



Vaccine Preventable Disease (VPD) Surveillance

The goal of VPD surveillance is to improve the capacity of the health system to prevent and control through timely detection and appropriate response to vaccine preventable diseases with high level of morbidity, disability and mortality. This report provides data from the period of January 1 to March 31, 2018 or Morbidity Weeks 1 - 13. (Table 1)

Table 1. Summary of Reported Vaccine Preventable Diseases, Philippines, January 1 – March 31, 2018

Vaccine Preventable Diseases	Total No of Cases	Confirmed Cases		
		Cases	Deaths	CFR %
Measles	4,492	761	14	1.84
Rubella		25	0	0.00
Diphtheria	25	9	4	44.44
Pertussis	63	16	1	6.25
Neonatal Tetanus	-	8	5	62.50
Polio (AFP Surveillance)	71	0	0	-

PIDSR Case Definition for Vaccine Preventable Diseases

MEASLES	
Reported Measles Case (Suspect measles case)	Any person with fever and maculopapular (non-vesicular) rash and either cough, coryza (runny nose), or conjunctivitis (red eyes)
Measles compatible case (Clinical Measles)	A suspect case for which - no adequate blood specimen was taken, OR - is not an epidemiological link to a confirmed case of measles or rubella, OR - laboratory confirmation is still pending
Confirmed measles case	A suspect with positive laboratory for measles or epidemiologically linked cases
Epidemiologically Linked (Epi-linked)	A suspect case that has not been confirmed by laboratory but has close contact and temporally related to a laboratory confirmed case or to another epi-linked case during times of epidemic
Laboratory confirmed rubella	A suspect case with a positive laboratory test result for rubella-specific IgM antibodies or other approved laboratory test method
Discarded non-measles/rubella	A suspect case that meets the clinical case definition for measles and tested negative for both measles and rubella testing
NEONATAL TETANUS	
Clinically Confirmed Neonatal Tetanus	<ul style="list-style-type: none"> Any neonate (≤ 28 days of life) that sucks and cries normally during the first 2 days of life, and becomes ill between 3 to 28 days of age and develops both an inability to suck and diffuse muscle rigidity (stiffness) and spasms (jerking of the muscles), which may include trismus, clenched fists or feet, continuously pursed lips, and/or curved back (opisthotonus); OR A neonate between 3 to 28 days of life, diagnosed as a case of tetanus by a physician.
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.
<i>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.</i>	
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
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	<ul style="list-style-type: none"> 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.
ACUTE FLACCID PARALYSIS	
Reported AFP Case (suspect AFP case)	<ul style="list-style-type: none"> Any child less than 15 years of age who developed an acute onset of floppy paralysis OR A person of any age in whom poliomyelitis is suspected by the physician <p>AFP "hotcase" An AFP case with no or less than 3 OPV dose and had FEVER at onset of paralysis</p>

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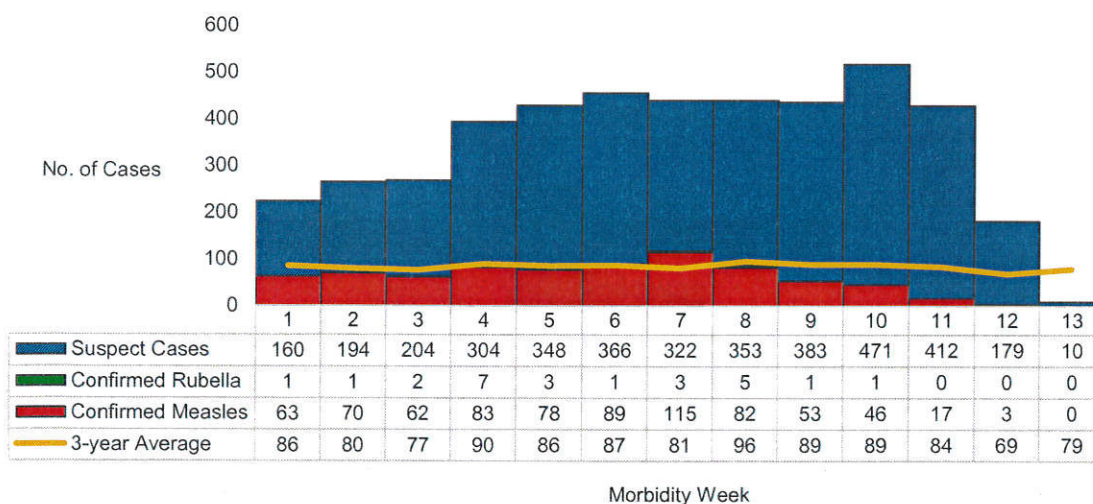
I. MEASLES-RUBELLA

Suspect Cases

Trend in the Philippines

A total of 4,492 suspect measles-rubella cases were reported from January 1 to March 31, 2018. The distribution of reported cases for 2018 compared to the 3-year average of cases from 2015-2017 is shown below. (Figure 1)

Figure 1. Reported Measles-Rubella Cases by Case Classification and Morbidity Week, Philippines, January to March 2018 (N=4,492)



Geographic Distribution

From January to March 2018, cases are 3.5 times as high as the number of cases reported during the same time period last year (996). Most of the reported cases were from the following regions: ARMM (1,208, 27%), Region XI (867, 19%), Region IX (716, 16%), Region XII (413, 9%) and Region X (398, 9%). (Table 2)

Table 2. Reported Measles Cases by Region, Philippines, January to March 2018 (N=4,492) vs. 2017 same time period*

Region	2017		2018		Percent Change
	Cases	Deaths	Cases	Deaths	
PHILIPPINES	996	2	4,492	47	↑ 351
I	124	1	75	0	↓ -40
II	14	0	15	0	↑ 7
III	87	0	113	3	↑ 30
IVA	245	1	127	1	↓ -48
MIMAROPA	16	0	17	0	↑ 6
V	16	0	9	0	↓ -44
VI	34	0	74	0	↑ 118
VII	28	0	90	0	↑ 221
VIII	57	0	9	0	↓ -84
IX	41	0	716	6	↑ 1,646
X	41	0	398	1	↑ 871
XI	26	0	867	13	↑ 3,235
XII	35	0	413	5	↑ 1,080
ARMM	11	0	1,208	13	↑ 10,882
CAR	38	0	22	0	↓ -42
CARAGA	14	0	51	0	↑ 264
NCR	169	0	288	5	↑ 70

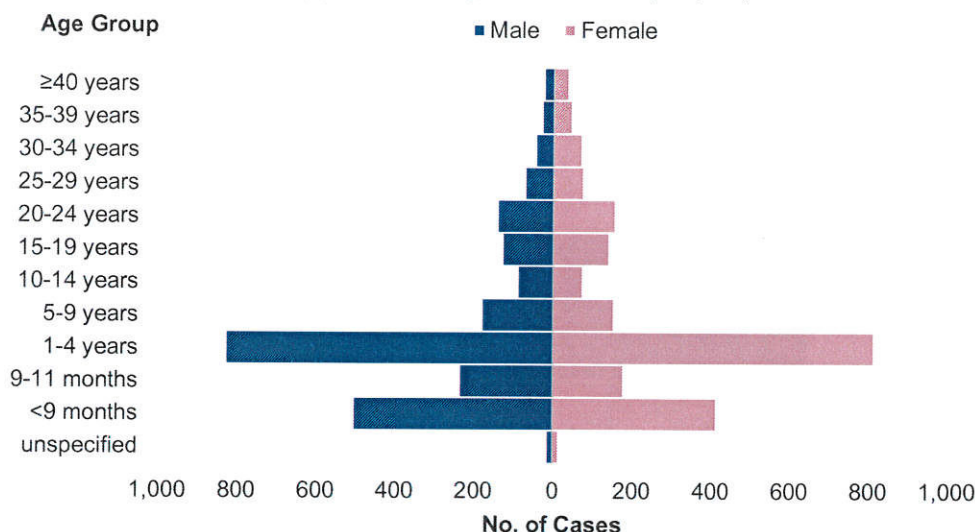
*From the period of January 1 to March 31, 2018



