



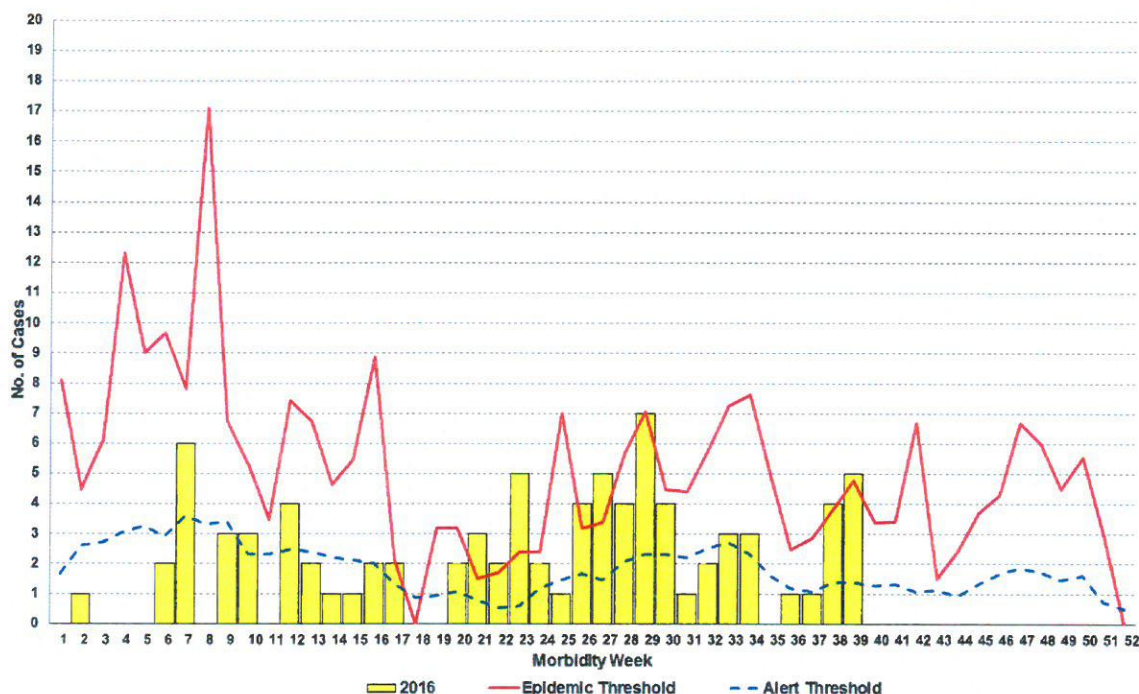
Morbidity Week 40: January 1 – October 8, 2016

Epidemiology Bureau  
Public Health Surveillance Division

### TRENDS IN THE PHILIPPINES

A total of **86** diphtheria cases were reported nationwide from January 1 – October 8, 2016. This was **5.50% lower** than the same period last year. Figure 1 shows the distribution of the reported diphtheria cases in the country by morbidity week. It can be noted that despite the decrease in the number of cases reported this year, cases have reached beyond epidemic threshold in MW 17, 21, 22, 23, 26, 27, 29, 38 and 39.

