



January 1 – December 31, 2016

Epidemiology Bureau
Public Health Surveillance Division

TRENDS IN THE PHILIPPINES

A total of **316** pertussis cases were reported nationwide from January 1 – December 31, 2016. This is **84% higher** than the same period last year (172 cases). Figure 1 shows the distribution of the reported pertussis cases by region in comparison to the same time period last year.

GEOGRAPHIC DISTRIBUTION

The number of pertussis cases varies by region. Figure 2 shows the distribution of reported pertussis cases by provinces and case classification. Majority of the case came from Metro Manila (24%) with 5 laboratory confirmed pertussis and 70 suspect cases of pertussis followed by Davao Del Sur (21%) with 12 laboratory confirmed pertussis and 53 suspect cases of pertussis. (See Annex A for case distribution by Barangay)

Table 1 indicates the reported pertussis cases by region in the Philippines. Majority of the reported pertussis cases came from NCR (24%) and Region 11 (22%). There are 17 (CFR=5.38%) deaths reported.

Fourteen pertussis cluster were identified as of December 31, 2016. No new cluster⁽¹⁾ of pertussis cases identified within the past 4 Morbidity Weeks. (See Annex B for case distribution by Cluster⁽¹⁾)

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

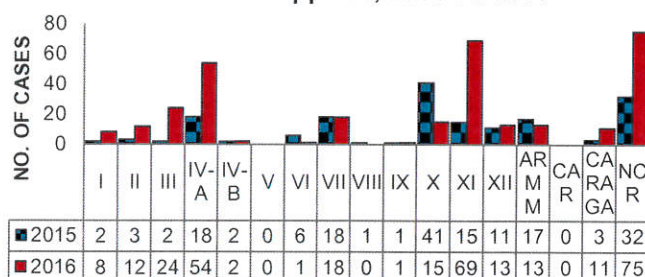


Fig. 2 Case Classification of Reported Pertussis Cases by Province, Philippines, as of December 31, 2016 (N=316)

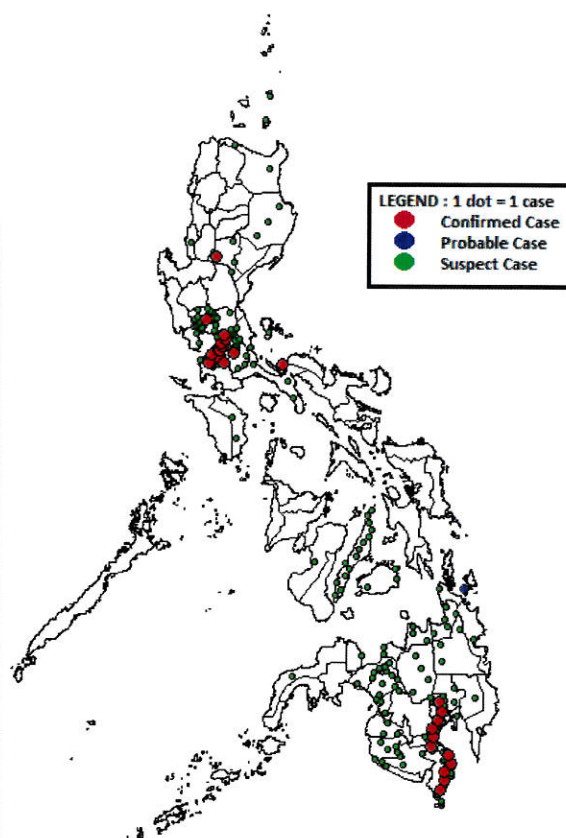


Table 1. Reported Pertussis Cases by Region, Philippines, as of December 31, 2016 (N=316)

