Republic of the Philippines
## Department of Health
Kagawaran ng Kalusugan

# Dengue Cases

Morbidity Week 26 – June 28 – July 4, 2015 | Epidemiology Bureau
Public Health Surveillance Division

## 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 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 **36,284** suspect dengue cases were reported nationwide from January 1 to July 4, 2015. This is **1.61%** higher compared to the same time period last year **(35,708).**

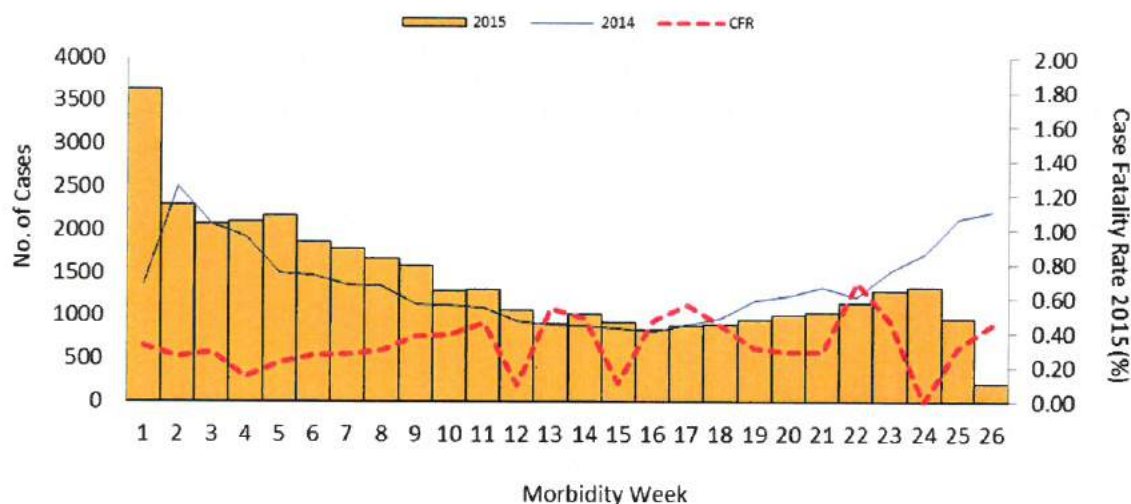### Fig. 1 Distribution of Suspect Dengue Cases by Morbidity Week Philippines, as of July 4, 2015
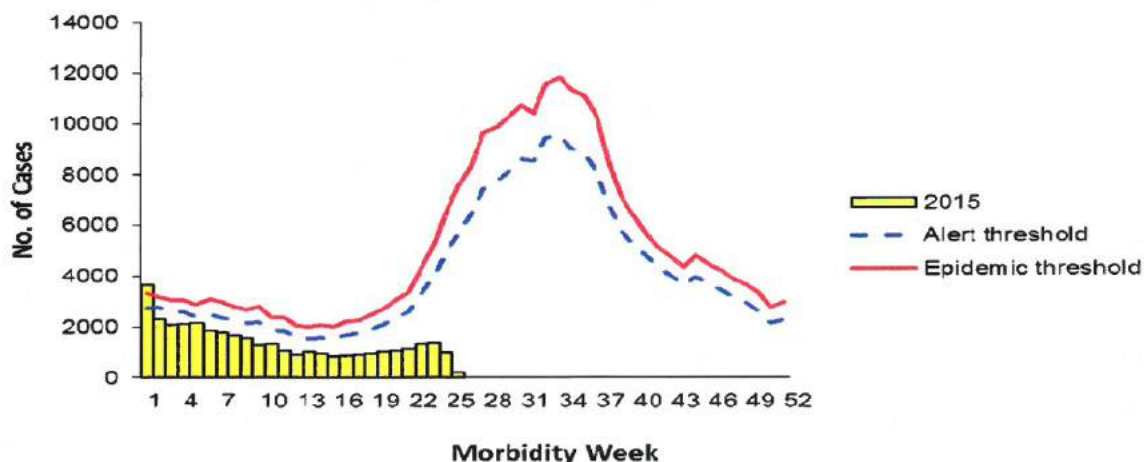


