Department of Health
Epidemiology Bureau
Public Health Surveillance Division

MEASLES-RUBELLA BULLETIN

Morbidity Week 17
April 26 – May 2, 2015

Trend

A total of 1,726 suspect measles cases were reported nationwide from January 1 to May 2, 2015. Of these, 495 (28.68%) were classified as laboratory confirmed (438) and epi-linked (57) cases (see Table 1). The number of confirmed measles cases decreased significantly in 2015 (97.92%) compared with last year (see Table 2).

Figure 3 shows the distribution of confirmed measles cases by morbidity month. The data includes laboratory confirmed and epi-linked confirmed measles cases.

Geographic distribution

The distribution of confirmed measles cases varied considerably among the regions (see Figure 2). Most of the confirmed cases came from Region XI (18.99%), Region IX (15.56%) and CARAGA (11.92%).

Profile of cases

Fifty three percent of the confirmed measles cases were male. Majority of the confirmed cases belonged to the children less than 9 months old (18.38%). Among the confirmed measles cases, 31% were vaccinated with measles containing vaccine, 58% were not vaccinated and 12% have unknown vaccination status. Two among the confirmed measles cases died (CFR=0.40).

TABLE 1. MEASLES AND RUBELLA CASES BY REGION
PHILIPPINES, JANUARY 1 – MAY 2, 2015 (N=1,726)

REGION	TARGET 2/100K	REPORTED	CONFIRMED MEASLES		MEASLES COMPATIBLE	CONFIRMED RUBELLA		DISCARDED AS NON-MEASLES/RUBELLA	PENDING CLASSIFICATION
			LABORATORY CONFIRMED	EPI-LINKED CONFIRMED		LABORATORY CONFIRMED	EPI-LINKED CONFIRMED		
1	101	59	1	0	19	7	0	32	0
2	69	63	8	0	35	3	0	17	0
3	226	70	1	0	14	6	0	49	0
4A	294	153	1	0	64	8	0	80	0
4B	60	24	1	0	15	4	0	4	0
5	117	6	0	0	1	0	0	5	0
6	152	175	56	0	8	35	0	76	0
7	149	80	41	0	2	7	0	30	0
8	88	103	8	5	88	0	0	2	0
9	75	176	71	6	58	1	0	40	0
10	95	185	37	8	120	0	0	18	2
11	99	185	81	13	53	3	0	35	0
12	93	139	41	6	74	1	0	17	0
ARMM	70	42	5	2	27	0	0	8	0
CAR	35	74	31	0	6	1	0	36	0
CRG	52	96	43	16	22	1	0	14	0
NCR	260	96	12	1	28	8	0	47	0
PHL	**2,035**	**1,726**	**438**	**57**	**634**	**85**	**0**	**510**	**2**

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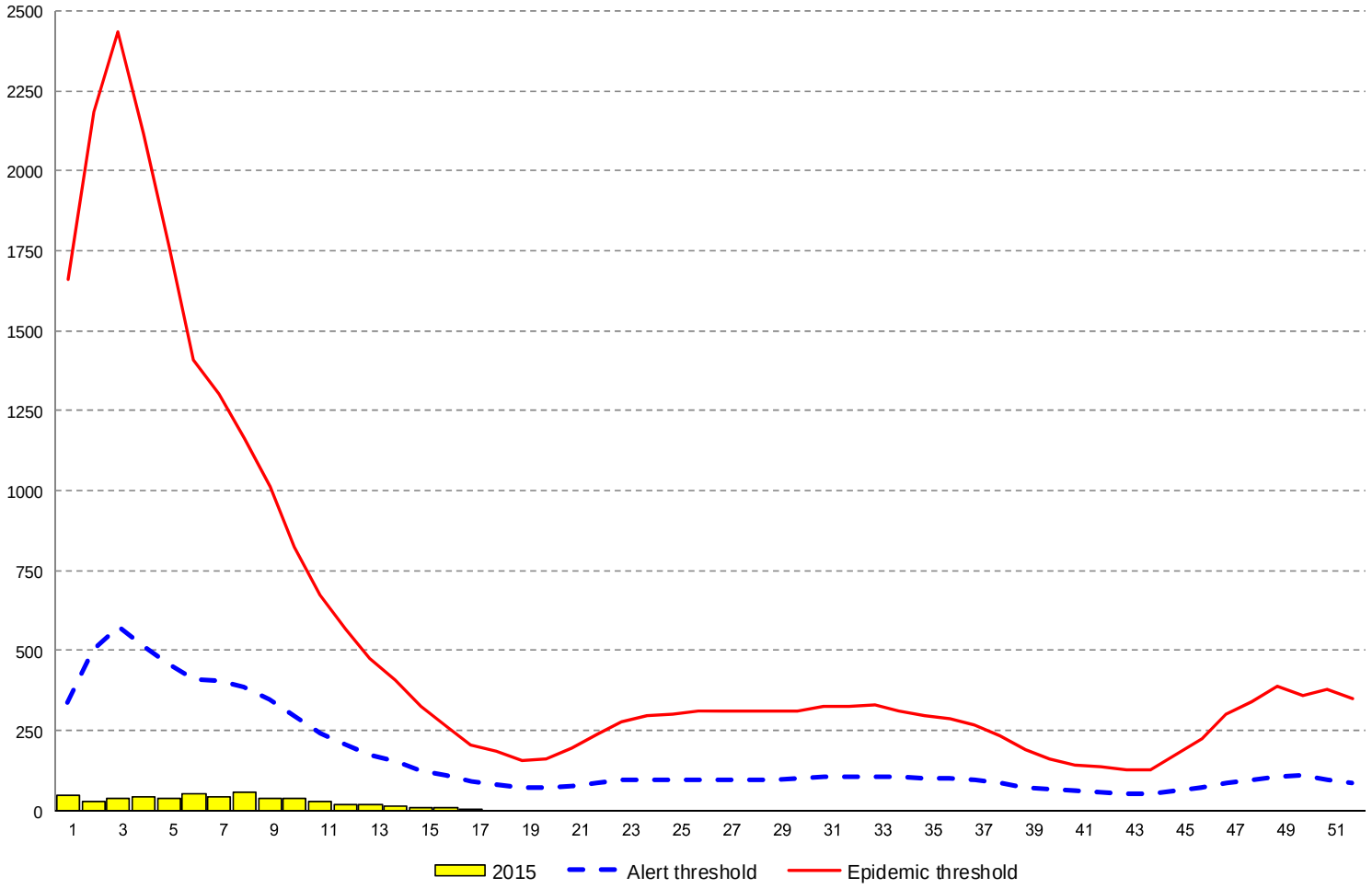
MEASLES-RUBELLA BULLETIN

