



January 1 – March 4, 2017

Epidemiology Bureau
Public Health Surveillance Division

Classification of Suspect Measles-Rubella Cases

A total of 508 suspect measles-rubella cases were reported nationwide from January 1 to March 4, 2017. Of these, 393 (77%) were tested. Among the suspect cases, 9 cases (1.77%) were classified as **laboratory confirmed measles** while 107 cases (21.06%) were classified as **laboratory confirmed rubella**. Measles cases are **18.18% lower** while rubella cases are **160.98% higher** than the previous year of the same time period. Currently, there were no reported deaths among the confirmed measles-rubella cases.

FIGURE 1. CLASSIFICATION OF SUSPECT MEASLES-RUBELLA CASES, PHILIPPINES, JANUARY 1 – MARCH 4, 2017 (N=508)

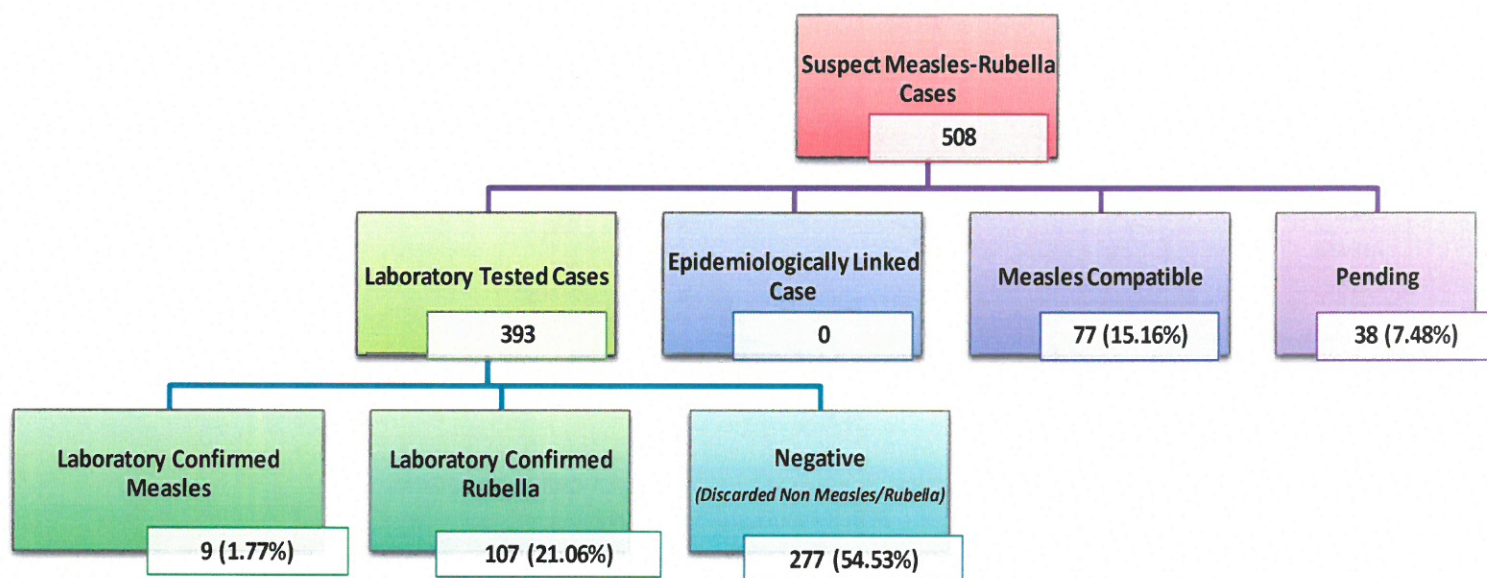


TABLE 1. MEASLES AND RUBELLA CASES BY REGION PHILIPPINES, JANUARY 1 – MARCH 4, 2017 (N=508)