Profile of Reported Cases

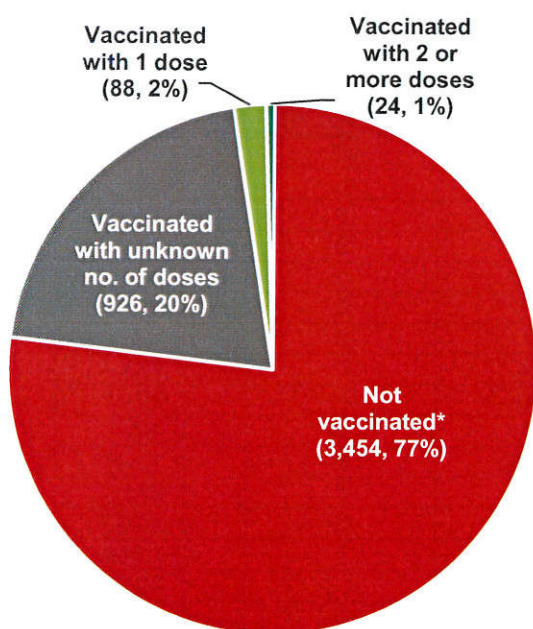
Majority (2,310, 51%) of the suspect cases were males. Ages of cases ranged from **less than 1 month** to **76 years old** (median age of 2 years). Age groups with the most number of cases were: 1-4 years old (1,644, 37%), less than 9 months old (920, 20%) and 9-11 months old (416, 9%). (Figure 2)

Figure 2. Reported Measles-Rubella Cases by Age Group and Sex, Philippines, January to March 2018 (N=4,492)



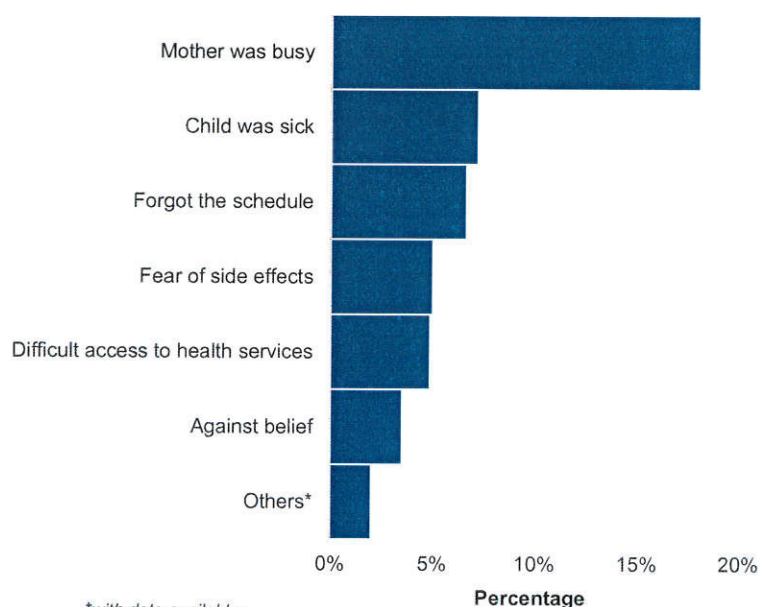
Majority (3,454, 77%) of the cases were not vaccinated (Figure 3). Top reasons for non-vaccination of measles-containing vaccine were: mother was busy (18%), child was sick (7%) and forgot the schedule (6%). (Figure 4)

Figure 3. Vaccination Status of Reported Measles-Rubella Cases, Philippines, January to March 2018 (N=4,492)



*includes cases with unknown vaccination status

Figure 4. Reasons for Non-vaccination of Measles Vaccine*, Philippines, January to March 2018



*with data available;

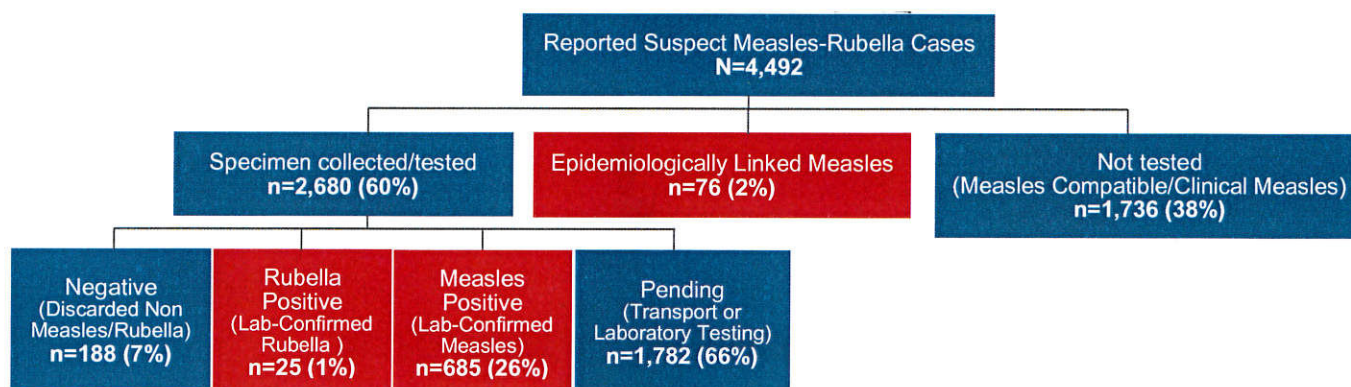
*other reasons: moves residence, history of travel, parents refused, war conflict, lack of knowledge, child was abandoned, medical contraindication



Case Classification

Among the 4,492 reported cases, a total of **2,680 (60%)** cases had specimens collected/tested for measles/rubella IgM and/or PCR. Among the tested cases, **685 (26%)** were positive for measles and **25 (1%)** were positive for rubella. **Seventy-six (2%)** cases were epidemiologically – linked to laboratory confirmed cases, hence classified also as confirmed measles cases (Figure 5).

Figure 5. Reported Measles-Rubella Cases by Case Classification (N=4,492)
Philippines, January to March 2018



Confirmed Measles Cases

Trend in the Philippines

There were 761 confirmed measles cases with 14 deaths (CFR=1.84). The distribution of confirmed measles cases for 2018 compared to the 3-year average of cases from 2015-2017 is shown in Figure 6.

Geographic Distribution

Most of the confirmed measles cases were from the following regions: Region XI (167, 22%), ARMM (157, 21%), Region IX (114, 15%), Region XII (87, 11%) and NCR (86, 11%). Confirmed measles cases in 2018 increased 41 times compared to the same period in 2017 (Table 3).

Top 5 provinces with confirmed cases include: Davao del Sur (107, 14%), Metro Manila (86, 11%), Zamboanga del Sur (76, 10%), Lanao del Sur (63, 8%) and Maguindanao (61, 8%).

Areas with declared epidemics were: Davao City, Zamboanga City, Isabela City in Basilan, Alicia in Zamboanga Sibugay, Taguig City in Metro Manila and some municipalities in Antique.

