



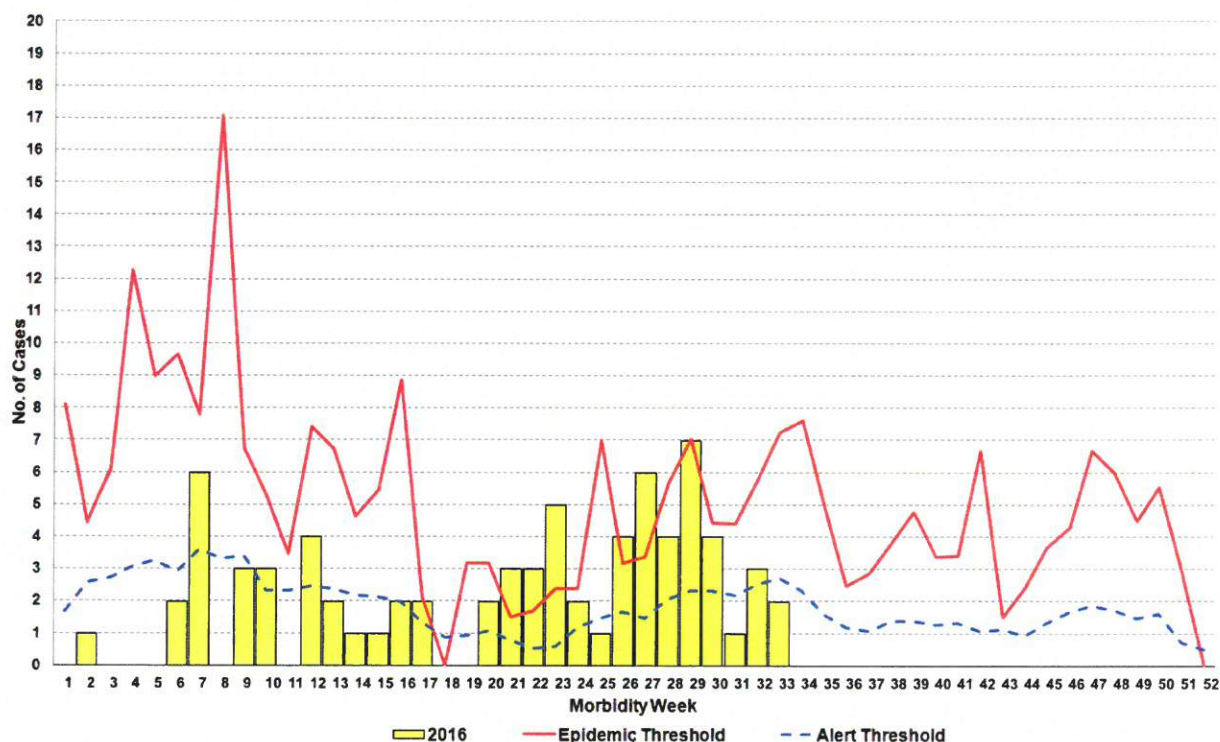
Morbidity Week 34: January 1 – August 27, 2016

Epidemiology Bureau  
Public Health Surveillance Division

### TRENDS IN THE PHILIPPINES

A total of **74** diphtheria cases were reported nationwide from January 1 – August 27, 2016. This was **9.76% 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 and 29.