REGION	REPORTED	LABORATORY CONFIRMED MEASLES	MEASLES COMPATIBLE	LABORATORY CONFIRMED RUBELLA	DISCARDED AS NON-MEASLES/RUBELLA	PENDING CLASSIFICATION
I	46	0	5	11	25	5
II	6	0	0	0	6	0
III	46	1	3	12	30	0
IVA	144	3	20	35	75	11
IVB	4	0	2	0	1	1
V	10	0	1	2	4	3
VI	24	0	0	5	16	3
VII	16	0	0	3	9	4
VIII	15	0	3	9	3	0
IX	15	2	5	2	6	0
X	32	2	7	3	15	5
XI	14	0	0	0	14	0
XII	16	0	1	0	14	1
ARMM	3	0	1	0	1	1
CAR	20	0	7	5	6	2
CRG	9	0	3	0	5	1
NCR	88	1	19	20	47	1
PHL	508	9	77	107	277	38



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FIGURE 2. GEOGRAPHICAL DISTRIBUTION OF CONFIRMED CASES*, PHILIPPINES, JANUARY 1 – MARCH 4, 2017

Region	Measles	Rubella
I	0	11
II	0	0
III	1	12
IVA	3	35
IVB	0	0
V	0	2
VI	0	5
VII	0	3
VIII	0	9
IX	2	2
X	2	3
XI	0	0
XII	0	0
ARMM	0	0
CAR	0	5
CRG	0	0
NCR	1	20
PHL	9	107

Legend:
1 dot = 1 case
● Rubella
● Measles

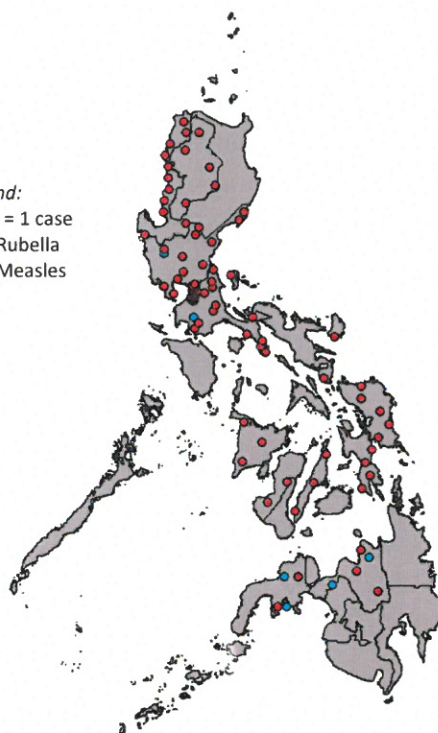


Figure 2 shows the distribution of cases among regions. For confirmed measles, Region IVA has the most number of cases with 3 (33.33%) cases per region followed by Regions IX and X with 2 (22.22%) cases per region.

Meanwhile, confirmed rubella cases in Region IVA is also highest in number, with 35 (32.71%) cases followed by NCR (20, 18.69%) and Region III (12, 11.21%).

*lab confirmed and epi-linked confirmed cases

TABLE 2. CONFIRMED MEASLES AND RUBELLA CASES BY REGION PHILIPPINES, 2016 vs. 2017

REGION	CONFIRMED MEASLES CASES			CONFIRMED RUBELLA CASES		
	2017	2016	% CHANGE	2017	2016	% CHANGE
I	0	1	↓ -100.00	11	0	↑ 1100.00
II	0	0	→ 0.00	0	0	→ 0.00
III	1	1	→ 0.00	12	1	↑ 1100.00
IVA	3	0	↑ 300.00	35	4	↑ 775.00
IVB	0	0	→ 0.00	0	1	↓ -100.00
V	0	0	→ 0.00	2	0	↑ 200.00
VI	0	1	↓ -100.00	5	27	↓ -81.48
VII	0	3	↓ -300.00	3	2	↑ 50.00
VIII	0	0	→ 0.00	9	0	↑ 900.00
IX	2	2	→ 0.00	2	0	↑ 200.00
X	2	0	↑ 200.00	3	0	↑ 300.00
XI	0	0	→ 0.00	0	2	↓ -200.00
XII	0	1	↓ -100.00	0	1	↓ -100.00
ARMM	0	0	→ 0.00	0	0	→ 0.00
CAR	0	1	↓ -100.00	5	0	↑ 500.00
CRG	0	1	↓ -100.00	0	0	→ 0.00
NCR	1	0	↑ 100.00	20	3	↑ 566.67
PHL	9	11	↓ -18.18	107	41	↑ 160.98

The number of confirmed rubella cases increased significantly by **160.98%** while number of measles cases decreased by **18.18%** as of morbidity week 9, compared to the same time period last year (see Table 2).



