



Trend in the Philippines

A total of 2,427 suspect measles cases were reported nationwide from January 1 to March 3, 2018. This is 294% higher than the number of cases reported during the same time period last year (616). There were 440 confirmed (laboratory confirmed or epidemiologically linked) measles cases with 8 deaths (CFR=1.82%). These deaths came from the following regions: **Region XI** (62.5%), **Region XII** (12.5%), **Region III** (12.5%) and **NCR** (12.5%).

Figure 1. Confirmed Measles Alert and Epidemic Thresholds, Philippines, January 1 – March 3, 2018 (n=440) vs. 3-year Average (2015-2017)

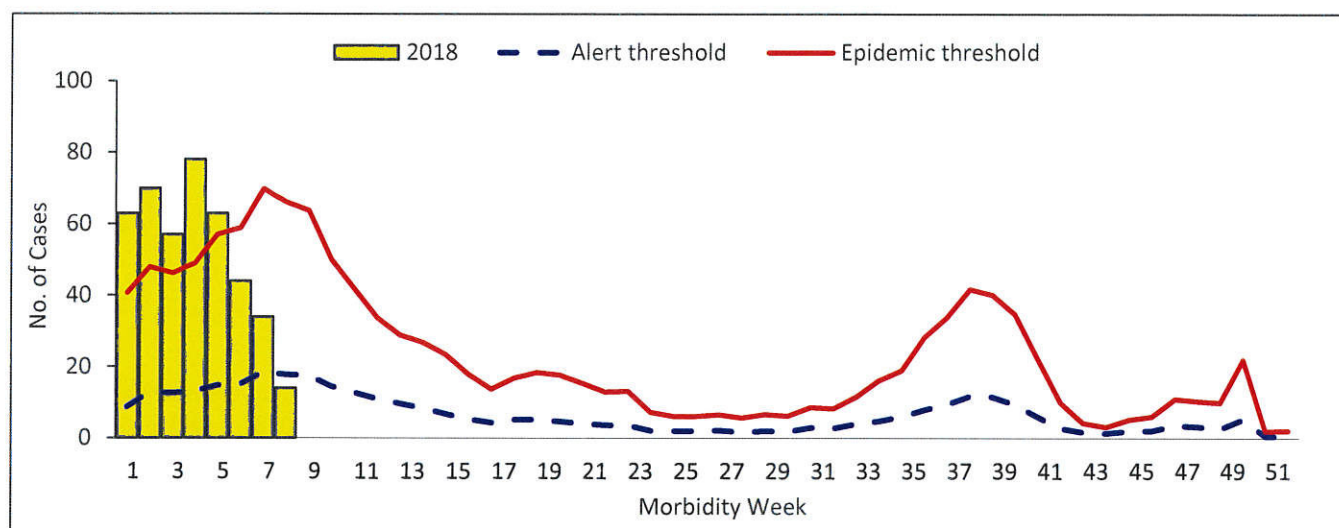
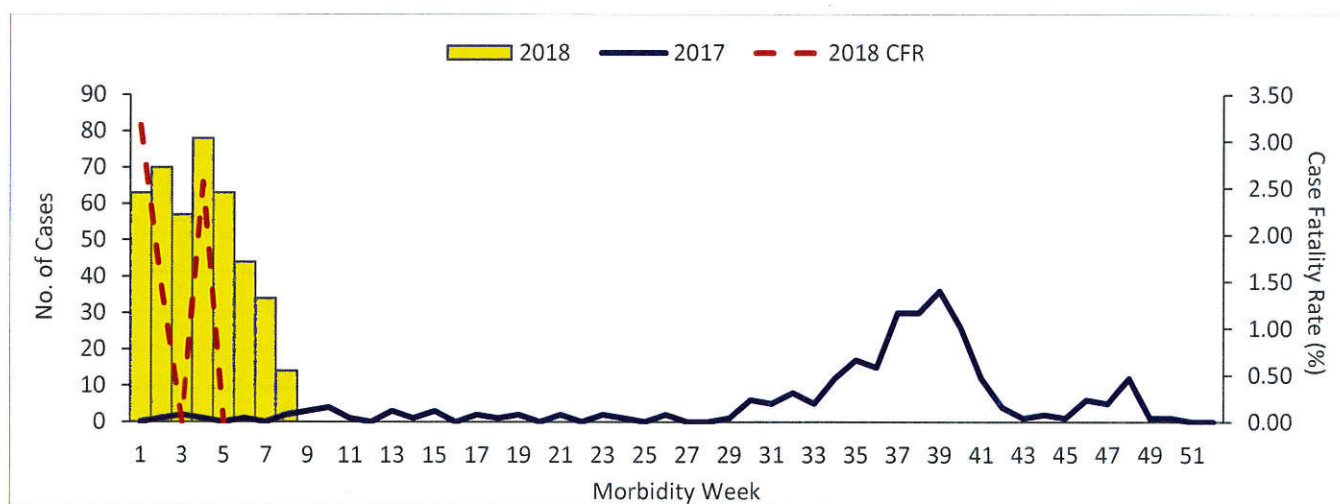


