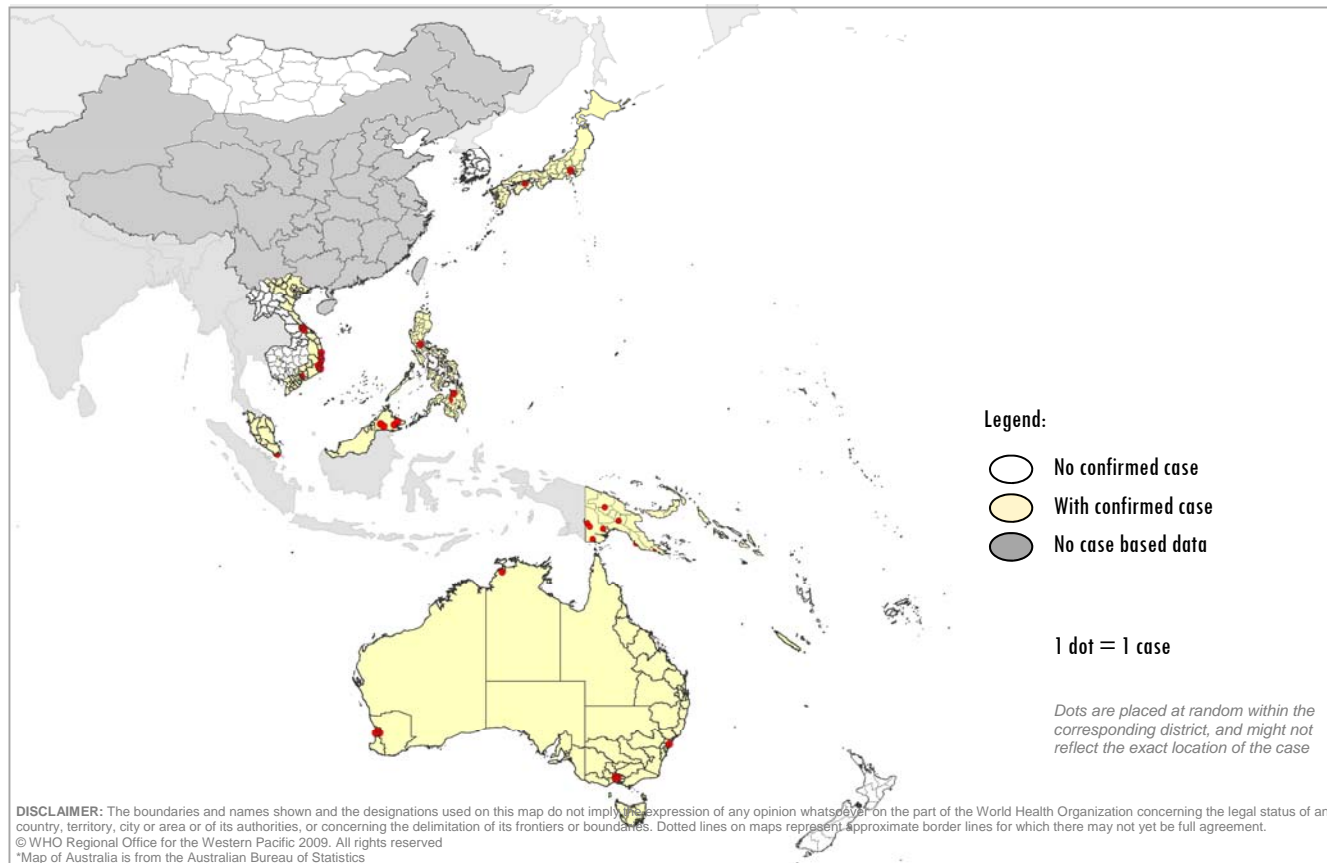


MEASLES-RUBELLA

Bulletin

Figure 1. Distribution of confirmed measles cases with rash onset 1–31 December 2014, WHO Western Pacific Region