Morbidity Week 17
April 26 – May 2, 2015

Morbidity Week	2015 cases	Alert Threshold	Epidemic Threshold
1	44	335	1,255
2	28	502	2,795
3	35	576	2,672
4	42	513	2,396
5	35	456	1,637
6	49	407	1,518
7	43	403	1,359
8	58	384	1,299
9	37	346	1,035
10	35	294	837
11	28	242	707
12	18	204	571
13	15	173	511
14	14	151	418
15	8	126	348
16	5	108	228
17	1	91	237
18		82	171
19		72	163
20		70	151
21		77	188
22		85	256
23		92	305
24		93	322
25		94	317
26		95	330
27		95	342
28		97	318
29		96	327
30		100	343
31		103	319
32		104	373
33		103	351
34		102	328
35		101	309
36		101	304
37		93	294
38		85	250
39		73	184
40		66	148
41		60	165
42		55	127
43		53	127
44		51	142
45		60	126
46		70	255
47		87	293
48		93	396
49		102	387
50		108	461
51		93	405
52		85	337

FIGURE 1. CONFIRMED* MEASLES ALERT AND EPIDEMIC THRESHOLD PHILIPPINES, JANUARY 1 – MAY 2, 2015 (n=495)



Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles

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FIGURE 2. DISTRIBUTION OF CONFIRMED* MEASLES CASES PHILIPPINES, JANUARY 1 – MAY 2, 2015 (n=495)

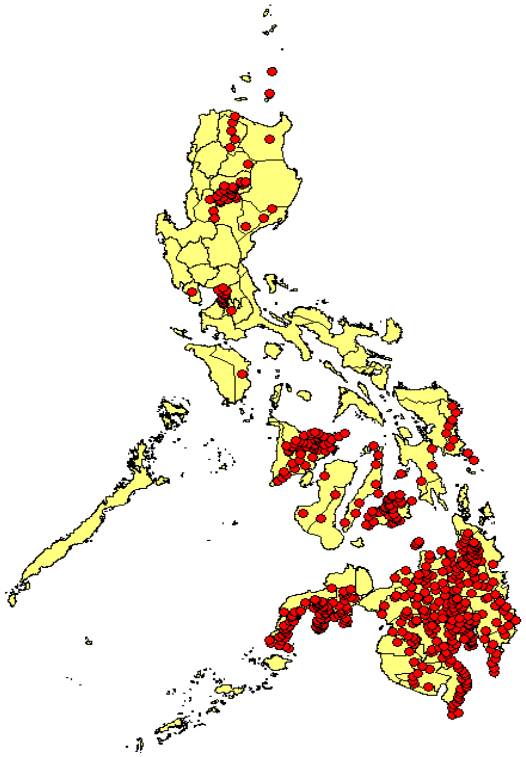


TABLE 2. CONFIRMED* MEASLES CASES AND DEATHS BY REGION PHILIPPINES, 2014 vs. 2015 (n=495)**

REGION	CASES			DEATHS			
	2015	2014	% CHANGE	2015	CFR (%)	2014	CFR (%)
1	1	761	↓-99.87	0	0.00	7	0.92
2	8	667	↓-98.80	0	0.00	1	0.15
3	1	2815	↓-99.96	0	0.00	11	0.39
4A	1	4818	↓-99.98	0	0.00	36	0.75
4B	1	347	↓-99.71	0	0.00	4	1.15
5	0	663	↓-100.00	0	0.00	5	0.75
6	56	942	↓-94.06	0	0.00	1	0.11
7	41	1143	↓-96.41	0	0.00	3	0.26
8	13	273	↓-95.24	0	0.00	4	1.47
9	77	268	↓-71.27	0	0.00	0	0.00
10	45	925	↓-95.14	0	0.00	3	0.32
11	94	1617	↓-94.19	2	2.13	3	0.19
12	47	1273	↓-96.31	0	0.00	2	0.16
ARMM	7	439	↓-98.41	0	0.00	3	0.68
CAR	31	213	↓-85.45	0	0.00	0	0.00
CRG	59	756	↓-92.20	0	0.00	2	0.26
NCR	13	5823	↓-99.78	0	0.00	32	0.55
PHL	**495**	**23743**	**↓-97.92**	**2**	**0.40**	**117**	**0.49**

2015** = as of May 2, 2015
Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles

**FIGURE 3. CONFIRMED* MEASLES CASES BY REGION AND MONTH
PHILIPPINES, 2014 VS. 2015** (n=495)**

2015 CASES 2014 CASES

FIGURE 3.1.

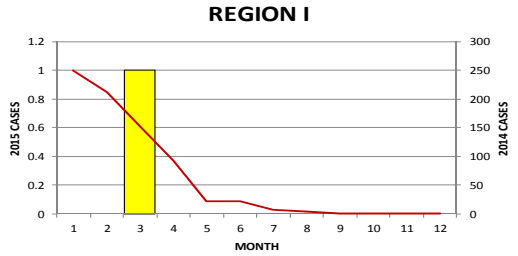


FIGURE 3.2.

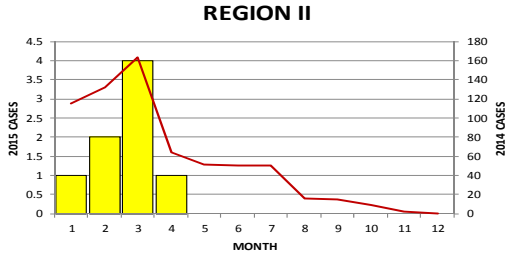


FIGURE 3.3.

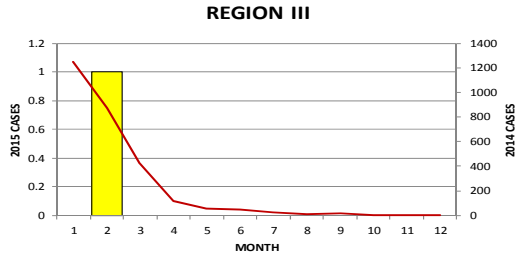


FIGURE 3.5.