Figure 6. Confirmed Measles Cases by Morbidity Week (n=761)
Philippines, January to March 2018

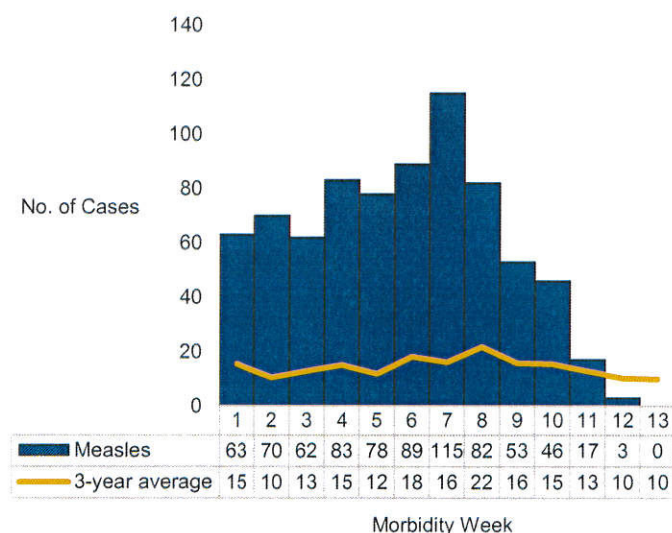


Table 3. Confirmed Measles Cases by Region (n=761)
Philippines, January to March 2017
vs. 2018 same time period

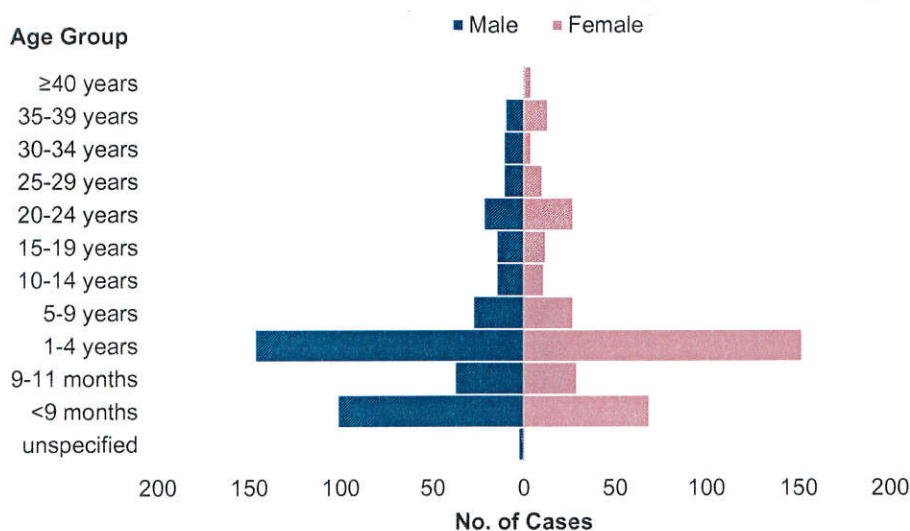
Region	2017		2018		Percent Change
	Cases	Deaths	Cases	Deaths	
PHL	18	0	761	14	↑ 4,128
I	2	0	6	0	↑ 200
II	0	0	1	0	-
III	1	0	13	1	↑ 1,200
IVA	4	0	11	1	↑ 175
MIMAROPA	0	0	0	0	-
V	0	0	0	0	-
VI	0	0	13	0	-
VII	0	0	33	0	-
VIII	0	0	2	0	-
IX	6	0	114	0	↑ 1,800
X	1	0	59	1	↑ 5,800
XI	1	0	167	5	↑ 16,600
XII	0	0	87	1	-
ARMM	1	0	157	0	↑ 15,600
CAR	0	0	1	0	-
CARAGA	0	0	11	0	-
NCR	2	0	86	5	↑ 4,200



Profile of Confirmed Measles Cases

Majority (403, 53%) of the confirmed measles cases were males. Ages of cases ranged from **less than 1 month to 41 years** old (median age of 2 years). Age groups with the most number of cases were: 1-4 years old (299, 39%), less than 9 months old (171, 22%) and 9-11 months old (67, 9%) (Figure 7).

Figure 7. Confirmed Measles Cases by Age Group and Sex, Philippines, January to March 2018 (n=761)



Majority (612, 80%) of the confirmed measles cases were not vaccinated (Figure 8). Top reasons for non-vaccination of measles-containing vaccine among confirmed cases were: not eligible for vaccination (28%), mother was busy (20%) and child was sick (16%) (Figure 9).

Figure 8. Vaccination Status of Confirmed Measles Cases, Philippines, January to March 2018 (n=761)

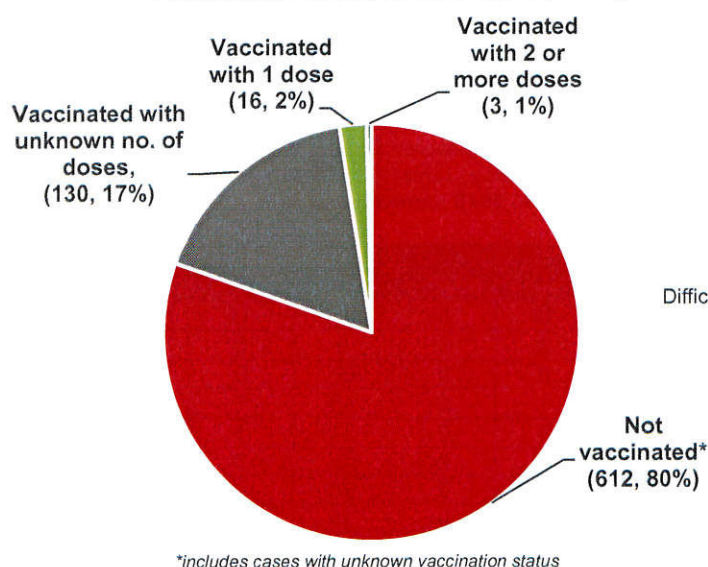
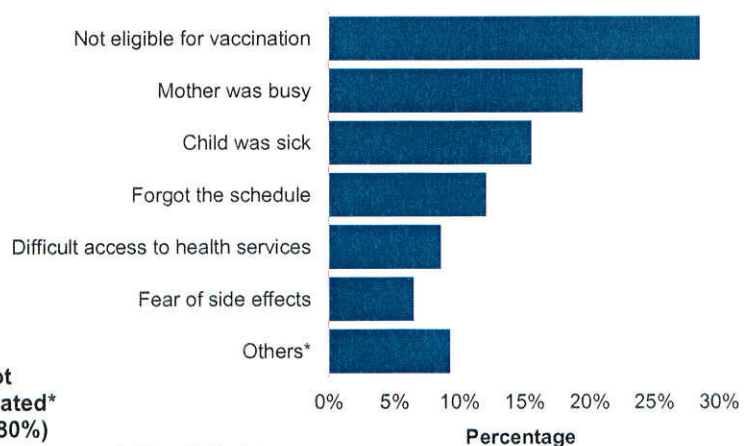


Figure 9. Reasons for Non-vaccination of Measles Vaccine among Confirmed Measles Cases*, Philippines, January to March 2018



*with available data

*other reasons: against belief, moves residence, war conflict, parents refused, lack of knowledge, child was abandoned, history of travel

Profile of Confirmed Measles Deaths

There were 14 deaths (CFR=1.84) out of the 761 confirmed measles cases. Ages of deaths ranged from **4 months to 3 years** old (median age of 9 months). Age groups of these deaths were: less than 9 months old (7, 50%), 1-4 years old (4, 29%) and 9-11 months old (3, 21%). Most (10, 71%) of the deaths had pneumonia complications. All died in the hospital with 0 to 28 days (median hospital days of 4 days) interval from date of admission to date of death.



Confirmed Rubella Cases

Trend in the Philippines

There were 25 confirmed rubella cases from January 1 to March 31, 2018. The distribution of confirmed rubella cases for 2018 compared to the 3-year average of cases from 2015-2017 is shown in Figure 10.