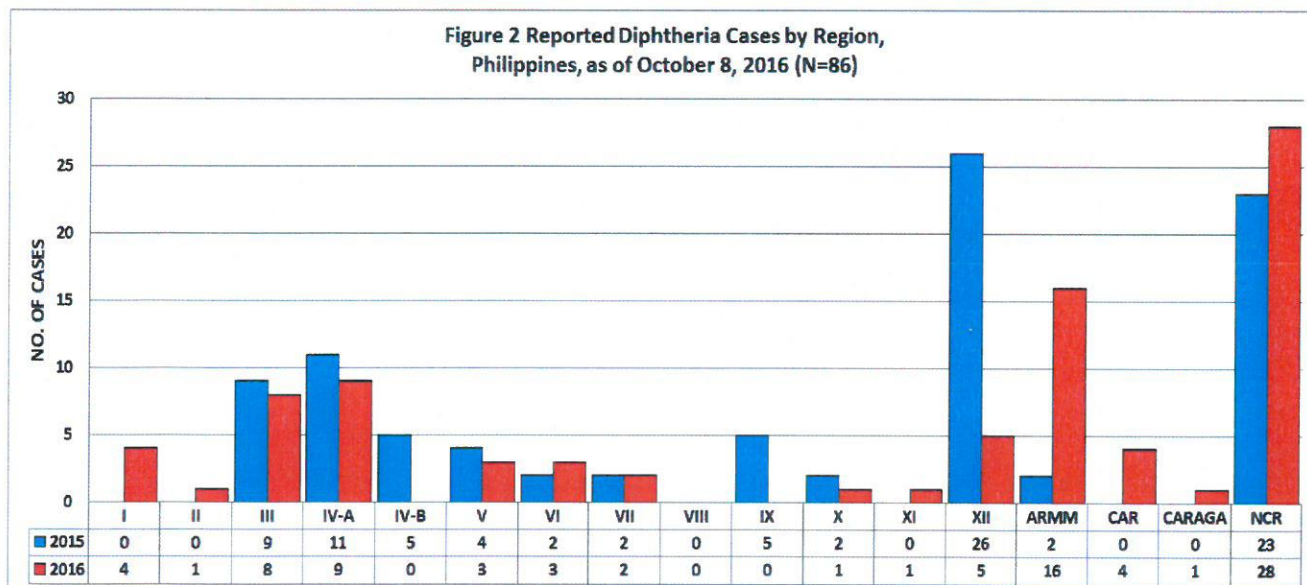
**Figure 1. Alert and Epidemic Threshold and Reported Diphtheria Cases by Morbidity Week, Philippines, as of October 8, 2016 (Morbidity Week 40) (N=86)**



### GEOGRAPHIC DISTRIBUTION

The number of diphtheria reports vary by region. Figure 2 shows the distribution of reported diphtheria cases by region in comparison to the same time period last year. There is an increase in the number of reported cases from regions NCR, ARMM, 1, 2, 6, 11, CAR and CARAGA, and a sustained presence of diphtheria cases in region 3, 4A, 5, 7, 10 and 12.

**Figure 2 Reported Diphtheria Cases by Region, Philippines, as of October 8, 2016 (N=86)**







Morbidity Week 40: January 1 – October 8, 2016

Epidemiology Bureau  
 Public Health Surveillance Division

Table 1 indicates the reported diphtheria cases by region in the Philippines. Majority of the reported diphtheria cases came from NCR. Table 2 shows the regions with the most number of reported diphtheria cases and its affected cities/municipality by case classification, outcome and CFR. Clustering<sup>(1)</sup> of diphtheria cases is reported in Brgy. Hulo, Pasig City in the past 4 morbidity weeks (Table 3).

Futhermore, Table 4 reflects a detailed information of the cases in Manila, the city with most number of reported diphtheria cases. Among the 8 diphtheria cases, 6 were from Tondo with 3 of the cases considered part of a cluster in morbidity week 27-30. This cluster of diphtheria cases is from Barrio Obrero, Tondo, Manila. They were 3 siblings who lived in the same house, two (2) of which were laboratory confirmed diphtheria cases.

**Table 1. Reported Diphtheria Cases by Region, Philippines as of October 8, 2016 (N=86)**

REGION	Case Classification		Reported Cases	Died	CFR %
	Probable Cases	Confirmed Cases			
I	4	0	4	2	50.00
II	1	0	1	1	100.00
III	6	2	8	4	50.00
IV-A	6	3	9	4	44.44
IV-B	0	0	0	0	0.00
V	3	0	3	1	33.33
VI	3	0	3	1	33.33
VII	2	0	2	0	0.00
VIII	0	0	0	0	0.00
IX	0	0	0	0	0.00
X	1	0	1	0	0.00
XI	1	0	1	0	0.00
XII	4	1	5	2	40.00
ARMM	13	3	16	7	43.75
CAR	2	2	4	0	0.00
CARAGA	1	0	1	0	0.00
NCR	9	19	28	10	35.71
PHL	56	30	86	32	37.21