REGION	Case Classification			Reported Cases	Died	CFR %
	Confirmed Cases	Probable Cases	Suspected Case			
I	2	1	5	8	2	25.00
II	1	0	11	12	0	0.00
III	1	0	23	24	3	12.50
IV-A	7	0	47	54	6	11.11
IV-B	0	0	2	2	0	0.00
V	0	0	0	0	0	0.00
VI	0	0	1	1	0	0.00
VII	0	0	18	18	0	0.00
VIII	0	0	0	0	0	0.00
IX	0	0	1	1	0	0.00
X	0	0	15	15	0	0.00
XI	12	0	57	69	2	2.90
XII	0	0	13	13	1	7.69
ARMM	0	0	13	13	0	0.00
CAR	0	0	0	0	0	0.00
CARAGA	0	1	10	11	1	9.09
NCR	5	0	70	75	2	2.67
PHL	28	2	286	316	17	5.38

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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PROFILE OF CASES

As shown in figure 3, there are **155 males and 161 females**. Most (47%) of them belonged to the **0 to 3 months old age group**. 175 (55%) case were not administered with any dose of DPT/pentavalent vaccine (Figure 4). Seventeen (5%) cases of pertussis have **died** (Figure 5).

Fig. 3 Reported Pertussis Cases by Age Group and Sex, Philippines, as of December 31, 2016 (N=316)

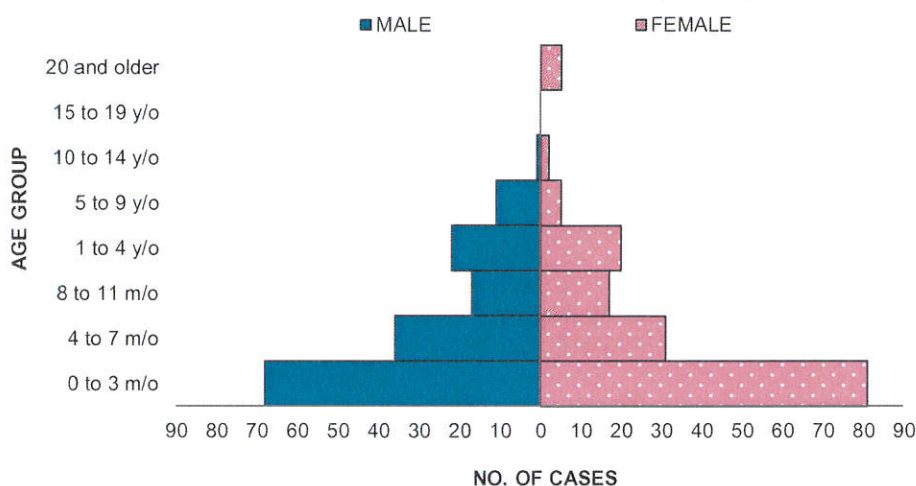


Fig. 4 Reported Pertussis Cases by DPT Doses and Age Group, Philippines, as of December 31, 2016 (N=316)

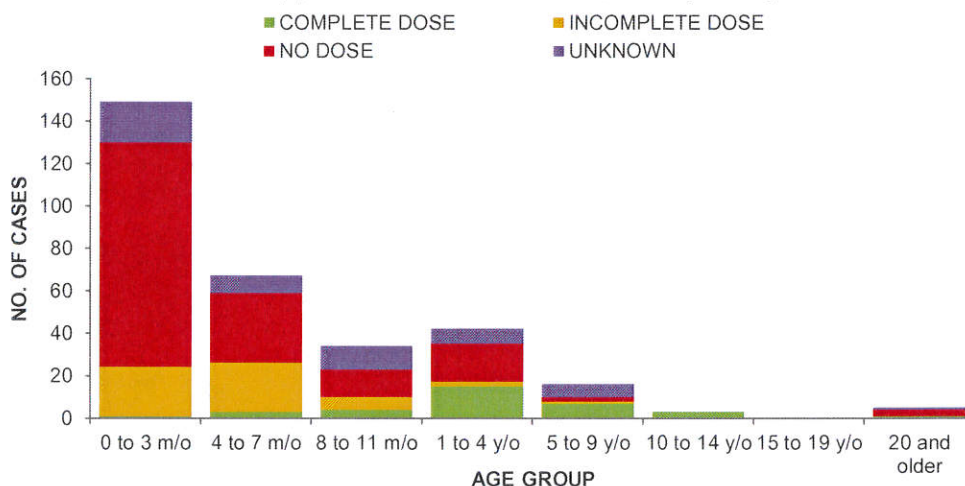
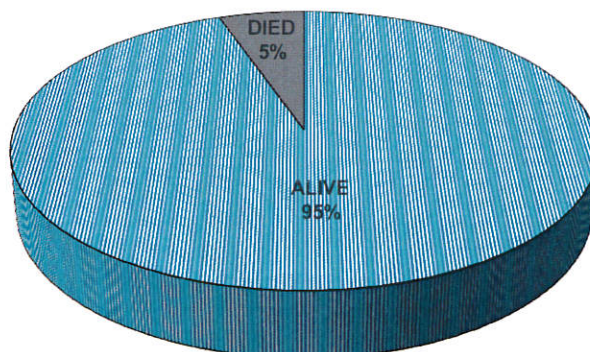


