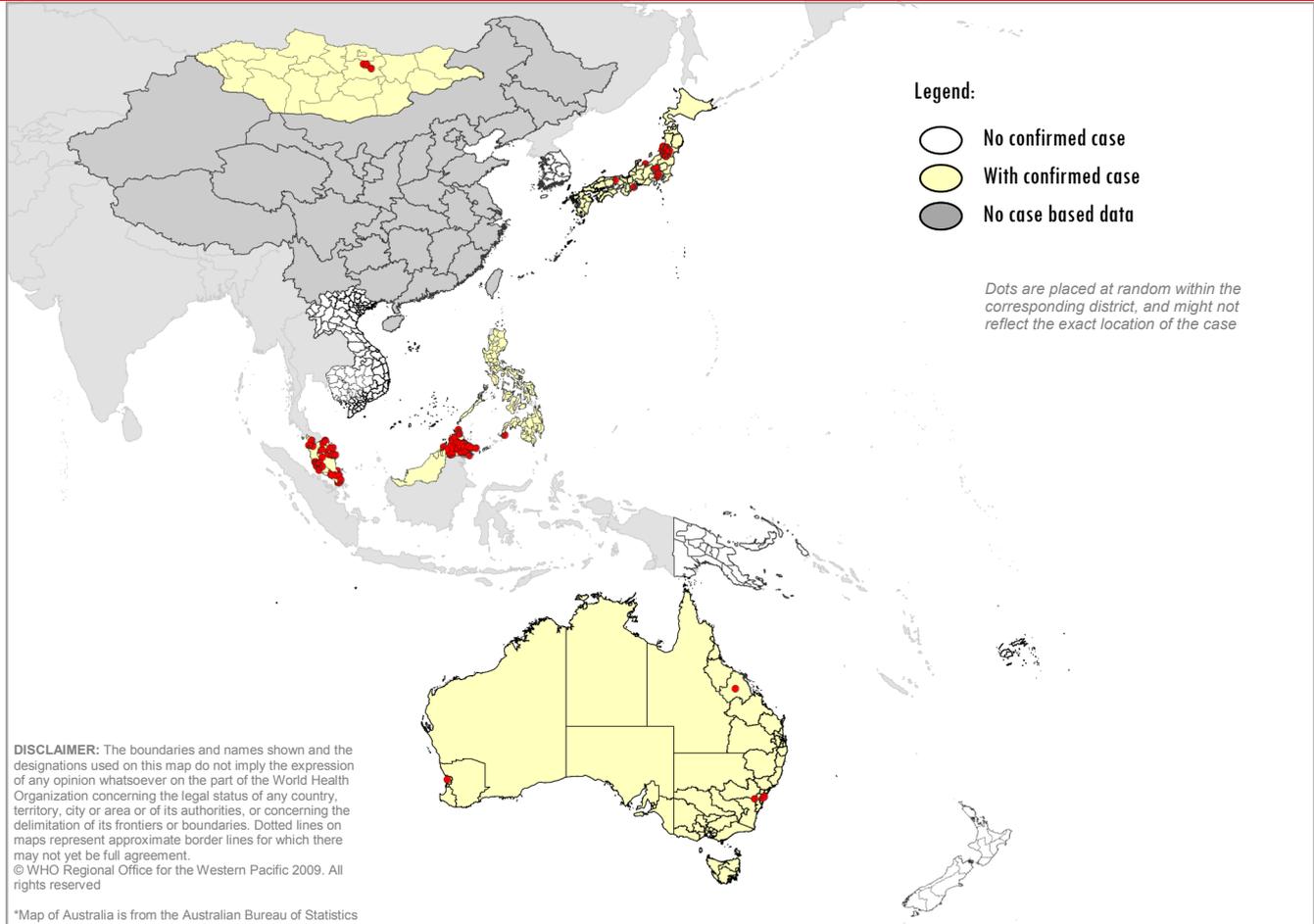


MEASLES-RUBELLA

Figure 1. Distribution of confirmed measles cases with rash onset 1–30 April 2017, WHO Western Pacific Region



Source: Measles and rubella monthly country reports to the Western Pacific Regional Office by 20 May 2017

