



January 1 – December 31, 2016

Epidemiology Bureau  
Public Health Surveillance Division

## TRENDS IN THE PHILIPPINES

A total of **126** diphtheria cases were reported nationwide from January 1 – December 31, 2016. This is **20% higher** compared to the same period last year (105 cases). Figure 1 shows the distribution of the reported diphtheria cases by region in comparison to the same time period last year.

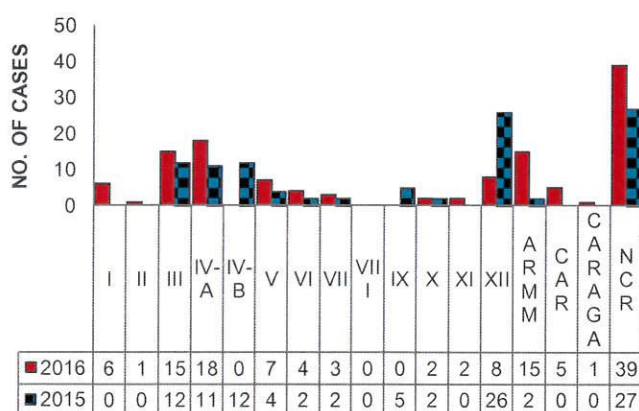
## GEOGRAPHIC DISTRIBUTION

The number of diphtheria cases vary by region. Figure 2 shows the distribution of reported diphtheria cases by case classification and province. Majority of the case came from Metro Manila (31%) with 23 laboratory confirmed diphtheria and 16 probable cases of diphtheria followed by Maguindanao, ARMM (11%) with 3 laboratory confirmed diphtheria and 11 probable cases of diphtheria. (See Annex A for case distribution by Barangay)

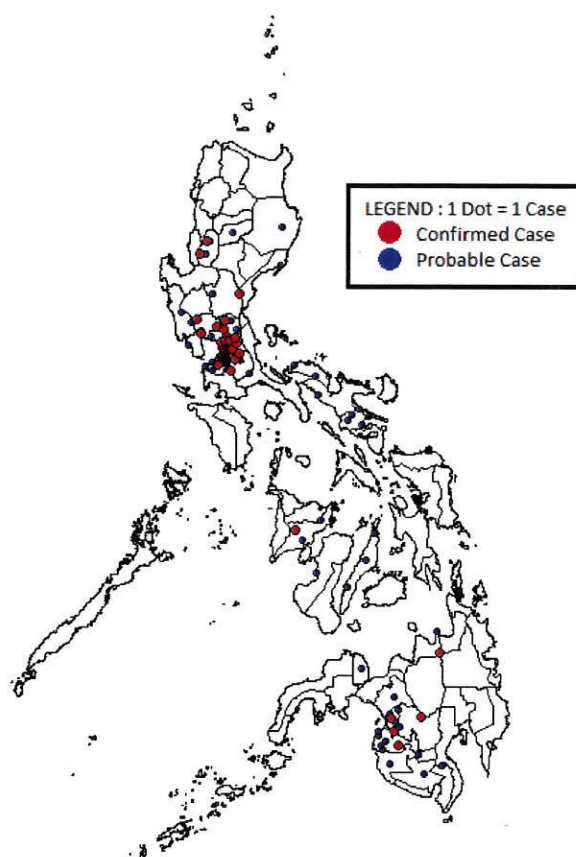
Table 1 indicates the reported diphtheria cases by region in the Philippines. Majority of the reported diphtheria cases came from NCR (31%) and Region 4A (14%). There are 46 (CFR=36.51%) deaths reported.