Fig. 5 Reported Pertussis Cases by Outcome, Philippines, as of December 31, 2016 (N=316)





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Standard Case Definition of Pertussis

• **Clinical Case:**

- A person with a cough lasting at least 2 weeks with at least one of the following:
 - paroxysms (i.e. fits) of coughing
 - inspiratory “whooping”
 - post-tussive vomiting (i.e. vomiting immediately after coughing)
 - without other apparent cause

Case classification

• **Clinically-confirmed case:**

- A case that meets the clinical case definition but is not laboratory confirmed.

• **Probable case:**

- Meets the clinical case definition, is not laboratory confirmed, and is not epidemiologically linked to a laboratory-confirmed case.

• **Laboratory-confirmed case:**

- A case of acute cough illness of any duration with a positive culture for *B. pertussis*; OR
- A case that meets the clinical case definition and is confirmed by PCR; OR
- A case that meets the clinical definition and is epidemiologically linked directly to a case confirmed by either culture or PCR.

⁽¹⁾Cluster Definition: 2 or more pertussis cases from the same barangay, reported within 4 consecutive weeks.


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ANNEX A. REPORTED PERTUSSIS CASES BY CASE CLASSIFICATION AND BARANGAY

Reported Pertussis Cases by Case Classification, Philippines, January 1 to December 31, 2016 (N=316)							
Region	Province	Muncity	Barangay	Case Classification			Reported Cases
				Confirmed Case	Probable Case	Suspect Case	
01	LA UNION	SAN FERNANDO CITY	TANQUI	0	0	1	1
	PANGASINAN	BAYAMBANG	WARDING	0	1	0	1
		CALASIAO	MANCUP	0	0	1	1
		DAGUPAN CITY	LASIP GRANDE	0	0	1	1
		MANGALDAN	EMBARCADERO	1	0	0	1
			GUILIG	1	0	0	1
		SAN CARLOS CITY	TAYAMBANI	0	0	1	1
02	CAGAYAN	SAN JACINTO	SAN VICENTE	0	0	1	1
		ALCALA	BACULOD	0	0	2	2
		SOLANA	LANNA	0	0	1	1
	ISABELA	TUGUEGARAO CITY	UGAC SUR	0	0	1	1
		JONES	PAYAC	0	0	1	1
			TUPAX	0	0	1	1
		SAN GUILLERMO	SAN MARIANO NORTE	0	0	1	1
	NUEVA VIZCAYA	DIADI	UNSPECIFIED	0	0	1	1
		KASIBU	ALIMIT	0	0	1	1
			MACALONG	0	0	1	1
			POBLACION (ALLOY)	1	0	0	1
		SANTA FE	IMUGAN	0	0	1	1
03	BATAAN	ORANI	PALIHAN (POB.)	0	0	1	1
			TALIMUNDOC	0	0	1	1
	BULACAN	SAN JOSE DEL MONTE CITY	UNSPECIFIED	0	0	1	1
		SAN MIGUEL	BAGONG SILANG	0	0	1	1
		SAN RAFAEL	331	0	0	1	1
		SANTA MARIA	LALAKHAN	0	0	1	1
		ARAYAT	SAN JUAN BANO	0	0	1	1
	PAMPANGA	BACOLOR	SAN ISIDRO	0	0	1	1
			TINAJERO	0	0	1	1
		FLORIDABLANCA	VALDEZ	0	0	1	1
		MABALACAT	DAU	0	0	1	1
		MAGALANG	SAN FRANCISCO	0	0	1	1
			SANTA LUCIA	0	0	2	2
		MEXICO	PANDACAQUI	0	0	1	1
			SANTA CRUZ	1	0	0	1
		SAN FERNANDO CITY	BULAON	0	0	1	1
			CALULUT	0	0	1	1
			DELA PAZ NORTE	0	0	1	1
			SAN ISIDRO	0	0	1	1
			SAN JOSE	0	0	2	2
			SAN JUAN	0	0	1	1
		SANTA ANA	SAN ISIDRO	0	0	1	1



