



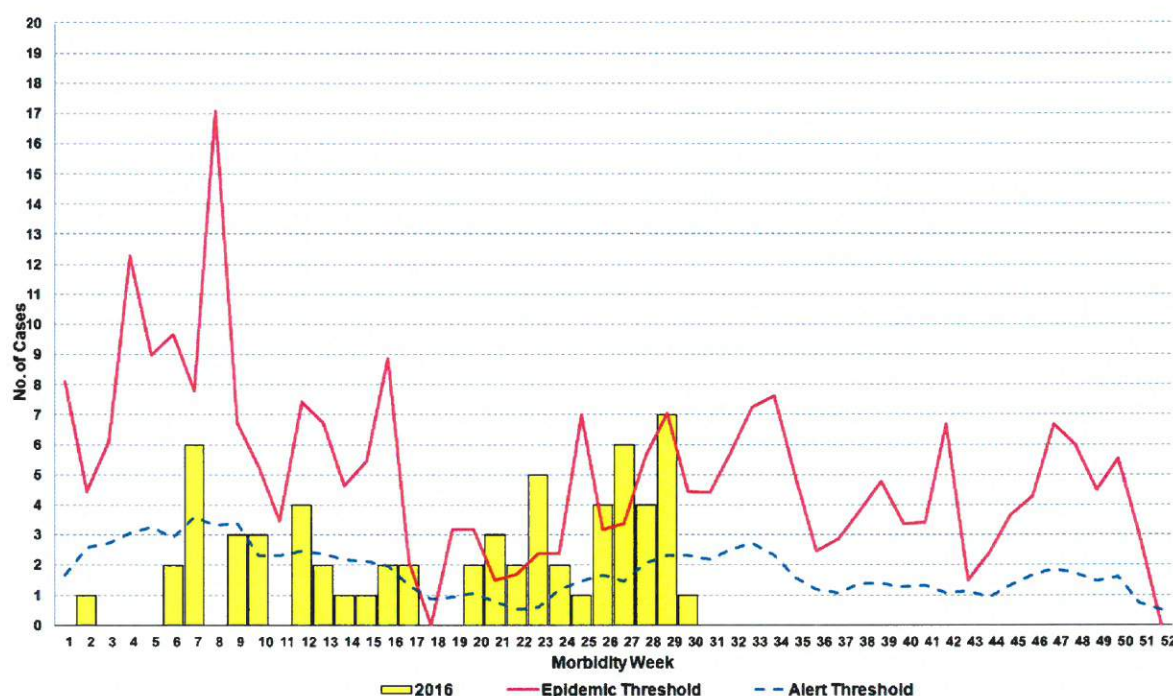
Morbidity Week 30: January 1 – July 30, 2016

Epidemiology Bureau
Public Health Surveillance Division

TRENDS IN THE PHILIPPINES

A total of **64** diphtheria cases were reported nationwide from January 1 – July 30, 2016. This was **14.67% 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 the alert threshold MW 7, 10, 12, 16, 17, 20, 21, 22, 23, 24, 26, 27, 28 and 29 and epidemic threshold 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 July 30, 2016 (Morbidity Week 30) (N=64)



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 July 30, 2016 (N=64)