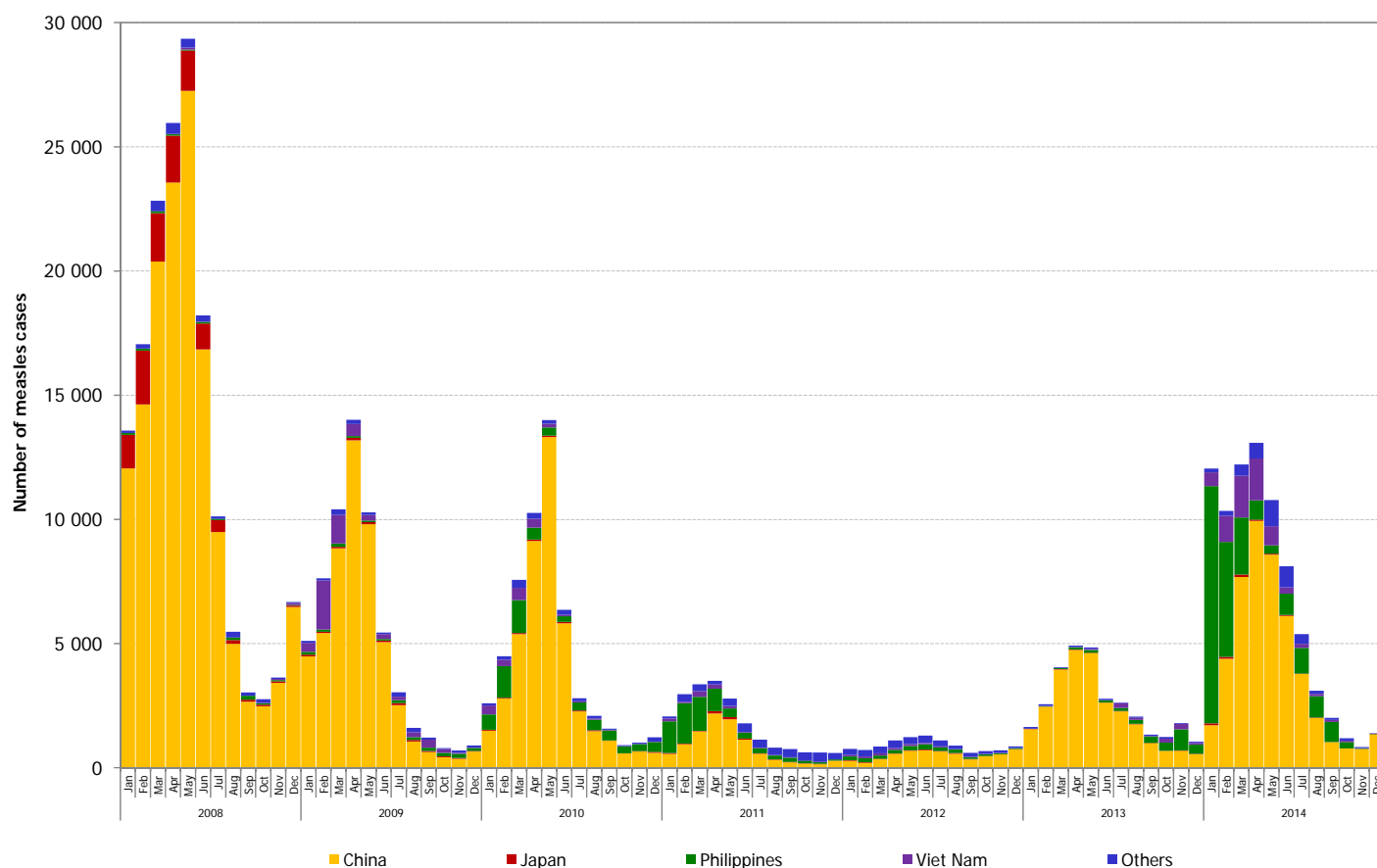
Source: Measles and rubella monthly country reports to the Western Pacific Regional Office by 20 January 2015

Table 1. Confirmed measles cases by month of onset, January – December 2014, WHO Western Pacific Region

Country	2014											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Australia	78	61	36	15	23	34	32	23	2	17	5	9
Brunei Darussalam	0	0	0	0	0	0	0	0	0	0	0	0
Cambodia	0	0	0	0	0	0	0	0	0	0	0	0
China	1717	4387	7675	9936	8587	6113	3779	2007	1033	778	755	1356
China, Hong Kong SAR	5	8	7	3	5	4	7	3	3	1	0	0
China, Macao SAR	0	0	0	0	0	1	0	0	0	0	0	0
Japan	73	78	102	60	37	38	12	19	5	2	6	2
Lao People's Democratic Republic	0	1	0	0	4	0	0	0	28	36	1	0
Malaysia	3	5	67	13	19	18	20	18	18	22	7	4
Mongolia	0	0	0	0	0	0	0	0	0	0	0	0
New Zealand	18	43	36	12	16	98	31	5	0	1	3	0
Papua New Guinea	5	18	231	497	777	640	259	65	29	10	35	10
Philippines	9549	4624	2302	773	330	861	1031	857	811	263	16	3
Republic of Korea	5	29	59	70	204	44	25	3	2	1	0	0
Singapore	31	28	16	18	10	6	12	9	0	2	0	2
Viet Nam	558	1059	1684	1687	767	252	170	93	77	50	9	9
Pacific island countries and areas	0	0	0	0	0	1	8	6	3	2	0	0
Western Pacific Region	12042	10 341	12 215	13 084	10779	8110	5386	3108	2011	1185	837	1395

Source: Case based and aggregate data reports to the Western Pacific Regional Office by 20 January 2015

Figure 2. Measles cases by month of onset, WHO Western Pacific Region, 2008–2014¹



Source: Measles and rubella monthly country reports to WHO by 20 January 2015

¹ Includes laboratory confirmed, epi-linked and clinically confirmed cases for 2008–2012

Table 2. Schedule of activities for measles and rubella, WHO Western Pacific Region

Countries and areas	Measles 2nd dose introduction	Rubella introduction	Post introduction evaluation	Supplementary immunization activities
Australia	1994 (MMR)	1971		
Brunei Darussalam	1988 (MMR)	1984		
Cambodia	2012 (M)	2013		
China	1986 (MMR)	1998		
China, Hong Kong SAR	1997 (MMR)	1978		
China, Macao SAR	1990 (MMR)	1985		
Japan	2006 (MR)	1989		
Lao People's Democratic Republic		2012		
Malaysia	2002 (M)	1998		
Mongolia	1989 (MMR)	2009		
New Zealand	1992 (MMR)	1979		
Papua New Guinea	2015	2015		April–September 2015 (MR, 9m to <15y)
Philippines	2010 (MMR)	2010		
Republic of Korea	1997 (MMR)	1982		
Singapore	1998 (MMR)	1990		
Viet Nam	2006 (M)	2014		October 2014–June 2015 (MR, 9m to <15y)
Pacific island countries and areas				

