



Classification of Suspect Measles-Rubella Cases

A total of 2,673 suspect measles-rubella cases were reported nationwide from January 1 to September 30, 2017. Of these, 1,908 (71.38%) were tested. Among the suspect cases, 117 (4.38%) cases were classified as **laboratory confirmed measles**, 406 (15.19%) cases were classified as **laboratory confirmed rubella** and 17 (0.64%) cases were classified as **epidemiologically-linked confirmed rubella**. Six (0.22%) cases had co-infection and tested positive for both measles and rubella virus. Measles cases are **108.47% higher** while rubella cases are **266.67% higher** than the previous year of the same time period (see Table 2). Four deaths (CFR=3.25%) were reported from Region III among the confirmed measles cases.

TABLE 1. MEASLES AND RUBELLA CASES BY REGION, PHILIPPINES, JANUARY 1 – SEPTEMBER 30, 2017 (N=2,673)

REGION	REPORTED	CONFIRMED CASES				NEGATIVE (DISCARDED AS NON-MEASLES/ RUBELLA)	MEASLES COMPATIBLE	PENDING CLASSIFICATION
		LABORATORY CONFIRMED MEASLES	LABORATORY CONFIRMED RUBELLA	EPI-LINKED CONFIRMED RUBELLA	POSITIVE FOR BOTH MEASLES & RUBELLA (CO-INFECTION)			
I	319	2	32	0	0	194	80	11
II	45	0	5	0	0	31	6	3
III	293	21	41	0	1	189	34	7
IVA	468	10	90	2	0	271	74	21
MIMAROPA	44	0	1	0	0	19	24	0
V	57	0	3	0	0	35	18	1
VI	253	0	88	4	1	140	8	12
VII	44	0	5	0	2	31	6	0
VIII	73	0	31	9	0	21	12	0
IX	138	45	5	0	1	25	54	8
X	111	1	6	0	0	39	56	9
XI	55	1	6	0	0	45	2	1
XII	70	1	2	0	0	63	2	2
ARMM	217	30	1	0	1	8	173	4
CAR	171	0	57	1	0	66	43	4
CRG	41	1	1	0	0	19	19	1
NCR	274	5	32	1	0	183	47	6
PHL	2,673	117	406	17	6	1,379	658	90

see Annex A for confirmed measles cases by barangay

FIGURE 1. GEOGRAPHICAL DISTRIBUTION OF CONFIRMED CASES*, PHILIPPINES, JANUARY 1 – SEPTEMBER 30, 2017

REGION	MEASLES	RUBELLA
I	2	32
II	0	5
III	22	42
IVA	10	92
MIMAROPA	0	1
V	0	3
VI	1	93
VII	2	7
VIII	0	40
IX	46	6
X	1	6
XI	1	6
XII	1	2
ARMM	31	2
CAR	0	58
CRG	1	1
NCR	5	33

*lab confirmed and epi-linked confirmed cases

Legend:
 1 dot = 1 case
 ● Measles
 ● Rubella

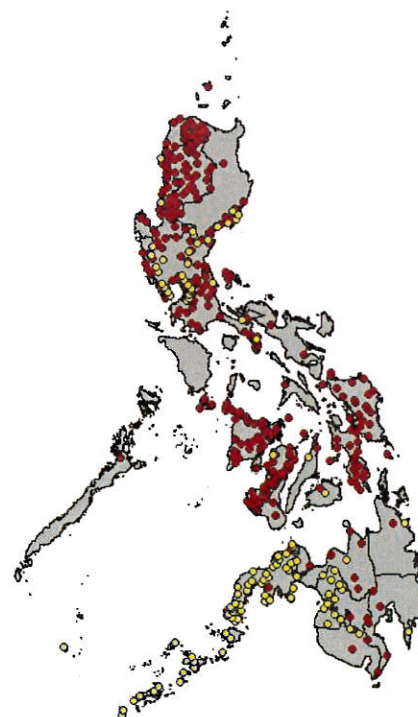




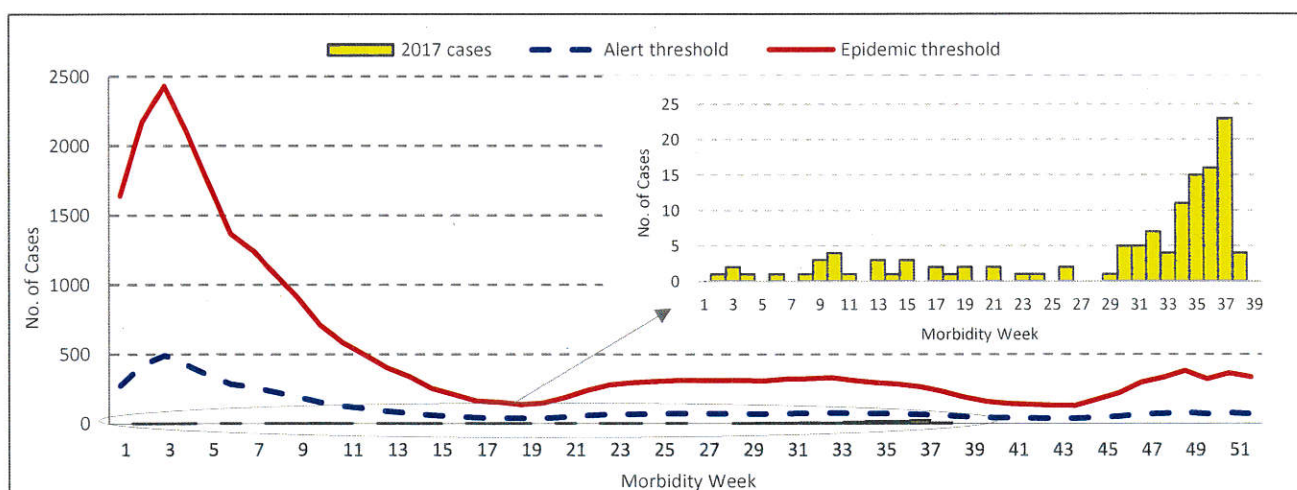
Figure 1 shows the distribution of cases among regions. Confirmed measles are highest in Mindanao specifically in Region IX with 46 (37.40%) cases and ARMM with 31 (25.20%) cases followed by Region III with 22 (17.89%) cases.