*NOTE: Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases.*

A PDF file of this report is available at nec.doh.gov.ph. For more inquiries, you may contact us on the following telephone number: (02) 651-7800 local 2930

Page 1

Republic of the Philippines
**Department of Health**
Kagawaran ng Kalusugan

**Dengue Cases**

Morbidity Week 26 – June 28 – July 4, 2015 | Epidemiology Bureau
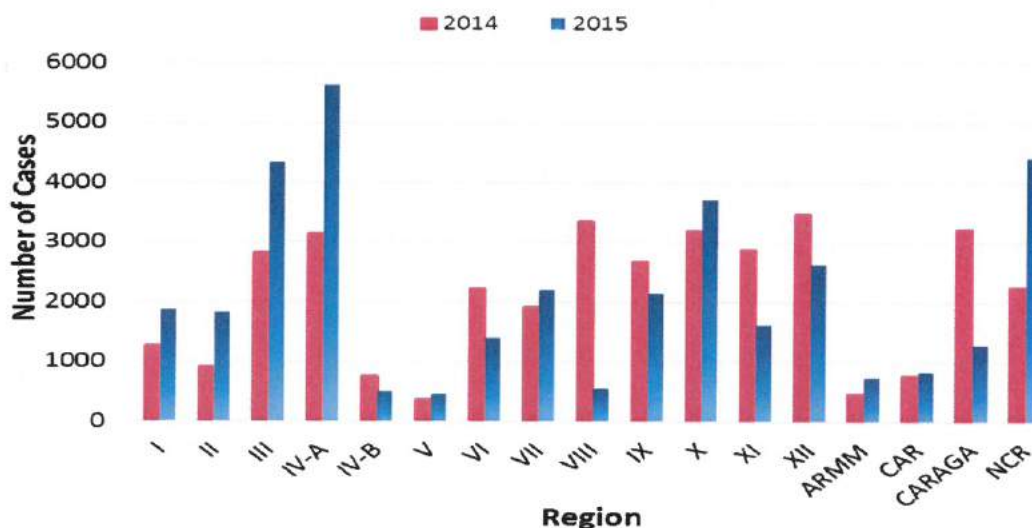Public Health Surveillance Division

### Fig. 2 Suspect Dengue Cases by Morbidity Week, Philippines, as of July 4, 2015 2015* vs 2014 (N=36,284)



**Geographic Distribution**

Most of the cases were from the following regions: **Region IV-A** (15.6%), **NCR** (12.2%), **Region III** (12%), **Region X** (10.3%) and **Region XII** (7.3%).

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



*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.*

A PDF file of this report is available at nec.doh.gov.ph. For more inquiries, you may contact us on the following telephone number: (02) 651-7800 local 2930

Page 2

Republic of the Philippines
**Department of Health**
Kagawaran ng Kalusugan

**Dengue Cases**

Morbidity Week 26 – June 28 – July 4, 2015

Epidemiology Bureau
Public Health Surveillance Division

## Fig 4. Suspect Dengue Cases as of January 1 to July 4, 2015

| Region | | Cases |
|--------|---|-------|
| Region 1 | = | 1887 |
| Region 2 | = | 1837 |
| Region 3 | = | 4349 |
| Region 4A | = | 5645 |
| Region 4B | = | 491 |
| Region 5 | = | 467 |
| Region 6 | = | 1408 |
| Region 7 | = | 2216 |
| Region 8 | = | 552 |
| Region 9 | = | 2159 |
| Region 10 | = | 3726 |
| Region 11 | = | 1621 |
| Region 12 | = | 2642 |
| ARMM | = | 741 |
| CAR | = | 828 |
| CARAGA | = | 1286 |
| NCR | = | 4429 |
| Total | | = 36284 |