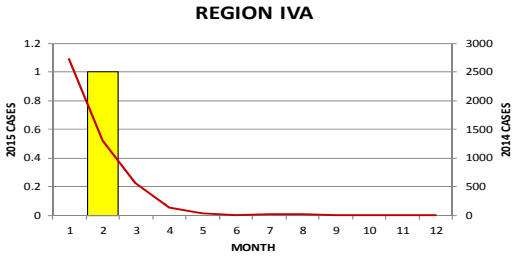


FIGURE 3.6.

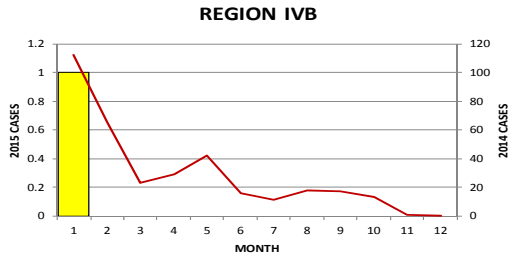


FIGURE 3.7.

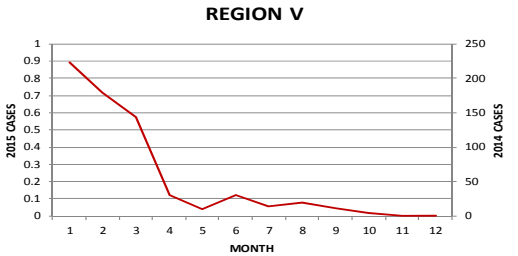


FIGURE 3.8.

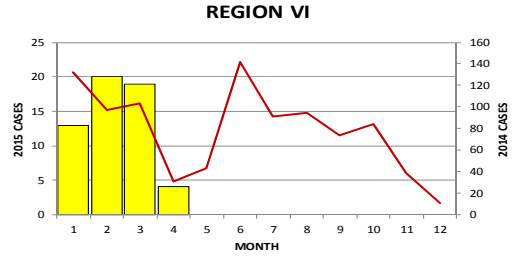


FIGURE 3.9.

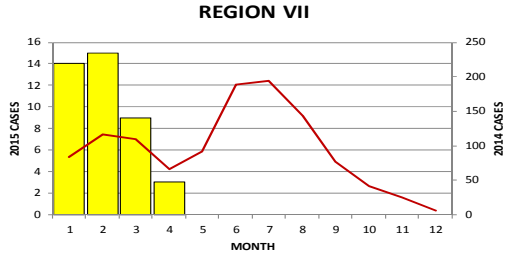


FIGURE 3.10.

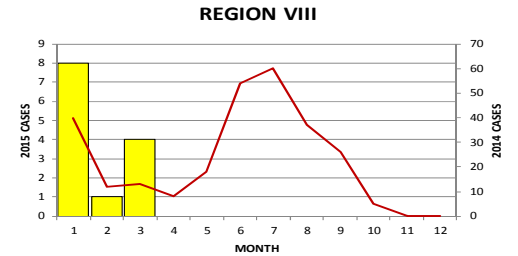


FIGURE 3.11.

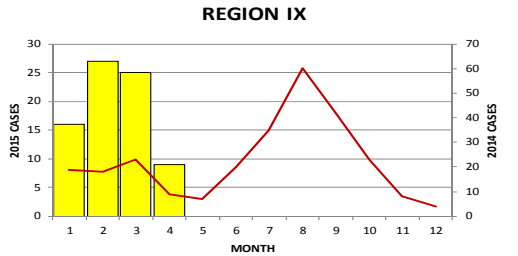


FIGURE 3.12.

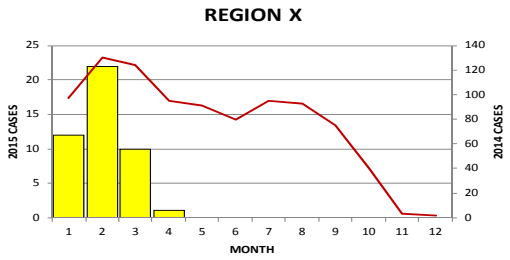


FIGURE 3.13.

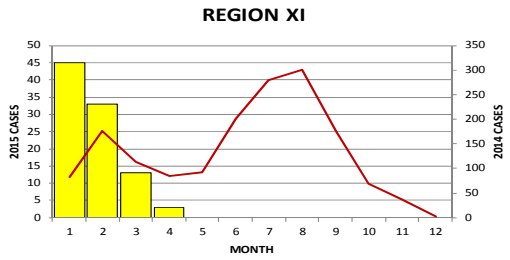


FIGURE 3.14.

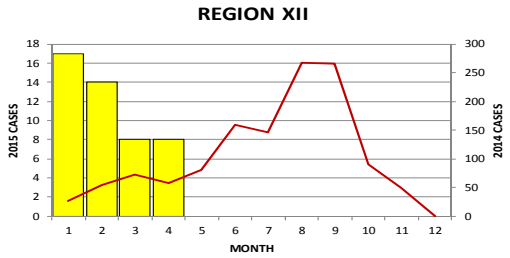


FIGURE 3.15.

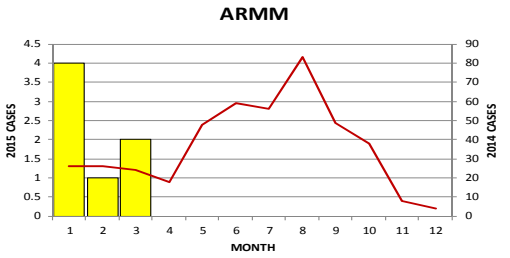


FIGURE 3.16.

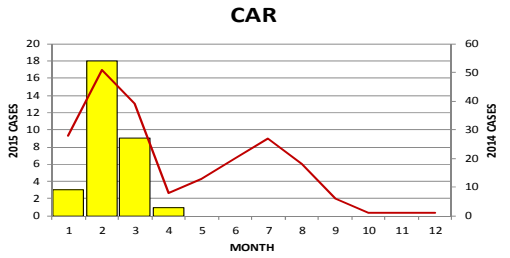


FIGURE 3.17.

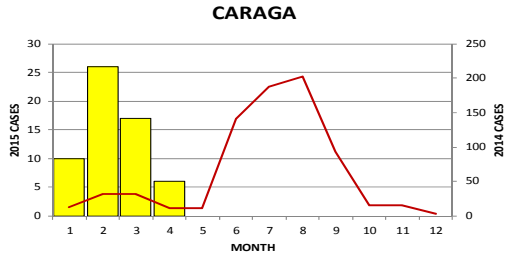


FIGURE 3.18.