Geographic Distribution

Most of the confirmed rubella cases were from the following regions: Region XI (10, 40%) and Region IVA (5, 20%). Confirmed rubella cases in 2018 is 86% lower compared to the same time period in 2017 (181). No deaths were reported. (Table 4)

Figure 10. Confirmed Rubella Cases by Morbidity Week, Philippines, January to March 2018 (n=25)

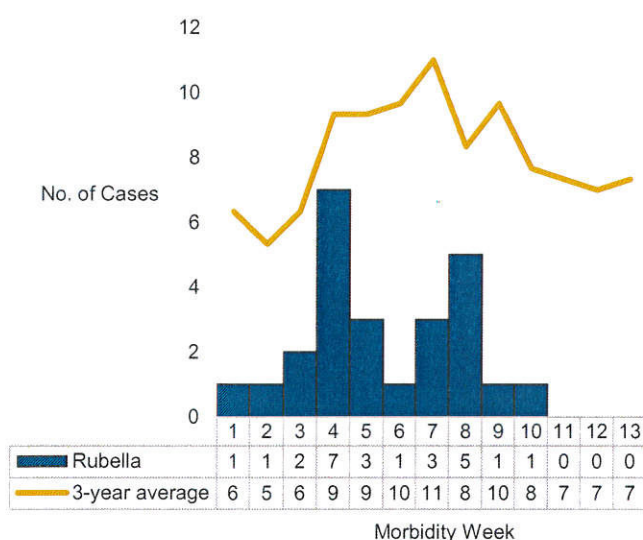


Table 4. Confirmed Rubella Cases by Region, Philippines, January to March 2018 (n=25) vs. 2017 same time period

Region	2017		2018		Percent Change
	Cases	Deaths	Cases	Deaths	
PHL	181	0	25	0	↓ -86
I	17	0	0	0	↓ -100
II	2	0	2	0	0
III	21	0	0	0	↓ -100
IVA	55	0	5	0	↓ -91
MIMAROPA	1	0	1	0	0
V	2	0	0	0	↓ -100
VI	6	0	1	0	↓ -83
VII	3	0	1	0	↓ -67
VIII	39	0	0	0	↓ -100
IX	2	0	1	0	↓ -50
X	3	0	1	0	↓ -67
XI	0	0	10	0	-
XII	0	0	2	0	-
ARMM	0	0	0	0	-
CAR	7	0	1	0	↓ -86
CARAGA	0	0	0	0	-
NCR	23	0	0	0	↓ -100

Profile of Confirmed Rubella Cases

Majority (13, 52%) of the confirmed rubella cases were females. Ages of cases ranged from **10 months to 30 years** old (median age of 17 years). Age groups with the most number of cases were: 25-29 years old (6, 24%), 9-11 months old (5, 20%) and 15-19 and 20-24 years old (4, 16% each). It can be noted that most of the cases were adults (Figure 11).

Majority (17, 68%) of the confirmed rubella cases were vaccinated but with unknown number of doses. Only 1 case (4%) was reported to have 2 or more doses of measles-containing vaccine which may be MMR (measles-mumps-rubella), the vaccine with rubella component (Figure 12).

Figure 11. Confirmed Rubella Cases by Age Group and Sex, Philippines, January to March 2018 (n=25)

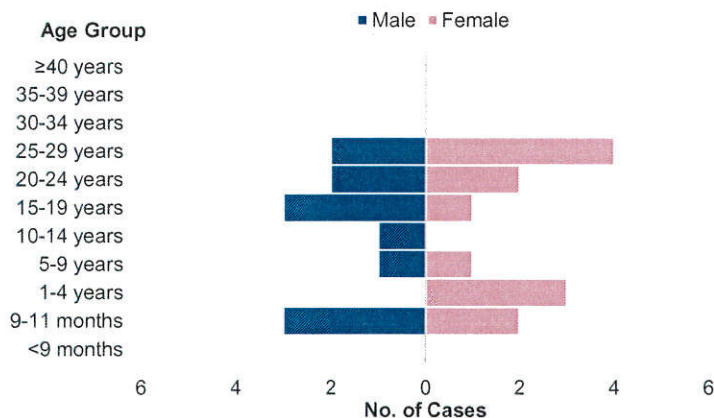
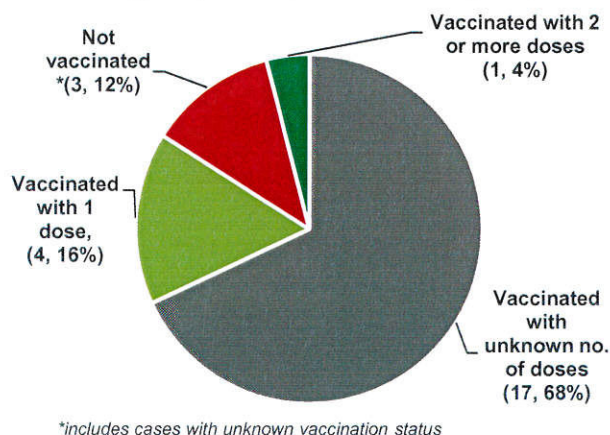


Figure 12. Vaccination Status of Confirmed Rubella Cases, Philippines, January to March 2018 (n=25)



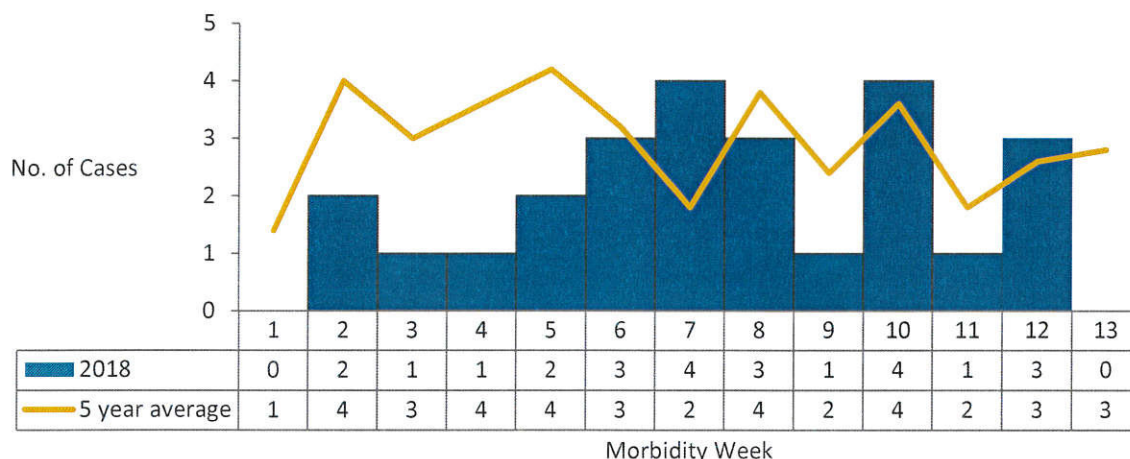


II. DIPHTHERIA

Trend in the Philippines

A total of 25 diphtheria cases were reported nationwide from January – March 2018. The distribution of diphtheria cases for 2018 compared to the 5-year average of cases from 2013 to 2017 is shown below (Figure 13).