Table 3. Measles case classification and incidence by country and area, WHO Western Pacific Region, 2010–2014 ¹

Country	2010		2011		2012		2013		2014 ¹									Rash onset of last confirmed measles case	
	Total confirmed ²	Measles incidence per 1 million pop.	Total confirmed ²	Measles incidence per 1 million pop.	Total confirmed ²	Measles incidence per 1 million pop.	Total confirmed ²	Measles incidence per 1 million pop.	Population (in millions) ³	Suspected measles cases	Confirmed measles cases			Annualized measles incidence per 1 million	Compatible cases	Discarded cases ⁵	Pending classification		Deaths due to measles
											Lab	Epi-linked	Total						
Australia	70	3.3	192	8.5	199	8.7	154	6.6	23.50	N/A ⁴	317	18	335	14.3	0	0	0	0	28-Dec-14
Brunei Darussalam	0	0.0	4	9.9	1	2.4	0	0.0	0.43	16	0	0	0	0.0	0	15	0	0	24-Jul-12
Cambodia	1 156	76.8	722	50.5	0	0.0	0	0.0	14.84	636	0	0	0	0.0	0	636	0	0	15-Nov-11
China	38 159	28.5	9 943	7.4	6 183	4.6	26 912	19.8	1 364.77	112 483	47 983	140	48 123	35.3	4 362	59 257	741	26	31-Dec-14
China, Hong Kong SAR	11	1.6	12	1.7	8	1.1	34	4.7	7.35	206	46	0	46	6.3	4	154	0	0	3-Oct-14
China, Macao SAR	0	0.0	1	1.8	1	1.8	3	5.2	0.59	17	1	0	1	1.7	0	16	0	0	3-Jun-14
Japan	432	3.4	411	3.2	228	1.8	141	1.1	126.23	1 047	421	13	434	3.4	18	592	3	0	18-Dec-14
Lao People's Democratic Republic	153	23.8	113	18.0	36	5.6	68	10.5	6.54	491	69	1	70	10.7	0	266	155	0	19-Nov-15
Malaysia	74	2.7	1 603	54.4	1 868	63.7	177	5.9	30.25	4 549	182	32	214	7.1	32	3 752	526	1	22-Dec-14
Mongolia	7	2.6	0	0.0	0	0.0	0	0.0	2.93	137	0	0	0	0.0	0	137	0	0	19-Jun-10
New Zealand	48	11.2	599	135.7	55	12.3	9	2.0	4.55	319	164	99	263	57.7	11	37	7	0	18-Nov-14
Papua New Guinea	0	0.0	0	0.0	0	0.0	7	1.0	7.49	4 634	2 576	0	2 576	344.1	0	2 054	0	0	18-Dec-14
Philippines	6 388	68.2	6 555	69.1	1 536	15.9	3 777	38.5	99.77	58 010	10 917	10 503	21 420	214.7	32 383	3 293	914	110	16-Dec-14
Republic of Korea	111	2.3	43	0.9	2	0.0	116	2.4	48.95	1 631	433	9	442	9.0	0	1 146	7	0	12-Oct-14
Singapore	54	11.2	143	27.6	40	7.6	56	10.6	5.34	256	134	0	134	25.1	37	85	0	0	22-Dec-14
Viet Nam	1 826	20.5	745	8.4	637	5.9	895	9.9	91.56	18 597	5 341	1 157	6 498	71.0	1 082	2 888	8 129	0	10-Dec-15
Pacific island countries and areas	1	0.3	2	1.0	0	0.0	0	0.0	3.27	1 132	20	0	20	6.1	0	130	982	0	10-Oct-14
Western Pacific Region	48 490	27.0	21 088	11.7	10 794	5.9	32 349	17.7	1 838.36	204 161	68 604	11 972	80 576	43.8	37 929	74 458	11 464	137	

¹ Includes all cases reported to the Western Pacific Regional Office by 20 January 2015.

² Includes laboratory confirmed, epi-linked and clinically confirmed cases for 2009 to 2012.

³ United Nations, Department of Economic and Social Affairs, Population Division World Population Prospects.

⁴ Australia reports confirmed cases only.

⁵ Excludes vaccine-associated cases

⁶ Classification is provisional based on laboratory data only.

Verified as having interrupted endemic measles virus transmission

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, 2013–2014 ¹

Country	2013				2014 ¹			
	Discarded non-measles rate per 100 000 pop	Second level units with ≥ 2 discarded cases per 100 000 pop	Suspected cases with adequate investigation	Suspected cases with adequate blood specimens ²	Annualized discarded non-measles rate per 100 000 pop	Second level units with ≥ 2 discarded cases per 100 000 pop (annualized)	Suspected cases with adequate investigation	Suspected cases with adequate blood specimens 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	3.8	100.0%	87.5%	100.0%	3.5	100.0%	93.8%	100.0%
Cambodia	3.7	45.8%	68.5%	98.0%	4.3	83.3%	68.9%	99.4%
China	3.7	64.5%	99.4%	94.6%	4.3	71.0%	91.0%	87.6%
China, Hong Kong SAR	2.5	100.0%	94.2%	91.1%	2.1	100.0%	100.5%	93.7%
China, Macao SAR	2.9	100.0%	95.0%	100.0%	2.7	100.0%	100.0%	100.0%
Japan	0.7	4.3%	Insufficient data	Insufficient data	0.5	0.0%	Insufficient data	Insufficient data
Lao People's Democratic Republic	7.5	58.8%	36.1%	66.5%	4.1	58.8%	74.5%	74.9%
Malaysia	22.6	100.0%	82.3%	81.1%	12.4	93.8%	73.6%	91.5%
Mongolia	7.4	36.4%	100.0%	100.0%	4.7	31.8%	100.0%	100.0%
New Zealand	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
Papua New Guinea	1.4	25.0%	0.0%	76.3%	27.4	75.0%	0.0%	63.8%
Philippines	3.3	64.7%	45.9%	62.9%	3.3	58.8%	52.5%	82.0%
Republic of Korea	0.8	6.3%	63.7%	72.9%	2.3	43.8%	95.8%	63.4%
Singapore	1.3	0.0%	75.4%	18.1%	1.6	0.0%	82.8%	25.4%
Viet Nam	1.2	21.9%	49.2%	63.9%	3.2	40.6%	43.5%	82.0%
Pacific island countries and areas	2.0	Insufficient data	0.0%	Insufficient data	4.0	Insufficient data	0.0%	Insufficient data
Western Pacific Region	3.6	38.0%	91.6%	89.9%	4.1	50.9%	20.3%	84.9%