Meanwhile, confirmed rubella cases are highest in number in Region VI with 93 (21.68%) cases followed by Region IVA with 92 (21.45%) cases and CAR with 58 (13.52%) cases.

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

REGION	CONFIRMED MEASLES CASES			CONFIRMED RUBELLA CASES		
	2017	2016	% CHANGE	2017	2016	% CHANGE
I	2	5	↓ -60.00	32	3	↑ 966.67
II	0	2	↓ -200.00	5	0	↑ 500.00
III	22	2	↑ 1000.00	42	6	↑ 600.00
IVA	10	7	↑ 42.86	92	6	↑ 1433.33
MIMAROPA	0	0	⇒ 0.00	1	2	↓ -50.00
V	0	3	↓ -300.00	3	2	↑ 50.00
VI	1	3	↓ -66.67	93	54	↑ 72.22
VII	2	10	↓ -80.00	7	4	↑ 75.00
VIII	0	2	↓ -200.00	40	4	↑ 900.00
IX	46	11	↑ 318.18	6	0	↑ 600.00
X	1	2	↓ -50.00	6	4	↑ 50.00
XI	1	0	↑ 100.00	6	5	↑ 20.00
XII	1	1	⇒ 0.00	2	2	⇒ 0.00
ARMM	31	1	↑ 3000.00	2	0	↑ 200.00
CAR	0	3	↓ -300.00	58	7	↑ 728.57
CRG	1	2	↓ -50.00	1	0	↑ 100.00
NCR	5	5	⇒ 0.00	33	18	↑ 83.33
PHL	123	59	↑ 108.47	429	117	↑ 266.67

FIGURE 2. CONFIRMED MEASLES ALERT AND EPIDEMIC THRESHOLDS, PHILIPPINES, JANUARY 1 – SEPTEMBER 30, 2017 (n=123)



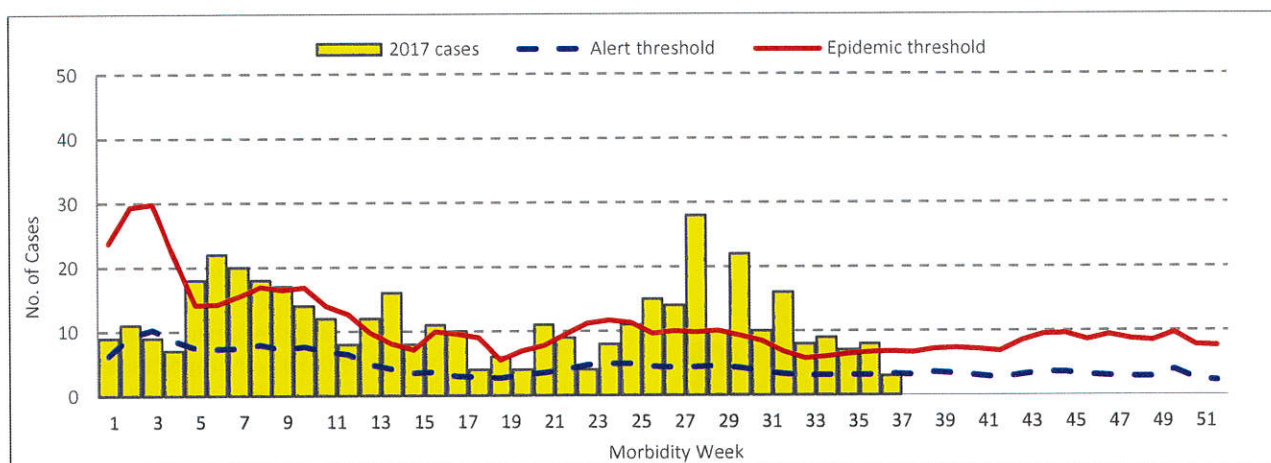
The current number of confirmed measles cases is below the alert threshold as shown in Figure 2. Annualized measles incidence rate is 1.56 per 1,000,000 population exceeding the target incidence of <1 per 1,000,000.

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



Figure 3 as shown below reflects the confirmed rubella cases in relation to the rubella alert and epidemic thresholds. It can be noted that the weekly number of rubella cases have almost consistently exceeded the alert threshold from the start of the year until morbidity week 37. In various weeks, the epidemic threshold was reached. Annualized rubella incidence rate is 5.45 per 1,000,000 population, indicating a high incidence of rubella in the country.

