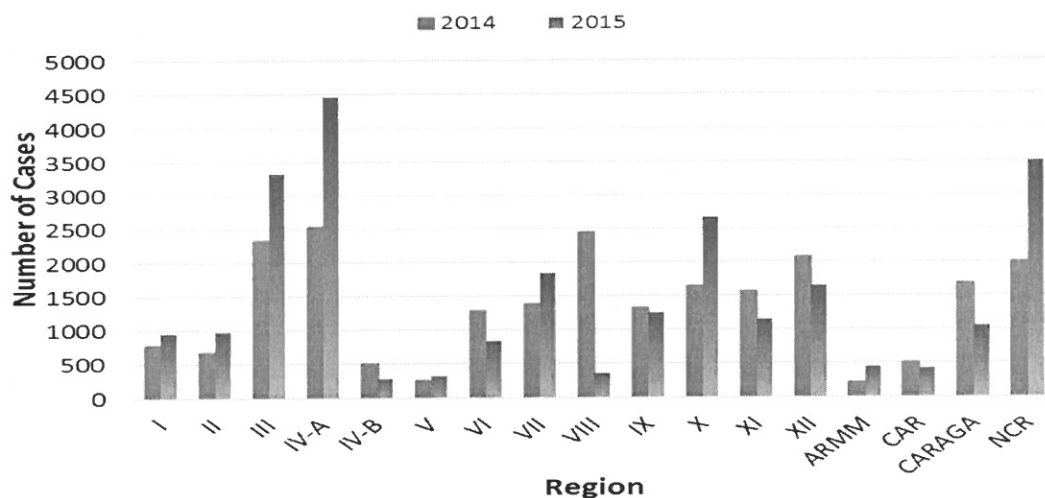
Fig. 2 Suspect Dengue Cases by Morbidity Week,
Philippines, as of May 30, 2015
2015* vs 2014 (N=28,600)



Geographic Distribution

Most of the cases were from the following regions: **Region IV-A (17.%)**, **NCR (13.3%)**, **Region III (12.7%)**, **Region X (10.5%)** and **Region VII (6.9%)**.

Fig. 3 Suspect Dengue Cases by Region
Philippines, 2015 vs 2014



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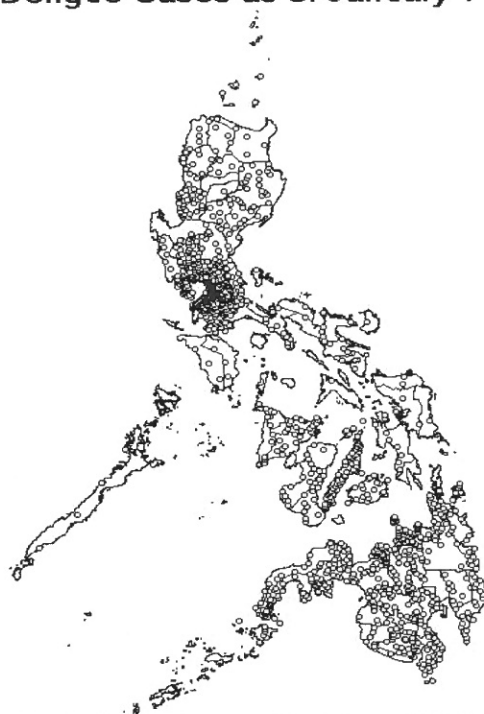


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Fig. 4 Suspect Dengue Cases as of January 1 to May 30, 2015

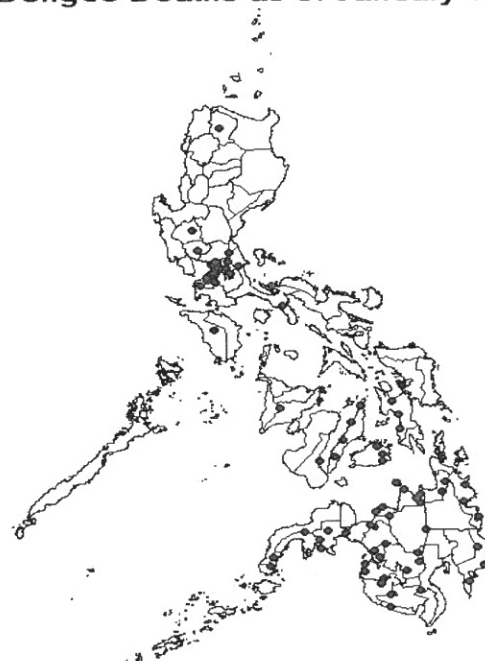
Region	Cases
Region 1	= 1146
Region 2	= 1084
Region 3	= 3635
Region 4A	= 4851
Region 4B	= 313
Region 5	= 360
Region 6	= 1057
Region 7	= 1980
Region 8	= 390
Region 9	= 1578
Region 10	= 2993
Region 11	= 1291
Region 12	= 1931
ARMM	= 534
CAR	= 513
CARAGA	= 1136
NCR	= 3808
Total	= 28600