Legend
1 Dot = 20 Cases
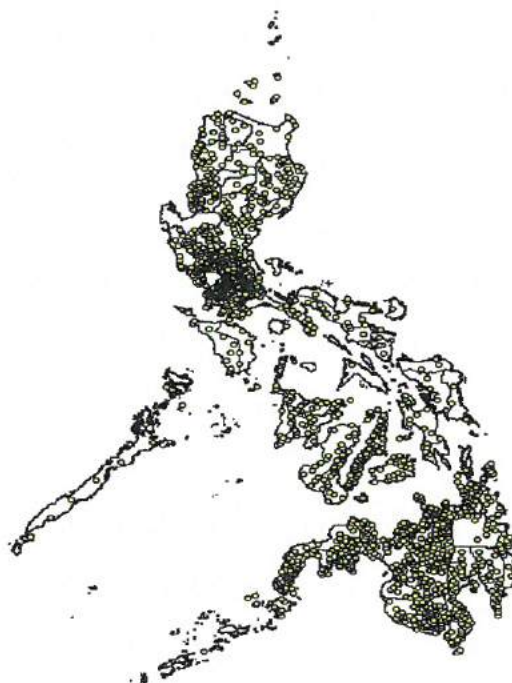
## Fig 5. Suspect Dengue Deaths as of January 1 to July 4, 2015

| Region | | Deaths |
|--------|---|--------|
| Region 1 | = | 6 |
| Region 2 | = | 4 |
| Region 3 | = | 5 |
| Region 4A | = | 14 |
| Region 4B | = | 2 |
| Region 5 | = | 1 |
| Region 6 | = | 3 |
| Region 7 | = | 10 |
| Region 8 | = | 3 |
| Region 9 | = | 7 |
| Region 10 | = | 11 |
| Region 11 | = | 7 |
| Region 12 | = | 11 |
| ARMM | = | 6 |
| CAR | = | 1 |
| CARAGA | = | 7 |
| NCR | = | 18 |
| Total | | = 116 |

Legend
1 Dot = 1 Death
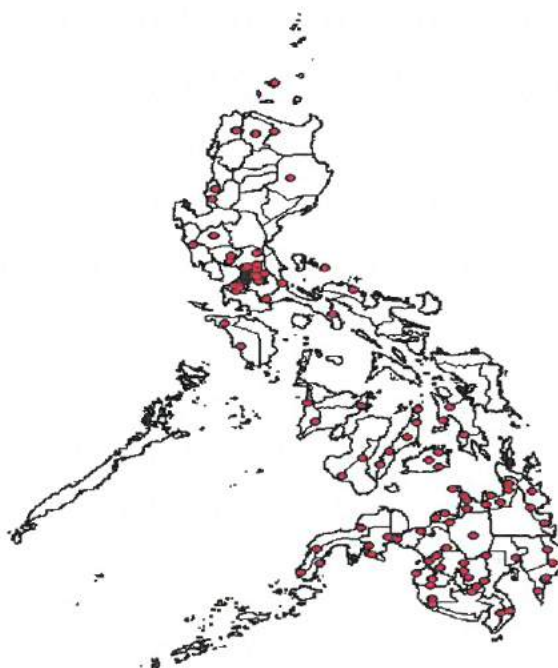
*NOTE: Case counts reported here do NOT represent the final number and are subject to
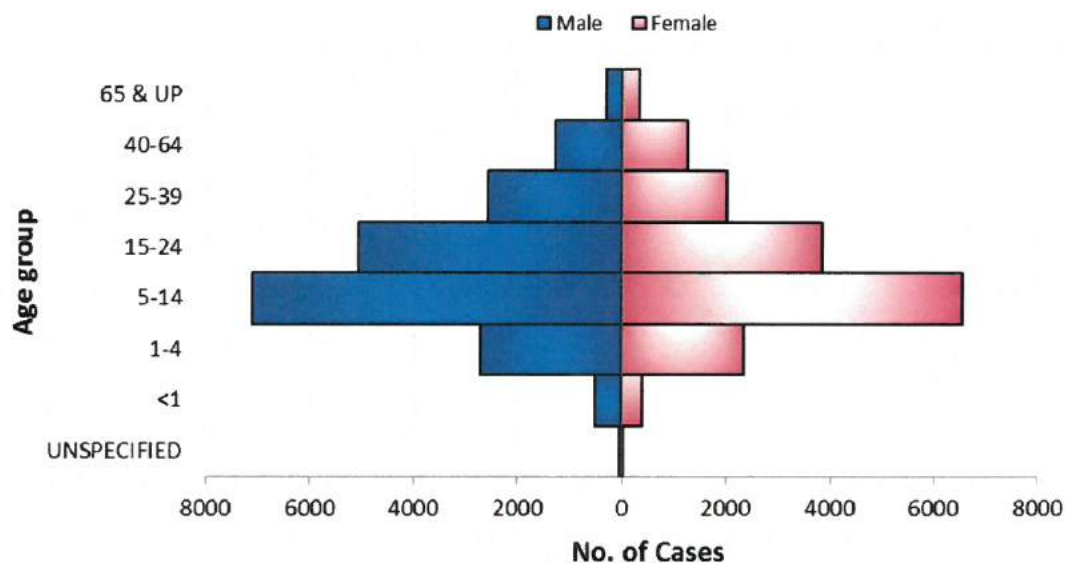change after inclusion of delayed reports and review of cases.*