FIGURE 3. CONFIRMED RUBELLA ALERT AND EPIDEMIC THRESHOLDS, PHILIPPINES, JANUARY 1 – SEPTEMBER 30, 2017 (n=429)

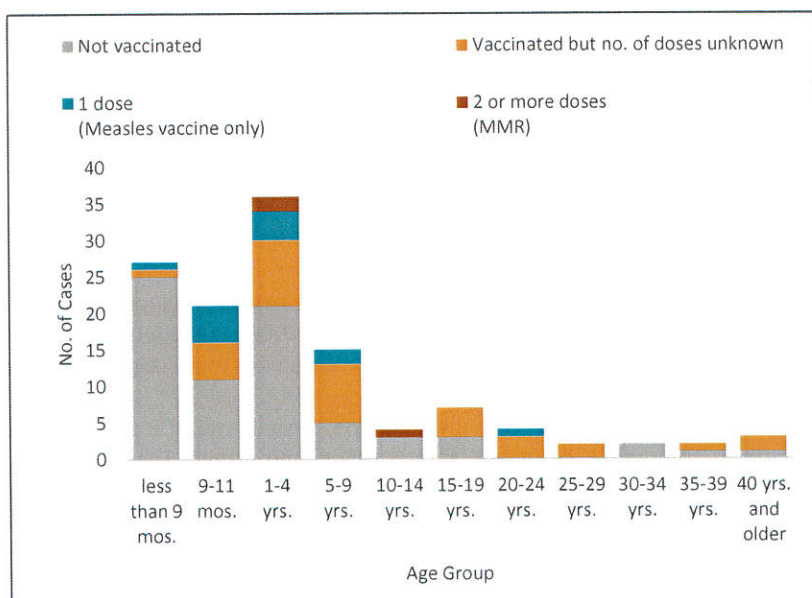


PCR Testing and Genotyping of Oropharyngeal or Nasopharyngeal Swabs (OPS/NPS)

There were 113 oropharyngeal/nasopharyngeal swabs submitted and tested by PCR for the current year. Among these, 2 cases revealed presence of measles virus RNA and 28 cases with rubella virus RNA. Of the 28 cases with rubella virus, 22 have 2B genotype results based on swab testing.

Profile of Cases: MEASLES

FIGURE 4. VACCINATION STATUS OF CONFIRMED MEASLES CASES BY AGE GROUP, PHILIPPINES, JANUARY 1 – SEPTEMBER 30, 2017 (n=123)

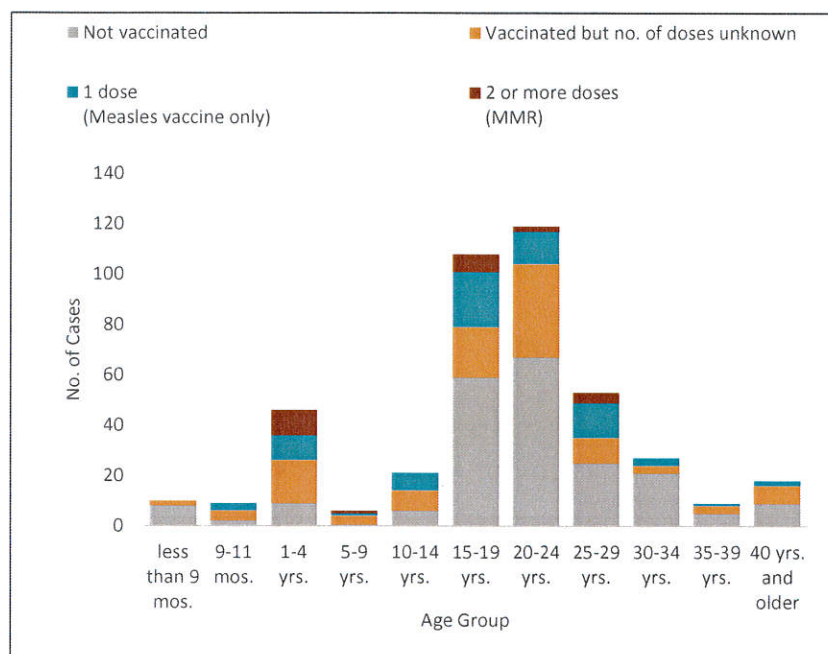


Among the confirmed measles cases, 72 (58%) cases were female. Most of the cases belong to the under five age groups. Thirty six (29.27%) of the confirmed measles cases belong to the 1-4 year old age group, 27 (21.95%) cases to the less than 9 month old age group and 21 (17.07%) cases to the 9-11 month old age group. Seventy two (58.54%) of the cases were not vaccinated, 35 (28.46%) cases were vaccinated but with unknown number of doses, 13 (10.57%) cases received 1 dose of measles vaccine and 3 (2.44%) cases received 2 doses of measles-containing vaccine as shown in Figure 4.



Profile of Cases: RUBELLA

FIGURE 5. VACCINATION STATUS OF CONFIRMED RUBELLA CASES BY AGE GROUP, PHILIPPINES, JANUARY 1 – SEPTEMBER 30, 2017 (n=429)



Of the confirmed rubella cases, 226 (53%) cases were female. One hundred nineteen (27.93%) of the confirmed rubella cases belong to the 20-24 year old age group followed by the 15-19 year old age group with 108 (25.35%) cases. It can be observed that most of the cases are among adults. Almost half (49.65%) of the cases were not vaccinated while only 24 (5.59%) received 2 or more doses inclusive of MMR vaccine as shown in Figure 5.

Among the female confirmed rubella cases, 7 (3.08%) were reported as pregnant. All pregnant cases are referred to the Maternal, Newborn and Child Health and Nutrition (MNCHN) program for monitoring of pregnancy and outcome of delivery. Exposure to rubella during pregnancy increases the risk of Congenital Rubella Syndrome (CRS) affecting the newborn.