Legend
1 Dot = 20 Cases

Fig. 5 Suspect Dengue Deaths as of January 1 to May 30, 2015

Region	Deaths
Region 1	= 3
Region 2	= 1
Region 3	= 3
Region 4A	= 11
Region 4B	= 1
Region 5	= 0
Region 6	= 1
Region 7	= 8
Region 8	= 3
Region 9	= 6
Region 10	= 11
Region 11	= 4
Region 12	= 8
ARMM	= 5
CAR	= 1
CARAGA	= 5
NCR	= 15
Total	= 86



Legend
1 Dot = 1 Death

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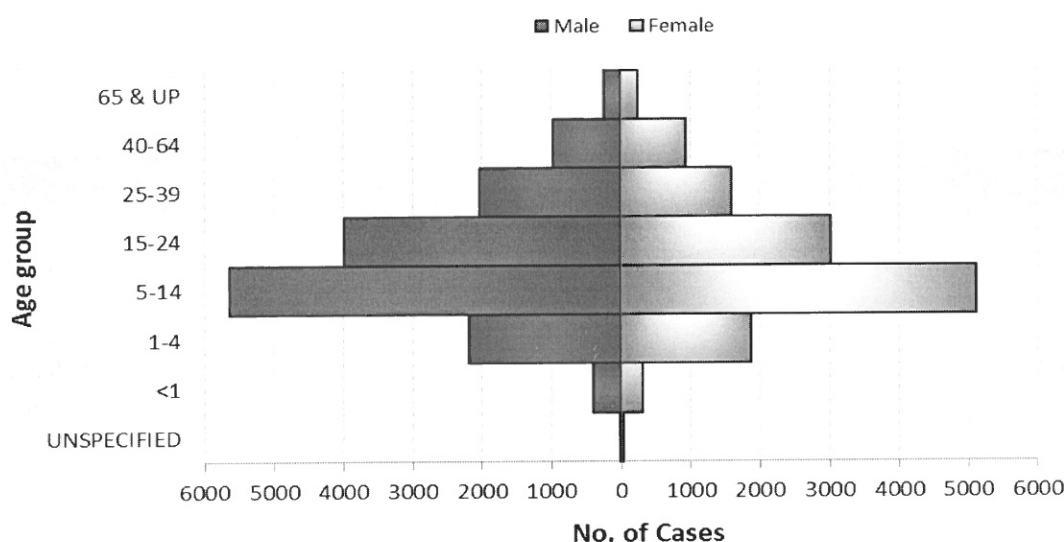
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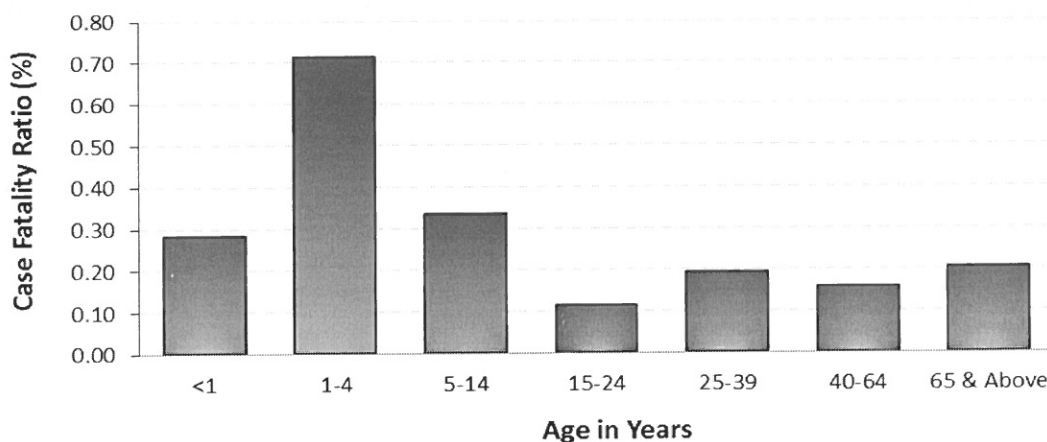
Profile of Cases

Ages of cases ranged from less than 1 month to 97 years old (median = 13 years). Majority of cases were male (54.4%). Most (37.9%) of the cases belonged to the 5 to 14 years age group (Fig. 6). There were 75 deaths (CFR = 0.29%).