Five diphtheria cluster were identified as of December 31, 2016. No new cluster<sup>(1)</sup> of diphtheria cases identified within the past 4 morbidity weeks. (See Annex B for case distribution by Cluster<sup>(1)</sup>)

**Fig. 1 Reported Diphtheria Cases by Region, In the Philippines, 2015 VS 2016**



**Fig. 2 Case Classification of Reported Diphtheria Cases by Province, Philippines, as of December 31, 2016 (N=126)**



**Table 1. Case Classification of Reported Diphtheria Cases by Region and Outcome, Philippines, as of December 31, 2016 (N=126)**

REGION	Case Classification		Reported Cases	Died	CFR %
	Confirmed Cases	Probable Cases			
I	3	3	6	4	66.67
II	0	1	1	1	100.00
III	7	8	15	7	46.67
IV-A	8	10	18	9	50.00
IV-B	0	0	0	0	0.00
V	0	7	7	1	14.29
VI	1	3	4	1	25.00
VII	0	3	3	0	0.00
VIII	0	0	0	0	0.00
IX	0	0	0	0	0.00
X	1	1	2	0	0.00
XI	0	2	2	1	50.00
XII	2	6	8	5	62.50
ARMM	3	12	15	7	46.67
CAR	2	3	5	0	0.00
CARAGA	0	1	1	0	0.00
NCR	23	16	39	10	25.64
PHL	50	76	126	46	36.51





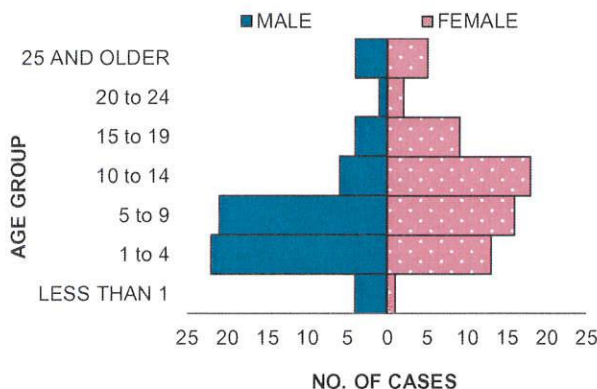
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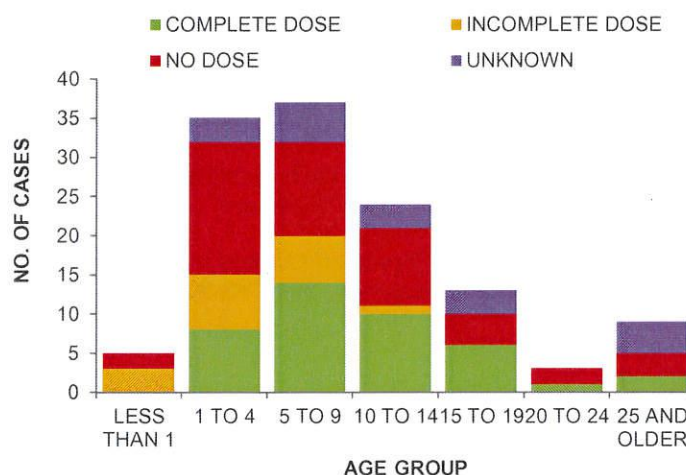
## PROFILE OF CASES

As shown in figure 3, there are **62 males and 64 females** and most (29%) of them belonged to the 5 to 9 year old age group. Immunization status of 50 (40%) of reported cases did not receive any DPT dose while 41 (33%) of reported cases received complete dose of DPT/pentavalent vaccine (Figure 4). Forty six (37%) of the reported diphtheria cases have died (Figure 5).

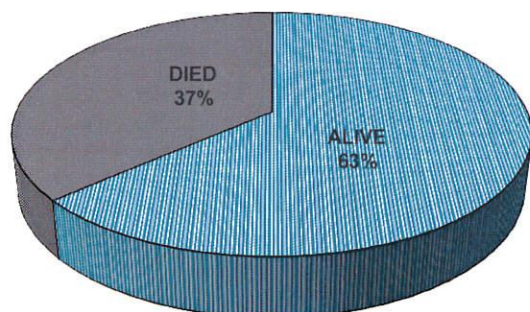
**Fig. 3 Reported Diphtheria Cases by Age Group and Sex, Philippines, as of December 31, 2016 (N=126)**