**Table 2. Reported Diphtheria Cases in NCR and ARMM Philippines, as of October 8, 2016**

PROVINCE	CITY/MUNICIPALITY	PROBABLE CASES	CONFIRMED CASES	TOTAL REPORTED CASES	DIED	CFR %
METRO MANILA	CALOOCAN CITY	0	1	1	0	0.00
	MALABON CITY	0	4	4	2	50.00
	MANDALUYONG CITY	1	3	4	1	25.00
	MANILA	4	4	8	3	37.50
	NAVOTAS	0	1	1	1	100.00
	PASIG CITY	0	2	2	2	100.00
	QUEZON CITY	3	3	6	1	16.67
	TAGUIG CITY	1	1	2	0	0.00
<b>NCR</b>		<b>9</b>	<b>19</b>	<b>28</b>	<b>10</b>	<b>35.71</b>
MAGUINDANAO	BULUAN	1	0	1	1	100.00
	DATU ODIN SINSUAT	2	1	3	1	33.33
	DATU PAGLAS	2	0	2	1	50.00
	KABUNTALAN	1	0	1	1	100.00
	LUMBA-BAYABAO	1	0	1	1	100.00
	NORTH UPI	1	0	1	0	0.00
	PARANG	4	0	4	1	25.00
	SHARIFF SAYDONA MUSTAPHA	1	1	2	0	0.00
	SULTAN KUDARAT	0	1	1	1	100.00
<b>ARMM</b>		<b>13</b>	<b>3</b>	<b>16</b>	<b>7</b>	<b>43.75</b>

<sup>(1)</sup>Clustering Definition: 2 or more diphtheria cases from the same barangay, reported within 4 consecutive weeks.





Morbidity Week 40: January 1 – October 8, 2016

Epidemiology Bureau  
 Public Health Surveillance Division

Table 3. Barangay with Clustering<sup>(1)</sup> of Diphtheria Cases in City of Pasig Philippines, as of October 8, 2016

MORBIDITY WEEK	REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CASES
37-40	NCR	METRO MANILA	PASIG CITY	HULO	2

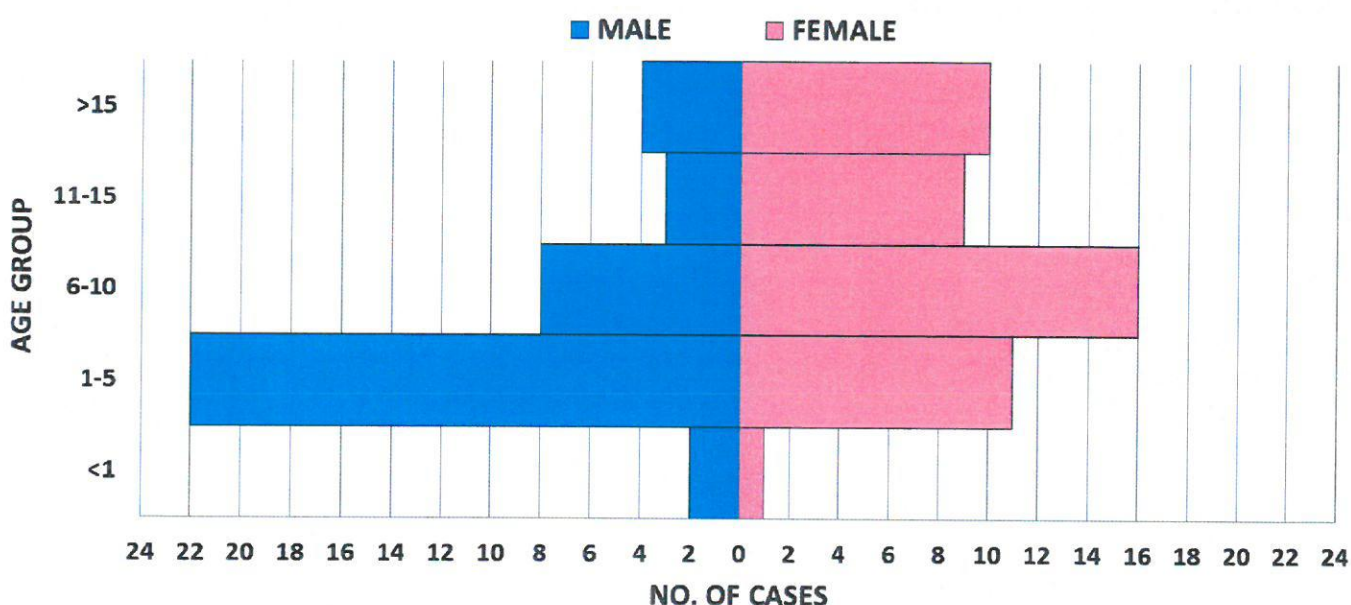
Table 4. Diphtheria Cases in City of Manila Philippines, as of October 8, 2016