Figure 2. Confirmed Measles Cases by Morbidity Week, Philippines, January 1 – March 3, 2018 (n=440) vs. 2017*



Geographic Distribution

Most of the confirmed cases were from the following regions: **Region XI** (27.73%), **ARMM** (21.59%), **Region IX** (14.32%), **Region XII** (10.45%) and **Region X** (10%). It can be noted that regions in Mindanao are mostly affected. Most of the cases were from the following provinces: **Davao del Sur** (19.55%), **Zamboanga del Sur** (10%), **Maguindanao** (7.50%), **Lanao del Sur** (7.05%), **Basilan** (ARMM) and **Lanao del Norte** (6.82% each).



Figure 3. Confirmed Measles Cases by Region, Philippines, January 1 – March 3, 2018 (n=440) vs. 2017*

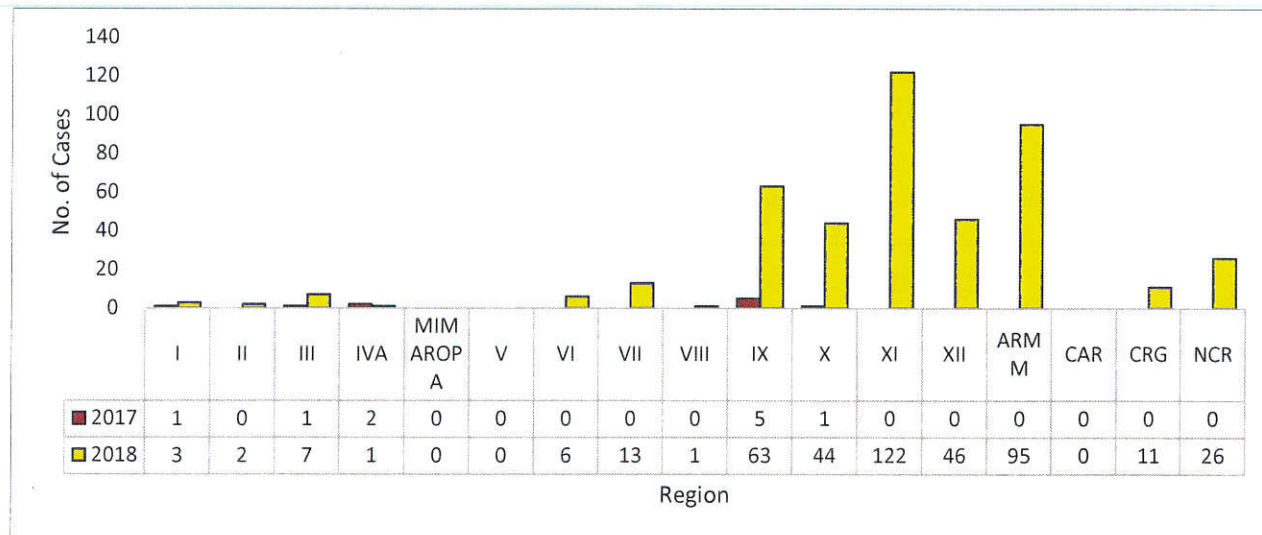


Figure 4. Geographical Location of Confirmed Measles Cases, Philippines, January 1 – March 3, 2018 (n=440)