Figure 13. Reported Diphtheria Cases by Morbidity Week, Philippines, January – March 2018 (N=25)



Geographic Distribution

There has been a 58% decrease of reported diphtheria cases from 60 cases in 2017 to 25 cases in 2018. Most of the reported diphtheria cases came from NCR (9, 36%) followed by Region 4A (6, 24%) and Region 3 (4, 16%) (Table 5). Nine (36%) cases were confirmed out of the reported cases. There were no diphtheria clusters identified as of March 31, 2018. A cluster is defined as two (2) or more diphtheria cases from the same barangay reported within four (4) consecutive weeks

Table 5. Reported Diphtheria Cases by Region, Philippines, January to March 2018 (N=25) vs. 2017 same time period*

REGION	2017		2018		PERCENT CHANGE
	CASES	DEATHS	CASES	DEATHS	
PHILIPPINES	60	13	25	9	↓ -58
I	1	0	0	0	↓ -100
II	1	1	0	0	↓ -100
III	5	1	4	1	↓ -20
IVA	10	3	6	1	↓ -40
MIMAROPA	0	0	0	0	-
V	0	0	1	1	-
VI	2	1	0	0	↓ -100
VII	0	0	0	0	-
VIII	0	0	1	0	-
IX	11	3	0	0	↓ -100
X	0	0	0	0	-
XI	2	2	2	1	→ 0
XII	0	0	0	0	-
ARMM	2	1	2	1	→ 0
CAR	2	0	0	0	↓ -100
CARAGA	0	0	0	0	-
NCR	24	1	9	4	↓ -63

*From the period of January 1 to March 31, 2018

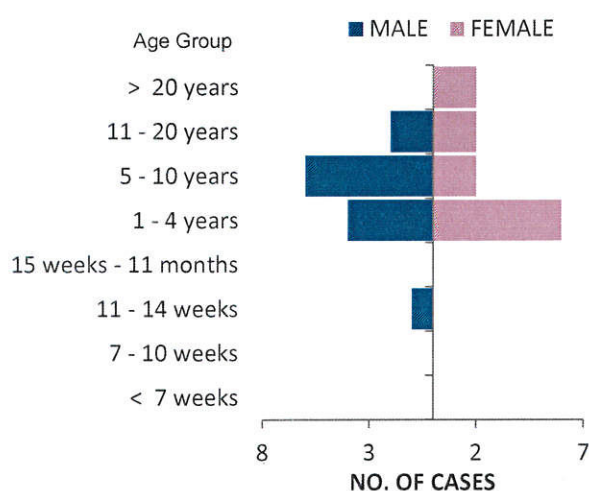


Profile of Cases

A. Suspect cases

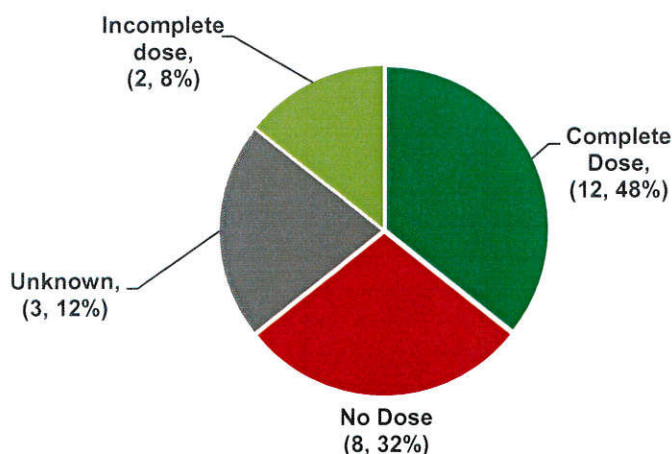
There were **13 males (52%)** and **12 females (48%)** among the reported diphtheria cases. Age of cases ranged from **4 months to 31 years old** (median age of 5 years). Age groups with the most number of cases were **1 - 4 years old (10, 40%)**, followed by 5-10 years old (8, 32%) and 11 - 20 years old (4, 16%) (Figure 14).

Figure 14. Suspect Diphtheria Cases by Age Group and Sex, Philippines, January – March 2018 (N=25)



Vaccination status of almost half (**12, 48%**) of the reported cases received **complete 3 primary doses** of the DPT/Pentavalent vaccine. Eight (32%) did not receive a dose of the DPT/Pentavalent vaccine, 3 (12%) had unknown vaccination status while 2 (8%) received an incomplete dose of the vaccine (Figure 15).

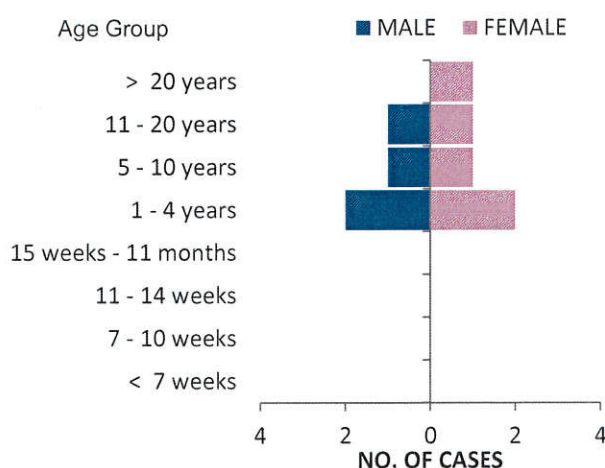
Figure 15. Suspect Diphtheria Cases by DPT Dose Received, Philippines, January to March 2018 (N=25)



B. Confirmed cases

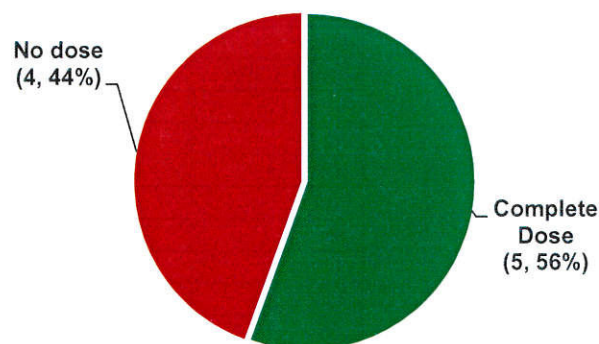
There were **5 females (56%)** and **4 males (44%)** among the confirmed diphtheria cases. Age of cases ranged from 1 year to 22 years old (median age of 7 years). Age groups with the most number of cases were **1 - 4 years old (4, 44%)**, followed by 5-10 years old (2, 22%) and 11 - 20 years old (2, 22%) (Figure 16).

Figure 16. Confirmed Diphtheria Cases by Age Group and Sex, Philippines, January – March 2018 (n=9)



Majority (5, 56%) of the confirmed cases received **complete 3 primary doses** of the DPT/Pentavalent vaccine while four (4) or 44% did not receive a dose of the DPT/Pentavalent vaccine (Figure 17).

Figure 17. Confirmed Diphtheria Cases by DPT Dose Received, Philippines, January to March 2018 (n=9)



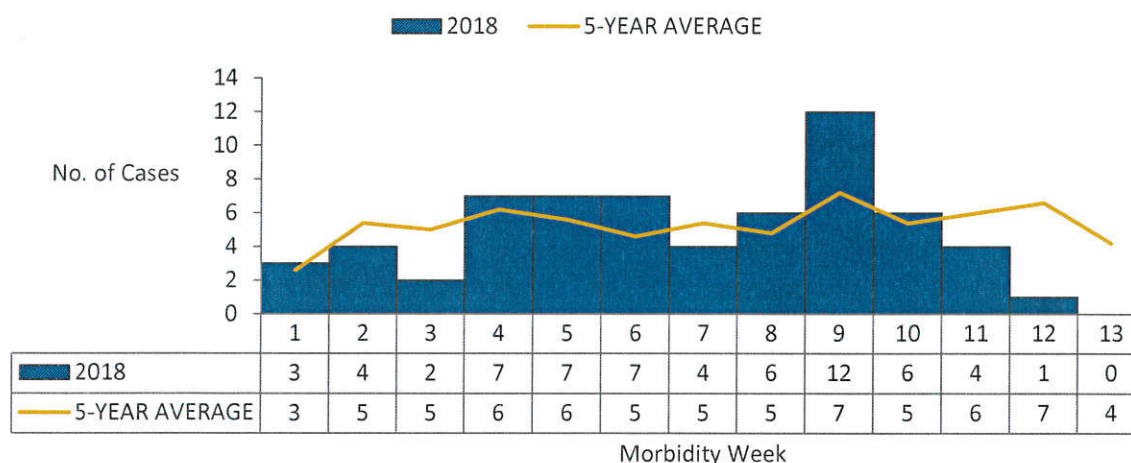


III. PERTUSSIS

Trend in the Philippines

A total of **63** pertussis cases were reported nationwide from January to March 2018. The distribution of pertussis cases for 2018 compared to the 5-year average of cases from 2013 to 2017 is shown below (Figure 18).