CITY	ADDRESS	CASE CLASSIFICATION		REPORTED CASES
		CONFIRMED CASE	PROBABLE CASE	
MANILA	BASECO, PORT AREA	1	0	1
	BARRIO OBRERO, TONDO	2	1	3
	ESGUERRA ST., TONDO	1	0	1
	GAGALANGIN, TONDO	0	1	1
	353, TONDO	0	1	1
	PACO	0	1	1

## PROFILE OF CASES

Majority of the reported diphtheria cases are female (54.65%) and most of them belong to the 1-5 years old age group (38.37%) as seen in Figure 3. Majority (41.86%) of reported cases have zero (0) dose of DPT/Pentavalent vaccine (Figure 4). Moreover, twenty seven (31.40%) out of the 86 reported cases have completed three (3) primary doses of DPT/Pentavalent vaccine. Thirty two (37%) cases died (Figure 5).

**Figure 3 Reported Diphtheria Cases by Age Group and Sex, Philippines, as of October 8, 2016 (N=86)**

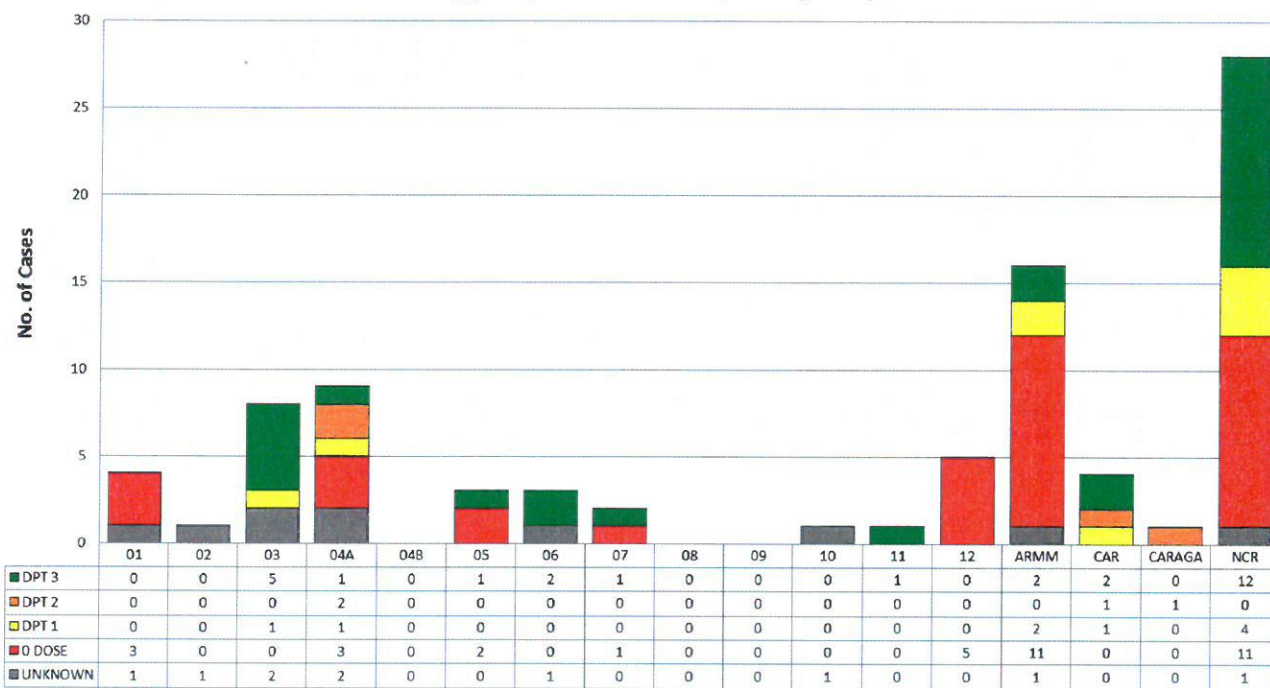




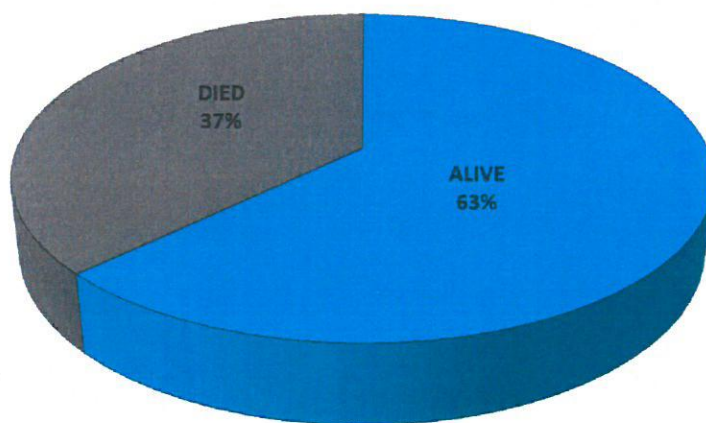
Morbidity Week 40: January 1 – October 8, 2016

Epidemiology Bureau  
 Public Health Surveillance Division

**Figure 4. Reported Diphtheria Cases by Region and DPT Dose, Philippines, as of October 8, 2016 (N=86)**



**Figure 5 Reported Diphtheria Cases by Outcome, Philippines, as of October 8, 2016 (N=86)**



## ACTIONS TAKEN

### Local Government Units

1. Identified close contacts and/or secondary diphtheria cases in the community.
2. Collected specimens from new suspected cases and identified close contacts, coordination with RITM for transport media supplies.
3. Provided prophylaxis treatment and booster immunization for close contacts in coordination with EPI Program.





Morbidity Week 40: January 1 – October 8, 2016

Epidemiology Bureau  
Public Health Surveillance Division

Regional Health Offices

1. Supported to Local Government Unit to strengthen surveillance and case investigation.

Epidemiology Bureau