¹ Includes all cases reported to the Western Pacific Regional Office by 20 January 2015.

² Excludes epidemiologically-linked cases.

³ Reports only confirmed cases.

Green
Yellow
Red

Reached or surpassed target

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

Substantially below target

Table 5. Rubella case classification and incidence by country and area, WHO Western Pacific Region, 2014 ¹

Country	2014 ¹									
	Population (in millions) ²	Investigated rubella cases	Confirmed rubella cases			Annualized rubella incidence per 1 million pop.	Compatible cases	Discarded cases ³	Pending classification	Congenital rubella syndrome
			Lab	Epi-linked	Total					
Australia	23.50	No data	-	-	-	No data	-	-	-	-
Brunei Darussalam	0.43	16	0	0	0	0.0	0	16	0	-
Cambodia	14.84	636	30	0	30	2.0	1	605	0	-
China	1 364.77	11 887	-	-	11 887	8.7	0	-	-	-
China, Hong Kong SAR	7.35	207	1	0	1	0.1	0	206	0	-
China, Macao SAR	0.59	16	0	0	0	0.0	0	16	0	-
Japan	126.23	No data	-	-	-	No data	-	-	-	-
Lao People's Democratic Republic	6.54	330	11	7	18	2.8	0	311	1	-
Malaysia	30.25	4 549	165	61	226	7.5	0	3 797	526	-
Mongolia	2.93	137	0	0	0	0.0	0	137	0	-
New Zealand	4.55	No data	-	-	-	No data	-	-	-	-
Papua New Guinea	7.49	No data	-	-	-	No data	-	-	-	-
Philippines	99.77	58 010	232	5	237	2.4	0	56 859	914	-
Republic of Korea	48.95	1 631	2	0	2	0.0	0	1 625	4	-
Singapore	5.34	11	0	0	0	0.0	0	11	0	-
Viet Nam	91.56	11 409	33	0	33	0.4	0	2 523	8 848	0
Pacific island countries and areas ⁴	3.27	123	4	0	4	1.2	0	119	0	-
Western Pacific Region	1 838.36	88 962	478	73	12 438	6.8	1	66 225	10 293	0

¹ Includes all cases reported to the Western Pacific Regional Office by 20 January 2015.

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

³ Excludes vaccine-associated cases

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
Gray	No data

Table 6A. Measles and rubella laboratory performance, WHO Western Pacific Region, 2013¹

Country	Laboratory	Measles and rubella		Measles												Rubella			
				Serology								Virus detection				Serum and blood (includes DBS)			
		Total number of cases tested	Total number of samples received	Serum			Blood		Timeliness of results		Measles Virus isolation/detection (swab, urine and others)		Measles Reverse Transcription-Polymerase Chain Reaction		Samples tested for rubella IgM		Rubella IgM (+)		Rubella IgM equiv
				Samples tested for measles IgM	Measles IgM (+)	Measles IgM equiv	DBS samples	No. received	No. (+)	<4 days ²	<7 days	No. of samples tested	No. of isolates	No. of samples tested	No. (+)	No.	No.	%	No.
Australia	VIDRL	94	127	34	23	67.6	0	0	-	100.0	100.0	0	0	96	79	13	2	15.4	0
Brunei Darussalam	DLS	42	42	38	0	0.0	2	0	-	69.0	88.1	0	0	0	0	40	3	7.5	0
Cambodia	NPHL	537	537	478	0	0.0	0	59	0	76.0	81.9	0	0	0	0	537	105	19.6	0
China ³	CCDC																		
Hong Kong (China)	PHLC	622	726	669	25	3.7	12	0	-	91.5	98.4	24	13	63	40	615	9	1.5	14
Macao (China)	PHLC	43	43	43	4	9.3	1	0	-	97.7	100.0	0	0	0	0	43	0	0.0	0
Japan	NIID	1 136	1 136	393	195	49.6	0	0	-	No data	No data	52	52	717	106	37	16	43.2	1
Lao People's Democratic Republic	NCLE	366	366	366	29	7.9	21	0	-	83.9	97.0	0	0	0	0	366	19	5.2	48
Malaysia	NPHL	7 586	8 645	6 863	241	3.5	73	0	-	53.5	81.0	1 615	14	0	0	6 783	807	11.9	227
Mongolia	NCCD	213	213	213	0	0.0	0	0	-	99.5	99.5	0	0	0	0	213	8	3.8	7
New Zealand	CHL	159	176	107	5	4.7	3	0	-	95.1	97.1	1	0	49	3	93	4	4.3	1
Papua New Guinea	CPHL	85	85	80	10	12.5	0	3	0	76.3	95.0	0	0	12	2	83	4	4.8	2
Philippines	RITM	6 057	6 069	5 807	2 416	41.6	277	120	23	68.2	80.2	304	90	32	6	3 241	106	3.3	165
Republic of Korea	KCDC	635	825	487	108	22.2	6	0	-	66.4	92.5	65	65	379	96	430	28	6.5	22
Singapore	SGH	434	691	199	16	8.0	7	0	-	85.2	98.7	186	5	0	0	291	16	5.5	10
Viet Nam (central)	Nha Trang	167	167	167	0	0.0	5	0	-	77.8	92.8	0	0	0	0	167	3	1.8	7
Viet Nam (northern)	NIHE	979	987	944	303	32.1	36	0	-	92.1	97.0	41	0	71	45	821	19	2.3	17
Viet Nam (southern)	PI	386	458	368	81	22.0	7	0	-	89.1	98.9	90	3	90	3	368	5	1.4	9
Fiji	FCCDC	60	61	59	0	0.0	0	1	0	89.7	94.8	0	0	0	0	50	4	8.0	0
Samoa	VIDRL	3	3	3	0	0.0	0	0	-	0.0	100.0	0	0	0	0	1	0	0.0	0
Solomon Islands	VIDRL	4	4	0	-	-	-	0	-	0.0	100.0	0	0	0	0	4	1	25.0	0
Total		19 608	21 361	17 318	3 456	20.0	450	183	23	66.3	84.2	2 378	242	1 509	380	14 196	1 159	8.2	530