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Reported Pertussis Cases by Case Classification, Philippines, January 1 to December 31, 2016 (N=316)							
Region	Province	Muncity	Barangay	Case Classification			Reported Cases
				Confirmed Case	Probable Case	Suspect Case	
04A	CAVITE	BACOR	MOLINO II	0	0	1	1
			QUEENS ROW WEST	1	0	1	2
			TALABA II	0	0	1	1
			ZAPOTE V	0	0	1	1
			UNSPECIFIED	0	0	1	1
		CARMONA	CABILANG BAYBAY	0	0	1	1
		DASMARIÑAS	BUROL I	0	0	1	1
			EMMANUEL BERGADO I	1	0	0	1
			FATIMA II	0	0	1	1
			SAN ANDRES I	0	0	1	1
			UNSPECIFIED	0	0	1	1
		GEN. MARIANO ALVAREZ	BARANGAY 1 POBLACION (AREA I)	0	0	1	1
			GAVINO MADERAN	1	0	0	1
		GENERAL TRIAS	SAN FRANCISCO	0	0	1	1
		ROSARIO	SAPA III	0	0	1	1
		SILANG	PALIGAWAN	0	0	1	1
			UNSPECIFIED	0	0	1	1
		TANZA	BAGTAS	1	0	1	2
			TRES CRUSES	0	0	1	1
		TRECE MARTIRES CITY	LAPIDARIO (BAYOG)	0	0	2	2
			PEREZ (LUCBANAN)	0	0	1	1
	LAGUNA	BIÑAN	SAN ANTONIO	0	0	1	1
			SAN VICENTE	0	0	1	1
			TIMBAO	1	0	0	1
		SAN PABLO CITY	BARANGAY II-D (POB.)	0	0	1	1
		SAN PEDRO	BAGONG SILANG	0	0	1	1
			SAN VICENTE	0	0	1	1
		SANTA ROSA	CAINGIN	1	0	0	1
			UNSPECIFIED	0	0	1	1
	QUEZON	LUCENA CITY	COTTA	1	0	0	1
			GULANG-GULANG	0	0	1	1
			IBABANG DUPAY	0	0	1	1
			IBABANG IYAM	0	0	1	1
			UNSPECIFIED	0	0	1	1
		SARIAYA	CONCEPCION NO. 1	0	0	1	1
	RIZAL	ANTIPOLO CITY	BAGONG NAYON	0	0	1	1
			SAN JOSE (POB.)	0	0	3	3
			UNSPECIFIED	0	0	3	3
		BINANGONAN	UNSPECIFIED	0	0	1	1