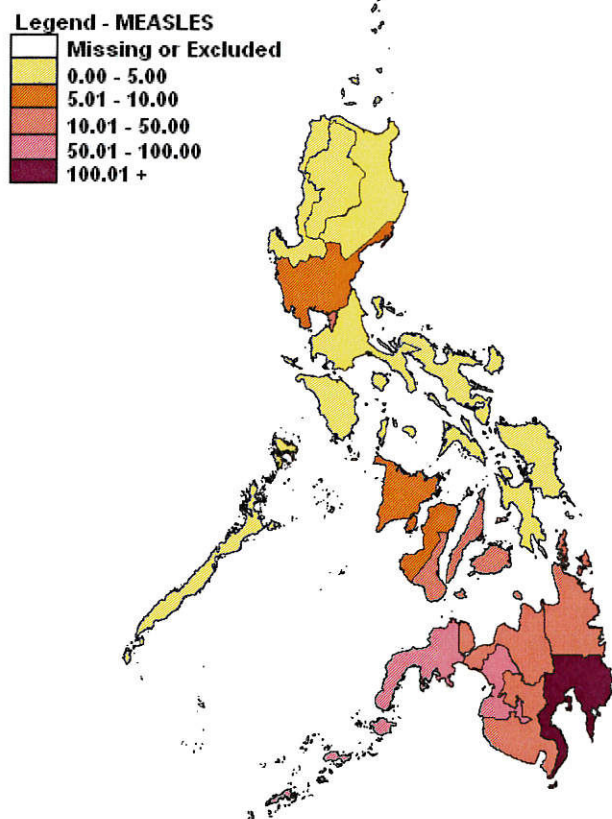


Table 1. Confirmed Measles Cases and Deaths by Region, Philippines, January 1 – March 3, 2018 (n=440) vs. 2017

REGION	2018	2017	% CHANGE	DEATHS	CFR (%)
I	3	1	↑ 200.00	0	0.00
II	2	0	↑ 200.00	0	0.00
III	7	1	↑ 600.00	1	14.29
IVA	1	2	↓ -50.00	0	0.00
MIMAROPA	0	0	→ 0.00	0	0.00
V	0	0	→ 0.00	0	0.00
VI	6	0	↑ 600.00	0	0.00
VII	13	0	↑ 1,300.00	0	0.00
VIII	1	0	↑ 100.00	0	0.00
IX	63	5	↑ 1,160.00	0	0.00
X	44	1	↑ 4,300.00	0	0.00
XI	122	0	↑ 12,200.00	5	4.10
XII	46	0	↑ 4,600.00	1	2.17
ARMM	95	0	↑ 9,500.00	0	0.00
CAR	0	0	→ 0.00	0	0.00
CRG	11	0	↑ 1,100.00	0	0.00
NCR	26	0	↑ 2,600.00	1	3.85
PHL	440	10	↑ 4,300.00	8	1.82

Table 1 shows the distribution of confirmed measles cases among regions and the percentage change in the number of cases from previous year to the current reporting period. There is a 4,300% increase from the number of confirmed cases for the same time period.

Case counts reported here do NOT represent the final number and are subject to change after inclusion of delayed reports and review of cases.