**Fig.6 Suspect Dengue Cases by Agegroup and Sex
Philippines, as of May 30, 2015 (N=28,600)**



**Fig. 7 Suspect Dengue Case Fatality Rate (CFR) by Age Group,
Philippines, as of May 30, 2015**



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Dengue Virus Serotype Distribution in the Philippines

Dengue Fever/Dengue Hemorrhagic Fever has emerged as a major public health problem in the past 20 years, with an increasing incidence and expanding geographical distribution in both the vector and the disease (Gubler, 2002). Increased human migration and travel, climate change, urbanization and social changes have all contributed to this resurgence. These factors will continue to increase in the future, thus, an effective prevention and control program needs to be in place in order to predict and prevent epidemics.

Dengue is considered a Category II notifiable disease in the syndromic based Philippine Integrated Disease Surveillance and Response (PIDS) of the country lead by the Epidemiology Bureau. Dengue cases from health facilities nationwide are reported to the NEC on a weekly basis. However, laboratory confirmation of these cases has been limited. An active surveillance obtained from a smaller percentage of cases on a sentinel basis may provide a more detailed serotype-specific incidence data. Using the data from both systems, disease burden estimates could be determined.

The Research Institute for Tropical Medicine (RITM) served as the National Reference Laboratory for Dengue and other arboviruses together with NEC has started laboratory confirmation of Dengue cases in 2008, thus providing the serotype incidence over the years. With that, the Epidemiology Bureau – Philippine Integrated Disease Surveillance and Response (PIDS), in collaboration with the Research Institute for Tropical Medicine (RITM), has developed a guideline entitled, “**Interim Guidelines on the Sentinel-based Active Dengue Surveillance**” (DM 2014-0112).

Dengue serotype data are based on samples systematically collected from 20 sentinel site hospitals in all regions of the Philippines. Based from this Sentinel Based Active Dengue Surveillance, there were **152** laboratory confirmed dengue cases in the Philippines, in which all four DENV serotypes were present from January 1 to May 30, 2015. The predominant serotype during the first four months of 2015 is **DENV-1** (44.7%) followed by **DENV-2** (26.3%), mostly occurring in the NCR region (27.6%).

**Fig. 8 Confirmed Dengue Cases by Region and Serotype
Philippines, as of May 30, 2015 (n=152)**

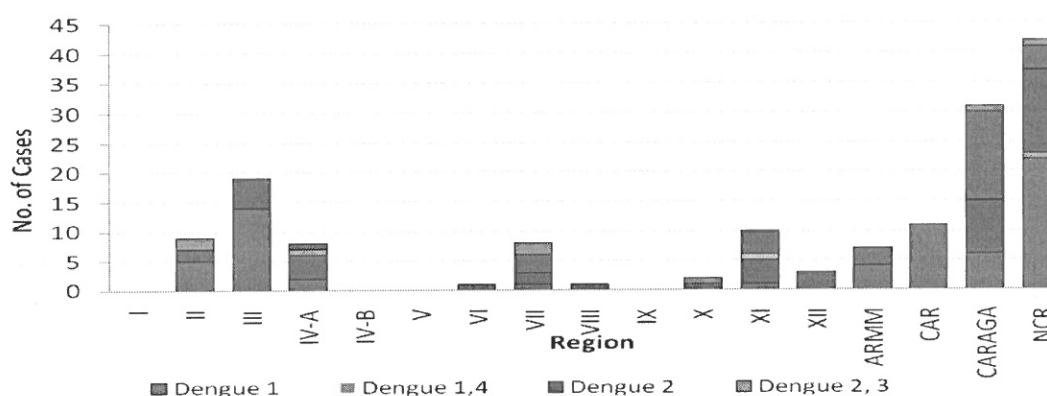




Fig. 9 Dengue virus serotype distribution in the Philippines, as of May 30, 2015 (n=152)