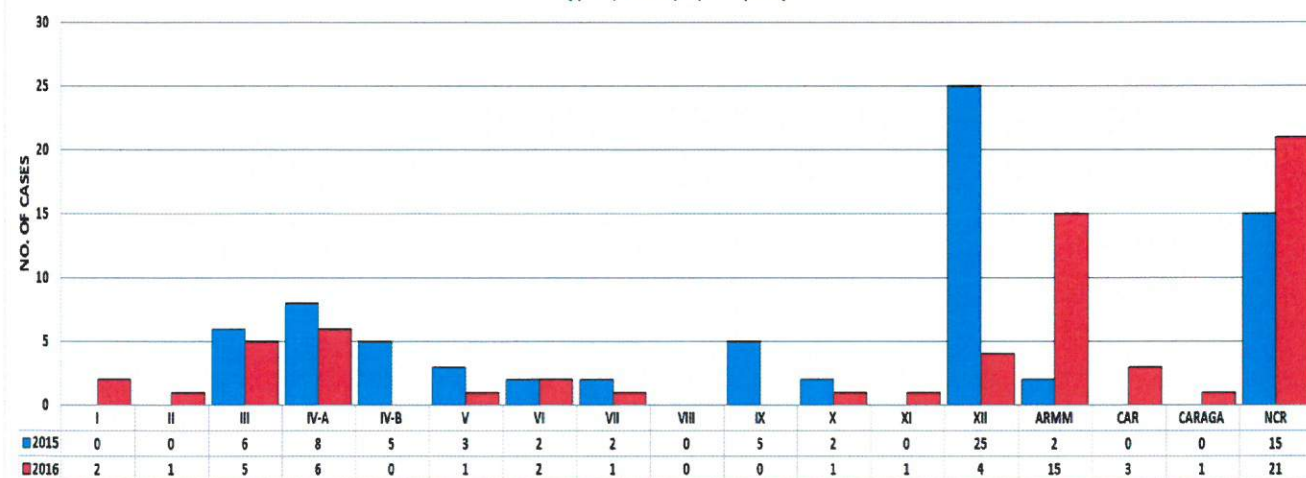




Table 1 indicates the reported diphtheria cases by region in the Philippines. Majority of the reported diphtheria cases came from NCR. There were cities/municipalities with 2 or more reported diphtheria cases (Table 2). Among these, clustering⁽¹⁾ of cases were seen in the City of Manila (Table 3). This cluster is composed of 3 diphtheria cases from Tondo, Manila who were siblings and lived in the same house. Two (2) of which were laboratory confirmed diphtheria cases.

Futhermore, Table 4 reflects the top 2 regions reporting diphtheria cases and their affected city/municipality by case classification, outcome and CFR. NCR has the most number of confirmed diphtheria cases (14) with CFR of 23.81%. The highest reported diphtheria cases came from Manila (9.38%) and Quezon City (7.81%). NCR is followed by ARMM (3 confirmed diphtheria cases, CFR =40.00%).

Table 1. Reported Diphtheria Cases by Region, Philippines as of July 30, 2016 (N=64)

REGION	Case Classification		Total Reported Cases	Died	CFR %
	Probable Cases	Confirmed Cases			
I	2	0	2	2	100.00
II	1	0	1	1	100.00
III	4	1	5	2	40.00
IV-A	4	2	6	3	50.00
IV-B	0	0	0	0	0.00
V	1	0	1	0	0.00
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	12	3	15	6	40.00
CAR	1	2	3	0	0.00
CARAGA	1	0	1	0	0.00
NCR	7	14	21	5	23.81
PHL	41	23	64	20	31.25

Table 2. Cities/ Municipalities with 2 or more Reported Diphtheria Cases Philippines, as of July 30, 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	DALICAN POBLACION	2	
			MAKIR	1	
		DATU PAGLAS	POBLACION	1	
			NO DATA	1	
		PARANG	BONGO ISLAND (LITAYEN)	1	
			POLLOC	2	
			POBLACION II	1	
			SHARIFF SAYDONA MUSTAPHA	DUGUENGEN	1
			LINANTANGAN	1	
			POBLACION IX	1	
XII	COTABATO	COTABATO CITY	NO DATA	2	

⁽¹⁾Clustering Definiton: 2 or more diphtheria cases from the same barangay, reported within 4 consecutive weeks.



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Table 3. Barangays with Clustering⁽¹⁾ of Diphtheria Cases in Manila City, as of July 30, 2016