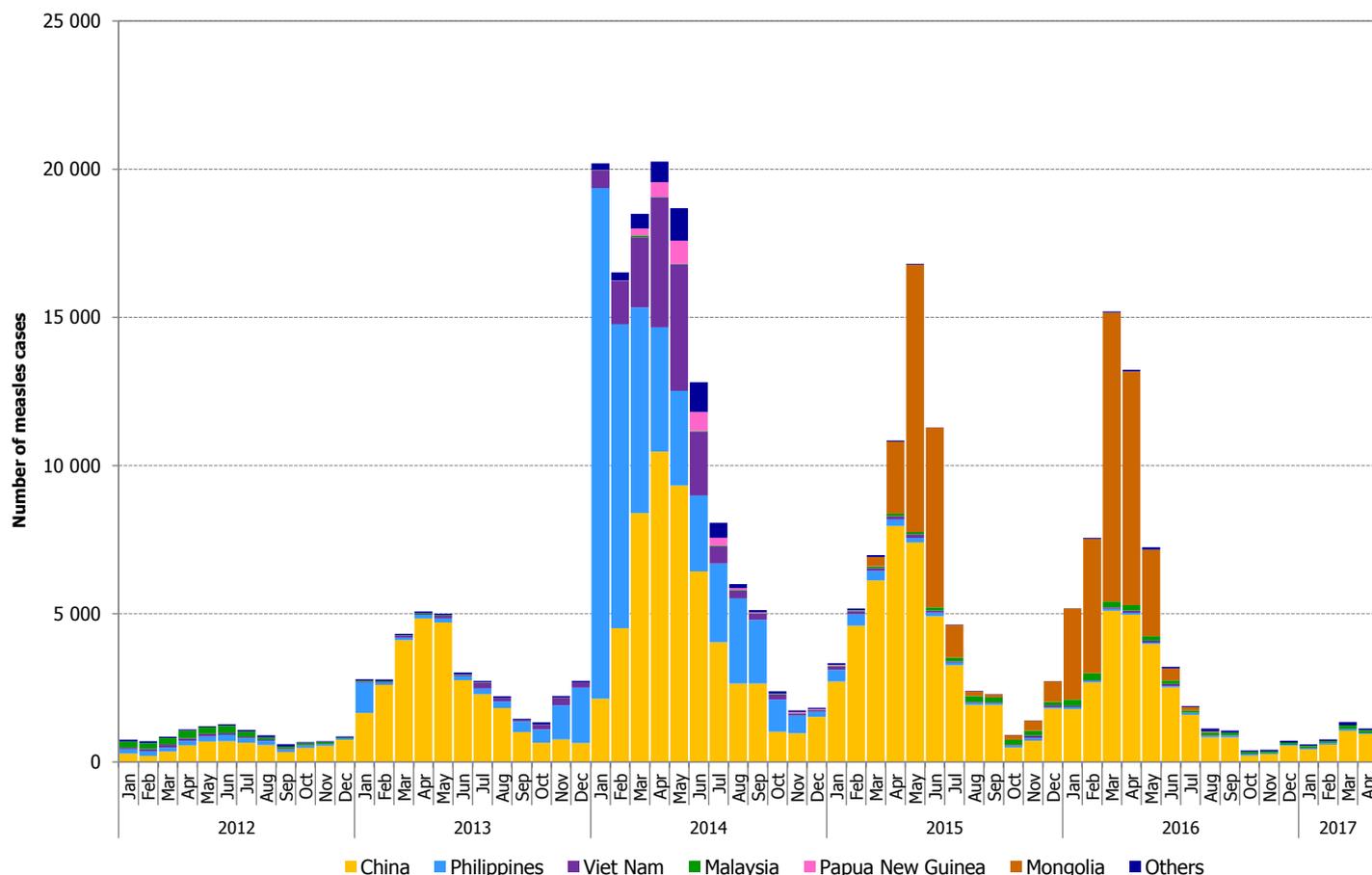
Table 1. Confirmed measles cases by month of rash onset, May 2016–April 2017, WHO Western Pacific Region

Country/area	2016								2017			
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Australia	5	4	6	1	7	7	6	16	9	7	25	7
Brunei Darussalam	0	0	0	1	0	0	0	0	0	0	0	0
Cambodia	2	4	5	11	1	9	12	10	4	5	0	0
China	3923	2619	1695	866	350	208	222	531	306	437	651	830
China, Hong Kong SAR	2	2	0	0	1	0	0	3	1	1	0	0
China, Macao SAR	0	0	0	0	0	0	0	0	0	0	0	0
Japan	3	3	5	76	43	10	2	5	15	26	67	36
Lao People's Democratic Republic	0	0	0	0	0	0	0	8	3	0	0	0
Malaysia	154	113	70	104	88	78	60	67	74	51	115	77
Mongolia	378	79	22	4	2	2	2	4	2	1	0	2
New Zealand	37	29	5	3	1	1	0	0	6	2	2	0
Papua New Guinea	0	0	0	0	0	0	0	0	0	0	0	0
Philippines	6	3	3	4	6	8	4	3	4	2	5	2
Republic of Korea	0	0	0	1	8	4	0	0	1	0	2	0
Singapore	31	6	3	8	7	11	24	16	9	10	9	5
Viet Nam	3	3	6	3	1	2	0	0	1	0	0	0
Pacific island countries and areas	1	1	0	0	0	0	0	0	0	0	0	0
Western Pacific Region	4545	2866	1820	1082	515	340	332	663	435	542	876	959

"-" No data

Source: Case based and aggregate data reports to the Western Pacific Regional Office by 20 May 2017

Figure 2. Confirmed and compatible measles cases by month of rash onset, WHO Western Pacific Region, 2012–2017 as of 20 May 2017



Source: Measles and rubella monthly country reports to WHO by 20 May 2017
Includes laboratory confirmed, epi-linked and clinically confirmed cases for 2012

Table 2. Status of measles verification, WHO Western Pacific Region

Country/area	Year verified	2016						2017					
		No. of confirmed cases	Source of infection				% of cases with known source of infection	No. of confirmed cases	Source of infection				% of cases with known source of infection
			Imported	Import-related	Unknown / not reported	Endemic			Imported	Import-related	Unknown / not reported	Endemic	
Australia	2014	99	31	18	50	0	49.5%	48	23	5	20	0	58.3%
Brunei Darussalam	2015	1	1	0	0	0	100.0%	0	-	-	-	-	-
Cambodia	2015	56	0	0	56	0	0.0%	9	0	0	9	0	0.0%
China	-	23 960	0	0	23 960	0	0.0%	2 224	0	0	2 224	0	0.0%
China, Hong Kong SAR	2016	9	1	0	8	0	11.1%	2	1	0	1	0	50.0%
China, Macao SAR	2014	0	-	-	-	-	-	0	-	-	-	-	-
Japan	2015	152	27	97	28	0	81.6%	144	24	90	30	0	79.2%
Lao People's Democratic Republic	-	8	0	0	8	0	0.0%	3	0	0	3	0	0.0%
Malaysia	-	1 577	5	0	69	1 503	95.6%	317	2	0	120	195	62.1%
Mongolia	-	3 587	0	2 392	0	1 195	100.0%	6	0	0	6	0	0.0%
New Zealand	-	104	0	0	104	0	0.0%	10	0	0	10	0	0.0%
Papua New Guinea	-	0	-	-	-	-	-	0	-	-	-	-	-
Philippines	-	74	1	0	53	20	28.4%	13	0	0	8	5	38.5%
Republic of Korea	2014	18	9	9	0	0	100.0%	3	3	0	0	0	100.0%
Singapore	-	140	16	90	34	0	75.7%	33	7	14	12	0	63.6%
Viet Nam	-	36	0	0	36	0	0.0%	1	0	0	1	0	0.0%
Pacific island countries and areas	-	6	0	0	6	0	0.0%	1	0	0	1	0	0.0%
Total		29 827	91	2 606	24 412	2 718	18.2%	2 814	60	109	2 445	200	13.1%