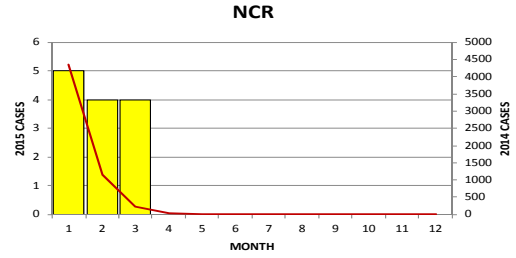
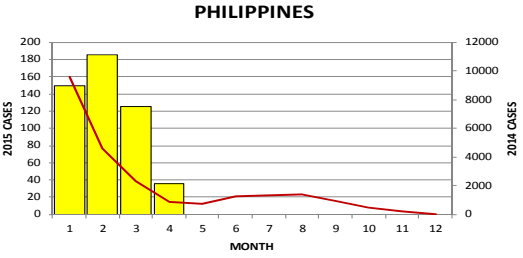


FIGURE 3.19.



2015** = as of May 2, 2015
Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles

FIGURE 4. IMMUNIZATION STATUS OF CONFIRMED* MEASLES CASES BY AGE GROUP PHILIPPINES, JANUARY 1 – MAY 2, 2015 (n=495)

VACCINATED NOT VACCINATED UNKNOWN

FIGURE 4.1.

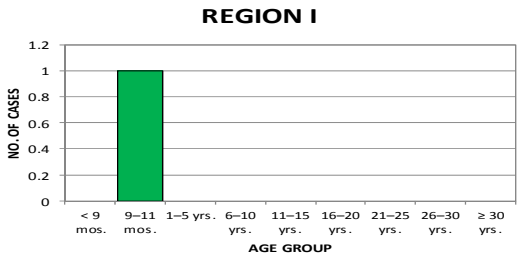


FIGURE 4.2.

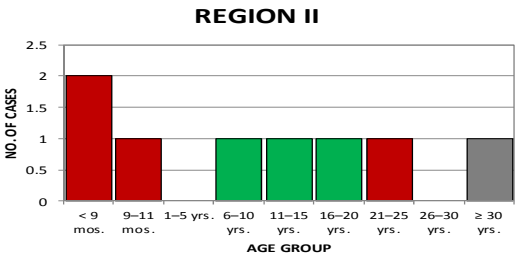


FIGURE 4.3.

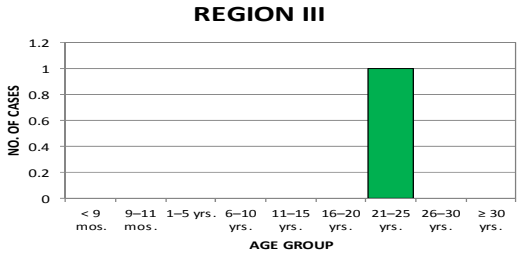


FIGURE 4.4.

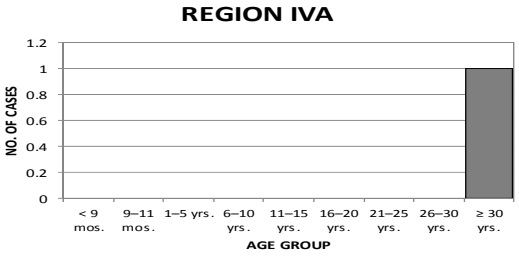


FIGURE 4.5.

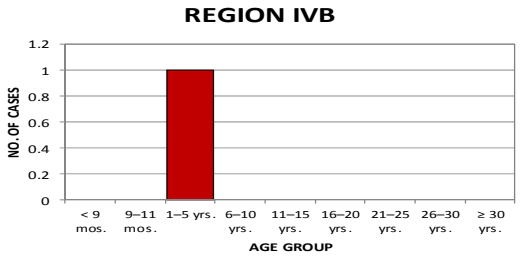


FIGURE 4.6.

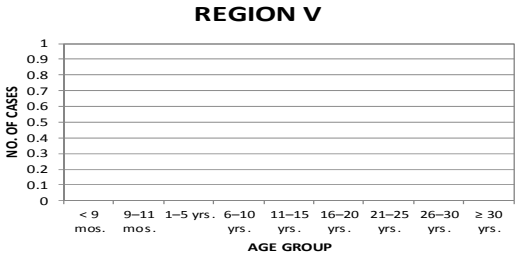


FIGURE 4.7.

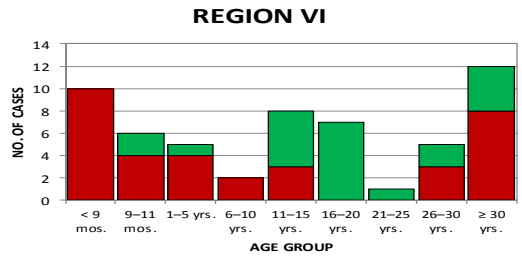


FIGURE 4.8.

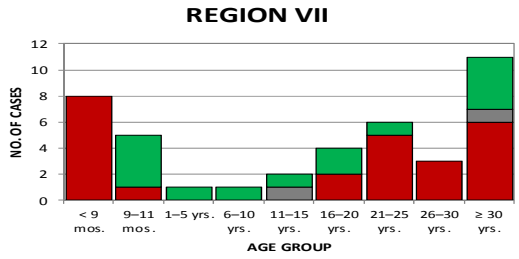


FIGURE 4.9.

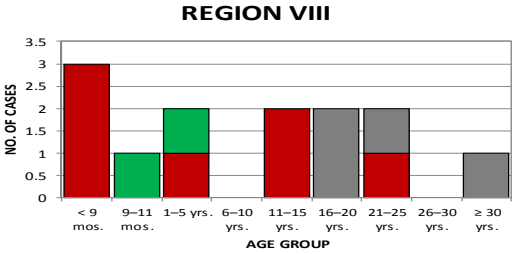


FIGURE 4.10.

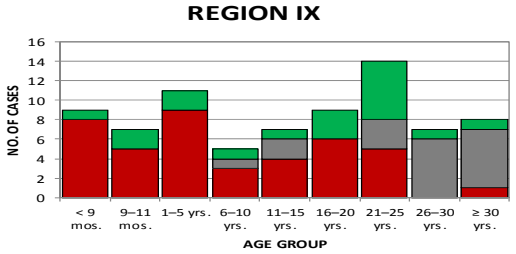


FIGURE 4.11.