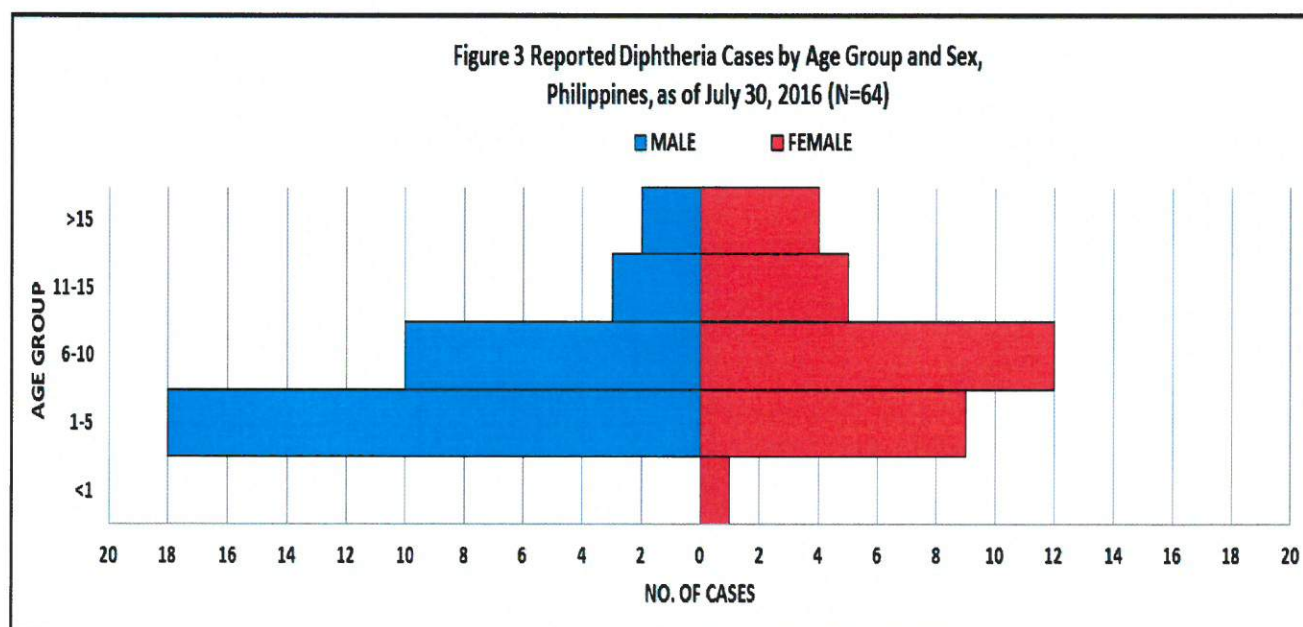
MORBIDITY WEEK	REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CASES
27-30	NCR	Metro Manila	Manila City	1059	3

Table 4. Reported Diphtheria Cases in NCR and ARMM, as of July 30, 2016

PROVINCE	CITY/MUNICIPALITY	CONFIRMED CASES	REPORTED CASES	DIED	CFR %
METRO MANILA	CALOOCAN CITY	1	1	0	0.00
	MALABON CITY	4	4	2	50.00
	MANDALUYONG CITY	1	3	1	33.33
	MANILA	4	6	1	16.67
	NAVOTAS	1	1	0	0.00
	QUEZON CITY	3	5	1	20.00
	TAGUIG CITY	0	1	0	0.00
NCR		14	21	5	23.81
MAGUINDANAO	BULUAN	0	1	1	100.00
	DATU ODIN SINSUAT	1	3	1	33.33
	DATU PAGLAS	0	2	1	50.00
	KABUNTALAN	0	1	1	100.00
	NORTH UPI	0	1	0	0.00
	PARANG	0	4	1	25.00
	SHARIFF SAYDONA MUSTAPHA	1	2	0	0.00
	SULTAN KUDARAT	1	1	1	100.00
ARMM		3	15	6	40.00

PROFILE OF CASES

Majority of the reported diphtheria cases are male (51.56%) and most of them belong to the 1-5 years old age group (42.19%) as seen in Figure 3. Majority (40.63%) of all reported cases have zero (0) dose of DPT/Pentavalent vaccine (Figure 4). Twenty (31%) cases died (Figure 5). Moreover, twenty one (32.81%) out of the 64 reported cases have completed three (3) primary doses of DPT/Pentavalent vaccine. Seven (10.94%) 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 July 30, 2016 (N=64)