Blue No measles cases
Green ≥80%
Yellow 60–79%
Red <60%

Source: Measles and rubella monthly country reports to WHO by 20 May 2017

Table 3. Measles case classification and incidence by country and area, WHO Western Pacific Region, 2013–2017 as of 20 May 2017

Country/area	2013		2014		2015		2016		2017										Rash onset of last confirmed measles case
	Total confirmed and compatible ¹	Measles incidence per 1 million pop.	Total confirmed and compatible ¹	Measles incidence per 1 million pop.	Total confirmed and compatible ¹	Measles incidence per 1 million pop.	Total confirmed and compatible ¹	Measles incidence per 1 million pop.	Population (in millions) ²	Suspected measles cases	Pending classification	Discarded cases ³	Confirmed and compatible measles cases					Deaths due to measles	
													Compatible cases	Lab	Epi-linked	Total confirmed and compatible	Annualized measles incidence per 1 million pop.		
Australia	154	6.6	340	14.5	74	3.3	99	4.1	24.6	NA ³	0	0	0	45	3	48	5.8	0	27-Apr-17
Brunei Darussalam	0	0.0	0	0.0	4	9.0	1	2.3	0.4	1	0	1	0	0	0	0	0.0	0	7-Aug-16
Cambodia	0	0.0	0	0.0	0	0.0	56	3.5	16.1	281	9	263	0	9	0	9	1.7	0	26-Feb-17
China	27825	20.5	52 485	38.5	42 864	30.7	24 839	18.0	1388.2	10 304	583	6 727	770	2 205	19	2 994	6.5	3	30-Apr-17
China, Hong Kong SAR	38	5.2	50	6.8	18	2.4	9	1.2	7.4	7	0	5	0	2	0	2	0.8	0	15-Feb-17
China, Macao SAR	3	5.2	1	1.7	0	0.0	0	0.0	0.6	2	0	2	0	0	0	0	0.0	0	3-Jun-14
Japan	207	1.6	454	3.6	35	0.3	157	1.2	126.0	315	13	150	8	142	2	152	3.6	0	24-Apr-17
Lao People's Democratic Republic	68	10.5	70	10.7	56	8.0	8	1.2	7.0	210	33	174	0	2	1	3	1.3	0	10-Jan-17
Malaysia	182	6.1	222	7.3	1 318	43.9	1 587	51.6	31.2	2 445	235	1 858	35	316	1	352	33.9	0	25-Apr-17
Mongolia	0	0.0	0	0.0	20 374	7136.8	28 813	9583.7	3.1	83	0	77	0	6	0	6	5.9	0	14-Apr-17
New Zealand	13	2.9	274	60.2	13	2.9	104	22.8	4.6	14	4	0	0	8	2	10	6.5	0	17-Mar-17
Papua New Guinea	7	1.0	2 589	345.9	53	6.9	0	0.0	7.9	3	0	3	0	0	0	0	0.0	0	21-Sep-15
Philippines	5798	59.1	54 669	548.0	2 003	19.7	641	6.3	103.8	1 011	91	736	171	13	0	184	5.3	0	9-Apr-17
Republic of Korea	107	2.2	442	9.0	7	0.1	18	0.4	50.7	77	1	73	0	3	0	3	0.2	0	19-Mar-17
Singapore	66	12.5	171	32.0	45	8.9	157	27.6	5.8	76	0	36	7	33	0	40	20.7	0	10-Apr-17
Viet Nam	1232	13.6	16 741	182.8	884	9.4	368	3.9	95.4	218	46	122	32	1	0	33	1.0	0	10-Apr-17
Pacific island countries and areas ⁴	0	0.0	278	85.0	20	6.1	6	1.8	3.3	36	3	32	0	1	0	1	0.9	0	1-May-17
Western Pacific Region	35 700	19.5	128 786	70.1	67 768	36.2	56 863	30.5	1876.2	15 083	1 018	10 259	1 023	2 786	28	3 837	6.1	3	

¹ Includes compatible, laboratory confirmed and epi-linked confirmed cases

² United Nations, Department of Economic and Social Affairs, Population Division World Population Prospects.

³ Australia reports confirmed cases only.

⁴ Classification is provisional based on laboratory data only.

Green <1 confirmed measles case / 1 000 000 population
 Yellow 1-9.9 confirmed measles case / 1 000 000 population
 Red >= 10 confirmed cases / 1 000 000 population

Table 4. Measles surveillance performance indicators by country and area, WHO Western Pacific Region, 2016–2017 as of 20 May 2017