**Fig. 4 Reported Diphtheria Cases by DPT Doses and Age Group, Philippines, as of December 31, 2016 (N=126)**



**Fig. 5 Reported Diphtheria Cases by Outcome, Philippines, as of December 31, 2016 (N=126)**



### 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.

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

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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**ANNEX A. REPORTED DIPHTHERIA CASES BY CASE CLASSIFICATION AND BARANGAY**

Reported Diphtheria Cases by Case Classification, Philippines, January 1 to December 31, 2016 (N=126)						
Region	Province	Muncity	Barangay	Case Classification		Reported Cases
				Confirmed Case	Probable Case	
01	PANGASINAN	BOLINAO	BINABALIAN	1	0	1
			LUCIENTE 1.0	0	1	1
		MANAOAG	BARITAO	0	1	1
			LELEMAAN	1	0	1
		MANGATAREM	DORONGAN SAWAT	0	1	1
		URDANETA CITY	NANCAMALIRAN EAST	1	0	1
02	ISABELA	CORDON	QUEZON (CENTRO NORTE ESTE)	0	1	1
03	BATAAN	ORANI	PANTALAN LUMA (POB.)	0	1	1
	BULACAN	BALIUAG	PINAGBARILAN	1	0	1
		MALOLOS CITY	UNSPECIFIED	0	1	1
			SANTOL	0	1	1
		MARILAO	PRENZA I	1	0	1
		MEYCAUAYAN CITY	UNSPECIFIED	1	0	1
		NORZAGARAY	UNSPECIFIED	0	1	1
	NUEVA ECIJA	CABANATUAN CITY	BANTUG NORTE	1	0	1
			PAMALDAN	0	1	1
	PAMPANGA	ANGELES CITY	BALIBAGO	1	0	1
		APALIT	CAPALANGAN	0	1	1
		GUAGUA	SAN PEDRO	1	0	1
		MABALACAT	UNSPECIFIED	1	0	1
		MAGALANG	DOLORES	0	1	1
	ZAMBALES	SAN MARCELINO	LAOAG	0	1	1
04A	CAVITE	DASMARIÑAS	DATU ESMAEL (BAGO-A-INGUD)	0	1	1
			SALAWAG	1	0	1
		GENERAL TRIAS	SANTIAGO	0	1	1
		TANZA	BUCAL	0	1	1
		TRECE MARTIRES CITY	CONCHU (LAGUNDIAN)	0	1	1
	LAGUNA	BIÑAN	LANGKIWA	0	1	1
			MALABAN	1	0	1
			TIMBAO	0	1	1
		PAETE	UNSPECIFIED	0	1	1
		SAN PEDRO	SAN ANTONIO	1	0	1
	RIZAL	ANTIPOLO CITY	UNSPECIFIED	1	0	1
			CUPANG	1	0	1
			SAN JOSE (POB.)	1	0	1
			SAN LUIS	1	0	1
		RODRIGUEZ	SAN JOSE	1	1	2
		SAN MATEO	UNSPECIFIED	0	1	1
		TANAY	KAYBUTO (POB.)	0	1	1
		LEGAZPI CITY	BGY. 61 - MASLOG (BGY. 58)	0	1	1
05	ALBAY	LIBON	BONBON	0	1	1
		RAPU-RAPU	SAN RAMON	0	2	2
		DAET	PAMORANGON	0	1	1
	CAMARINES NORTE	TALISAY	SAN ISIDRO	0	1	1
	CAMARINES SUR	PILI	CURRY	0	1	1