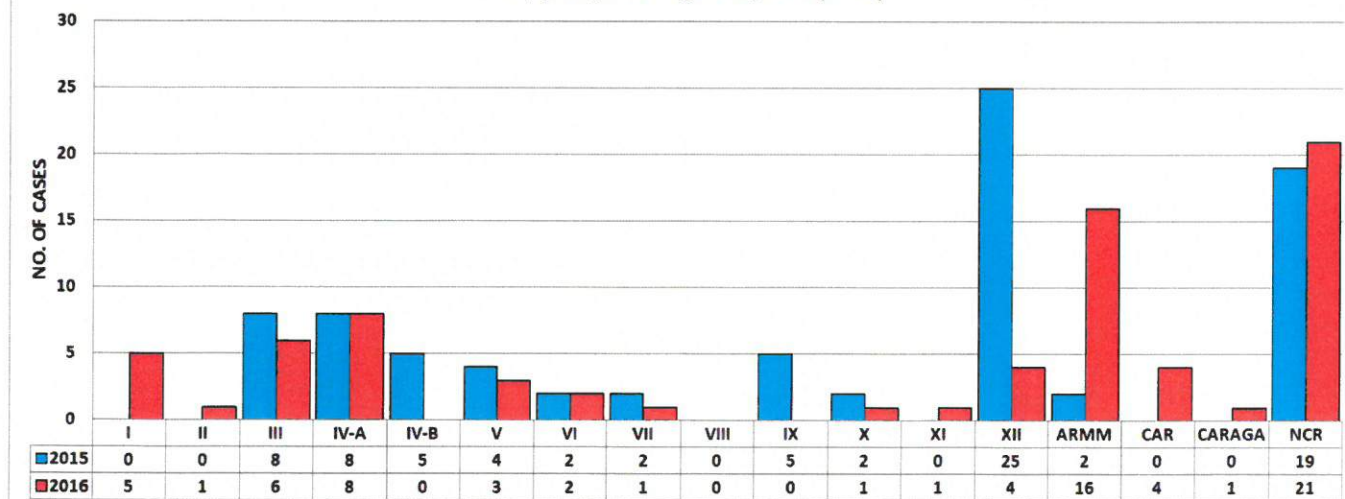
**Figure 1. Alert and Epidemic Threshold and Reported Diphtheria Cases by Morbidity Week, Philippines, as of August 27, 2016 (Morbidity Week 34) (N=74)**



### 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, 11, CAR and CARAGA, and a sustained presence of diphtheria cases in region 3, 4A, 5, 6, 7, 10 and 12.

**Figure 2 Reported Diphtheria Cases by Region, Philippines, as of August 27, 2016 (N=74)**





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Table 1 indicates the reported diphtheria cases by region in the Philippines. Majority of the reported diphtheria cases came from NCR. There were cities/municipalities with 2 or more reported diphtheria cases (Table 2). There was no clustering<sup>(1)</sup> of diphtheria cases in the past 4 morbidity weeks.

Futhermore, Table 3 reflects a detailed information of the cases in Manila, the city with most number of reported diphtheria cases. Among the 6 diphtheria cases, 5 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 August 27, 2016 (N=74)**

REGION	Case Classification		Total Reported Cases	Died	CFR %
	Probable Cases	Confirmed Cases			
I	5	0	5	2	40.00
II	1	0	1	1	100.00
III	4	2	6	2	33.33
IV-A	5	3	8	3	37.50
IV-B	0	0	0	0	0.00
V	3	0	3	2	66.67
VI	2	0	2	0	0.00
VII	1	0	1	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	3	1	4	1	25.00
ARMM	13	3	16	7	43.75
CAR	2	2	4	0	0.00
CARAGA	1	0	1	0	0.00
NCR	7	14	21	6	28.57
PHL	49	25	74	24	32.43