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				Confirmed Case	Probable Case	Suspect Case	
04A	RIZAL	CAINTA	UNSPECIFIED	0	0	2	2
		RODRIGUEZ	GERONIMO	0	0	1	1
			UNSPECIFIED	0	0	1	1
		SAN MATEO	SILANGAN	0	0	1	1
			UNSPECIFIED	0	0	2	2
04B	ORIENTAL MINDORO	VICTORIA	ANTONINO	0	0	1	1
			MACATOC	0	0	1	1
06	NEGROS OCCIDENTAL	MANAPLA	BARANGAY II (POB.)	0	0	1	1
07	BOHOL	BIEN UNIDO	BILANGBILANGAN DAKO	0	0	1	1
			HINGOTANAN EAST	0	0	1	1
		CALAPE	ABUCAYAN NORTE	0	0	1	1
	CEBU	BORBON	LAAW	0	0	1	1
		CARMEN	BARING	0	0	1	1
		CEBU CITY	BABAG	0	0	2	2
			BUSAY (POB.)	0	0	1	1
			TABUNAN	0	0	1	1
			ZAPATERA	0	0	1	1
		DANAO CITY	BINALIW	0	0	1	1
		LILOAN	CALERO	0	0	1	1
		MINGLANILLA	CALAJO-AN	0	0	1	1
			TUNGKIL	0	0	1	1
		NAGA	INAYAGAN	0	0	1	1
		SAN FERNANDO	BALUNGAG	0	0	1	1
		TALISAY CITY	SAN ROQUE	0	0	1	1
		TOLEDO CITY	CAMP 8	0	0	1	1
09	ZAMBOANGA DEL NORTE	DIPOLOG CITY	MINAOG	0	0	1	1
10	BUKIDNON	MALAYBALAY CITY	SUMPONG	0	0	1	1
		MANOLO FORTICH	DAMILAG	0	0	1	1
			MINSURO	0	0	1	1
		TALAKAG	SAN ISIDRO	0	0	1	1
	LANAO DEL NORTE	ILIGAN CITY	KIWALAN	0	0	1	1
			LUINAB	0	0	1	1
			POBLACION	0	0	1	1
			TUBOD	0	0	1	1
		PANTAO RAGAT	POBLACION	0	0	1	1
	MISAMIS OCCIDENTAL	TANGUB CITY	BARANGAY VI - LOWER POLAO (POB.)	0	0	1	1
	MISAMIS ORIENTAL	ALUBIJID	POBLACION	0	0	1	1
		CAGAYAN DE ORO CITY	BAYABAS	0	0	1	1
			LAPASAN	0	0	1	1
		GINGOOG CITY	POBLACION	0	0	1	1
		JASAAN	BOBONTUGAN	0	0	1	1



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Region	Province	Muncity	Barangay	Case Classification			Reported Cases
				Confirmed Case	Probable Case	Suspect Case	
11	COMPOSTELA VALLEY	NABUNTURAN	MAGADING	0	0	1	1
	DAVAO DEL NORTE	TAGUM CITY	MAGUGPO WEST	0	0	2	2
		TALAINGOD	DAGOHOY	0	0	1	1
	DAVAO DEL SUR	DAVAO CITY	BAGO GALLERA	0	0	2	2
			BARANGAY 2-A (POB.)	0	0	1	1
			BARANGAY 5-A (POB.)	0	0	1	1
			BARANGAY 15-B (POB.)	0	0	1	1
			BARANGAY 23-C (POB.)	0	0	1	1
			BARANGAY 37-D (POB.)	0	0	1	1
			BUCANA	1	0	1	2
			BUDA	0	0	1	1
			BUHANGIN (POB.)	0	0	1	1
			DALIAO	1	0	0	1
			DUMOY	1	0	0	1
			EDEN	0	0	1	1
			GOV. PACIANO BANGOY	0	0	1	1
			GOV. VICENTE DUTERTE	0	0	1	1
			INAYANGAN	0	0	1	1
			INDANGAN	0	0	2	2
			LANGUB	0	0	1	1
			LAPU-LAPU	1	0	0	1
			LEON GARCIA, SR.	0	0	1	1
			LIZADA	1	0	1	2
			LUBOGAN	0	0	1	1
			MA-A	0	0	5	5
			MAGSAYSAY	0	0	1	1
			MALABOG	0	0	1	1
			MATINA APLAYA	2	0	4	6
			MATINA CROSSING	0	0	4	4
			MATINA PANGI	3	0	0	3
			PAMPANGA	0	0	1	1
			PANACAN	0	0	1	1
			PANGYAN	0	0	1	1
			RAFAEL CASTILLO	0	0	1	1
			SANTO NIÑO	1	0	2	3
			SASA	0	0	1	1
			SIRIB	0	0	1	1