Figure 18. Reported Pertussis Cases by Morbidity Week, Philippines, January – March 2018 (N=63)



Geographic Distribution

There has been a **16%** decrease of reported pertussis cases from 75 cases in 2017 to 63 cases in 2018. Majority of the reported pertussis cases came from NCR (13, 21%) followed by Regions IVA (10, 16%) and XI (9, 14%) (Table 6). Seventeen (27%) cases were confirmed out of 63 cases. No pertussis clusters were identified as of March 31, 2018. A cluster is defined as two (2) or more pertussis cases from the same barangay reported within four (4) consecutive weeks.

Table 6. Reported Pertussis Cases by Region, Philippines, January to March 2018 (N=63) vs. 2017 same time period*

REGION	2017		2018		PERCENT CHANGE
	CASES	DEATHS	CASES	DEATHS	
PHILIPPINES	75	4	63	2	↓-16
I	1	0	2	0	↑100
II	3	1	4	2	↑33
III	9	1	7	0	↓-22
IVA	16	2	10	0	↓-38
MIMAROPA	0	0	0	0	-
V	1	0	1	0	-
VI	0	0	2	0	-
VII	4	0	7	0	-
VIII	0	0	0	0	-
IX	0	0	0	0	-
X	1	0	1	0	-
XI	14	0	9	0	↓-36
XII	4	0	0	0	-
ARMM	1	0	0	0	↓-100
CAR	0	0	1	0	-
CARAGA	2	0	6	0	-
NCR	19	0	13	0	↓-32

*From the period of January 1 to March 31, 2018

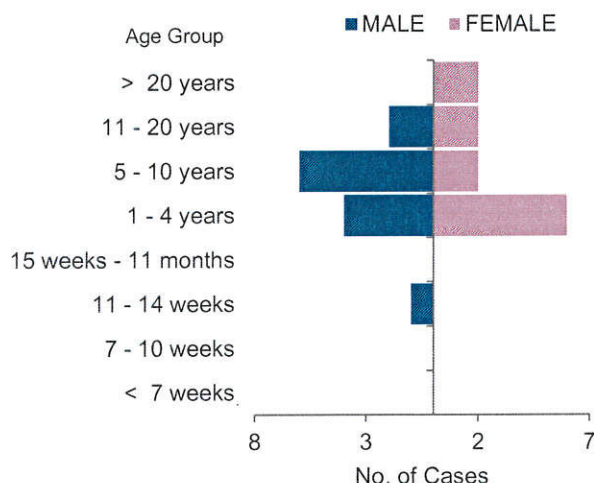


Profile of Cases

A. Suspect cases

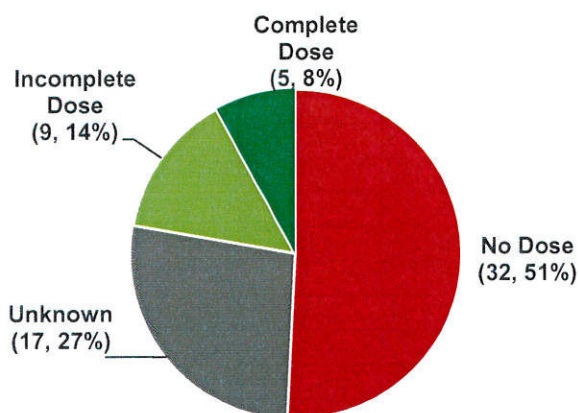
There were **34 (54%) males** and **29 (46%) females** among the reported pertussis cases. Age of cases ranged from **29 days to 71 years old** (median age of 3 months). Age groups with most number of cases (35, 56%) were **15 weeks to 11 months** (16,25%), followed by those from the <7 weeks old (12,19%) and 7-10 weeks old (12,19%) age group (Figure 19).

Figure 19. Reported Pertussis Cases by Age Group and Sex, Philippines, January 1 – March 31, 2018 (N=63)



Majority of the reported cases (**32, 51%**) were **not vaccinated** with the DPT/pentavalent vaccine. Seventeen cases (27%) had unknown vaccination status, 9 (14%) received an incomplete dose, while the remaining 5 cases (8%) received complete 3 primary doses of the vaccine (Figure 20).

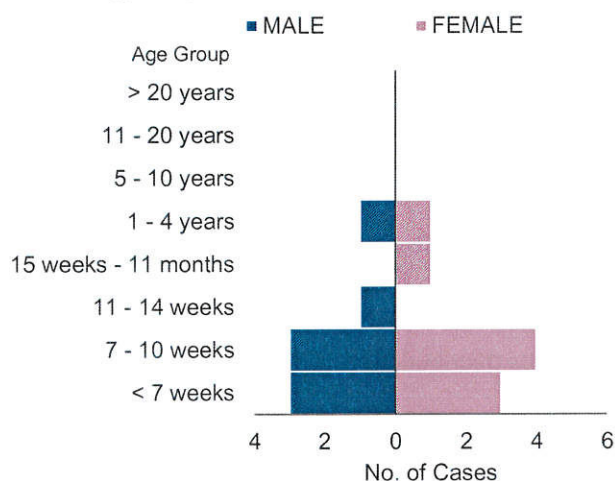
Figure 20. Suspect Pertussis Cases by DPT Dose Received, Philippines, January to March 2018 (N=63)



B. Confirmed cases

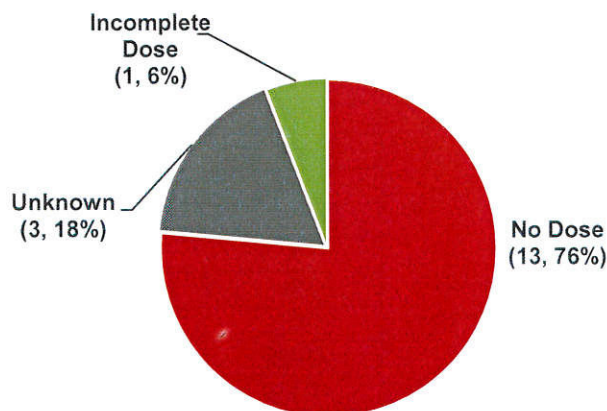
There were **9 females (53%)** and **8 males (47%)** among the confirmed pertussis cases. Age of cases ranged from **29 days to 4 years old** (median age of 2 months). Age groups with the most number of cases were **7 to 10 weeks** (7, 41%), followed by those less than 7 weeks (6, 35%) and 1 to 4 years old (2, 12%) (Figure 21).

Figure 21. Confirmed Pertussis Cases by Age Group and Sex, Philippines, January 1 – March 31, 2018 (n=17)



Majority (**13,76%**) of the confirmed cases were **not vaccinated** with the DPT/Pentavalent vaccine. Three (3) or 18% had an unknown vaccinated status while 1 case (6%) received an incomplete dose (Figure 22).