**Table 2. Cities/ Municipalities with 2 or more Reported Diphtheria Cases Philippines, as of August 27, 2016**

REGION	PROVINCE	CITY/MUNICIPALITY	BARANGAY	CASES
NCR	METRO MANILA	MALABON CITY	NO DATA	4
		MANDALUYONG CITY	NO DATA	3
		MANILA	NO DATA	6
		QUEZON CITY	BATASAN HILLS	1
			COMMONWEALTH	1
			SAN AGUSTIN	1
			TANDANG SORA	1
			NO DATA	1
ARMM	MAGUINDANAO	DATU ODIN SINSUAT	DAUCAN POBLACION	2
			MAKIR	1
		DATU PAGLAS	POBLACION	1
			NO DATA	1
		KABUNTALAN	NO DATA	2
		PARANG	BONGO ISLAND (LITAYEN)	1
			POLLOC	2
			POBLACION II	1
		SHARIFF SAYDONA MUSTAPHA	DUGUENGEN	1
			LINANTANGAN	1
I	PANGASINAN	BOLINAO	BINABALIAN	1
			LUCIENTE 1.0	1
		URDANETA	NANCAMALIRAN EAST	1
IV-A	LAGUNA		NO DATA	1
		BIÑAN	MALABAN	1
			TIMBAO	1
XII	COTABATO	COTABATO CITY	POBLACION IX	1
			NO DATA	2

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





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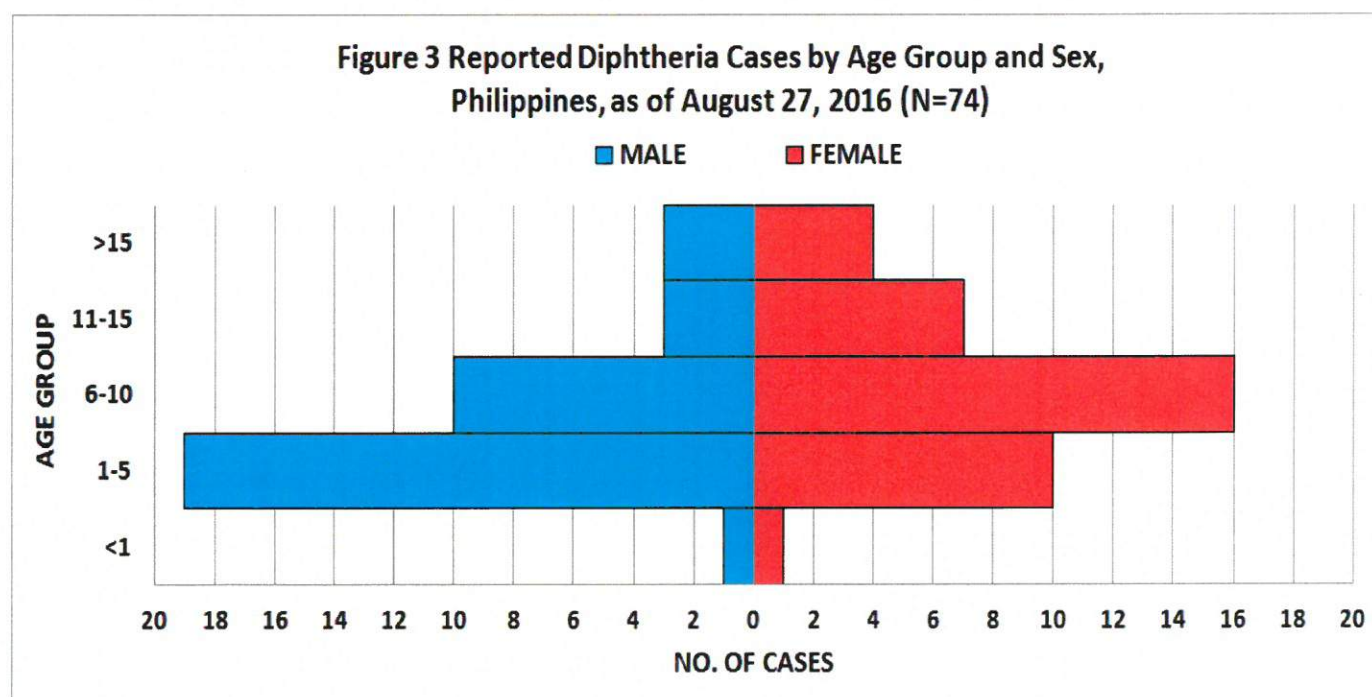
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**Table 3. Diphtheria Cases in City of Manila  
Philippines, as of August 27, 2016**