A PDF file of this report is available at nec.doh.gov.ph. For more inquiries, you may contact
us on the following telephone number: (02) 651-7800 local 2930

Page 3

## Profile of Cases

Ages of cases ranged from less than 1 month to 97 years old (median = 13 years). Majority of cases were male (53.9%). Most (37.6%) of the cases belonged to the 5 to 14 years age group (Fig. 6). There were 116 deaths (CFR = 0.32%).

## Fig.6 Suspect Dengue Cases by Agegroup and Sex Philippines, as of July 4, 2015 (N=36,284)



## Fig. 7 Suspect Dengue Case Fatality Rate (CFR) by Age Group, Philippines, as of July 4, 2015
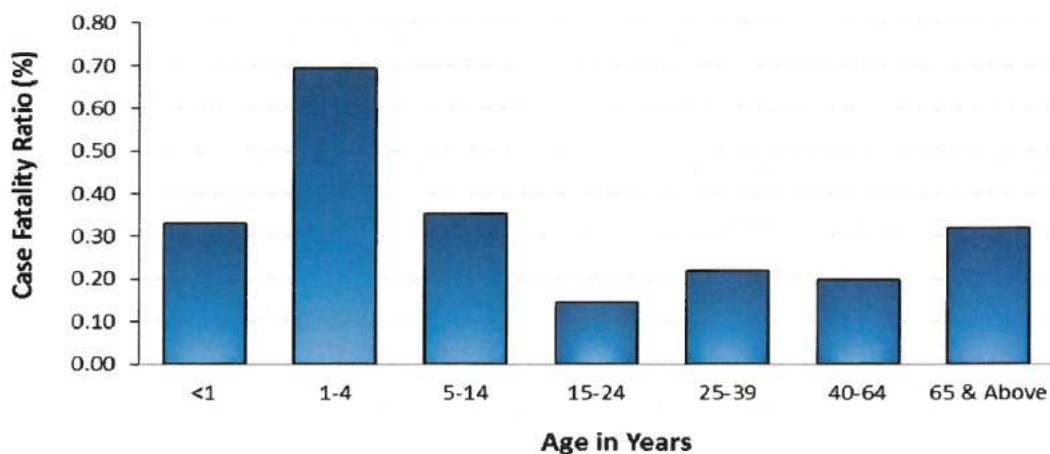


> *NOTE: Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases.*

A PDF file of this report is available at nec.doh.gov.ph. For more inquiries, you may contact us on the following telephone number: (02) 651-7800 local 2930

Page 4

**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 (PIDSR) 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 (PIDSR), 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 the Sentinel Based Active Dengue Surveillance, there were **216** laboratory confirmed dengue cases in the Philippines, in which all four DENV serotypes were present from January 1 to July 4, 2015. The predominant serotype is **DENV-1** (41.7%) followed by **DENV-3** (25.5%), mostly occuring in the NCR region (26.4%).