Clustering of Measles-Rubella Cases

Nine measles and 18 rubella clusters were identified since January 2017. These cases were related in terms of place of residences and onset of symptoms, located in the same barangay or identified place of transmission and occurred within 4 consecutive weeks. (see Annex B for list of new clusters)

Actions Taken for Clusters and Cases:

1. Validation of clustering with the regions concerned
2. Provision of recommendations for surveillance and coordination with the program
3. Data dissemination to the Disease Prevention and Control Bureau (DPCB) specifically Family Health Office (FHO) and Infectious Disease Office (IDO) providing updates on current status of measles-rubella cases for appropriate action

Measles Surveillance Performance Indicators

Table 3 presents the surveillance performance of regions based on the indicators for measles surveillance. Countrywide incidence rate of 1.56 per 1,000,000 population was reached, not achieving the target of <1 per 1,000,000 population. Regions III, IX and ARMM did not meet the regional targets which implies increased occurrence of measles in these regions, therefore raising the countrywide incidence rate beyond the target.

Surveillance performance on adequate blood collection, adequate case investigation, suspect measles reporting, non-measles/non-rubella reporting and reducing measles compatible cases are all still below the target. These surveillance indicators gauge the capacity of the country in achieving the measles elimination goal. Development of strategies and towards a highly functional surveillance system is vital towards attainment of measles control and eventually, towards elimination. Strategies may include intensification of active surveillance across the country through enhanced case reporting, specimen collection and case investigation.

see Annex C for measles surveillance performance indicators dictionary



TABLE 3. MEASLES SURVEILLANCE PERFORMANCE INDICATORS BY REGION,
PHILIPPINES, 2016 vs. 2017


REGION	POPULATION 2017	ANNUALIZED MEASLES INCIDENCE RATE		ADEQUATE BLOOD COLLECTION RATE		ADEQUATE CASE INVESTIGATION RATE		ANNUALIZED SUSPECT MEASLES REPORTING RATE		ANNUALIZED NON- MEASLES/ NON- RUBELLA REPORTING		PERCENTAGE OF MEASLES COMPATIBLE	
		Target: <1/1,000,000 Pop.		Target: ≥80%		Target: ≥80%		Target: ≥2/100,000 Pop.		Target: ≥2/100,000 Pop.		Target: <10%	
		2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
I	5,263,258	1.56	0.51	44	74	40	67	3.97	8.08	1.51	4.91	55	25
II	3,595,623	0.57	0.00	80	84	75	84	1.68	1.67	1.28	1.15	20	13
III	11,427,139	0.17	2.57	81	86	77	80	1.25	3.42	0.93	2.21	19	12
IVA	14,659,353	0.86	0.91	74	81	61	71	2.08	4.26	1.32	2.46	23	16
MIMAROPA	3,216,466	0.00	0.00	47	41	42	41	1.86	1.82	0.88	0.79	49	55
V	6,266,652	0.68	0.00	76	63	75	58	1.00	1.21	0.59	0.74	24	32
VI	7,919,887	0.52	0.17	95	93	90	69	3.91	4.26	2.93	2.36	5	3
VII	7,689,735	1.32	0.35	96	84	93	80	1.28	0.76	1.03	0.54	4	14
VIII	4,704,894	0.45	0.00	35	50	33	71	1.76	2.07	0.45	0.60	65	16
IX	3,896,152	3.15	15.74	53	54	47	44	1.91	4.72	0.84	0.86	40	39
X	4,857,342	0.41	0.27	43	49	38	41	6.00	3.05	2.47	1.07	56	50
XI	5,153,130	0.40	0.26	88	96	86	89	1.97	1.42	1.59	1.16	12	4
XII	4,780,211	0.21	0.28	84	97	81	93	1.53	1.95	1.22	1.76	16	3
ARMM	3,896,848	0.56	10.61	26	20	26	16	0.53	7.42	0.08	0.27	74	80
CAR	1,847,347	1.67	0.00	84	71	84	57	4.46	12.34	3.18	4.76	13	25
CRG	2,828,583	1.13	0.47	67	51	67	37	2.30	1.93	1.39	0.90	34	46
NCR	12,918,977	0.45	0.52	76	82	70	72	1.76	2.83	1.11	1.89	19	17
PHL	104,921,597	0.73	1.56	70	72	65	63	2.16	3.40	1.30	1.75	29	25
LEGEND:		<1	≥1	≥80%	<80%	≥80%	<80%	≥2/100,000 Pop.	<2/100,000 Pop.	≥2/100,000 Pop.	<2/100,000 Pop.	<10%	≤50%
													>50%

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ANNEX A. CONFIRMED MEASLES AND RUBELLA CASES BY BARANGAY

CONFIRMED MEASLES CASES PHILIPPINES, JANUARY 1 - SEPTEMBER 30, 2017 (n=123)				
REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CONFIRMED CASES
01	LA UNION	AGOO	SANTA ANA	1
	PANGASINAN	DAGUPAN CITY	MAYOMBO	1
03	BULACAN	GUIGUINTO	DAUNGAN	1
			POBLACION	1
		MARILAO	PRENZA I	1
	PAMPANGA	CITY OF SAN FERNANDO	XEVORA	1
		LUBAO	SANTA CRUZ	1
		MABALACAT CITY	TABUN	1
	TARLAC	CAPAS	O'DONNELL	1
		LA PAZ	SAN ROQUE (POB.)	1
		PANQUI	ABOGADO	1
		SAN JOSE	BURGOS	1
		TARLAC CITY	CUT-CUT II	3
			MATATALAIB	2
			SAN ISIDRO	2
			SAN JUAN DE MATA	2
			SAN LUIS	1
			SAN PASCUAL	1
04A	BATANGAS	BATANGAS CITY	SAN RAFAEL	1
		LIPA CITY	SAN JOSE SICO	1
			SIRANG LUPA	1
	CAVITE	DASMARIÑAS CITY	MARAUOY	1
			SANTA ANA	1
		TANZA	EMMANUEL BERGADO I	1
	QUEZON	TAYABAS	SANTA MARIA (BARANGAY 20)	1
	RIZAL	ANTIPOLO CITY	SANJA MAYOR	1
			BAGUIO	1
			SAN JOSE	1
06	AKLAN	TANGALAN	BAYBAY	1
07	CEBU	CEBU CITY	QUIOT PARDO	1
		CONSOLACION	LAMAC	1
09	BASILAN	ISABELA CITY	BALUNO	1
			SANTA CRUZ (POB.)	1
			TABUK (POB.)	1
			TIMPUL	1
	ZAMBOANGA DEL NORTE	DIPOLOG CITY	ESTAKA	1
	ZAMBOANGA DEL SUR	ZAMBOANGA CITY	UNSPECIFIED	5
			AYALA	1
			BALUWASAN	1
			CALIANAN	1
			CAWIT	1
			GUIWAN	1
			GUIWAN PORCENTRO	1
			KALAMBUAN	1
			LUNZURAN	1
			MERCEDES	4
			QUINIPUT	1
			RECODO	1
			SAN JOSE	1
			SAN JOSE GUSU	1
			SAN ROQUE	1
			SANTA MARIA	1