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**FIGURE 3. CONFIRMED RUBELLA ALERT AND EPIDEMIC THRESHOLD
PHILIPPINES, JANUARY 1 – MARCH 4, 2017 (n=107)**

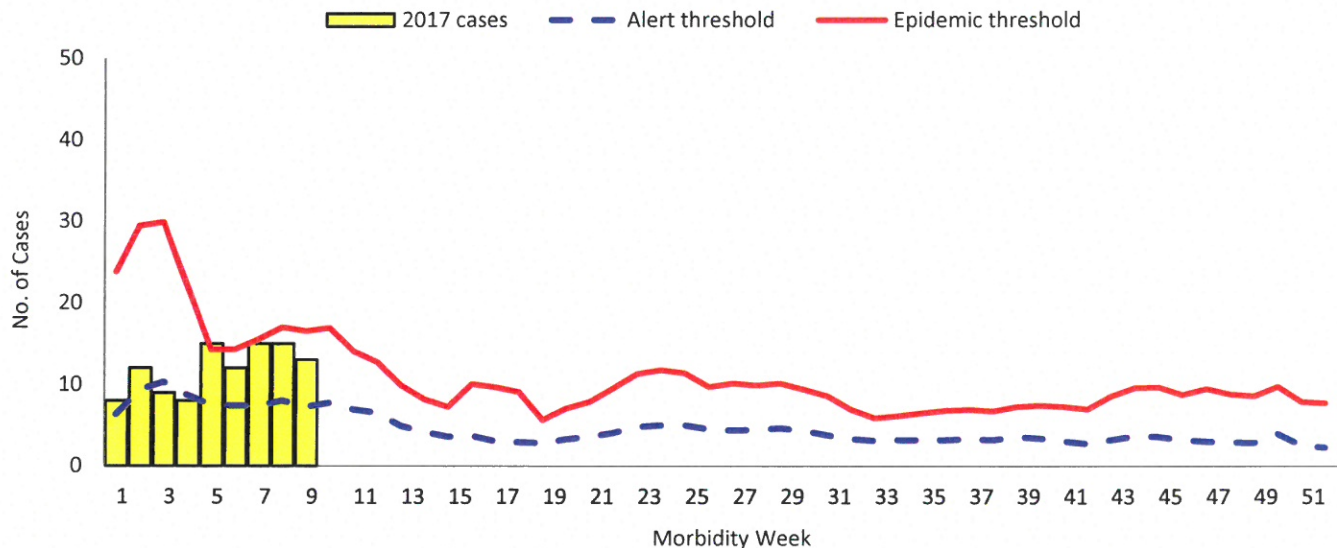


Figure 3 reflects the confirmed rubella cases in relation with the rubella alert and epidemic thresholds. It can be noted that the weekly number of rubella cases have consistently exceeded the alert threshold from weeks 1 to 9. It reached the epidemic threshold in morbidity weeks 5 and 7. As of morbidity week 9, rubella incidence rate is 1.02 per 1,000,000 population.

The current number of confirmed measles cases is still way below the alert threshold. Measles incidence rate is 0.09 per 1,000,000 population.