**Fig. 8 Confirmed Dengue Cases by Region and Serotype Philippines, as of July 4, 2015 (n=216)**
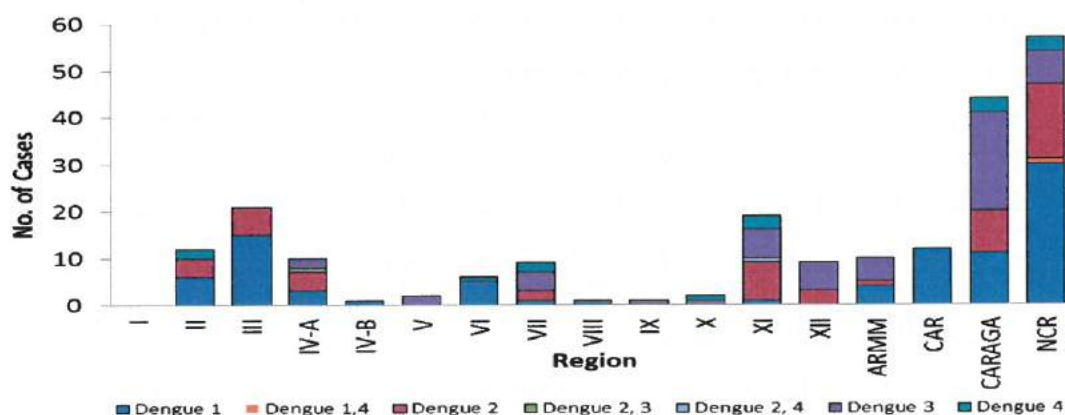


*NOTE: Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases.*
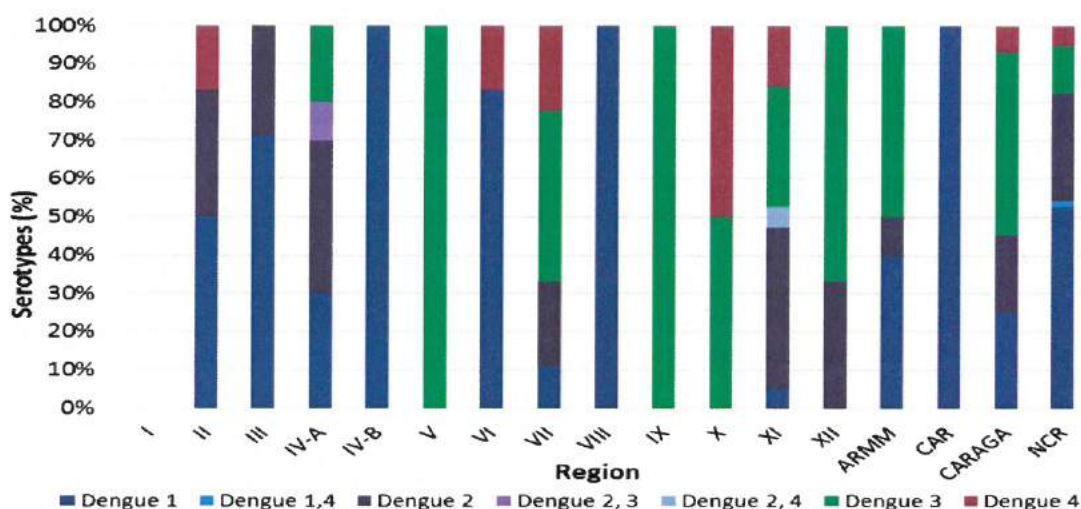
A PDF file of this report is available at nec.doh.gov.ph. For more inquiries, you may contact us on the following telephone number: (02) 651-7800 local 2930