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Region	Province	Muncity	Barangay	Case Classification		Reported Cases
				Confirmed Case	Probable Case	
06	ILOILO	CARLES	CABILAO PEQUEÑO	0	1	1
		ILOILO CITY	BUNTATALA	0	1	1
		PAVIA	UNGKA I	1	0	1
	NEGROS OCCIDENTAL	ILOG	PINGGOT	0	1	1
07	CEBU	CEBU CITY	SEÑOR SANTO NIÑO (CENTRAL POB.)	0	1	1
			SUBA POB. (SUBA SAN NICOLAS)	0	1	1
		DANAO CITY	LOOC	0	1	1
10	MISAMIS OCCIDENTAL	LOPEZ JAENA	PUNTOD	0	1	1
	MISAMIS ORIENTAL	CAGAYAN DE ORO CITY	IPONAN	1	0	1
11	DAVAO DEL SUR	DAVAO CITY	DALIAO	0	1	1
			TIGATTO	0	1	1
12	COTABATO CITY	COTABATO CITY	UNSPECIFIED	0	2	2
			POBLACION IX	1	0	1
			ROSARY HEIGHTS VIII	0	1	1
			TAMONTAKA	0	1	1
	NORTH COTABATO	PIKIT	UNSPECIFIED	1	0	1
	SOUTH COTABATO	KORONADAL CITY	GENERAL PAULINO SANTOS (BO. 1)	0	1	1
	SULTAN KUDARAT	TACURONG CITY	CARMEN	0	1	1
	LANAO DEL SUR	LUMBA-BAYABAO	POBLACION	0	1	1
ARMM	MAGUINDANAO	BULUAN	UNSPECIFIED	0	1	1
		DATU ODIN SINSUAT	DALICAN POBLACION	0	2	2
			MAKIR	1	0	1
		DATU PAGLAS	UNSPECIFIED	0	1	1
			POBLACION	0	1	1
		KABUNTALAN	UNSPECIFIED	0	1	1
		NORTH UPI	NURO POBLACION	0	1	1
			BONGO ISLAND (LITAYEN)	0	1	1
			POLLOC	0	1	1
		POLLOC, POBLACION II		0	1	1
		SHARIFF SAYDONA MUSTAPHA	DUGUENGEN	0	1	1
			LINANTANGAN	1	0	1
		SULTAN KUDARAT	CALSADA	1	0	1
CAR	BENGUET	BAGUIO CITY	PADRE ZAMORA	1	0	1
		KAPANGAN	GADANG	0	1	1
		LA TRINIDAD	PICO	1	0	1
			PUGUIS	0	1	1
	IFUGAO	ALFONSO LISTA	PINTO	0	1	1
CARAGA	AGUSAN DEL NORTE	REMEDIOS T. ROMUALDEZ	POBLACION I (AGAY)	0	1	1



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				Confirmed Case	Probable Case	
NCR	METRO MANILA	CALOOCAN CITY	BARANGAY 11	1	0	1
			BARANGAY 120	0	1	1
		MALABON CITY	UNSPECIFIED	4	0	4
		MANDALUYONG CITY	UNSPECIFIED	1	1	2
			HULO	2	0	2
		MANILA	UNSPECIFIED	6	7	13
		NAVOTAS	UNSPECIFIED	1	0	1
		PASIG	UNSPECIFIED	0	1	1
		PASIG CITY	MAYBUNGA	1	0	1
			PINAGBUHATAN	1	0	1
		QUEZON CITY	UNSPECIFIED	1	3	4
			BATASAN HILLS	0	1	1
			COMMONWEALTH	1	0	1
			SAN AGUSTIN	1	0	1
			TANDANG SORA	1	0	1
			TATALON	1	0	1
		TAGUIG CITY	UNSPECIFIED	1	2	3
PHILIPPINES				50	76	126

**ANNEX B. CLUSTER<sup>(1)</sup> OF DIPHTHERIA CASES**

MORBIDITY WEEK	REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CASES
6-8	NCR	METRO MANILA	MANILA	TONDO	7
9	NCR	METRO MANILA	MANDALUYONG CITY	HULO	2
9-10	NCR	METRO MANILA	MANILA	PANDACAN	2
26-29	ARMM	MAGUINDANAO	DATU ODIN SINSUAT	DALICAN POBLACION	2
30-33	05	ALBAY	RAPU-RAPU	SAN RAMON	2