1. Provided technical assistance in the conduct of investigation.
2. Drafted memorandum on diphtheria control through surveillance and outbreak response.
3. Visited selected areas with reported cases for further case investigation, along with WHO country representatives.

**RECOMMENDATIONS**

1. High routine vaccine coverage with effective vaccine is the mainstay of prevention.
2. Immunizations should be completed for those whose schedule is incomplete.
3. Active surveillance in all health facilities would greatly help in getting all diphtheria cases.
4. Contact tracing of confirmed diphtheria cases. Provision of prophylaxis and booster immunization for close contacts and in the community.
5. The mainstay of treatment is intramuscular or intravenous administration of Diphtheria Anti-Toxin (DAT). Anti-toxin only neutralizes circulating toxin that has not yet been taken up intracellularly. Procurement of enough DAT would lower mortality rate of diphtheria.
6. Weekly data analysis for the alert and epidemic threshold of reported diphtheria cases. The Epidemiology and Surveillance Unit, as well as areas where there is an increase in the number of reported cases, shall be immediately notified for appropriate actions.

**Standard Case Definition of Diphtheria:**

• ***Probable Case:***

- A person with an illness of the upper respiratory tract characterized by laryngitis or pharyngitis or tonsillitis, and adherent membranes on tonsils, pharynx and/or nose.

• ***Confirmed Case:***

- A probable case that is laboratory confirmed or linked epidemiologically to a laboratory-confirmed case.

**Note:** Persons with positive *Corynebacterium diphtheriae* cultures who do not meet the clinical description (i.e. asymptomatic carriers) should not be reported as probable or confirmed diphtheria cases.