Country/area	2016				2017			
	Discarded non-measles rate per 100 000 pop	Second level units with ≥ 2 discarded cases per 100 000 pop [annualized] ¹	Suspected cases with adequate investigation	Suspected cases with adequate specimens for laboratory confirmation ²	Annualized discarded non-measles rate per 100 000 pop	Second level units with ≥ 2 discarded cases per 100 000 pop [annualized] ¹	Suspected cases with adequate investigation	Suspected cases with adequate specimens for laboratory confirmation ²
	≥ 2	≥ 80%	≥ 80%	≥ 80%	≥ 2	≥ 80%	≥ 80%	≥ 80%
Australia ³	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
Brunei Darussalam	2.8	Not applicable	100.0%	100.0%	0.0	Not applicable	100.0%	100.0%
Cambodia	4.2	72.0%	88.3%	99.0%	4.9	24.0%	94.3%	98.6%
China	3.2	77.4%	97.1%	87.9%	1.5	12.9%	94.8%	82.8%
China, Hong Kong SAR	2.5	Not applicable	97.9%	99.5%	0.0	Not applicable	85.7%	85.7%
China, Macao SAR	2.0	Not applicable	100.0%	100.0%	1.0	Not applicable	100.0%	100.0%
Japan	0.7	4.3%	Insufficient data	Insufficient data	0.4	0.0%	Insufficient data	Insufficient data
Lao People's Democratic Republic	7.3	70.6%	98.6%	47.6%	7.4	64.7%	89.0%	89.5%
Malaysia	16.1	93.8%	79.6%	88.6%	17.9	93.8%	77.5%	87.8%
Mongolia	46.4	95.5%	8.0%	14.4%	7.6	27.3%	90.4%	89.2%
New Zealand	1.1	Insufficient data	Insufficient data	Insufficient data	0.0	Insufficient data	Insufficient data	Insufficient data
Papua New Guinea	0.6	10.0%	65.3%	89.8%	0.1	5.0%	0.0%	0.0%
Philippines	1.5	17.6%	57.3%	70.2%	Not available	29.4%	40.1%	77.5%
Republic of Korea	0.6	0.0%	92.1%	79.9%	0.4	0.0%	90.9%	100.0%
Singapore	⁴ 1.6	Not applicable	85.1%	51.8%	1.9	Not applicable	92.1%	65.8%
Viet Nam	1.2	22.2%	56.9%	77.9%	0.4	28.6%	52.8%	75.2%
Pacific island countries and areas	7.8	13.0%	52.5%	90.1%	2.9	8.7%	0.0%	80.6%
Western Pacific Region	3.0	39.0%	70.8%	67.7%	1.6	22.9%	87.1%	83.6%

¹ This indicator is not applicable for countries which have no second-level administrative units

² Adequate specimen defined as blood specimen collected within 28 days of rash onset or other specimen (throat swab, nasopharyngeal swab, cerebrospinal fluid, urine) collected within 5 days of rash onset; excludes epidemiologically-linked cases

³ Reports only confirmed cases.

Green	Reached or surpassed target
Yellow	Nearly reached target: 1.00–1.99 for non-measles suspected case rate; 10.1–25% for percent clinically confirmed cases; 60–79% for other indicators
Red	Substantially below target

Table 5. Rubella case classification and incidence by country and area, WHO Western Pacific Region, 2014–2017 as of 20 May 2017

Country/area	2014		2015		2016		2017									
	Total confirmed and compatible	Rubella incidence per 1 million pop.	Total confirmed and compatible	Rubella incidence per 1 million pop.	Total confirmed and compatible	Rubella incidence per 1 million pop.	Population (in millions) ¹	Investigated for rubella	Pending classification	Discarded cases	Confirmed and compatible rubella cases					Congenital rubella syndrome
											Compatible cases	Lab	Epi-linked	Total confirmed and compatible	Annualized rubella incidence per 1 million pop.	
Australia	-	-	-	-	-	-	24.64	-	-	-	-	-	-	-	-	-
Brunei Darussalam	0	0.0	0	0.0	0	0.0	0.43	2	0	2	0	0	0	0	0.0	-
Cambodia	31	2.1	18	1.1	4	0.3	16.08	281	0	267	0	5	0	5	0.9	-
China	11 887	8.7	8 245	5.9	4 476	3.2	1 388.23	10 304	-	-	-	-	-	296	0.6	-
China, Hong Kong SAR	1	0.1	12	1.6	3	0.4	7.40	0	-	-	-	-	-	0	0.0	-
China, Macao SAR	0	0.0	2	3.5	1	1.7	0.61	2	0	2	0	0	0	0	0.0	-
Japan	-	-	2	0.0	3	0.0	126.05	315	0	13	0	2	0	2	0.0	-
Lao People's Democratic Republic	18	2.8	24	3.4	40	5.8	7.04	210	34	167	0	7	2	9	3.8	-
Malaysia	226	7.5	34	1.1	68	2.2	31.16	2 460	235	2 196	0	29	0	29	2.8	-
Mongolia	0	0.0	28	9.8	27	9.0	3.05	83	0	68	0	6	0	6	5.9	-
New Zealand	-	-	-	-	-	-	4.60	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	4	0.5	2	0.3	7.93	3	0	3	0	0	0	0	0.0	-
Philippines	343	3.4	154	1.5	165	1.6	103.80	1 011	91	729	0	180	11	191	5.5	-
Republic of Korea	2	0.0	2	0.0	3	0.1	50.70	77	1	76	0	0	0	0	0.0	-
Singapore	0	0.0	1	0.2	0	0.0	5.78	-	-	-	-	-	-	0	0.0	-
Viet Nam	50	0.5	972	10.4	350	3.7	95.41	174	36	122	2	10	0	10	0.3	-
Pacific island countries and areas ²	4	1.2	0	0.0	1	0.3	3.28	33	0	31	0	2	0	2	1.8	-
Western Pacific Region	675	0.4	1 253	0.7	667	0.4	1 876.21	14 955	397	3 676	2	241	13	550	0.9	-

¹ United Nations, Department of Economic and Social Affairs, Population Division World Population Prospects.

² Classification is provisional based on laboratory data only.