¹ National measles laboratory monthly reports received in the Western Pacific Regional Office by 20 February 2014

² Recommendation from the Fourth Meeting on Vaccine Preventable Diseases Laboratory Networks in the Western Pacific Region

³ National measles laboratory report is not available

Table 6B. Measles and rubella laboratory performance, WHO Western Pacific Region, 2014¹

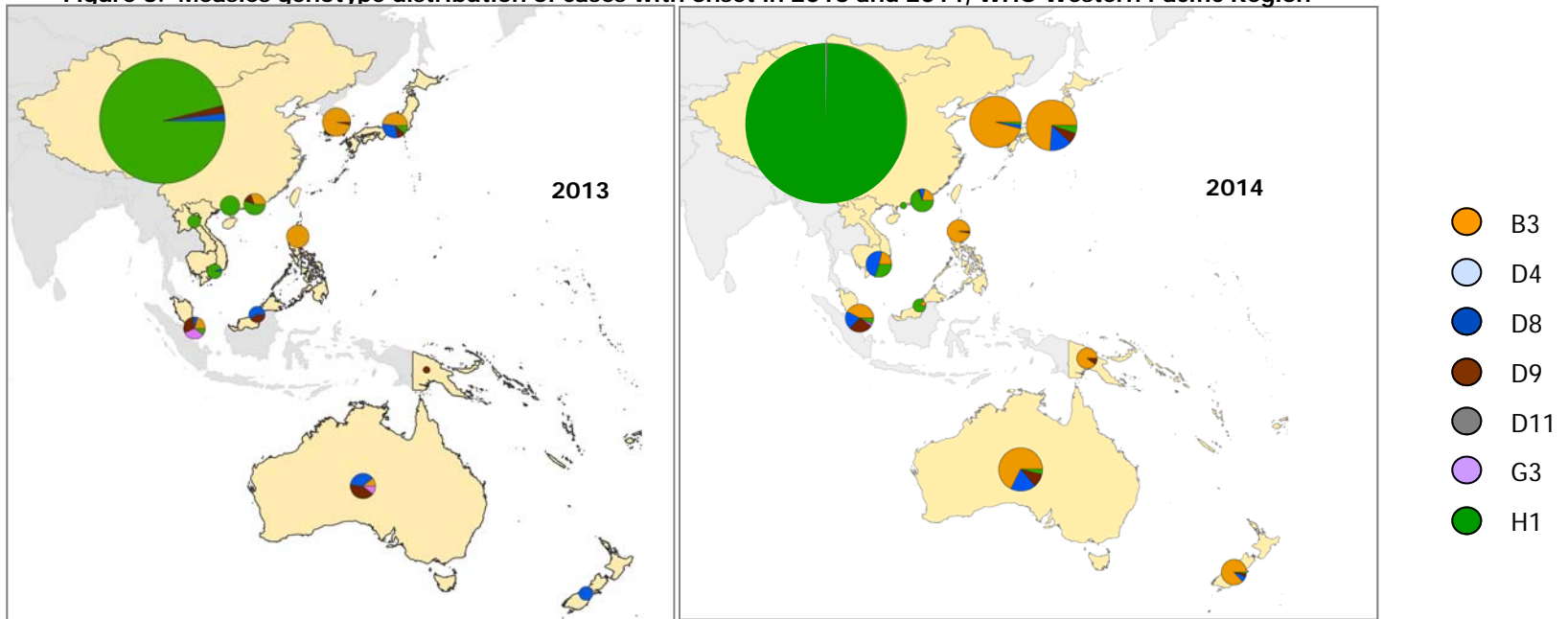
Country	Laboratory	Measles and rubella		Measles													Rubella			
				Serology									Virus detection				Serum and blood (includes DBS)			
		Total number of cases tested	Total number of samples received	Serum			Blood		Timeliness of results		Measles Virus isolation/detection (swab, urine and others)		Measles Reverse Transcription-Polymerase Chain Reaction		Total number of lab confirmed cases	Samples tested for rubella IgM		Rubella IgM (+)		Rubella IgM equiv
				No.	No.	%	No.	No. received	No. (+)	%	%	No. of samples tested	No. of isolates	No. of samples tested		No. (+)	No.	No.	%	
Australia	VIDRL	226	312	66	42	63.6	3	0	-	100.0	100.0	0	0	258	236	207	24	0	0.0	0
Brunei Darussalam	DLS	51	51	51	1	2.0	0	0	-	71.2	98.1	0	0	0	0	1	52	2	3.8	0
Cambodia	NIPH	635	635	577	0	0.0	0	58	0	98.6	100.0	0	0	0	0	0	604	31	5.1	0
China ³	CCDC																			
Hong Kong (China)	PHLC	665	791	698	34	4.9	21	0	-	93.6	98.9	39	28	204	58	49	645	8	1.2	5
Macao (China)	PHLC	58	58	58	1	1.7	0	0	-	100.0	100.0	0	0	1	1	1	57	0	0.0	0
Japan	NIID	854	2 396	362	172	47.5	15	0	-	No data	No data	9	9	780	365	190	11	2	18.2	0
Lao People's Democratic Republic	NCLE	369	370	370	74	20.0	9	0	-	92.6	99.7	0	0	0	0	74	366	11	3.0	28
Malaysia	NPHL	5 134	5 789	4 751	257	5.4	100	0	-	67.5	90.2	997	6	0	0	261	4 434	220	5.0	87