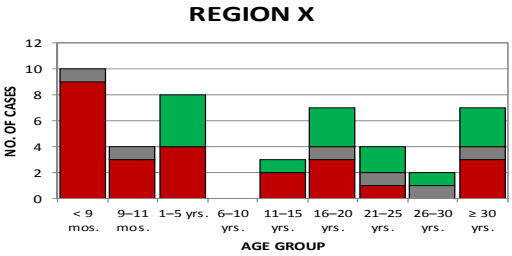
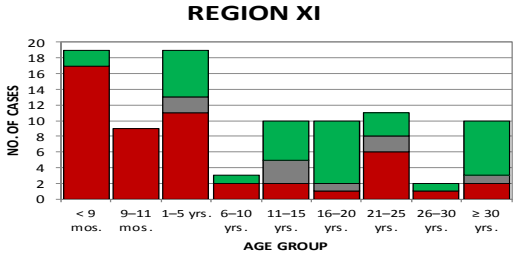


FIGURE 4.12.



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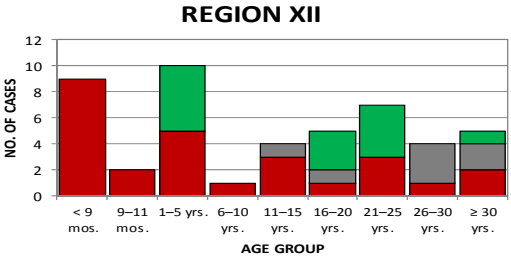


FIGURE 4.14.

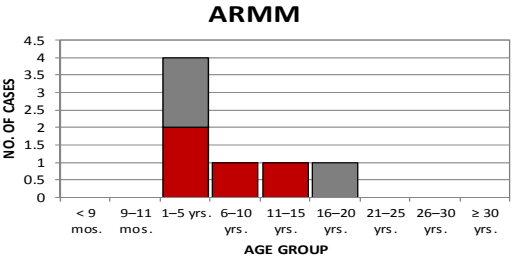


FIGURE 4.15.

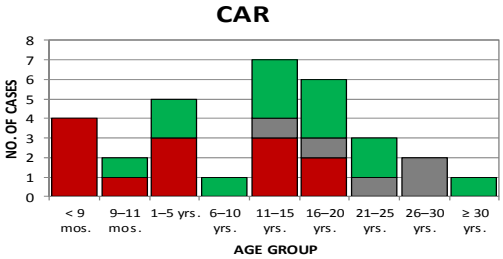


FIGURE 4.16.

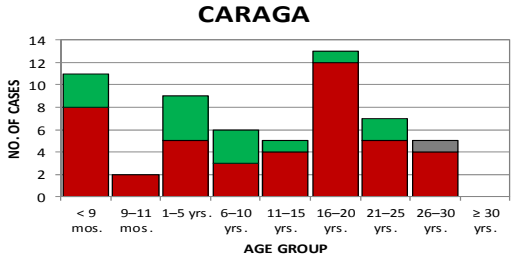


FIGURE 4.17.

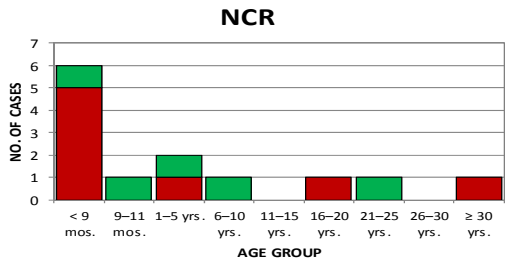
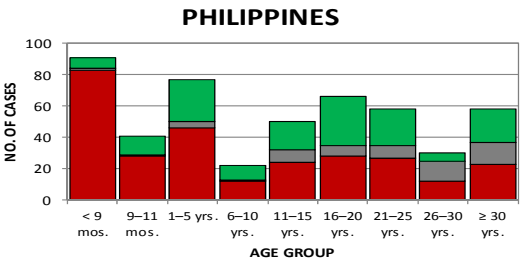


FIGURE 4.18.



Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles

**FIGURE 5. CONFIRMED* MEASLES CASES BY AGE GROUP AND SEX
PHILIPPINES, JANUARY 1 – MAY 2, 2015 (n=495)**

MALE FEMALE

FIGURE 5.1.

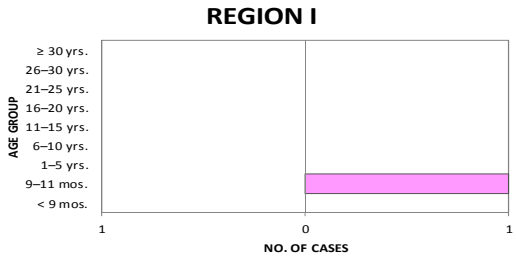


FIGURE 5.2.

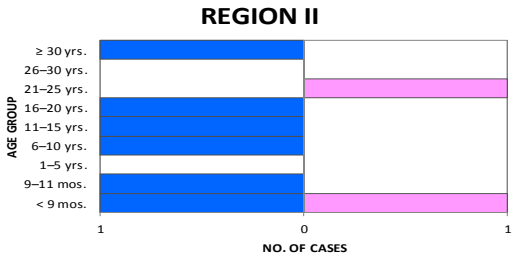


FIGURE 5.3.

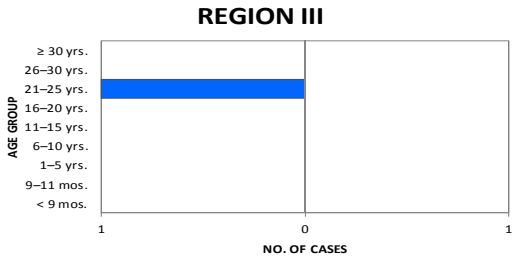


FIGURE 5.4.

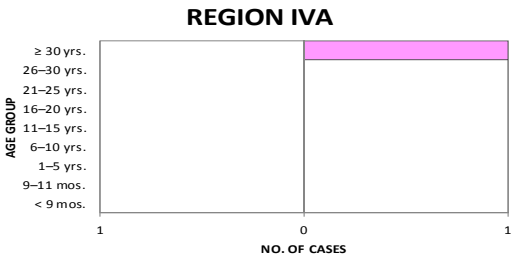


FIGURE 5.5.