**Note: Target incidence rate for measles and rubella elimination is <1 per 1,000,000 population*

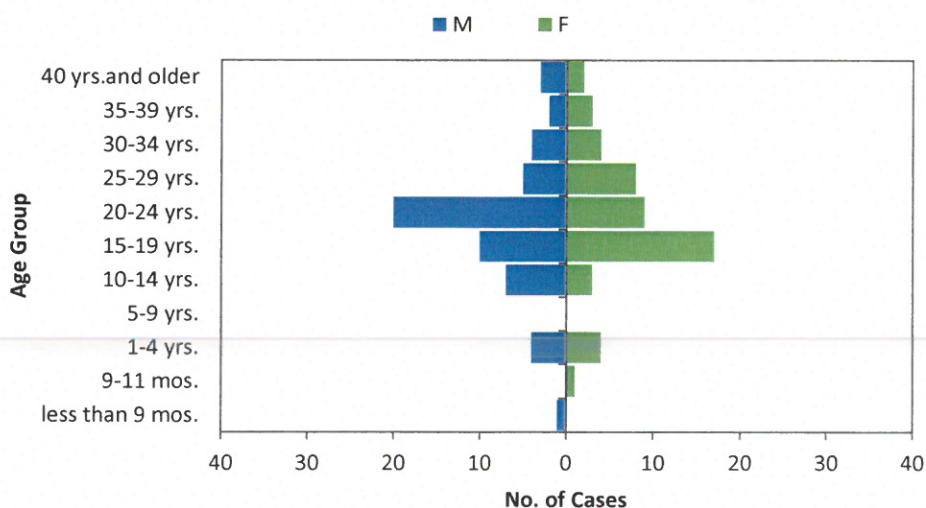
Virus Isolation and Genotyping

There were 8 oropharyngeal/nasopharyngeal swab samples submitted since January 2017. Among these, only 1 tested positive for rubella virus. Genotype identified for the case was 2B. None of the samples tested positive for measles virus.

RUBELLA

Profile of Cases

**FIGURE 4. CONFIRMED RUBELLA CASES BY AGE GROUP AND SEX
PHILIPPINES, JANUARY 1- MARCH 4, 2017 (n=107)**



Of the confirmed rubella cases, 52.34% were male (56 cases). Majority of the confirmed rubella cases belonged to the 20-24 year old age group (27.10%) followed by the 15-19 year old age group (25.23%) as shown in Figure 4.

Two (2) confirmed rubella cases reported in January and February were pregnant. One is on her 32nd week and the other on her 15th week. Both cases are currently being monitored by their respective Epidemiology and Surveillance Units (ESUs) and Maternal, Newborn and Child Health and Nutrition (MNCHN) program managers.



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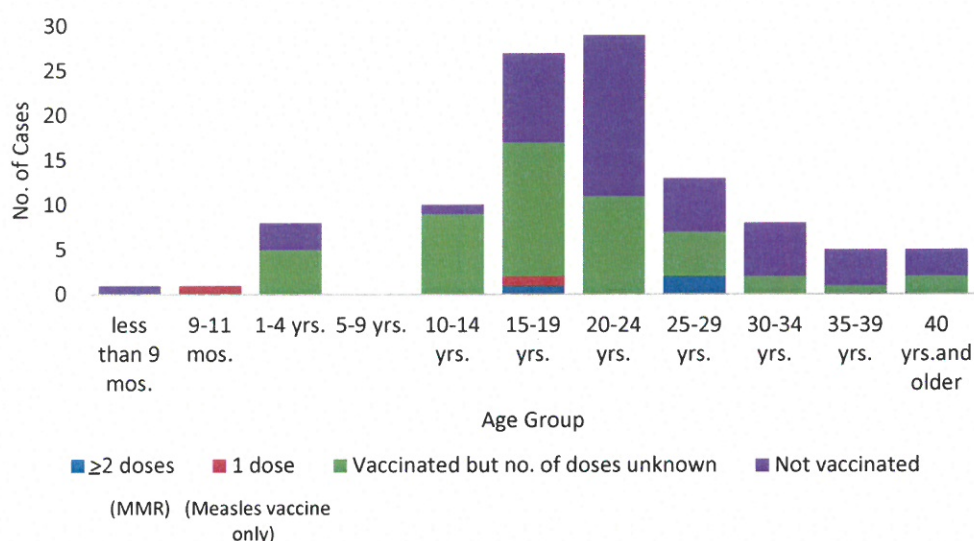
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Immunization Status

Basis for the immunization status among confirmed rubella cases is the measles vaccination status. Fifty five (51.4%) were vaccinated and 52 (48.6%) were not vaccinated. (Figure 5)

Analysis on MMR vaccination and doses are limited due to incomplete data on the current surveillance database. Among the 55 vaccinated cases, only 2 specified that they have received MMR doses.