Figure 22. Confirmed Pertussis Cases by DPT Dose Received, Philippines, January to March 2018 (n=17)



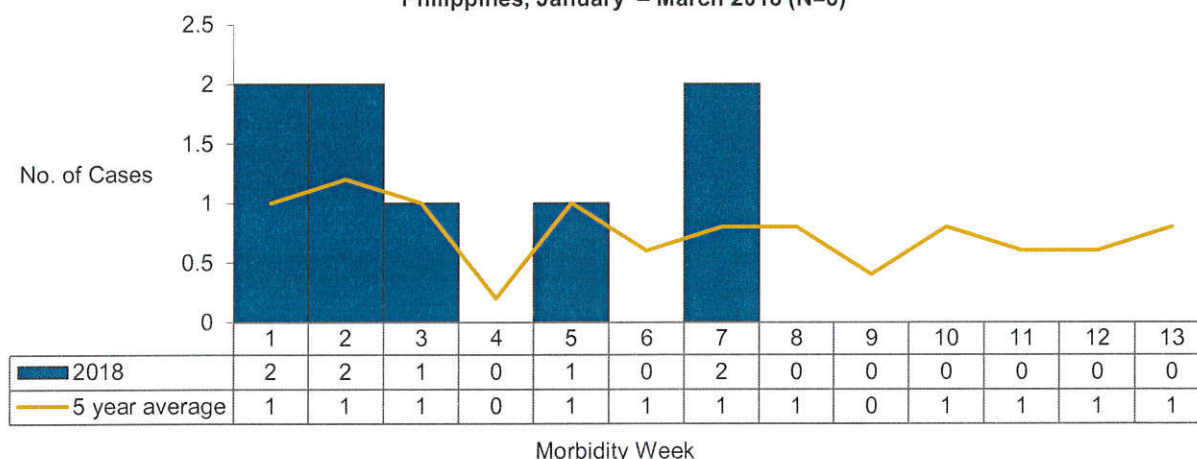


IV. NEONATAL TETANUS

Trend in the Philippines

A total of **eight (8)** clinically confirmed neonatal tetanus (NT) cases were reported nationwide from January – March 2018. The distribution of neonatal tetanus cases for 2018 compared to the 5-year average of cases from 2013 to 2017 is shown below (Figure 23).

Figure 23. Neonatal Tetanus Cases by Morbidity Week, Philippines, January – March 2018 (N=8)



Geographic Distribution

There has been a **64%** decrease of reported neonatal tetanus cases from 22 cases in 2017 to 8 cases in 2018. **ARMM** reported the most number of cases (**4, 50%**), followed by Region IX with 2 cases (25%) and Regions III and VIII with 1 case each (12.50%) (Table 7).

Table 7. Neonatal Tetanus Cases by Region, Philippines, January to March 2018 (N=8) vs. 2017 same time period*

REGION	2017		2018		PERCENT CHANGE
	CASES	DEATHS	CASES	DEATHS	
PHILIPPINES	22	19	8	5	↓ -64
I	0	0	0	0	-
II	1	1	0	0	↓ -100
III	1	1	1	1	→ 0
IVA	1	0	0	0	↓ -100
MIMAROPA	3	3	0	0	↓ -100
V	1	1	0	0	↓ -100
VI	1	1	0	0	↓ -100
VII	0	0	0	0	-
VIII	0	0	1	1	-
IX	0	0	2	1	-
X	0	0	0	0	-
XI	0	0	0	0	-
XII	5	4	0	0	↓ -100
ARMM	6	5	4	2	↓ -33
CAR	0	0	0	0	-
CARAGA	2	2	0	0	↓ -100
NCR	1	1	0	0	↓ -100

*From the period of January 1 to March 31, 2018

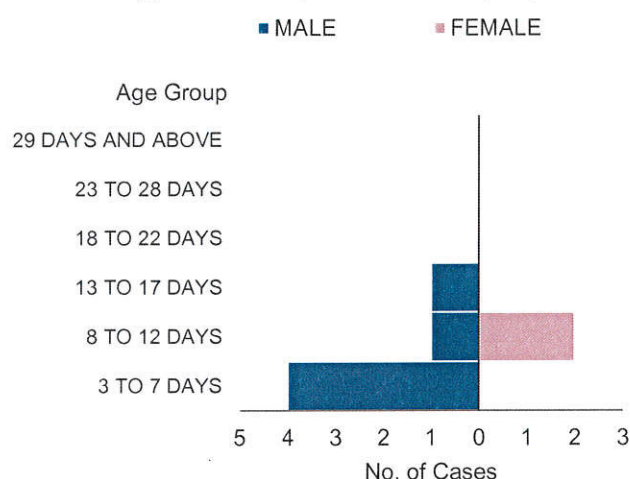


Profile of Cases

A. Age group and Sex

Six clinically-confirmed cases (75%) were male. Age of the cases ranged from **3 to 13 days old** (median age of 8 days). Half of the cases were from the **3 to 7 day age group** (4, 50 %), followed by cases 8 to 12 days old (3,38%) and 13 to 17 days old (1,12%) (Figure 24).

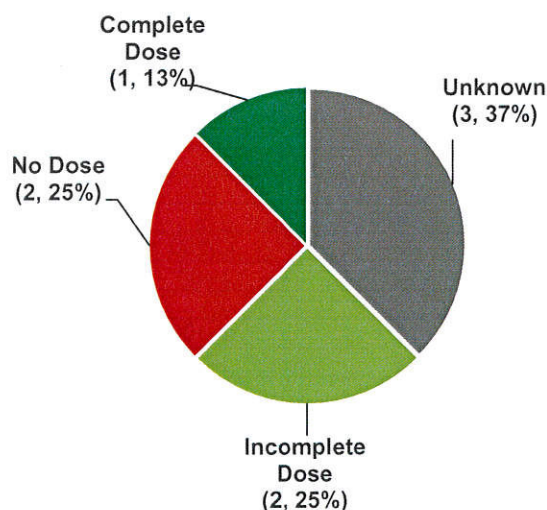
Figure 24. Clinically Confirmed Neonatal Tetanus Cases by Age Group and Sex, Philippines, January to March 2018 (N=8)



B. Vaccination Status

Most (3, 37%) of the mothers of clinically confirmed cases had **unknown vaccination status** on the tetanus toxoid vaccine, followed by those receiving an incomplete dose (2, 25%) and no received dose (2, 25%) (Figure 25).

Figure 25. Clinically Confirmed Neonatal Tetanus Cases by Vaccination Status, Philippines, January to March 2018 (N=8)



C. Delivery Practices among Clinically Confirmed Neonatal Tetanus Cases

In terms of delivery practices, seven (88%) of the neonatal tetanus cases were delivered at home, while 1 (12%) was delivered at a lying-in clinic. Six (76%) of the cases were attended by a hilot. Five (63%) cases had scissors as the common cord cutting tool used. Umbilical stump treatment of majority of the NT cases was alcohol (5, 63%) (Table 8).