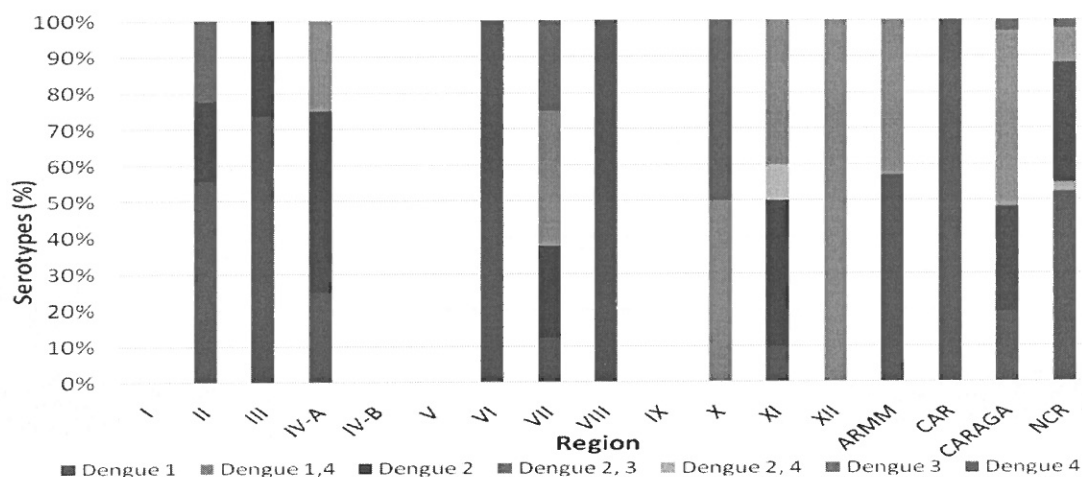


Table 1. Dengue Cases & Deaths by Region
Philippines, 2015* vs 2014

Region	Cases			Deaths			
	2015	2014	% Change	2015	CFR (%)	2014	CFR (%)
I	1146	913	↑ 25.5	3	0.26	0	0.00
II	1084	725	↑ 49.5	1	0.09	3	0.41
III	3635	2471	↑ 47.1	3	0.08	3	0.12
IV-A	4851	2735	↑ 77.4	11	0.23	8	0.29
IV-B	313	594	↓ -47.3	1	0.32	4	0.67
V	360	293	↑ 22.9	0	0.00	1	0.34
VI	1057	1488	↓ -29.0	1	0.09	7	0.47
VII	1980	1534	↑ 29.1	8	0.40	7	0.46
VIII	390	2787	↓ -86.0	3	0.77	10	0.36
IX	1578	1735	↓ -9.0	6	0.38	8	0.46
X	2993	2020	↑ 48.2	11	0.37	9	0.45
XI	1291	1877	↓ -31.2	4	0.31	9	0.48
XII	1931	2544	↓ -24.1	8	0.41	23	0.90
ARMM	534	294	↑ 81.6	5	0.94	1	0.34
CAR	513	606	↓ -15.3	1	0.19	1	0.17
CARAGA	1136	2176	↓ -47.8	5	0.44	11	0.51
NCR	3808	2105	↑ 80.9	15	0.39	4	0.19
Total	28600	26897	↑ 6.33	86	0.30	109	0.41



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Table 2. Weekly Dengue Summary Report by Region
 Philippines, as of May 30, 2015

Region	Morbidity Week				21st Morbidity Week		Cumulative Total 1st wk to 21st wk	
	17	18	19	20	2015	2014	2015	2014
I	62	52	49	16	0	51	1146	913
II	16	33	24	4	0	20	1084	725
III	113	87	69	43	1	45	3635	2471
IV-A	102	99	87	88	24	70	4851	2735
IV-B	11	6	3	5	4	35	313	594
V	12	9	11	8	5	17	360	293
VI	33	30	19	14	1	91	1057	1488
VII	34	40	38	20	4	62	1980	1534
VIII	6	3	2	2	6	116	390	2787
IX	36	47	64	42	4	168	1578	1735
X	96	80	82	74	44	101	2993	2020
XI	52	37	31	34	5	120	1291	1877
XII	81	72	53	16	0	166	1931	2544
ARMM	24	24	18	18	5	25	534	294
CAR	13	15	23	30	1	21	513	606
CARAGA	16	21	20	2	1	186	1136	2176
NCR	68	48	63	37	17	38	3808	2105
Total	775	703	656	453	122	1332	28600	26897

Treatment

- Do not give aspirin for fever.
- Give sufficient amount of water or rehydrate a dengue suspect.
- If fever or symptoms persist for 2 or more days, bring the patient to the nearest hospital.

Prevention and Control

Follow the 4-S against Dengue:

1. Search and Destroy
 - Cover water drums and pails.
 - Replace water in flower vases once a week.
 - Clean gutters of leaves and debris.
 - Collect and dispose all unsuable tin, cans, jars, bottles and other items that can collect and hold water.
2. Self-protection Measures
 - Wear long pants and long sleeved shirt.
 - Use mosquito repellent every day.
3. Seek Early Consultant
 - Consult the doctors immediately if fever persist after 2 days and rashes appears.
4. Say Yes to Fogging When There is an Impending Outbreak or a Hotspot.

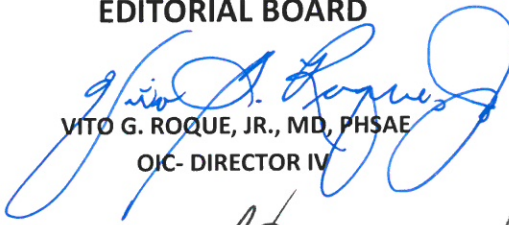
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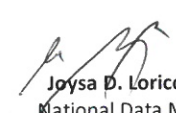



Morbidity Week 21 – May 24 – May 30, 2015

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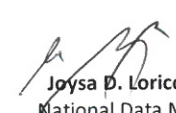
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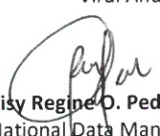

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