Page 5

## Fig. 9 Dengue virus serotype distribution in the Philippines, as of July 4, 2015 (n=216)



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

| Region | Cases | | | Deaths | | | |
|---|---|---|---|---|---|---|---|
| | 2015 | 2014 | % Change | 2015 | CFR (%) | 2014 | CFR (%) |
| I | 1887 | 1266 | ⬆ 49.1 | 6 | 0.32 | 2 | 0.16 |
| II | 1837 | 905 | ⬆ 103.0 | 4 | 0.22 | 7 | 0.77 |
| III | 4349 | 2820 | ⬆ 54.2 | 5 | 0.11 | 4 | 0.14 |
| IV-A | 5645 | 3138 | ⬆ 79.9 | 14 | 0.25 | 8 | 0.25 |
| IV-B | 491 | 764 | ⬇ -35.7 | 2 | 0.41 | 4 | 0.52 |
| V | 467 | 360 | ⬆ 29.7 | 1 | 0.21 | 2 | 0.56 |
| VI | 1408 | 2221 | ⬇ -36.6 | 3 | 0.21 | 10 | 0.45 |
| VII | 2216 | 1924 | ⬆ 15.2 | 10 | 0.45 | 9 | 0.47 |
| VIII | 552 | 3351 | ⬇ -83.5 | 3 | 0.54 | 13 | 0.39 |
| IX | 2159 | 2684 | ⬇ -19.6 | 7 | 0.32 | 12 | 0.45 |
| X | 3726 | 3198 | ⬆ 16.5 | 11 | 0.30 | 17 | 0.53 |
| XI | 1621 | 2878 | ⬇ -43.7 | 7 | 0.43 | 14 | 0.49 |
| XII | 2642 | 3474 | ⬇ -23.9 | 11 | 0.42 | 27 | 0.78 |
| ARMM | 741 | 461 | ⬆ 60.7 | 6 | 0.81 | 3 | 0.65 |
| CAR | 828 | 776 | ⬆ 6.7 | 1 | 0.12 | 1 | 0.13 |
| CARAGA | 1286 | 3231 | ⬇ -60.2 | 7 | 0.54 | 16 | 0.50 |
| NCR | 4429 | 2257 | ⬆ 96.2 | 18 | 0.41 | 4 | 0.18 |
| Total | 36284 | 35708 | ⬆ 1.61 | 116 | 0.32 | 153 | 0.43 |

*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.

A PDF file of this report is available at nec.doh.gov.ph. For more inquiries, you may contact us on the following telephone number: (02) 651-7800 local 2930

Page 6

### Table 2. Weekly Dengue Summary Report by Region
Philippines, as of July 4, 2015

| Region | Morbidity Week | | | | 26th Morbidity Week | | Cumulative Total 1st wk to 26th wk | |
|---|---|---|---|---|---|---|---|---|
| | 22 | 23 | 24 | 25 | 2015 | 2014 | 2015 | 2014 |
| I | 94 | 148 | 162 | 106 | 9 | 95 | 1887 | 1266 |
| II | 94 | 85 | 107 | 96 | 6 | 56 | 1837 | 905 |
| III | 103 | 104 | 146 | 61 | 11 | 116 | 4349 | 2820 |
| IV-A | 138 | 155 | 164 | 145 | 41 | 100 | 5645 | 3138 |
| IV-B | 40 | 35 | 41 | 18 | 13 | 53 | 491 | 764 |
| V | 23 | 22 | 15 | 15 | 4 | 17 | 467 | 360 |
| VI | 49 | 64 | 63 | 42 | 1 | 209 | 1408 | 2221 |
| VII | 35 | 55 | 50 | 42 | 3 | 100 | 2216 | 1924 |
| VIII | 5 | 13 | 10 | 7 | 5 | 101 | 552 | 3351 |
| IX | 82 | 61 | 54 | 17 | 0 | 253 | 2159 | 2684 |
| X | 159 | 145 | 137 | 117 | 50 | 245 | 3726 | 3198 |
| XI | 62 | 80 | 70 | 50 | 5 | 284 | 1621 | 2878 |
| XII | 99 | 90 | 84 | 46 | 12 | 233 | 2642 | 3474 |
| ARMM | 34 | 31 | 29 | 14 | 8 | 43 | 741 | 461 |
| CAR | 19 | 65 | 77 | 73 | 29 | 48 | 828 | 776 |
| CARAGA | 18 | 38 | 20 | 17 | 1 | 217 | 1286 | 3231 |
| NCR | 91 | 103 | 105 | 98 | 22 | 42 | 4429 | 2257 |
| Total | 1145 | 1294 | 1334 | 964 | 220 | 2212 | 36284 | 35708 |

*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.*

## 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.

*A PDF file of this report is available at nec.doh.gov.ph. For more inquiries, you may contact us on the following telephone number: (02) 651-7800 local 2930*

Page 7

Republic of the Philippines
**Department of Health**
Kagawaran ng Kalusugan

**Dengue Cases**

**Morbidity Week 26 – June 28 – July 4, 2015**

Epidemiology Bureau
Public Health Surveillance Division

- Use mosquito repellant 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.

*A PDF file of this report is available at nec.doh.gov.ph. For more inquiries, you may contact us on the following telephone number: (02) 651-7800 local 2930*

Page 8