Table 8. Delivery Practices of Clinically Confirmed Neonatal Tetanus Cases, Philippines, January to March 2018 (N=8)

Delivery Practices	No. of Cases	Percentage
Place of Delivery		
Home	7	88%
Hospital/Lying-In/Clinic	1	12%
Delivery Attendant		
Hilot	6	76%
Lay person	0	0%
Midwife	1	12%
Unknown	1	12%
Physician	0	0%
Cord Cut Tool Used		
Bamboo	1	12%
Blade	0	0%
Scissors	5	63%
Unknown	2	25%
Others	0	0%
Stump Treatment Used		
Unknown	3	37%
Alcohol	5	63%
Others	0	0%
None	0	0%
Povidone Iodine	0	0%



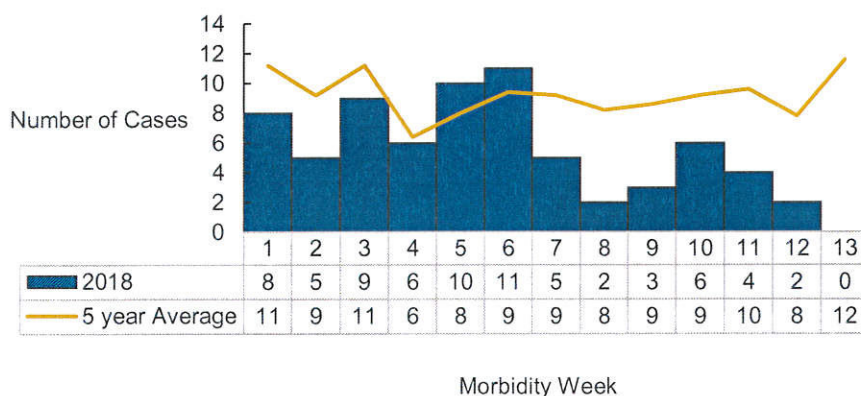
V. ACUTE FLACCID PARALYSIS

AFP surveillance is an essential strategy which aims to look for poliovirus circulation in the community by investigating all possible polio cases. Its role is to identify high risk areas or groups and certify that the Philippines is still polio-free.

Trend in the Philippines

A total of **seventy-one (71)** cases were reported nationwide from January to March 2018. The distribution of AFP cases for 2018 compared to the 5-year average of cases from 2013 to 2017 is shown below (Figure 26).

Figure 26. Reported AFP Cases by Morbidity Week (N=71)
Philippines, January to March 2018



Geographic Distribution

From January to March 2018, there was **52% decrease** of AFP cases reported compared to the same time period last year (147). Among the 71 reported AFPs, **40 (56%)** have been **discarded as non-polio AFP**, while **27 (38%)** are still pending for 60 day follow-up, expert panel review and for official laboratory result. There were **4 (6%)** reported cases that did not fit the case definition and were classified as **not AFP**. The distribution of reported AFP cases among region is shown below (Table 9).

Table 9. AFP Cases By Region and Classification (N=71)
Philippines, January to March 2018 vs. 2017 same time period*

Region	2017	2018	Classification					Percent Change
	Reported Cases	Reported Cases	Non-Polio (Discarded)	NOT AFP	Pending (27, 38%)			
					For 60-day ff-up	For EPM	For Lab Result	
PHILIPPINES	147	71	40 (56%)	4 (6%)	17	1	9	↓-52
I	15	3	3	0	0	0	0	↓-80
II	6	2	1	0	0	0	1	↓-67
III	21	8	4	1	2	0	1	↓-62
IV-A	18	11	7	1	3	0	0	↓-39
MIMAROPA	3	1	0	0	1	0	0	↓-67
V	9	8	6	1	0	0	1	↓-11
VI	11	11	5	0	2	1	3	→0
VII	3	2	2	0	0	0	0	↓-33
VIII	4	7	5	1	1	0	0	↑ 75
IX	2	2	1	0	0	0	1	→0
X	13	0	0	0	0	0	0	↓-100
XI	9	1	0	0	0	0	1	↓-89
XII	11	5	3	0	1	0	1	↓-55
ARMM	3	0	0	0	0	0	0	↓-100
CAR	3	2	1	0	1	0	0	↓-33
CARAGA	3	0	0	0	0	0	0	↓-100
NCR	13	8	2	0	6	0	0	↓-38

*From the period of January 1 to March 31, 2018

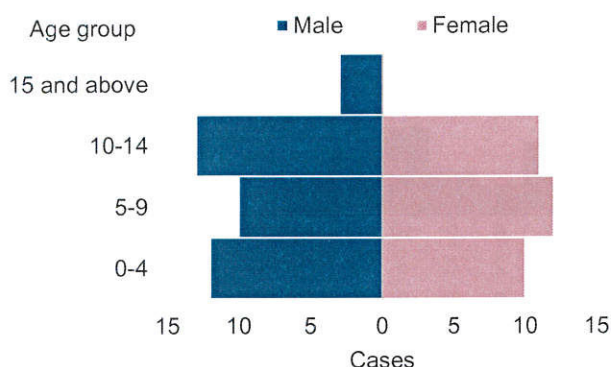


Profile of Cases

A. Age group and Sex

Among the reported AFP cases, **38 (53.52%)** are males and **33 (46.48%)** are females. Age ranges from 9 months to 42 years (median age of 8 years). **Twenty-four (33.80%)** of the AFP cases reported belong to 10-14 age group (Figure 27).

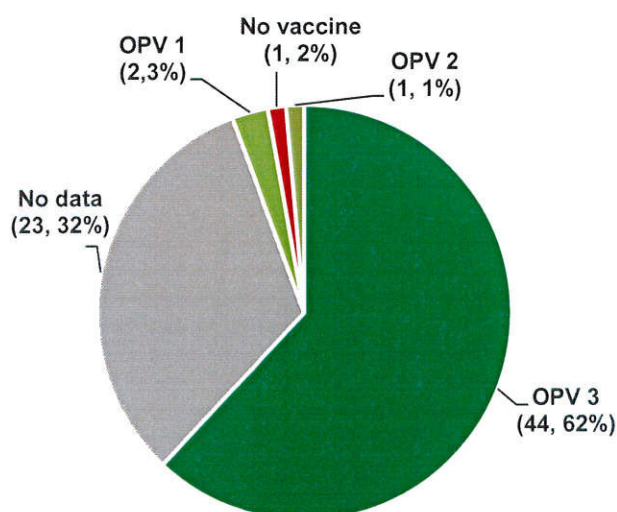
Figure 27 . AFP Cases by Sex and Age Group
Philippines, January to March 2018 (N=71)



B. Vaccination Status

Among the 71 reported AFPs, **44 (62%)** completed their 3 doses of OPV. **Twenty-three (32%)** had no data (Figure 28).

Figure 28. AFP Cases by OPV Dose Received
Philippines, January to March 2018 (N=71)



C. Laboratory Status

There were no isolated wild poliovirus from January to March 2018. Among the 71 AFP cases, **65 (92%)** had Stool 1. Fifty-five (**77%**) had Stool 2. Two cases had non-polio enterovirus (NPEV) isolated (Table 10).

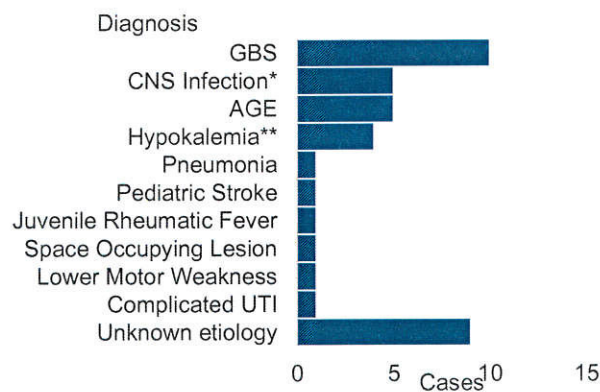
Table 10. AFP Cases by Laboratory Status
Philippines, January to March 2018 (N=71)

Stool Specimen Result	Stool Specimen 1		Stool Specimen 2	
Total	65	92%	55	77%
Negative for poliovirus	54	83%	48	87%
Others:				
Non-polio enterovirus	2	3%	2	4%
Pending Lab Results	9	14%	5	9%

D. Differential Diagnosis

The top diagnosis among AFP cases reported were **Guillain Barre Syndrome or GBS (10, 14%)**, **CNS Infection* (5, 7%)** and **AGE (5, 7%)** (Figure 29).

Figure 29. AFP Cases by Differential Diagnosis
Philippines, January to March 2018 (N=71)



*Includes Bacterial Meningitis, TB Meningitis

**Includes Hypokalemic Periodic Paralysis and Electrolyte Imbalance