CONFIRMED MEASLES CASES PHILIPPINES, JANUARY 1 - SEPTEMBER 30, 2017 (n=123)				
REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CONFIRMED CASES
09	ZAMBOANGA DEL SUR	ZAMBOANGA CITY	SANTO NIÑO	1
			TALON-TALON	5
			TETUAN	1
			TUGBUNGAN	1
			TUMAGA	5
	ZAMBOANGA SIBUGAY	KABASALAN	UNSPECIFIED	1
			BUAYAN	1
			MALANGAS	GACBUSAN
10	MISAMIS ORIENTAL	MANTICAO	REBOCON	1
11	DAVAO DEL NORTE	ISLAND GARDEN CITY OF SAMAL	POBLACION	1
12	SOUTH COTABATO	SURALLAH	SAN ISIDRO (BABAK)	1
ARMM	BASILAN	AL-BARKA	TALAHIK	1
		ISABELA CITY	BOHE-PIANG	2
			UNSPECIFIED	1
			CABUNBATA	1
			DIKI	1
			KAPURNAH	1
			KATUMPURNAH	1
			LANOTE	1
			LUKKETON	1
			MAGCAWA	1
			SAN RAFAEL	1
			SUMAGDANG	1
			SUNRISE	1
			TABUK	1
			UNGKAYA PUKAN	1
		LAMITAN CITY	BATO	1
			COLONIA	1
			MATATAG	1
		LANTAWAN	PANIONGAN	1
		MALUSO	SANGBAY BIG	3
			UNSPECIFIED	1
		TIPO-TIPO	TOWN SITE	1
		UNGKAYA PUKAN	BOHE-PAHUH	1
	SULU	INDANAN	ULITAN	1
		JOLO	LANGPAS	1
			UNSPECIFIED	1
	TAWI-TAWI	BONGAO	ASTURIAS	1
		SITANGKAI	LAMION	1
	CARAGA	SURIGAO DEL SUR	MADRID	UNSPECIFIED
NCR	METRO MANILA	MADRID	PATONG-PATONG	1
		CALOOCAN CITY	PATONG-PATONG	1
		MANILA CITY	BAGONG BARRIO	1
			BARANGAY 649	1
		PARAÑAQUE CITY	TONDO	1
QUEZON CITY	BACLARAN	1		
PHILIPPINES				123



CONFIRMED RUBELLA CASES PHILIPPINES, JANUARY 1 - SEPTEMBER 30, 2017 (n=429)				
REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CONFIRMED CASES
01	ILOCOS SUR	SAN ESTEBAN	POBLACION	1
		SAN VICENTE	SAN SEBASTIAN	1
		SANTA	BANAOANG	1
		VIGAN CITY	BARANGAY VII	1
			NAGSANGALAN	1
	LA UNION	ARINGAY	SAN BENITO SUR	1
			SANTA RITA EAST	1
		BACNOTAN	BURAYOC	1
		BANGAR	CADAPLI	1
		BAUANG	BACCUIT SUR	1
			PAYOCPOC NORTE ESTE	1
			PAYOCPOC SUR	1
		CABA	SAN JOSE	1
		SAN FERNANDO CITY	BAGBAG	1
			BARANGAY I (POB.)	1
			CARLATAN	1
			LINGSAT	1
		SUDIPEN	SAN FRANCISCO SUR	1
	PANGASINAN	BINMALEY	GAYAMAN	1
		DAGUPAN CITY	BONUAN BOQUIG	1
			BONUAN GUESET	1
			COLDIT	1
			LUCAO	1
			MACARANG	1
			MANGIN	1
			NAGUILAYAN	1
			POBLACION	1
		MANAOAG	BABASIT	1
		SANTA BARBARA	MANINGDING	1
			TULIAO	1
		URDANETA CITY	NANCAMALIRAN WEST	1
		VILLASIS	UNZAD	1
		CAUAYAN CITY	SAN LUIS	1
02	ISABELA	ILAGAN	ALIBAGU	1
		ROXAS	BANTUG (POB.)	1
		SAN AGUSTIN	LAOAG	1
		SANTIAGO CITY	SAGANA	1
03	AURORA	MARIA AURORA	DECOLIAT	1
	BATAAN	BALANGA CITY	ALAS ASIN	1
			UPPER TUYO	1
		MARIVELES	ALASASIN	1
			BALON-ANITO	1
			CAMAYA	2
		ORION	ARELLANO (POB.)	1
			DAANG BAGO (POB.)	1
			GENERAL LIM (KAPUT)	1
	BULACAN	BALIUAG	CATACTE	1
			SABANG	1
		CALUMPIT	PALIMBANG	1
		GUIGUINTO	PULONG GUBAT	1
			SANTA CRUZ	1
			STA. CRUZ	1
		MALOLOS CITY	SAN VICENTE	1
			SANTO ROSARIO	1