Mongolia	NCCD	137	138	137	0	0.0	0	0	-	99.3	99.3	0	0	0	0	0	137	1	0.7	1
New Zealand	CHL	704	787	249	45	18.1	5	0	-	98.6	99.0	15	8	519	162	181	103	4	3.9	1
Papua New Guinea	CPHL	4 591	4 595	4 583	2 270	49.5	316	0	-	67.7	88.7	0	0	37	32	2 266	2 270	89	3.9	93
Philippines	RITM	19 841	41 235	18 766	12 736	67.9	665	364	187	0.3	1.3	1 247	444	830	760	13 431	5 870	235	4.0	104
Republic of Korea	KCDC	1 873	2 609	1 324	270	20.4	115	0	-	75.1	89.7	332	231	1 440	328	469	770	28	3.6	39
Singapore	SGH	619	675	222	41	18.5	13	0	-	93.6	96.9	170	6	0	0	47	278	9	3.2	4
Viet Nam (central)	Nha Trang	1 800	1 800	1 736	999	57.5	30	0	-	72.6	90.5	0	0	99	50	1 023	780	6	0.8	3
Viet Nam (highland)	IHE	483	483	482	266	55.2	3	0	-	35.6	51.5	0	0	0	0	266	425	1	0.2	0
Viet Nam (northern)	NIHE	4 763	4 804	4 650	2 636	56.7	261	0	-	61.6	84.6	130	5	131	16	2 648	2 196	18	0.8	21
Viet Nam (southern)	PI	11 444	12 684	11 342	6 917	61.0	142	0	-	12.0	18.4	1 342	134	1 343	16	6 924	4 637	20	0.4	11
Fiji	FCCDC	131	131	112	0	0.0	0	19	1	83.3	95.0	0	0	0	0	1	128	3	2.3	0
Vanuatu	FFCDC	13	13	13	4	30.8	2	0	-	91.7	100.0	0	0	0	0	4	13	1	7.7	3
Total		54 391	80 356	50 549	26 765	52.9	1 700	441	188	31.3	40.7	4 281	871	5 642	2 024	28 043	23 800	689	2.9	400

¹ National measles laboratory monthly reports received in the Western Pacific Regional Office by 20 January 2015

² Recommendation from the Fourth Meeting on Vaccine Preventable Diseases Laboratory Networks in the Western Pacific Region

³ National measles laboratory report is not available

Figure 3. Measles genotype distribution of cases with onset in 2013 and 2014, 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.
© WHO Regional Office for the Western Pacific 2009. All rights reserved.