FIGURE 5. IMMUNIZATION STATUS OF CONFIRMED RUBELLA CASES BY AGE GROUP
PHILIPPINES, JANUARY 1- MARCH 4, 2017 (n=107)



Rubella Clusters

MW	Region	Province	Muncity	Barangay	Place of Transmission	No. of Confirmed Cases	No. of Suspect Cases
3	V	Camarines Norte	Labo	Malatap	Home/ Dormitory	2	0
3-7	NCR	Metro Manila	San Juan City	West Crame	Barangay/ Community	4	0
5-6	IVA	Batangas	Batangas City	Pinamucan Ibaba	Home/ Dormitory	2	0
5-9	VIII	Northern Samar	San Antonio	Dalupirit	School	7	1
9	III	Pampanga	Mabalacat	Airforce City	Unknown	3	0

Five rubella clusters have been identified for year 2017. These cases are related in place of residences and onset of symptoms, located in the same barangay or identified place of transmission (e.g. school in Northern Samar) and occurred within 4 consecutive weeks.

Actions taken for the Northern Samar Cluster:

1. Coordinated with RESU VIII for validation of linkages between cases and active search for other cases.
2. Communicated with the National Measles Laboratory for laboratory results and further specimen testing.
3. Coordinated with the Field Epidemiology Training Program (FETP) regarding the investigation conducted in San Antonio, Northern Samar.
4. Notified the National Immunization Program (NIP) at the central level.
5. Analyzed the data for establishment of evidence for action and presented it in the meeting with the Disease Prevention and Control Bureau (DPCB).
6. Monitored the health event until end of transmission and absence of cases reported.



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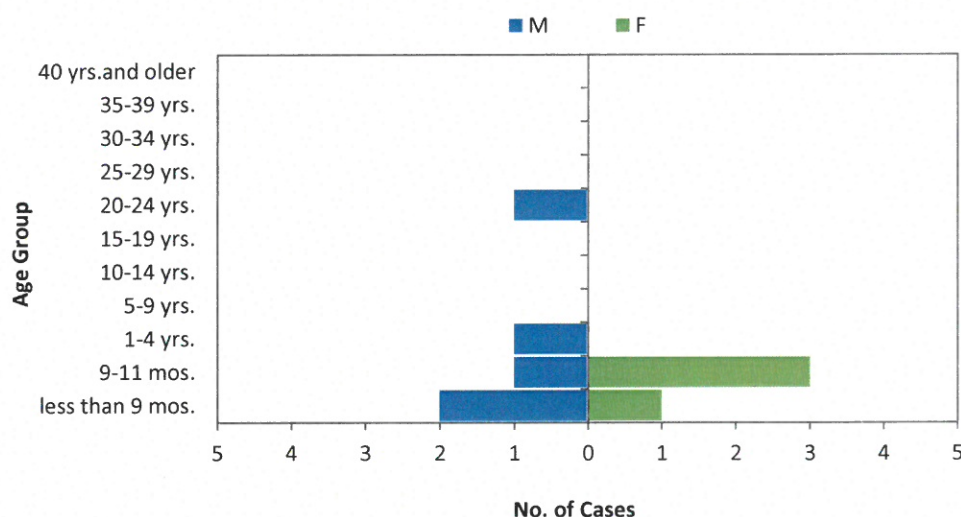
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MEASLES

Profile of Cases

Five (55.56%) confirmed measles cases were male. Majority of the confirmed cases belonged to children aged 9 to 11 months old (44.44%) as shown in Figure 6.