CONFIRMED RUBELLA CASES PHILIPPINES, JANUARY 1 - SEPTEMBER 30, 2017 (n=429)				
REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CONFIRMED CASES
03	BULACAN	MARILAO	CAMANSI PRENZA III	1
			LAMBAKIN	1
		SAN ILDEFONSO	MALIPAMPANG	1
		SANTA MARIA	SAN GABRIEL	1
			SAN ROQUE	1
	NUEVA ECIJA	CABANATUAN CITY	M. S. GARCIA	1
		SAN ANTONIO	PAPAYA	1
		SCIENCE CITY OF MUÑOZ	POBLACION NORTH	1
	PAMPANGA	CITY OF SAN FERNANDO	BULAON	1
		MABALACAT CITY	AIRFORCE CITY	3
		SANTA ANA	SANTA MARIA	1
		SASMUAN	SAN PEDRO	1
	TARLAC	LA PAZ	DUMARAIS	1
		MONCADA	POBLACION 4	1
		TARLAC CITY	CUT-CUT II	1
			SAN ISIDRO	1
	ZAMBALES	BOTOLAN	PORAC	1
		CANDELARIA	MALABON	1
		IBA	PALANGINAN	1
		OLONGAPO CITY	NEW CABALAN	1
		SANTA CRUZ	NAULO	1
04A	BATANGAS	BATANGAS CITY	SUBIC	1
			ILWAS (POB.)	1
			BANABA SOUTH	1
			BARANGAY 15 (POB.)	1
			BARANGAY 18 (POB.)	1
			BARANGAY 19	1
			BARANGAY 20 (POB.)	1
			BATANGAS CITY	1
			CONCEPCION	2
			DUMANTAY	1
			KUMINTANG ILAYA	2
			MAHACOT KANLURAN	1
			PALLOCAN KANLURAN	5
			PALLOCAN SILANGAN	1
			PINAMUCAN IBABA	1
			SAN ISIDRO	1
			SAN MIGUEL	1
			SANTO DOMINGO	1
			SIMLONG	1
			TABANGAO DAO	1
			TALAHIB PANDAYAN	1
			TINGA LABAK	1
			WAWA	1
		LIPA CITY	BULACNIN	2
			MATAAS NA LUPA	1
			MUNTING PULO	2
			PANGAO	1
			POBLACION BARANGAY 2	1
			QUEZON	1
			SAMPAGUITA	1
			SAN SEBASTIAN (BALAGBAG)	1
		ROSARIO	ITLUGAN	1



CONFIRMED RUBELLA CASES PHILIPPINES, JANUARY 1 - SEPTEMBER 30, 2017 (n=429)				
REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CONFIRMED CASES
04A	BATANGAS	SAN JOSE	BANAYBANAY II	2
			CALANSAYAN	1
			MAHABANG PARANG	1
			PINAGTUNG-ULAN	1
			TULAY IBAAN	1
		SAN LUIS	SAN ANTONIO	1
		SAN PASCUAL	SANTO NIÑO	1
		TANAUAN CITY	PANTAY BATA	1
		TAYSAN	MABAYABAS	1
	CAVITE	BACOR CITY	MOLINO III	2
		DASMARIÑAS CITY	BUROL I	1
			H2	2
			MANGAS I	1
			MAYPAJO	1
			SALAWAG	2
			SAN ANTONIO DE PADUA I	1
			SAN DIONISIO (BARANGAY 1)	1
			SAN FRANCISCO I	1
			SAN ISIDRO LABRADOR I	1
			SAN JUAN (SAN JUAN I)	1
			SAN LORENZO RUIZ II	1
			SAN LUIS II	1
			SAN NICOLAS I	1
			SAN NICOLAS IV	1
			SANTA CRUZ I	1
			SANTA FE	1
			SANTA LUCIA (SAN JUAN II)	1
			SANTA MARIA (BARANGAY 20)	1
			VICTORIA REYES	2
		GENERAL TRIAS	SANTIAGO	1
		IMUS CITY	MALAGASANG II-G	1
			TANZANG LUMA II	1
		SILANG	BIGA I	1
			SAN VICENTE II	1
		TANZA	AMAYA III	1
			BIWAS	1
			CALIBUYO	1
		TERNATE	SAPANG I	1
	LAGUNA	NAGCARLAN	MARAVILLA	1
		SAN PABLO CITY	SAN GABRIEL	1
		SAN PEDRO	SAN VICENTE	1
	QUEZON	LOPEZ		1
		LUCENA CITY	IBABA IYAM	1
	RIZAL	ANTIPOLO CITY	DELA PAZ (POB.)	1
			MAYAMOT	1
			SAN ISIDRO (POB.)	1
		BINANGONAN	MACAMOT	1
		TAYTAY	SAN JUAN	1
		TERESA	PRINZA	1
04B	PALAWAN	PUERTO PRINCESA CITY	SAN MIGUEL	1
05	CAMARINES NORTE	LABO	MALATAP	2
	SORSOGON	SORSOGON CITY	SAN JUAN	1