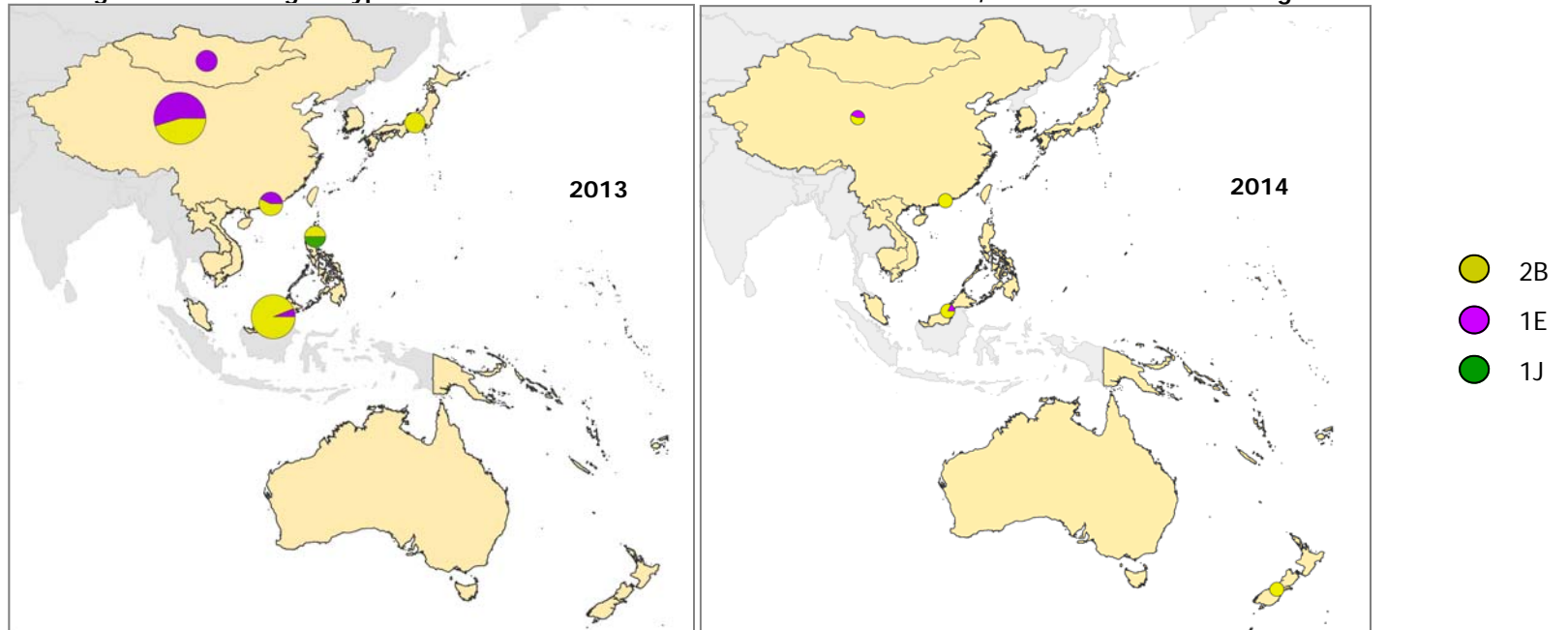
* Size of the pie chart is proportional to the number of genotypes reported by the country

Table 7. Measles genotype distribution of cases with onset in January to December 2014, WHO Western Pacific Region

Country	2014																																																														
	Jan					Feb					Mar				Apr				May				Jun				Jul				Aug				Sep				Oct				Nov				Dec																
	B3	D8	D9	G3	H1	B3	D8	D9	G3	H1	B3	D8	D9	H1	B3	D8	D9	G3	H1	B3	D8	D9	H1	B3	D8	D9	H1	B3	D8	D9	H1	B3	D8	D9	H1	B3	D8	D9	H1	B3	D8	D9	H1	B3	D8	D9	H1	B3	D8	D9	H1	B3	D8	D9	H1								
Australia	53	5	7			40	5	1		1	16	4	1		2	1		1	2	10	3	5		14	7	1	1	9	4	1	3	2	9		1		1			2	2	4																					
Brunei Darussalam																																																															
Cambodia																																																															
China	4			1	261	1	3		469	2	2		751	3				912	1		607			1	537				378				182				121								37																		
Hong Kong (China)	2			1	2	1		5	3	1	3	1										2		2		2				6				3				3	1																								
Macao (China)																																																															
Japan	53	2	1			57	2	2		1	64	7	10	3	35	1	8		1	14	12	4		13	7		1	5				5	3																														
Lao People's Democratic Republic																																																															
Malaysia													5						1											1																																	
Mongolia																																																															
New Zealand	10	1				8	1		1	5		2			6							6						6				3	1					1																									
Papua New Guinea						1	2			10					12		1					4																																									
Philippines	15		1			19				6																																																					
Republic of Korea	1					10				27	1			60	2		2	114	4					63		2	29			2	2			1				1																									
Singapore	13		4	1		12	2	4	1	3	2	8		1	4	1	2		2		2	1	1		4		1	1	1	1	3	1			1																												
Viet Nam		15			1		2			12	11		1																																																		
Pacific island countries and areas ⁴																																																															

Sources: National and regional measles reference laboratory monthly reports from December 2014 and the Measles Nucleotide Sequence online database (MeaNS).

Figure 4. Rubella genotype distribution of cases with onset in 2013 and 2014, 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.
© WHO Regional Office for the Western Pacific 2009. All rights reserved.

* Size of the pie chart is proportional to the number of genotypes reported by the country

Table 8. Rubella genotype distribution of cases with onset in January to December 2014, WHO Western Pacific Region

Country	2014																																				
	Jan			Feb			Mar			Apr			May			Jun			Jul			Aug			Sep			Oct			Nov			Dec			
	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																																					
Brunei Darussalam																																					
Cambodia																																					
China	1	3			2		10	17		15	10		24	7																							
Hong Kong (China)													1						1																		
Macao (China)																																					
Japan																																					
Lao People's Democratic Republic																																					
Malaysia	3	1		6	1		5	1																													
Mongolia																																					
New Zealand	1															1																					
Papua New Guinea																																					
Philippines																																					
Republic of Korea																																					
Singapore																																					
Viet Nam																																					
Pacific island countries and areas ⁴																																					

Sources: National and regional measles reference laboratory monthly reports from December 2014 and the Measles Nucleotide Sequence online database (MeANS).