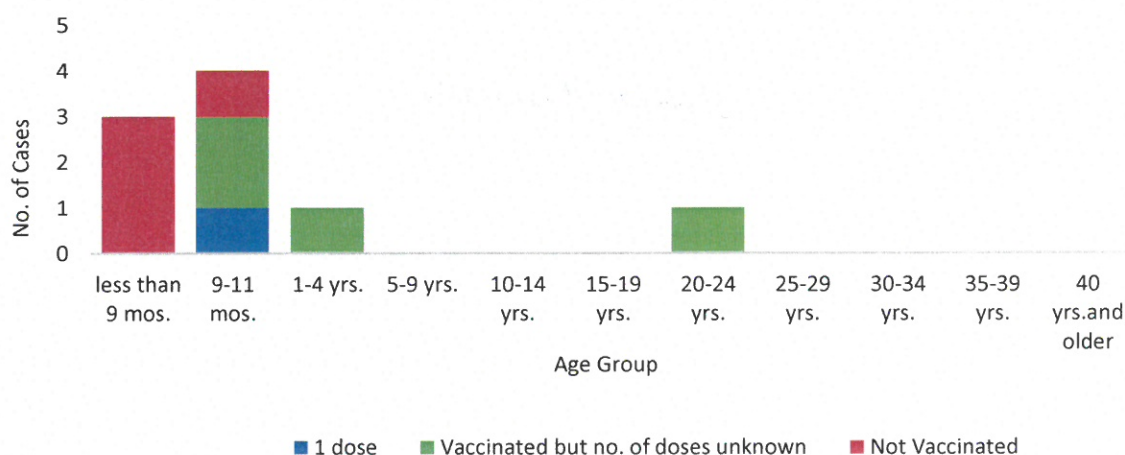
**FIGURE 6. CONFIRMED MEASLES CASES BY AGE GROUP AND SEX
PHILIPPINES, JANUARY 1- MARCH 4, 2017 (n=9)**



Immunization Status

Among the confirmed measles cases, 5 (55.55%) were vaccinated and 4 (44.44%) were not vaccinated. Only 1 vaccinated cases specified receipt of 1 measles-containing vaccine. (Figure 7)

**FIGURE 7. IMMUNIZATION STATUS OF CONFIRMED MEASLES CASES BY AGE GROUP
PHILIPPINES, JANUARY 1- MARCH 4, 2017 (n=9)**



Measles Clusters

No measles clusters identified.




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Annex A. Definition of Terms

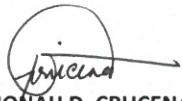
Laboratory confirmed measles case	☞ A suspect measles case with a positive laboratory test result for measles-specific IgM antibodies or other approved laboratory test method
Laboratory confirmed rubella case	☞ A suspect measles case with a positive laboratory test result for rubella-specific IgM antibodies or other approved laboratory test method
Measles compatible case	☞ A case that meets the suspect case definition for measles but for which no adequate blood specimen was taken and which has not been linked epidemiologically to another case positive for measles IgM or another laboratory-confirmed communicable disease
Confirmed Measles cases	☞ Laboratory confirmed + Epidemiologically-linked measles cases
Epidemiologically-linked measles (or rubella) case	☞ A suspect measles case that has not been confirmed by laboratory but that is geographically AND temporally related (with dates of rash onset occurring between 7 and 21 days apart) to a laboratory-confirmed case or (in the event of an outbreak) to another epidemiologically confirmed measles case.
Discarded non-measles/rubella	☞ A case that meets the clinical case definition for measles and tested negative for both measles and rubella testing.
Pending Classification	☞ Cases with blood specimen collected and pending laboratory results.
Alert threshold	☞ Refers to the level of occurrence of disease that serves as an early warning for epidemics. An increase in the number of cases above the threshold level should trigger an investigation, epidemic preparedness and implement appropriate prevention and control measures.
Epidemic threshold	☞ Refers to the level of occurrence of disease above which an urgent response is required. The threshold is specific to each disease and depends on the infectiousness, other determinants of transmission and local endemicity levels.
Cluster of cases	☞ 2 or more cases with temporal (occurring in a span of 4 weeks) and geographical association (within the same barangay)

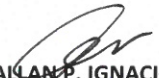
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