"-" No data

Green	<1 confirmed measles case / 1 000 000 population
Yellow	1-9.9 confirmed measles case / 1 000 000 population
Red	>= 10 confirmed cases / 1 000 000 population
Gray	No data

Table 6A. Measles and rubella laboratory testing, WHO Western Pacific Region, 2016 as of 20 February 2017

Country/area	Laboratory	Measles and rubella			Measles													Rubella				
					Serology						Virus detection				Total number of lab confirmed cases	Serum and blood (includes DBS)						
		Serum			Blood		% of samples with results ≤ 4 days	Measles Virus isolation/detection (swab, urine and others)		Measles Reverse Transcription-Polymerase Chain Reaction		Samples tested for rubella IgM	Rubella IgM (+)			Rubella IgM equiv						
		No.	No.	%	No.	%		No. received	No. (+)	No. of samples tested	No. of isolates		No. of samples tested	No. (+)		No.	No.	%	No.	%		
Australia	VIDRL	92	92	67	22	14	63.6	4	18%	0	-	72.7	0	-	66	60	58	7	2	28.6	0	0%
Brunei Darussalam	DLS	16	16	13	13	1	7.7	1	8%	0	-	92.3	0	-	1	1	1	13	0	0.0	0	0%
Cambodia	NIPH	719	719	719	596	54	9.1	0	0%	123	2	80.9	0	-	0	-	44	719	4	0.6	0	0%
China	CCDC	-	-	-	-	-	-	-	-	-	-	89.0	-	-	-	-	-	-	-	-	-	-
China, Hong Kong SAR	PHLC	600	600	509	538	9	1.7	16	3%	0	-	93.0	5	4	64	20	12	535	3	0.6	3	1%
China, Macao SAR	PHL	46	46	46	46	3	6.5	2	4%	0	-	100.0	0	-	1	0	3	46	4	8.7	1	2%
Japan	NIID	1 585	1 398	802	206	44	21.4	34	17%	0	-	-	0	-	669	146	156	10	1	-	0	0%
Lao People's Democratic Republic	NCLE	254	254	254	254	2	0.8	4	2%	0	-	80.7	0	-	0	-	0	254	8	3.1	9	4%
Malaysia	NPHL	8 579	6 593	6 593	6 256	1 620	25.9	180	3%	0	-	93.6	1 264	122	0	-	1 662	4 513	108	2.4	53	1%
Mongolia	NCCD	10 031	10 031	9 996	9 749	4 969	51.0	981	10%	0	-	99.8	1	0	286	142	5 076	6 506	31	-	15	0%
New Zealand	CHL	842	842	757	221	22	10.0	10	5%	0	-	98.2	1	0	590	68	79	157	1	0.6	0	0%
Papua New Guinea	CPHL	40	40	40	40	0	-	0	0%	0	-	7.5	0	-	0	-	0	40	1	2.5	2	5%
Philippines	RITM	1 612	1 612	1 610	1 524	36	2.4	31	2%	51	5	98.9	62	0	62	0	40	1 576	110	7.0	62	4%
Republic of Korea	KCDC	633	633	530	400	51	12.8	33	8%	0	-	82.9	0	-	222	17	55	244	25	10.2	18	7%
Singapore	SGH	813	813	724	243	25	10.3	0	0%	0	-	100.0	186	6	0	-	25	347	2	0.6	0	0%
Viet Nam national lab (Northern)	NIHE	332	332	318	313	1	0.3	1	0%	0	-	96.1	10	0	19	0	1	313	31	9.9	15	5%
Viet Nam national lab (Southern)	PI	870	870	868	865	39	4.5	20	2%	0	-	85.2	5	0	5	0	39	865	384	44.4	24	3%
Viet Nam subnational lab (Central)	PI	183	183	183	182	2	1.1	1	1%	0	-	51.1	0	-	1	0	2	182	10	5.5	3	2%
Viet Nam subnational lab (Highland)	IHE	77	77	77	77	0	-	0	0%	0	-	20.8	0	-	0	-	0	77	0	0.0	1	1%
Fiji	FCCDC	243	243	243	233	5	2.1	4	2%	9	0	-	0	-	0	-	5	243	1	0.4	0	0%
Vanuatu	FCCDC	15	15	15	15	0	0.0	0	0%	15	0	-	0	-	0	-	0	15	0	0.0	1	7%
Total		27 582	25 409	24 364	21 793	6 897	31.6	1 322	6%	198	7	95.1	1 534	132	1 986	454	7 258	16 662	726	4.4	207	1%

"-" No data

Table 6B. Measles and rubella laboratory testing, WHO Western Pacific Region, 2017 as of 20 May 2017