CITY	ADDRESS	CASE CLASSIFICATION		REPORTED CASES	DIED	CFR %
		CONFIRMED CASE	PROBABLE CASE			
MANILA	BASECO, PORT AREA	1	0	1	1	100.00
	BARRIO OBRERO, TONDO	2	1	3	0	0.00
	ESGUERRA ST., TONDO	1	0	1	0	0.00
	GAGALANGIN, TONDO	0	1	1	0	0.00

### PROFILE OF CASES

Majority of the reported diphtheria cases are female (51.35%) and most of them belong to the 1-5 years old age group (39.19%) as seen in Figure 3. Majority (41.89%) of all reported cases have zero (0) dose of DPT/Pentavalent vaccine (Figure 4). Twenty four (32%) cases died (Figure 5). Moreover, twenty three (31.08%) out of the 74 reported cases have completed three (3) primary doses of DPT/Pentavalent vaccine. Eight (10.81%) of which are confirmed diphtheria cases ages 4-16 years old (Figure 6).





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Figure 4 Reported Diphtheria Cases by DPT Doses and Region, Philippines, as of August 27, 2016 (N=74)

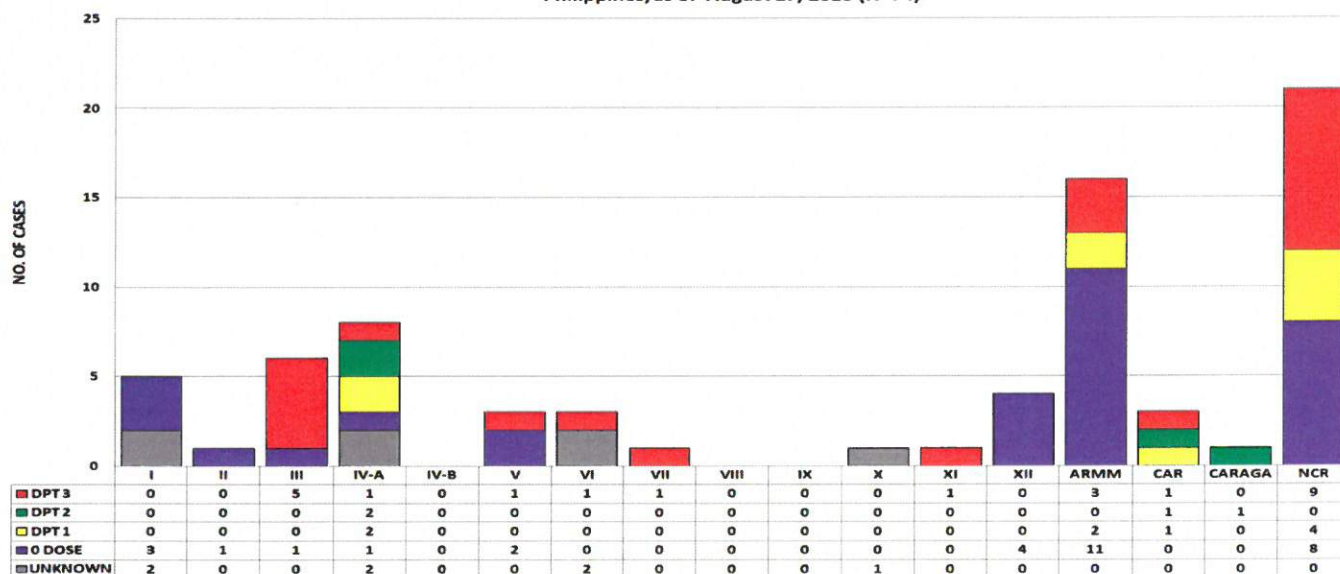


Figure 5 Reported Diphtheria Cases by Outcome, Philippines, as of August 27, 2016 (N=74)