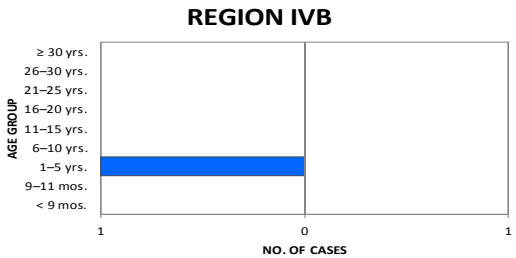
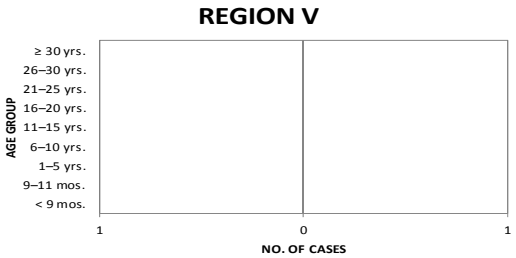


FIGURE 5.6.



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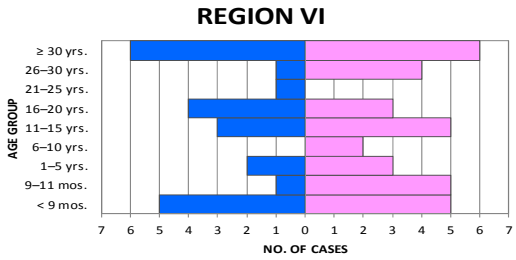

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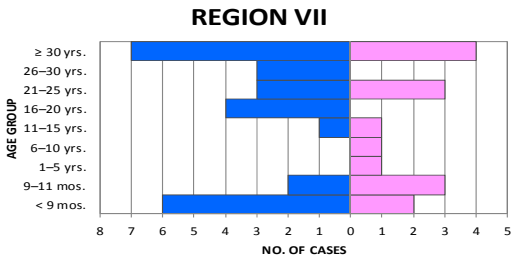
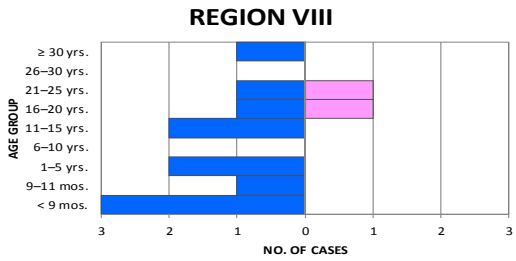


FIGURE 5.9.



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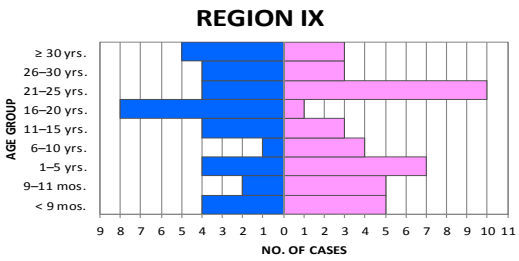


FIGURE 5.11.

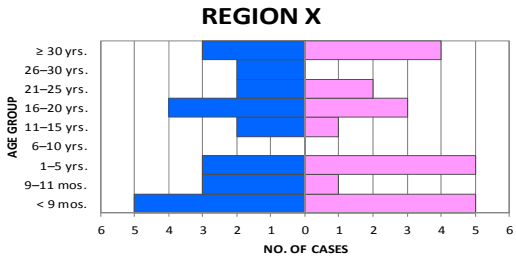


FIGURE 5.12.

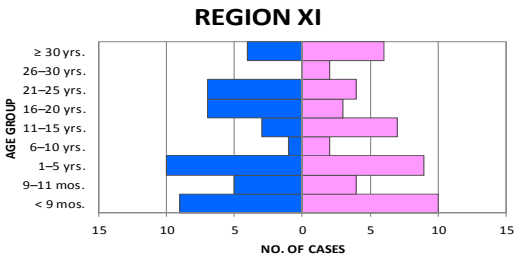


FIGURE 5.13.

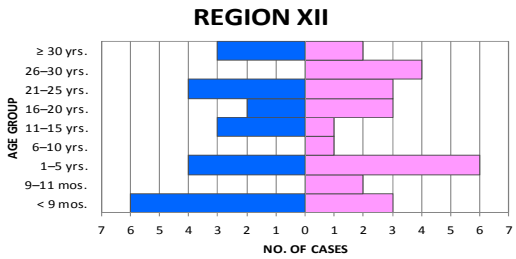


FIGURE 5.14.

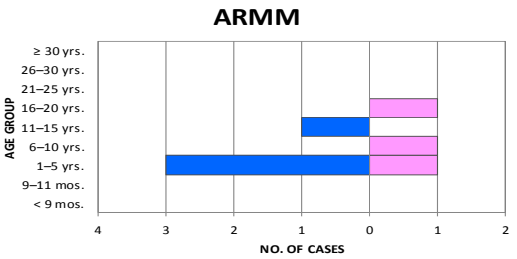


FIGURE 5.15.

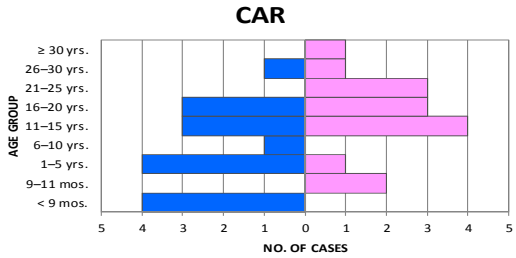


FIGURE 5.16.

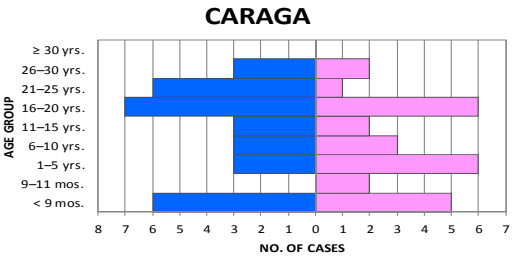


FIGURE 5.17.

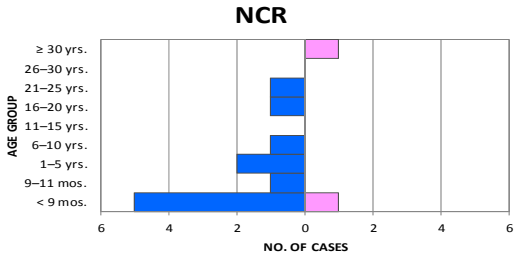
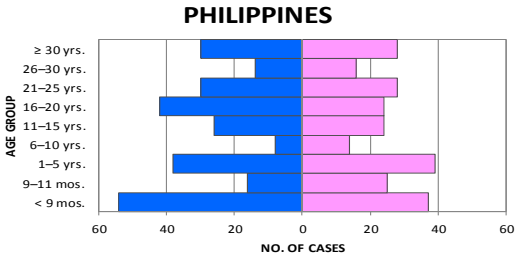


FIGURE 5.18.



Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles

FIGURE 6. CASE FATALITY RATIO AMONG CONFIRMED* MEASLES CASES BY AGE GROUP PHILIPPINES, JANUARY 1 – MAY 2, 2015 (n=2)

FIGURE 6.1.

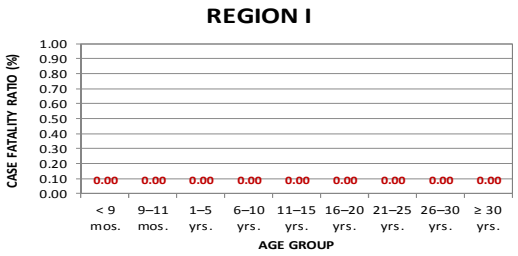


FIGURE 6.2.

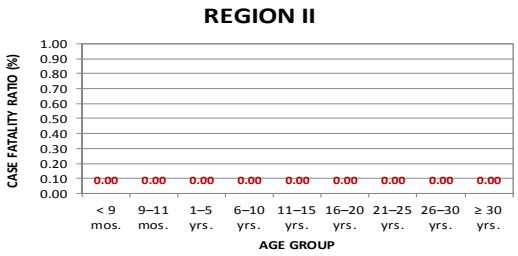


FIGURE 6.3.

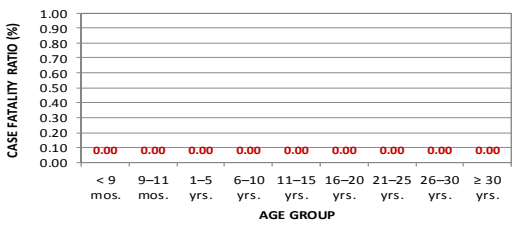


FIGURE 6.4.

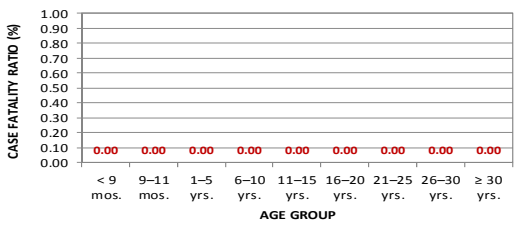


FIGURE 6.5.

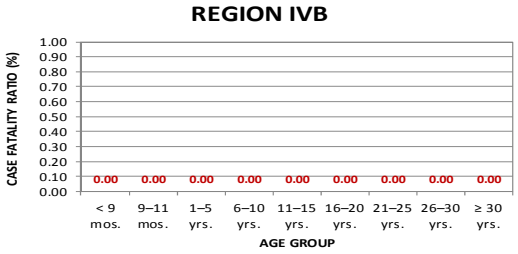


FIGURE 6.6.

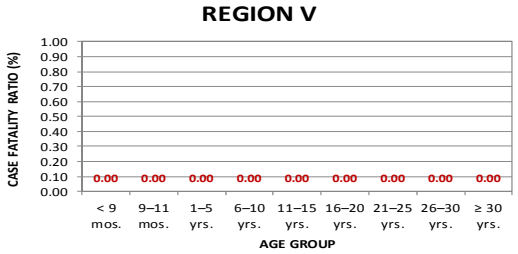


FIGURE 6.7.

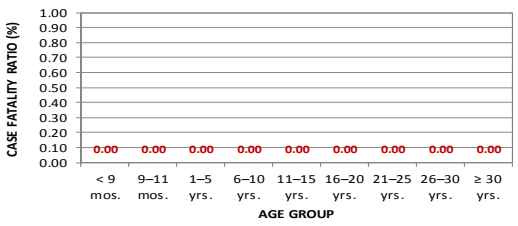


FIGURE 6.8.

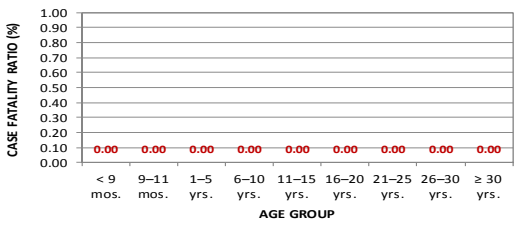


FIGURE 6.9.

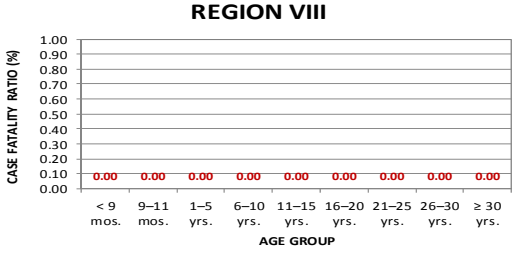


FIGURE 6.10.

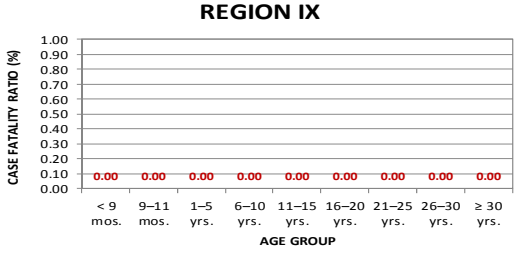


FIGURE 6.11.

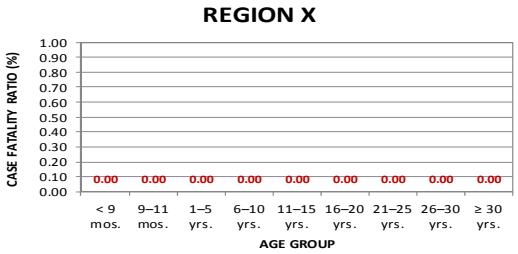


FIGURE 6.12.

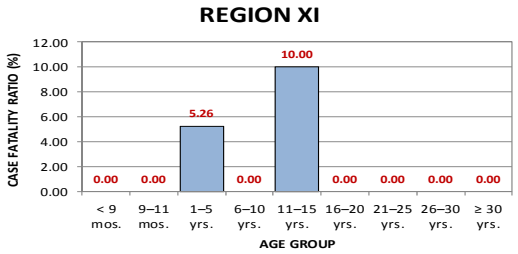


FIGURE 6.13.