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				Confirmed Case	Probable Case	Suspect Case	
11	DAVAO DEL SUR	DAVAO CITY	TALOMO (POB.)	0	0	1	1
			TAMUGAN	0	0	1	1
			TIBUNGCO	0	0	1	1
			TIGATTO	0	0	1	1
			TORIL (POB.)	0	0	1	1
			WILFREDO AQUINO	0	0	1	1
		HAGONOY	HAGONOY CROSSING	0	0	1	1
		MALITA	KIDALAPONG	1	0	0	1
		SANTA CRUZ	ASTORGA	0	0	1	1
			INAWAYAN	0	0	1	1
			ZONE III (POB.)	0	0	1	1
12	SOUTH COTABATO	BANGA	REYES (POB.)	0	0	1	1
		NORALA	POBLACION	0	0	1	1
	SULTAN KUDARAT	BAGUMBAYAN	SOUTH SEPAKA	0	0	1	1
		ISULAN	KALAWAG I (POB.)	0	0	1	1
			KALAWAG II (POB.)	0	0	2	2
		LAMBAYONG	POBLACION (LAMBAYONG)	0	0	1	1
		PRESIDENT QUIRINO	POBLACION (SAMBULAWAN)	0	0	1	1
		SEN. NINOY AQUINO	BUENAFLORES	0	0	1	1
			KULAMAN	0	0	1	1
			MIDTUNGOK	0	0	1	1
		TACURONG CITY	NEW ISABELA	0	0	1	1
			SAN EMMANUEL	0	0	1	1
ARMM	LANAO DEL SUR	BALINDONG	POBLACION	0	0	1	1
		BAYANG	POBLACION	0	0	1	1
		DITSAAN-RAMAIN	POBLACION	0	0	2	2
		LUMBA-BAYABAO	POBLACION	0	0	1	1
		MARAWI CITY	POBLACION	0	0	2	2
		PAGAYAWAN	POBLACION	0	0	1	1
		TAMPARAN	POBLACION	0	0	1	1
	MAGUINDANAO	BULUAN	POBLACION	0	0	1	1
		GEN. S. K. PENDATUN	SUMAKUBAY	0	0	1	1
		SOUTH UPI	KUYA	0	0	1	1
		SULTAN KUDARAT	SENDITAN	0	0	1	1



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Region	Province	Muncity	Barangay	Case Classification			Reported Cases
				Confirmed Case	Probable Case	Suspect Case	
CARAGA	AGUSAN DEL NORTE	BUTUAN CITY	BAAN KM 3	0	0	1	1
			BAYANIHAN POB. (BGY. 27)	0	0	1	1
			LIBERTAD	0	0	1	1
			VILLA KANANGA	0	0	1	1
		MAGALLANES	MARCOS	0	0	1	1
	AGUSAN DEL SUR	PROSPERIDAD	AWA	0	0	1	1
			PATIN-AY	0	0	1	1
		TRENTO	PULANG-LUPA	0	0	1	1
	SURIGAO DEL NORTE	MAINIT	MAGPAYANG	0	1	0	1
		PLACER	PANANAY-AN	0	0	1	1
	SURIGAO DEL SUR	TAGBINA	DOÑA CARMEN	0	0	1	1
NCR	METRO MANILA	CALOOCAN CITY	176-PH9	0	0	1	1
			BARANGAY 132	0	0	1	1
			BARANGAY 182	0	0	1	1
			BRGY. #4197	0	0	1	1
			BRGY. 177	0	0	1	1
			UNSPECIFIED	0	0	2	2
		LAS PIÑAS CITY	ALMANZA DOS	0	0	1	1
			ALMANZA UNO	0	0	1	1
			B. F. INTERNATIONAL VILLAGE	0	0	1	1
			DANIEL FAJARDO	0	0	1	1
			PILAR	0	0	1	1
			UNSPECIFIED	0	0	1	1
		MAKATI CITY	UNSPECIFIED	1	0	0	1
		MALABON CITY	UNSPECIFIED	0	0	1	1
		MANDALUYONG CITY	UNSPECIFIED	0	0	1	1
		MANILA	BARANGAY 126	0	0	1	1
			BARANGAY 210	0	0	1	1
			BARANGAY 48	0	0	1	1
			UNSPECIFIED	1	0	4	5
		MUNTINLUPA CITY	ALABANG	0	0	1	1
			BAYANAN	1	0	1	2
		NAVOTAS	SAN JOSE (POB.)	0	0	1	1
		PARAÑAQUE CITY	B. F. HOMES	0	0	2	2
			MOONWALK	1	0	0	1
			SUN VALLEY	0	0	1	1
		PASAY CITY	BARANGAY 115	0	0	1	1
			BARANGAY 195	0	0	1	1
			UNSPECIFIED	0	0	1	1
		PASIG CITY	PINAGBUHATAN	0	0	2	2
			ROSARIO	0	0	1	1