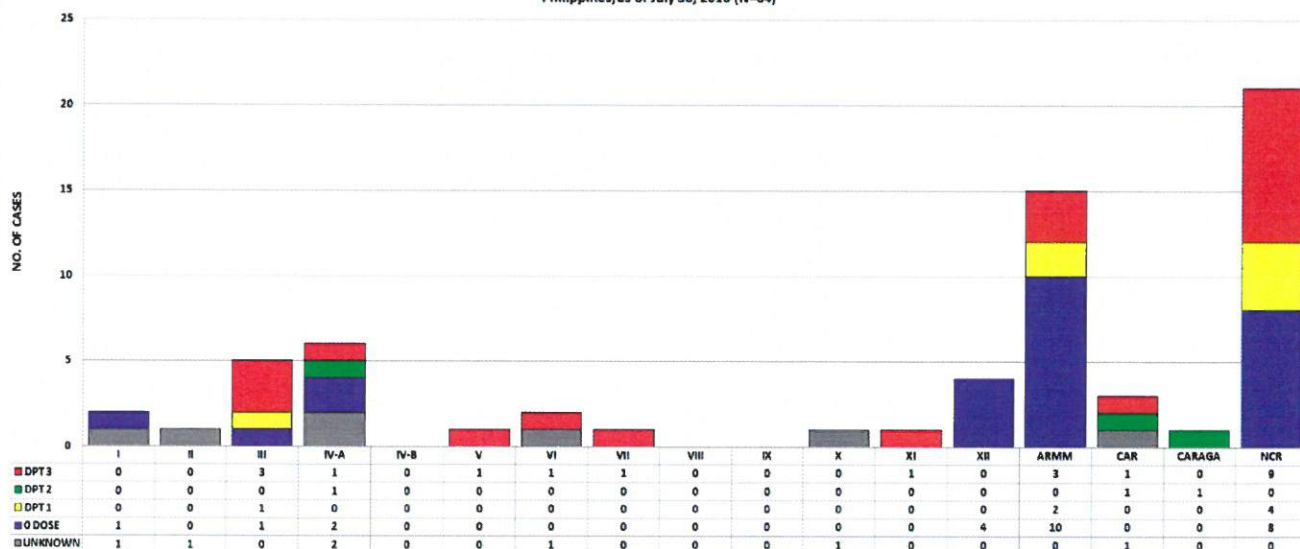


Figure 5 Reported Diphtheria Cases by Outcome, Philippines, as of July 30, 2016 (N=64)

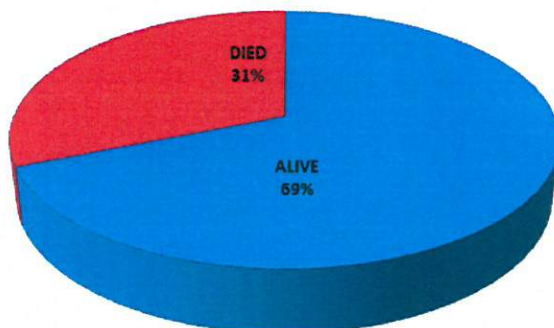
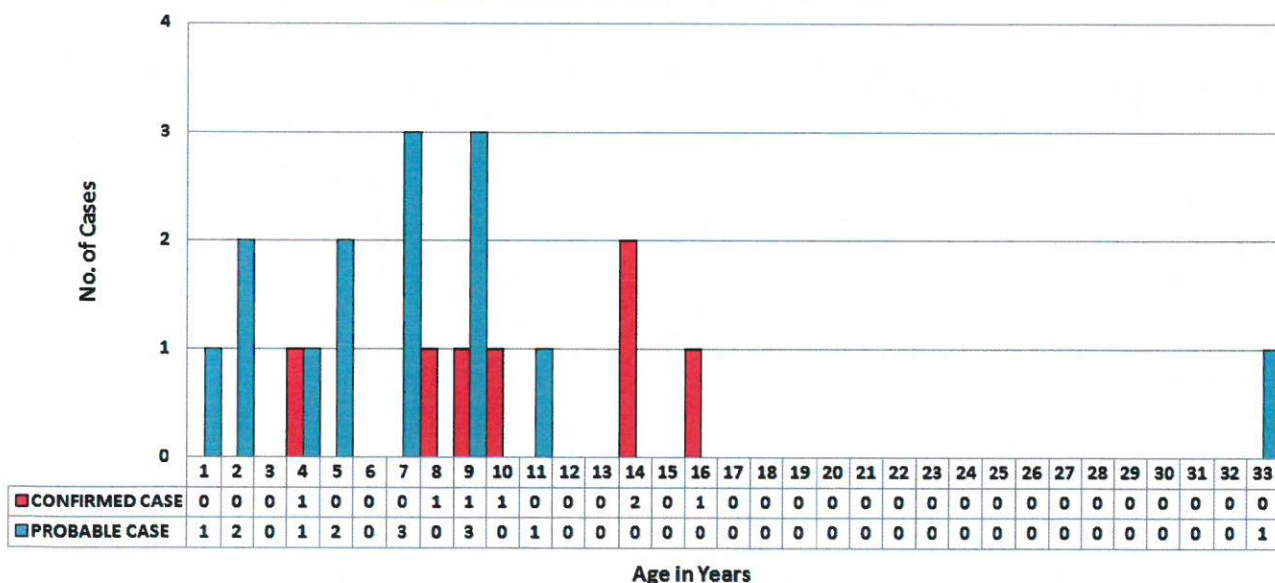


Figure 6 Reported Diphtheria Cases with DPT 3, by Age in Years Philippines, as of July 30, 2016 (n=21)





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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.