Country/area	Laboratory	Measles and rubella			Measles													Rubella				
					Serology						Virus detection							Serum and blood (includes DBS)				
		Total number of samples received	Total number of samples tested	Total number of cases tested	Serum			Blood		% of samples with results ≤4 days	Measles Virus isolation/detection (swab, urine and others)		Measles Reverse Transcription-Polymerase Chain Reaction		Total number of lab confirmed cases	Samples tested for rubella IgM	Rubella IgM (+)		Rubella IgM equiv			
					Samples tested for measles IgM	Measles IgM (+)	Measles IgM equiv	DBS samples	No. of samples tested		No. of isolates	No. of samples tested	No. (+)	No.			%	No.	%			
No.	No.	%	No.	%	No. received	No. (+)	No. of samples tested	No. of isolates	No. of samples tested	No. (+)	No.	%	No.	%	No.	%	No.	%				
Australia	VIDRL	34	34	27	4	2	50.0	2	50%	0	-	100.0	0	-	31	31	27	0	-	-	-	-
Brunei Darussalam	DLS	2	2	2	2	0	0.0	1	50%	0	-	-	0	-	0	-	0	2	0	0.0	0	0%
Cambodia	NIPH	272	272	272	226	9	4.0	0	0%	46	0	79.0	0	-	0	-	9	271	5	1.8	0	0%
China	CCDC	-	-	-	-	-	-	-	-	-	-	91.2	-	-	-	-	-	-	-	-	-	-
China, Hong Kong SAR	PHLC	94	94	80	78	2	2.6	2	3%	0	-	92.1	4	2	18	5	2	73	0	0.0	1	1%
China, Macao SAR	PHL	14	14	14	14	0	0.0	0	0%	0	-	100.0	0	-	0	-	0	14	0	0.0	1	7%
Japan	NIID	576	566	305	72	31	43.1	4	6%	0	-	-	0	-	271	136	144	5	0	-	0	0%
Lao People's Democratic Republic	NCLE	171	171	171	171	2	1.2	5	3%	0	-	-	0	-	0	-	0	169	8	4.7	7	4%
Malaysia	NPHL	3 594	3 594	2 722	2 630	409	15.6	79	3%	0	-	94.1	645	29	0	-	424	2 139	41	1.9	44	2%
Mongolia	NCCD	319	319	319	313	3	1.0	11	4%	0	-	100.0	0	-	6	0	0	288	1	0.3	14	5%
New Zealand	CHL	129	129	128	38	2	5.3	2	5%	0	-	97.4	0	-	74	7	8	39	0	0.0	0	0%
Papua New Guinea	CPHL	4	4	4	4	0	-	0	0%	0	-	0.0	0	-	0	-	0	4	0	0.0	0	0%
Philippines	RITM	889	889	889	829	10	1.2	11	1%	25	1	99.3	50	0	100	0	10	852	170	20.0	48	6%
Republic of Korea	KCDC	153	153	126	105	12	11.4	5	5%	0	-	89.7	0	-	43	2	13	55	7	12.7	8	15%
Singapore	NPHL	166	166	161	23	5	21.7	0	0%	0	-	100.0	24	8	128	24	28	18	1	5.6	0	0%
Viet Nam national lab (Northern)	NIHE	81	81	81	79	2	2.5	2	3%	0	-	97.5	2	0	2	0	2	79	6	7.6	2	3%
Viet Nam national lab (Southern)	PI	88	88	88	88	0	0.0	1	1%	0	-	83.0	0	-	0	-	0	88	6	6.8	4	5%
Viet Nam subnational lab (Central)	PI	43	43	43	43	0	-	1	2%	0	-	27.9	0	-	0	-	0	43	1	-	0	0%
Viet Nam subnational lab (Highland)	IHE	1	1	1	1	0	0.0	0	0%	0	-	-	0	-	0	-	0	1	0	0.0	0	0%
Fiji	FCCDC	35	35	34	34	1	2.9	0	0%	1	0	-	0	-	0	-	1	34	2	5.9	0	0%
Total		6 665	6 655	5 467	4 754	490	10.3	126	3%	72	1	93.4	725	39	673	205	668	4 174	248	5.9	129	3%

"-" No data

Figure 3. Measles genotype distribution of cases with rash onset in 2016 and 2017, WHO Western Pacific Region

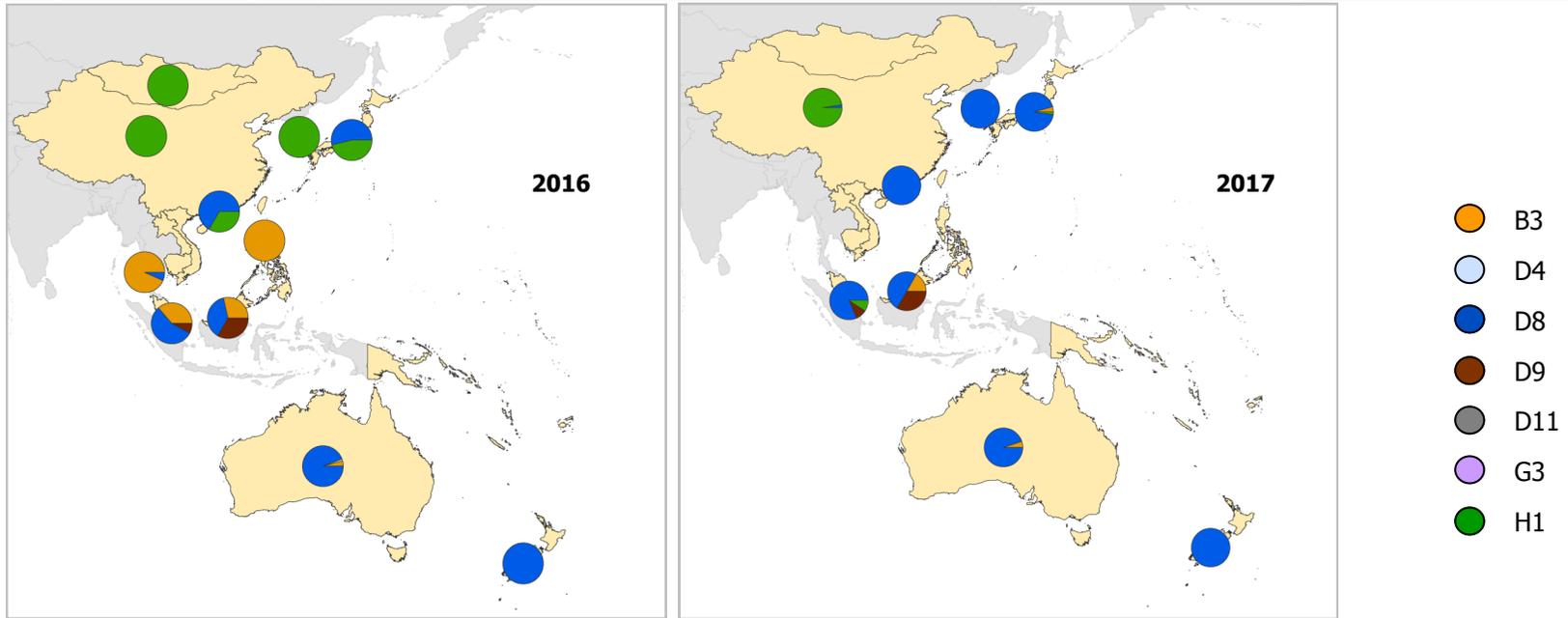
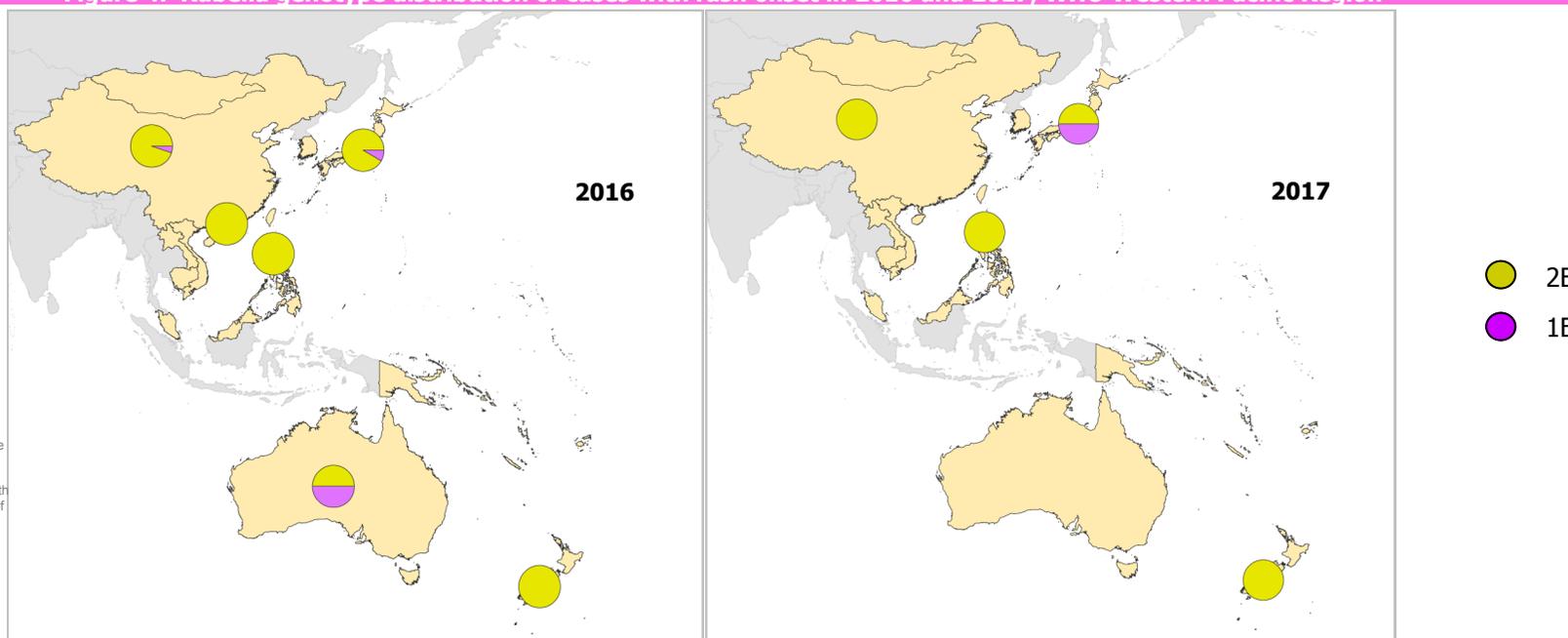