*all 2017 data reflect partial data only for all regions



Classification of Cases and Laboratory Results

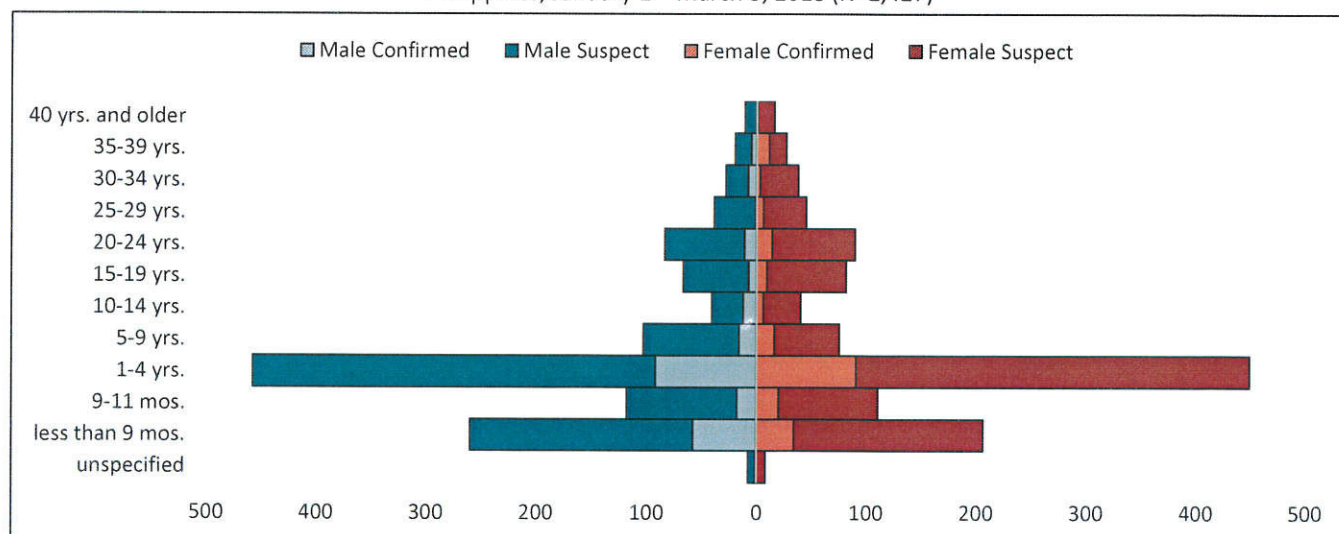
Of the reported cases, 43.26% are still pending for transport or testing and 23.32% were tested. Among the cases tested, 74.73% tested positive for measles and 2.65% tested positive for rubella. Laboratory confirmation is currently done through serology testing and Polymerase Chain Reaction (PCR) among cases with oropharyngeal and/or nasopharyngeal swabs. Table 2 shows the classification of cases. It can be noted that there is a high percentage of suspect measles cases which do not have specimen for laboratory confirmation classified as measles compatible (32.72%).

Table 2. Reported Measles Cases by Region and Case Classification, Philippines, January 1 – March 3, 2018 (N=2,427)

REGION	REPORTED	LABORATORY CONFIRMED MEASLES	EPI-LINKED CONFIRMED MEASLES	LABORATORY CONFIRMED RUBELLA	MEASLES COMPATIBLE	NEGATIVE FOR BOTH MEASLES & RUBELLA (DISCARDED NON MEASLES/RUBELLA)	NEGATIVE FOR MEASLES ONLY (DISCARDED AS NON MEASLES)	PENDING CLASSIFICATION
I	54	3	0	0	3	9	4	35
II	9	2	0	1	0	1	0	5
III	52	7	0	0	8	9	3	25
IVA	75	1	0	3	17	17	1	36
MIMAROPA	15	0	0	0	8	2	1	4
V	4	0	0	0	2	1	0	1
VI	27	6	0	1	0	4	1	15
VII	24	13	0	0	2	5	1	3
VIII	6	1	0	0	1	0	1	3
IX	440	63	0	1	168	5	2	201
X	166	44	0	0	45	0	1	76
XI	568	106	16	8	117	24	6	291
XII	179	46	0	1	31	11	1	89
ARMM	661	94	1	0	370	1	2	193
CAR	15	0	0	0	3	6	0	6
CRG	24	11	0	0	4	3	0	6
NCR	108	26	0	0	15	6	0	61
PHL	2,427	423	17	15	794	104	24	1,050

Profile of Cases

Figure 5. Reported Measles Cases by Sex, Age Group and Case Classification, Philippines, January 1 – March 3, 2018 (N=2,427)