CONFIRMED RUBELLA CASES PHILIPPINES, JANUARY 1 - SEPTEMBER 30, 2017 (n=429)				
REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CONFIRMED CASES
06	AKLAN	ALTAVAS	DALIPDIP	1
		BALETE	CALIZO	1
			FELICIANO	1
		BANGA	POLOCATE	1
			TABA-AO	1
			TABAYON	1
			UGSOD	1
		BATAN	CAMALIGAN	1
			MAMBUQUIAO	1
		BURUANGA	HABANA	1
			MAYAPAY	1
			TAG-OSIP	13
		IBAJAY	MALOCO	1
		KALIBO (CAPITAL)		2
			AGBANAWAN	1
			BACHAW SUR	1
			CABAYUGAN	1
			DUMAGUIT	1
			JOYAO JOYAO	1
			LUPO	1
			OLD BUSWANG	1
			POBLACION	2
			POOK	1
			WALOOK	1
		LEZO	BIGA-A	1
			IBAO	1
			POBLACION	1
		MADALAG	MEDINA	1
		MAKATO	CABATANGA	1
			EAST LIBANA	1
			LIBANG	1
			TINA	1
		MALAY	BALABAG	1
			MANOC-MANOC	3
		MALINAO	DANGCALAN	1
			KINALANGAY VIEJO	1
		NEW WASHINGTON	DUMAGUIT	1
			POBLACION	3
			PUIS	1
		NUMANCIA	JOYAO-JOYAO	1
		TANGALAN	AFGA	1
			BAYBAY	3
			DAPDAP	1
			DUMATAD	1
			PUDIOT	1
			PUMOT	1
			TAMALAGON	7
			TANDOG	1
			TONDOG	2
	ANTIQUÉ	PANDAN	DUMROG	1
		SAN JOSE	FUNDA	1



CONFIRMED RUBELLA CASES PHILIPPINES, JANUARY 1 - SEPTEMBER 30, 2017 (n=429)				
REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CONFIRMED CASES
06	CAPIZ	CUARTERO	ANGUB	1
			BITO-ON ILAWOD	1
			BUN-OD	1
			NAGBA	1
			POBLACION TAKAS	1
		JAMINDAN	FE	1
		MA-AYON	CABUNGAHAN	1
	TAPAZ	POBLACION	1	
	GUIMARAS	BUENAVISTA	SAWANG	1
	ILOILO	ILOILO CITY	NORTH FUNDIDOR	1
			PAVIA	1
		PASSI CITY	MAN-IT	1
		SAN ENRIQUE	CAMIRI	1
NEGROS OCCIDENTAL	ENRIQUE B. MAGALONA	POBLACION II (BARANGAY 2)	1	
	VALLADOLID	DOLDOL	1	
07	CEBU	CEBU CITY	INAYAWAN	1
			PUNTA PRINCESA	1
			QUIOT PARDO	1
		COMPOSTELA	LUPA	1
		CONSOLACION	LAMAC	1
		MANDAUE CITY	TABOK	1
	NEGROS ORIENTAL	DUMAGUETE CITY	POBLACION NO. 8 (BARANGAY 8)	1
08	BILIRAN	KAWAYAN	POBLACION	1
	NORTHERN SAMAR	SAN ANTONIO	DALUPIRIT	18
			MANRAYA	9
			PILAR	5
			SAN NICOLAS	4
			VINISITAHAN	2
	SAMAR	CATBALOGAN	MAULONG	1
09	ZAMBOANGA DEL NORTE	DAPITAN CITY	SAN PEDRO	1
		DIPOLOG CITY	MIPUTAK (POB.)	1
	ZAMBOANGA DEL SUR	ZAMBOANGA CITY	BALIWASAN	1
			TALON-TALON	1
			TUGBUNGAN	1
	ZAMBOANGA SIBUGAY	IPIL	TAWAY	1
10	LANAO DEL NORTE	ILIGAN CITY	DATU SABER	1
	MISAMIS OCCIDENTAL	OZAMIS CITY	MALAOUBANG	1
		TANGUB CITY	BARANGAY VII - UPPER POLAO (POB.)	1
	MISAMIS ORIENTAL	CAGAYAN DE ORO CITY	CARMEN	1
			PATAG	1
			MANTICAO	CABALANTIAN
11	COMPOSTELA VALLEY	MARAGUSAN	MARAGUSAN (POB.)	1
	DAVAO DEL NORTE	KAPALONG	GUPITAN	1
		TAGUM CITY	TIBAL-OG (POB.)	1
	DAVAO DEL SUR	DAVAO CITY	BAJADA	2
		MALALAG	POBLACION	1
12	SOUTH COTABATO	GENERAL SANTOS CITY	FATIMA	1
		SURALLAH	RIZAL POBLACION	1
ARMM	BASILAN	ISABELA CITY	LANOTE	1
	LANAO DEL SUR	MARAWI CITY	MARINAUT	1
CAR	ABRA	BANGUED	PATUCANNAY	1
	APAYAO	PUDTOL	SWAN	1
	BENGUET	ATOK	ABIANG	1