Table 7. Measles genotype distribution of cases with rash onset in May 2016 to April 2017, WHO Western Pacific Region

Country/area	2016																				2017																															
	May				Jun				Jul				Aug				Sep				Oct				Nov				Dec				Jan				Feb				Mar				Apr							
	B3	D8	D9	H1	B3	D8	D9	H1	B3	D8	D9	H1	B3	D8	D9	H1	B3	D8	D9	H1	B3	D4	D8	D9	H1	B3	D8	D9	H1																							
Australia		6								5				1				4								8				1	7			8				15				2	2			9				11		
Brunei Darussalam												2														4	2					5				7																
Cambodia	2					4				4				11												4	2					5				7																
China		2		443				241				131				42				18				2				3				11				40				20		1		14		1		1				
China, Hong Kong SAR				2										1																2												2										
China, Macao SAR																														2																						
Japan		2		1		1				4				14		44		22		10		10		1				1		8				14		1		1	1	16		1	2	38				1		18		
Lao People's Democratic Republic																																																				
Malaysia	2	14		2																										1	3	1								1												
Mongolia																																																				
New Zealand		7				10				4				2				1								1								3								4										
Papua New Guinea																																																				
Philippines																																																				
Republic of Korea				1												1				10										1																						
Singapore	20	3		1		2	2			3				1	6			5								2	3			16	2			10	2			5	2	2		4				5				4		
Viet Nam																																																				
Pacific island countries and areas																																																				

Sources: Includes all cases reported to the Western Pacific Regional Office by 20 May 2017 and the Measles Nucleotide Surveillance online database (MeaNS).

Figure 4. Rubella genotype distribution of cases with rash onset in 2016 and 2017, WHO Western Pacific Region



The boundaries and names shown and the designations used on the maps do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.
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Table 8. Rubella genotype distribution of cases with rash onset in May 2016 to April 2017, WHO Western Pacific Region

Country/area	2016												2017																										
	May			Jun			Jul			Aug			Sep			Oct			Nov			Dec			Jan			Feb			Mar			Apr					
	2B	1E	1J	2B	1E	1J	2B	1E	1J	2B	1E	1J	2B	1E	1J	2B	1E	1J	2B	1E	1J	2B	1E	1J	2B	1E	1J	2B	1E	1J	2B	1E	1J	2B	1E	1J			
Australia	1																																						
Brunei Darussalam																																							
Cambodia																																							
China	16	5		6			2			1			1						2			18			6			1			11								
China, Hong Kong SAR				1																																			
China, Macao SAR																																							
Japan	2			4									1												1			1											
Lao People's Democratic Republic																																							
Malaysia																																							
Mongolia																																							
New Zealand	1																								1														
Papua New Guinea																																							
Philippines	1						1																		6						5			3					
Republic of Korea																																							
Singapore																																							
Viet Nam																																							
Pacific island countries and areas																																							

Sources: Includes all cases reported to the Western Pacific Regional Office by 20 May 2017 and the Rubella Nucleotide Surveillance online database (RubeNS).