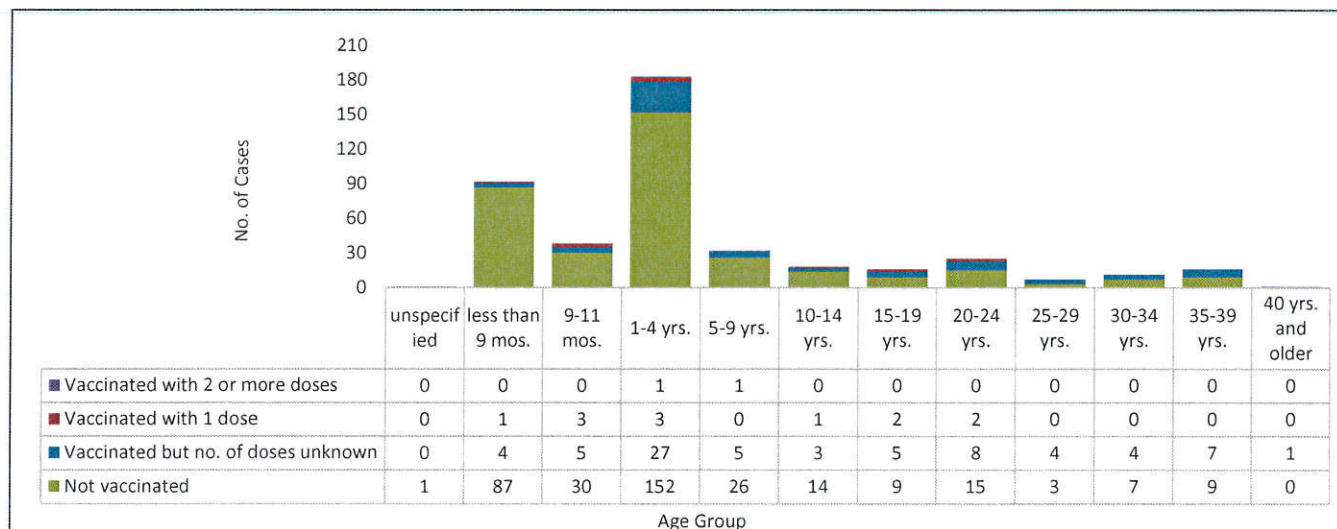


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*all 2017 data reflect partial data only for all regions



Figure 6. Vaccination Status of Confirmed Measles Cases by Age Group, Philippines, January 1 – March 3, 2018 (n=440)



Majority (52%) of the confirmed cases were males (Figure 5). Ages of cases ranged from less than 1 month to 39 years old (median= 2 years). As shown in Figures 5 and 6, age groups with the most number of cases were: 1-4 years old (41.59%), less than 9 months old (20.91%) and 9-11 months old (8.64%). Majority of the cases were not vaccinated (60.45%). (Figure 7)

Figure 7. Vaccination Status of Confirmed Measles Cases, Philippines, January 1 – March 3, 2018 (n=440)

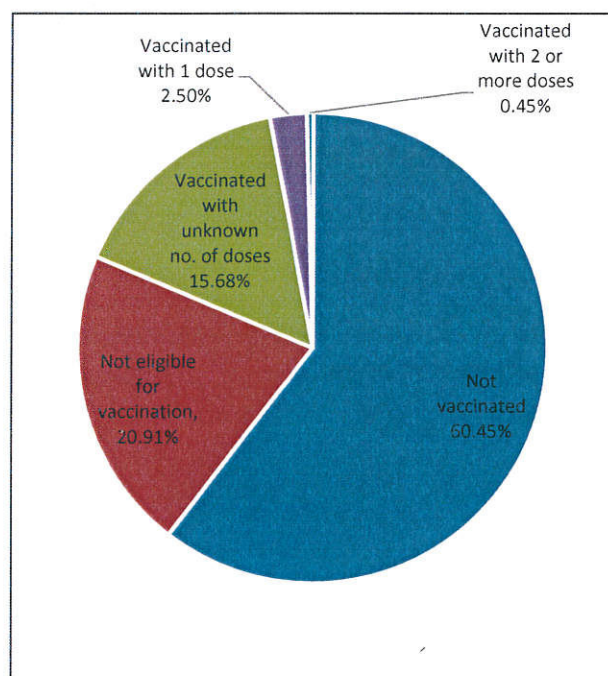
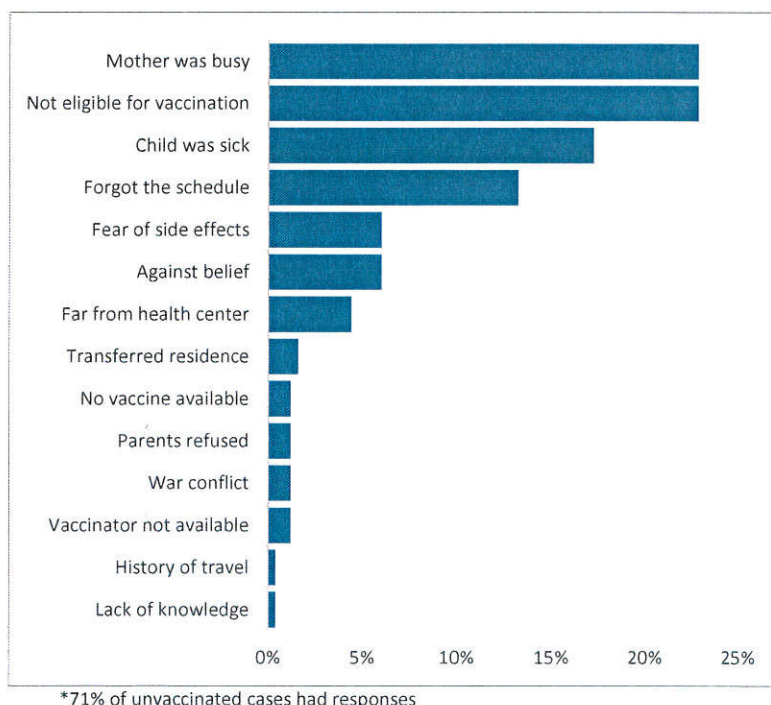