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Reported Pertussis Cases by Case Classification, Philippines, January 1 to December 31, 2016 (N=316)							
Region	Province	Muncity	Barangay	Case Classification			Reported Cases
				Confirmed Case	Probable Case	Suspect Case	
NCR	METRO MANILA	QUEZON CITY	APOLONIO SAMSON	0	0	1	1
			BAGBAG	0	0	1	1
			BAGONG SILANGAN	0	0	2	2
			BATASAN HILLS	0	0	5	5
			CUBAO	0	0	1	1
			CULIAT	0	0	1	1
			DOÑA IMELDA	0	0	1	1
			HOLY SPIRIT	0	0	1	1
			HORSESHOE	0	0	1	1
			KALIGAYAHAN	0	0	1	1
			KRUS NA LIGAS	0	0	1	1
			MARIBLO	0	0	1	1
			MATANDANG BALARA	0	0	1	1
			NORTH FAIRVIEW	0	0	1	1
			PAYATAS	0	0	2	2
			PINAGKAISAHAN	0	0	1	1
			SAN ANTONIO	0	0	1	1
			TALIPAPA	0	0	1	1
			TANDANG SORA	1	0	2	3
			TATALON	0	0	5	5
			UNSPECIFIED	0	0	2	2
		TAGUIG CITY	WESTERN BICUTAN	0	0	2	2
		VALENZUELA CITY	UGONG	0	0	1	1
PHILIPPINES				28	2	286	316



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ANNEX B. CLUSTER⁽¹⁾ OF PERTUSSIS CASES

MORBIDITY WEEK	REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CASES
1-2	11	DAVAO DEL SUR	DAVAO CITY	MATINA PANGI	2
3-4	02	CAGAYAN	ALCALA	BACULOD	2
3-5	11	DAVAO DEL SUR	DAVAO CITY	MATINA APLAYA	3
6-8	11	DAVAO DEL SUR	DAVAO CITY	SANTO NIÑO	2
9	ARMM	LANAO DEL SUR	MARAWI CITY	POBLACION	2
10-12	11	DAVAO DEL SUR	DAVAO CITY	MA-A	2
10-12	NCR	METRO MANILA	QUEZON CITY	TATALON	2
15-18	04A	CAVITE	TANZA	BAGTAS	2
18	11	DAVAO DEL NORTE	TAGUM CITY	MAGUGPO WEST	2
20-21	04A	CAVITE	TRECE MARTIRES CITY	LAPIDARIO (BAYOG)	2
40	03	PAMPANGA	MAGALANG	SANTA LUCIA	2
47-48	NCR	METRO MANILA	QUEZON CITY	PAYATAS	2
47-50	07	CEBU	CEBU CITY	BABAG	2
48-50	11	DAVAO DEL SUR	DAVAO CITY	MATINA CROSSING	2