Table 9A. Completeness and timeliness of epidemiologic reporting, WHO Western Pacific Region, 2016–2017

Country	2016 ¹		2017 ¹					
	Completeness ²	Timeliness ³	Jan	Feb	Mar	Apr	Completeness ²	Timeliness ³
Australia	100%	75%	10 Feb	09 Mar	10 Apr	10 May	100%	75%
Brunei Darussalam	100%	100%	07 Feb	06 Mar	08 Apr	06 May	100%	100%
Cambodia	100%	100%	10 Feb	10 Mar	10 Apr	10 May	100%	100%
China	100%	83%	15 Feb	11 Mar	18 Apr	10 May	100%	75%
China, Hong Kong SAR	100%	100%	10 Feb	09 Mar	06 Apr	02 May	100%	100%
China, Macao SAR	100%	100%	07 Feb	07 Mar	05 Apr	05 May	100%	100%
Japan	100%	100%	06 Feb	09 Mar	10 Apr	10 May	100%	100%
Lao People's Democratic Republic	100%	100%	10 Feb	10 Mar	10 Apr	10 May	100%	100%
Malaysia	100%	100%	07 Feb	09 Mar	10 Apr	09 May	100%	100%
Mongolia	100%	83%	09 Feb	07 Mar	06 Apr	09 May	100%	100%
New Zealand	100%	100%	09 Feb	07 Mar	07 Apr	05 May	100%	100%
Papua New Guinea	92%	50%	08 Feb	08 Mar	13 Apr	10 May	75%	75%
Philippines	100%	75%	-	-	31 Mar	05 May	100%	50%
Republic of Korea	100%	100%	10 Feb	09 Mar	10 Apr	10 May	100%	100%
Singapore	100%	100%	08 Feb	09 Mar	10 Apr	08 May	100%	100%
Viet Nam	100%	92%	09 Feb	10 Mar	07 Apr	09 May	100%	100%
Pacific island countries and areas	100%	100%	14 Feb	14 Mar	13 Apr	15 May	100%	100%
Completeness	100%		100%	100%	100%	100%	100%	
Timeliness		92%	94%	94%	88%	100%		94%

¹ National measles surveillance monthly reports from April 2017.

Legend: black = timely report; red = untimely report

² Completeness is defined as the number of reports received by the end of the reporting month divided by the number of expected reports for the year.

³ Countries and areas should submit reports by the 10th (or the next working day) of the following month; Pacific island countries and areas and China may report to the Regional Office by the 15th (or the next working day) of the following month.

Table 9B. Completeness and timeliness of laboratory reporting, WHO Western Pacific Region, 2016–2017

Country/area	2016		2017 ¹						Genotype results by source of data			
	Completeness ²	Timeliness ³	Jan	Feb	Mar	Apr	Completeness ²	Timeliness ³	Measles		Rubella	
									MeaNS	Submission to WPRO	Rubens	Submission to WPRO
Australia	100%	100%	03 Feb	06 Mar	04 Apr	02 May	100%	100%	40	24	1	0
Brunei Darussalam	100%	100%	04 Feb	02 Mar	03 Apr	29 Apr	100%	100%	0	0	0	0
Cambodia	100%	100%	10 Feb	10 Mar	10 Apr	10 May	100%	100%	0	0	0	0
China	100%	100%	03 Feb	06 Mar	10 Apr	03 May	100%	100%	17	60	18	18
China, Hong Kong SAR	100%	100%	09 Feb	07 Mar	06 Apr	05 May	100%	100%	2	2	0	0
China, Macao SAR	100%	100%	07 Feb	08 Mar	07 Apr	05 May	100%	100%	0	0	0	0
Japan	100%	100%	06 Feb	09 Mar	10 Apr	10 May	100%	100%	3	120	2	0
Lao People's Democratic Republic	100%	100%	10 Feb	10 Mar	10 Apr	10 May	100%	100%	0	0	0	0
Malaysia	100%	83%	08 Feb	09 Mar	10 Apr	09 May	100%	100%	6	0	0	0
Mongolia	92%	67%	10 Feb	06 Mar	10 Apr	10 May	100%	100%	0	0	0	0
New Zealand	100%	100%	09 Feb	07 Mar	07 Apr	05 May	100%	100%	7	5	1	1
Papua New Guinea	100%	33%	13 Feb	10 Mar	10 Apr	10 May	100%	75%	0	0	0	0
Philippines	100%	92%	21 Feb	08 Mar	07 Apr	10 May	100%	75%	0	0	14	1
Republic of Korea	100%	100%	10 Feb	10 Mar	10 Apr	10 May	100%	100%	1	1	0	0
Singapore	100%	100%	08 Feb	09 Mar	10 Apr	08 May	100%	100%	0	22	0	0
Viet Nam national lab (Northern)	100%	92%	07 Feb	07 Mar	03 Apr	10 May	100%	100%	0	0	0	0
Viet Nam national lab (Southern)	100%	100%	10 Feb	08 Mar	07 Apr	05 May	100%	100%	0	0	0	0
Viet Nam subnational lab (Central)	100%	92%	07 Feb	07 Mar	03 Apr	10 May	100%	100%	0	0	0	0
Viet Nam subnational lab (Highland)	100%	92%	07 Feb	07 Mar	03 Apr	10 May	100%	100%	0	0	0	0
Fiji	100%	92%	14 Feb	14 Mar	13 Apr	15 May	100%	100%	0	0	0	0
Completeness	100%		100%	100%	100%	100%	100%					
Timeliness		92%	100%	100%	95%	100%		96%	76	234	36	20

¹ National measles laboratory monthly reports from April 2017.

Legend: black = timely report; red = untimely report

² Completeness is defined as the number of reports received by the end of the reporting month divided by the number of expected reports for the year.

³ National measles and rubella laboratories should submit monthly reports by the 10th (or the next working day) of the following month.

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Please send your comments and monthly data before the 10th of the month to:
WPROEPIdata@who.int

More detailed information available in the
Regional and country profile of measles elimination