Figure 8. Reasons* for Non-vaccination of Measles Vaccine, Philippines, January 1 – March 3, 2018



Top reasons for non-vaccination of measles-containing vaccine were: mother was busy (23%), not eligible for vaccination (23%) and child was sick (17%). (Figure 8)



Measles Outbreaks

Outbreaks have been declared in several areas in Mindanao, Taguig City in NCR and in some municipalities/cities of Negros Oriental. The following activities were done to address these: intensification of surveillance activities and outbreak investigations, outbreak immunization activities guided by the issued memorandum to all regions and intensification of information campaign on prevention and early consultation.

Rubella Cases

A total of 15 cases were confirmed as rubella through laboratory testing. No deaths were reported among the confirmed rubella cases. Eight (53%) out of 15 cases were females. Most (33.33%) of the cases belong to the 25-29 year old age group and 60% of the cases were vaccinated but with unknown number of doses (Figure 9). Basis of vaccination status was the number of measles-containing vaccine doses received. Table 3 shows the distribution of confirmed measles cases among regions and the percentage change in the number of cases from previous year to the current reporting period. There is a 88.64% decrease from the number of confirmed cases for the same time period.

Figure 9. Vaccination Status of Confirmed Measles Cases by Age Group, Philippines, January 1 – March 3, 2018 (n=15)

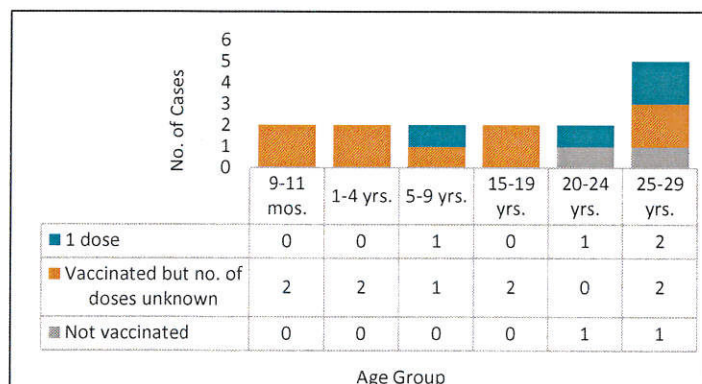


Table 3. Confirmed Rubella Cases by Region, Philippines, January 1 – March 3, 2018 (n=15) vs. 2017

REGION	2018	2017	% CHANGE
I	0	11	↓ -1,100.00
II	1	0	↑ 100.00
III	0	12	↓ -1,200.00
IVA	3	34	↓ -91.18
MIMAROPA	0	0	→ 0.00
V	0	2	↓ -200.00
VI	1	5	↓ -80.00
VII	0	2	↓ -200.00
VIII	0	36	↓ -3,600.00
IX	1	2	↓ -50.00
X	0	3	↓ -300.00
XI	8	0	↑ 800.00
XII	1	0	↑ 100.00
ARMM	0	0	→ 0.00
CAR	0	5	↓ -500.00
CRG	0	0	→ 0.00
NCR	0	20	↓ -2,000.00
PHL	15	132	↓ -88.64

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