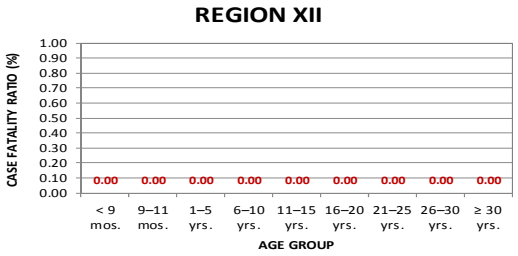


FIGURE 6.14.

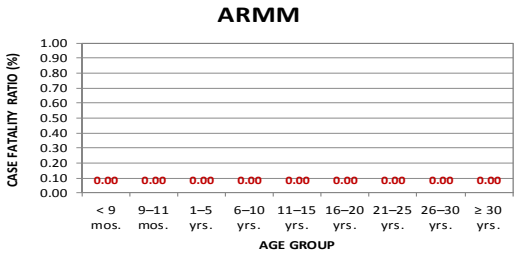


FIGURE 6.15.

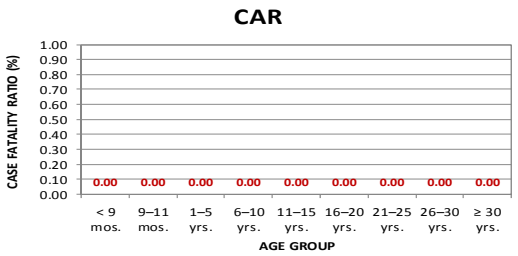


FIGURE 6.16.

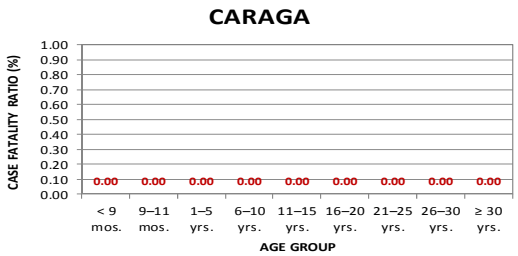


FIGURE 6.17.

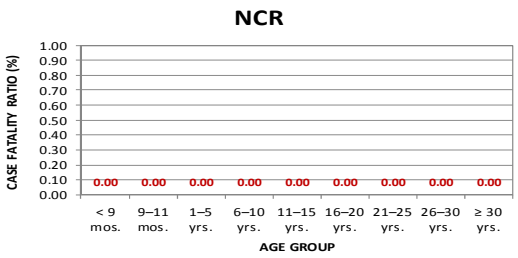
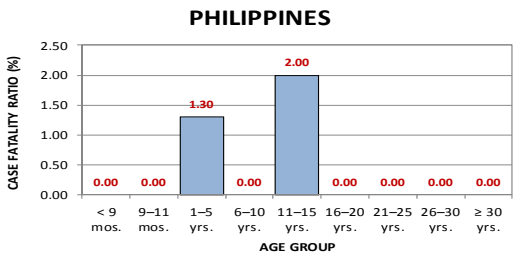


FIGURE 6.18.



Confirmed* Measles cases = Laboratory confirmed + Epi-linked confirmed Measles

Measles Elimination in the Philippines

The goal for Measles elimination in the Western Pacific Region was set in 2005. In September 2012, the Regional Committee for the Western Pacific Region encouraged its member states to undertake the challenges for Measles elimination.

The Department of Health through the Epidemiology Bureau take part in achieving this goal by closely monitoring the standard surveillance indicators to ensure that the Measles elimination goal will be attained and sustained. Currently, the Philippines has exceeded the low incidence target rate of <1/1million population (14.59/1,000,000 population), illustrating that the country needs to exert more efforts in attaining the elimination goal.

TABLE 3. MEASLES SURVEILLANCE INDICATORS BY REGION
PHILIPPINES, JANUARY 1 – MAY 2, 2015

REGION	MEASLES INCIDENCE RATE		BLOOD ADEQUACY RATE		SUSPECT MEASLES CASES ADEQUATELY INVESTIGATED		SUSPECT MEASLES REPORTING RATE		NON-MEASLES/ NON-RUBELLA RATE		MEASLES COMPATIBLE %	
	Target: <1/1,000,000 Pop.		Target: ≥80%		Target: ≥80%		Target: ≥2/100,000 Pop.		Target: ≥2/100,000 Pop.		Target: <10%	
	2014	2015*	2014	2015	2014	2015	2014	2015*	2014	2015*	2014	2015
1	152.42	0.59	91	83	80	51	48.23	3.50	3.89	1.90	59	32
2	195.19	6.93	65	78	53	54	60.25	5.46	2.19	1.47	64	56
3	254.46	0.27	79	93	59	44	58.94	1.86	4.10	1.30	49	20
4A	337.15	0.20	72	65	33	26	64.92	3.12	4.21	1.63	41	42
4B	117.53	1.00	43	46	27	29	62.90	2.40	2.17	0.40	77	63
5	115.22	0.00	71	100	60	100	35.12	0.31	2.10	0.26	61	17
6	125.53	22.10	96	97	52	67	33.69	6.91	7.45	3.00	38	5
7	156.38	16.54	90	98	66	84	29.72	3.23	3.89	1.21	33	3
8	63.18	8.91	24	19	15	15	32.44	7.06	1.94	0.14	74	85
9	72.87	61.68	65	69	52	48	21.07	14.10	1.50	3.20	58	33
10	197.91	28.31	63	50	52	45	54.09	11.64	3.51	1.13	57	65
11	333.87	57.12	84	92	73	55	69.64	11.24	6.71	2.13	42	29
12	280.13	30.29	50	54	39	40	93.65	8.96	4.40	1.10	65	53
ARMM	126.76	5.98	46	38	33	19	45.13	3.59	1.24	0.68	69	64
CAR	122.88	52.77	96	96	86	76	37.73	12.60	5.13	6.13	51	8
CRG	292.86	67.58	78	84	70	33	76.82	11.00	5.58	1.60	54	23
NCR	456.60	3.01	71	73	41	14	108.33	2.22	5.37	1.09	53	29
PHL	**237.73**	**14.59**	**71**	**72**	**48**	**45**	**59.27**	**5.09**	**4.15**	**1.50**	**52**	**37**

2015* - Annualized rate

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

Clinically 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

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 as non-measles/non-rubella – A case that meets the clinical case definition for measles and discarded as non-measles/rubella case.

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.