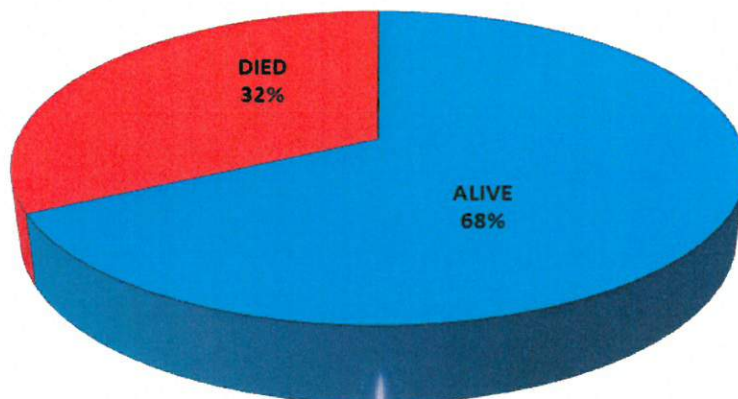
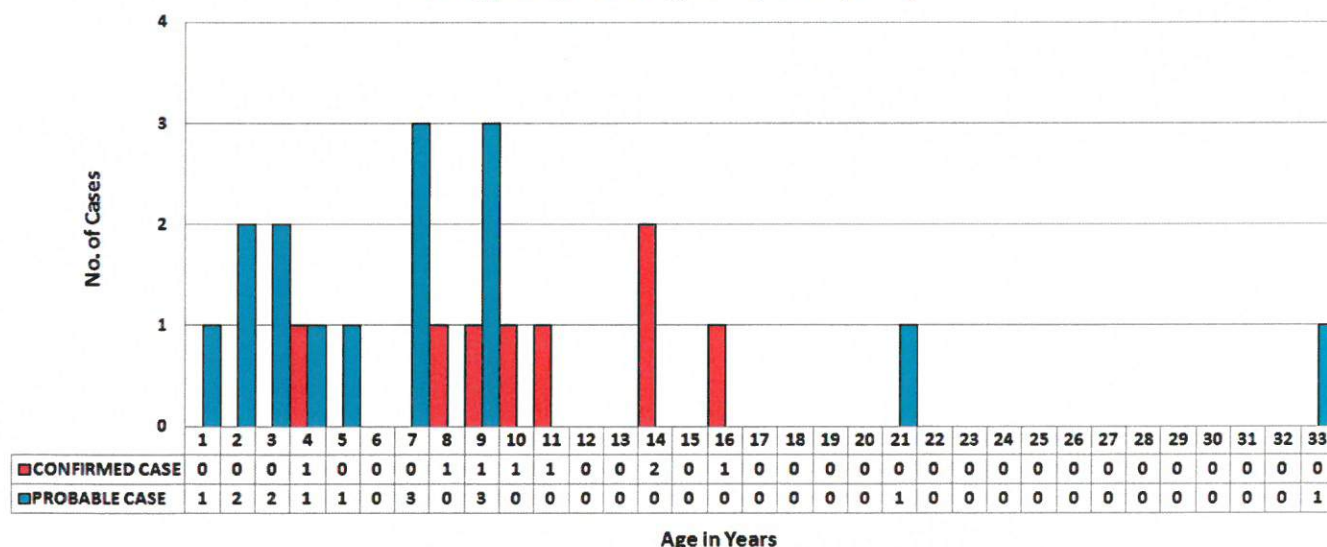


Figure 6 Reported Diphtheria Cases with DPT 3, by Age in Years Philippines, as of August 27, 2016 (n=23)







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## 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.

### 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:**

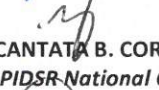
- A probable case that is laboratory confirmed or linked epidemiologically to a laboratory-confirmed case.

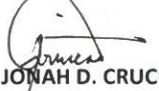
**Note:** Persons with positive Corynebacterium diphtheriae cultures who do not meet the clinical description (i.e. asymptomatic carriers) should not be reported as probable or confirmed diphtheria cases.


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