CONFIRMED RUBELLA CASES PHILIPPINES, JANUARY 1 - SEPTEMBER 30, 2017 (n=429)				
REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CONFIRMED CASES
CAR	BENGUET	BAGUIO CITY	A. BONIFACIO-CAGUIOA-RIMANDO (ABCR)	2
			AMBIONG	3
			AURORA HILL	4
			BAKAKENG CENTRAL	1
			BROOKESIDE	1
			CABINET HILL-TEACHER'S CAMP	1
			CAMP 7	1
			CAMP ALLEN	1
			CENTRAL FAIRVIEW	1
			CITY CAMP CENTRAL	1
			ENGINEER'S HILL	1
			HAPPY HOLLOW	1
			HOLY GHOST EXTENSION	1
			HOLY GHOST PROPER	1
			HONEYMOON (HONEYMOON-HOLY GHOST)	4
			IRISAN	1
			NAVY BASE ST. JOSEPH	1
			NEW LUCBAN	2
			PACDAL	1
			PADRE BURGOS	1
			POLIWES	2
			QUEZON HILL PROPER	1
			RIMANDO ROAD	1
			SAINT JOSEPH VILLAGE	1
			SALUD MITRA	1
			SAN CARLOS HEIGHTS	1
			SAN LUIS VILLAGE	1
			SANITARY CAMP, NORTH	1
			SANTA ESCOLASTICA	1
			SANTO ROSARIO	1
			SANTO TOMAS PROPER	2
			UPPER QM	1
			UPPER WEST QUIRINO HILL	1
		BOKOD	BILA	1
		ITOGON	AMPUCAO	1
			LOACAN	1
		LA TRINIDAD	AMBIONG	2
			BETAG	1
			LONGLONG PUGUIS	1
			LUBAS	1
			PICO	1
		TUBA	POBLACION	1
CARAGA	AGUSAN DEL SUR	ESPERANZA	DAPITAN	1
NCR	METRO MANILA	UNSPECIFIED	UNSPECIFIED	1
		CALOOCAN CITY	BARANGAY 170	1
			BARANGAY 179	1
		LAS PIÑAS CITY	TALON SINGKO	1
		MAKATI CITY	PITOGO	1
		MALABON CITY	TONSUYA	1



CONFIRMED RUBELLA CASES PHILIPPINES, JANUARY 1 - SEPTEMBER 30, 2017 (n=429)				
REGION	PROVINCE	MUNCITY	BARANGAY	NO. OF CONFIRMED CASES
NCR	METRO MANILA	MANILA CITY	BARANGAY 399	1
			BARRIO BANANA	1
			BINONDO	1
			BRGY. 33	1
			HABITAT BASECO	1
			OLD SITE BASECO	1
			PACO	1
			SAMPALOC	1
		SANTA CRUZ	2	
		PARAÑAQUE CITY	DON GALO	1
			SAN DIONISIO	1
		PASAY CITY	TAMBO	1
			BRGY. 145	1
		QUEZON CITY	CENTRAL	1
			COMMONWEALTH	1
			CUBAO	1
			MARIANA	1
			PAYATAS	1
			PROJECT 4	2
		SAN JUAN CITY	ONSE	2
			WEST CRAME	3
		VALENZUELA CITY	LAWANG BATO	1
PHILIPPINES				429

ANNEX B. NEW CLUSTERS OF MEASLES AND RUBELLA CASES

Type of VPD	MW	Region	Province	Muncity	Barangay	Place of Transmission	No. of Confirmed Cases
Rubella	34	XI	Davao del Sur	Davao City	Bajada	Unknown	2
Measles	32-37	IX	Zamboanga del Sur	Zamboanga City	-	3 cases: Home/ Dormitory 2 cases: Unknown	5
	34-36				Mercedes	Home/ Dormitory Barangay/Community	4
	34-36				Talon-talon	1 case: Daycare/School 3 cases: Unknown	4
	35-37				Tumaga	2 cases: Home/Dormitory 2 cases: Unknown	4
	34-37	ARMM	Basilan	Al-Barka	Bohe-Piang	Home/ Dormitory Barangay/Community	2
	35-36			Lantawan	Sangbay Big	Home/ Dormitory	3
	34-35	III	Tarlac	Tarlac City	Cut-cut II	Home/ Dormitory	3
	35-36				San Juan de Mata	Home/ Dormitory	2



ANNEX C. MEASLES SURVEILLANCE PERFORMANCE INDICATORS

- **Measles incidence rate:** target: <1/ 1,000,000 of the total population. It measures the progress of a country towards measles elimination. High incidence rate indicates persistence of measles transmission in some areas.
- **Adequate blood collection rate:** target: ≥80% adequate specimen collected within 28 days from rash onset. This will facilitate the specificity (ability to determine measles virus as the cause of illness) of reported measles cases. With adequate specimen collection, there will be an access to identify the circulating measles virus in the community.
- **Timeliness and adequacy of investigation:** target: ≥80% adequate investigation within 48 hours of notification, with collection of all 10 core variables. This provides venue to prevent further transmission of measles cases in the community, furthermore, provides immediate response to prevent potential outbreaks.
- **Suspect Measles Reporting Rate:** target: ≥2 per 100,000 of the total population. It measures the ability to detect suspect measles cases. Reporting an adequate number of suspected cases provides confidence that the system is sensitive to detect measles cases.
- **Non-Measles Reporting Rate:** target: ≥2 per 100,000 of the total population. If non-measles reporting rate is equal or proportion to the number of suspect measles cases in all regions, it gives us higher chance in attaining our goal of measles elimination. However, symptoms similar to that of measles may be attributed to another organism causing the illness.

ANNEX D. DEFINITION OF TERMS

Laboratory confirmed case	A suspect case with a positive laboratory test result for measles-specific/rubella-specific IgM antibodies or other approved laboratory test method
Epidemiologically-linked case	A suspect case that has not been confirmed by laboratory but that is geographically AND temporally related to a laboratory-confirmed case or (in the event of an outbreak) to another epidemiologically confirmed measles case.
Co-infection	A suspect case with a positive laboratory test result for both measles-specific and rubella-specific IgM antibodies or other approved laboratory test method
Confirmed cases	Laboratory confirmed + Epidemiologically-linked cases
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
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 but with pending transport or laboratory results.
Alert threshold	Refers to the level of occurrence of disease that serves as an early warning for epidemics.
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)