Table 9A. Completeness and timeliness of epidemiologic reporting, WHO Western Pacific Region, 2012–2014

Country	2012		2013		2014 ¹												Completeness ²	Timeliness ³
	Completeness	Timeliness	Completeness	Timeliness	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
					10 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	10 Oct	10 Nov	10 Dec	10 Jan		
Australia	100%	100%	100%	100%	11 Feb	07 Mar	09 Apr	09 May	06 Jun	08 Jul	08 Aug	02 Sep	10 Oct	07 Nov	05 Dec	07 Jan	100%	92%
Brunei Darussalam	100%	100%	100%	100%	06 Feb	08 Mar	08 Apr	08 May	03 Jun	07 Jul	09 Aug	08 Sep	08 Oct	08 Nov	08 Dec	06 Jan	100%	100%
Cambodia	100%	92%	100%	100%	10 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	10 Oct	10 Nov	10 Dec	10 Jan	100%	100%
China	100%	83%	100%	83%	14 Feb	19 Mar	11 Apr	16 May	23 Jun	11 Jul	18 Aug	15 Sep	11 Oct	13 Nov	11 Dec	13 Jan	100%	67%
Hong Kong (China)	100%	100%	100%	100%	10 Feb	07 Mar	08 Apr	07 May	10 Jun	10 Jul	08 Aug	10 Sep	10 Oct	10 Nov	10 Dec	05 Jan	100%	100%
Macao (China)	100%	100%	100%	100%	06 Feb	05 Mar	04 Apr	05 May	09 Jun	04 Jul	05 Aug	08 Sep	06 Oct	07 Nov	03 Dec	05 Jan	100%	100%
Japan	100%	100%	100%	83%	11 Feb	12 Mar	13 Apr	10 May	11 Jun	13 Jul	10 Aug	11 Sep	13 Oct	13 Nov	12 Dec	10 Jan	100%	17%
Lao People's Democratic Republic	100%	75%	100%	100%	10 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	10 Oct	10 Nov	10 Dec	10 Jan	100%	100%
Malaysia	100%	92%	100%	100%	04 Feb	03 Mar	03 Apr	07 May	03 Jun	08 Jul	05 Aug	12-Sep	10 Oct	10 Nov	10 Dec	10 Jan	100%	92%
Mongolia	100%	100%	100%	100%	10 Feb	07 Mar	07 Apr	06 May	09 Jun	09 Jul	10 Aug	09 Sep	09 Oct	10 Nov	08 Dec	09 Jan	100%	100%
New Zealand	100%	83%	100%	92%	04 Feb	06 Mar	09 Apr	09 May	09 Jun	09 Jul	08 Aug	09 Sep	07 Oct	06 Nov	04 Dec	05 Jan	100%	100%
Papua New Guinea	83%	33%	100%	92%	10 Feb	10 Mar	09 Apr	08 May	13 Jun	17 Jul	28 Aug		10 Oct	10 Nov	05 Dec	21 Jan	92%	58%
Philippines	100%	100%	100%	100%	09 Feb	08 Mar	04 Apr	05 May	04 Jun	04 Jul	08 Aug	08 Sep	09 Oct	10 Nov	10 Dec	05 Jan	100%	100%
Republic of Korea	100%	100%	100%	100%	06 Feb	10 Mar	09 Apr	10 May	10 Jun	10 Jul	10 Aug	05 Sep	10 Oct	07 Nov	10 Dec	08 Jan	100%	100%
Singapore	100%	100%	100%	100%	10 Feb	10 Mar	07 Apr	08 May	06 Jun	09 Jul	10 Aug	04 Sep	09 Oct	11 Nov	10 Dec	05 Jan	100%	92%
Viet Nam	100%	92%	100%	100%	10 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	10 Oct	10 Nov	10 Dec	10 Jan	100%	100%
Pacific island countries and areas	100%	100%	100%	100%	03 Feb	04 Mar	09 Apr	09 May	04 Jun	07 Jul	08 Aug	04 Sep	09 Oct	04 Nov	04 Dec	05 Jan	100%	100%
Completeness	99%		100%		100%	100%	100%	100%	100%	100%	100%	94%	100%	100%	100%	100%	100%	
Timeliness		92%		97%	88%	88%	94%	94%	82%	88%	88%	82%	94%	88%	94%	94%		90%

¹ National measles surveillance monthly reports from December 2014.

Legends: 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, 2012–2014

Country	2012		2013		2014 ¹												Completeness ³	Timeliness ⁴
	Completeness	Timeliness	Completeness	Timeliness	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
					10 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	10 Oct	10 Nov	10 Dec	10 Jan		
Australia	100%	100%	100%	100%	04 Feb	05 Mar	01 Apr	02 May	03 Jun	02 Jul	07 Aug	02 Sep	03 Oct	06 Nov	03 Dec	30 Dec	100%	100%
Brunei Darussalam			100%	78%	04 Feb	04 Mar	02 Apr	03 May	06 Jun	01 Jul	04 Aug	02 Sep	09 Oct	03 Nov	08 Dec	10 Jan	100%	100%
Cambodia	100%	100%	100%	100%	10 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	10 Oct	10 Nov	10 Dec	10 Jan	100%	100%
China	17%	17%	100%	100%	07 Feb	07 Mar	09 Apr	10 May	10 Jun	03 Jul	07 Aug	05 Sep	08 Oct	06 Nov	09 Dec	06 Jan	100%	100%
Hong Kong (China)	100%	100%	100%	100%	07 Feb	08 Mar	08 Apr	07 May	09 Jun	09 Jul	06 Aug	05 Sep	08 Oct	06 Nov	08 Dec	06 Jan	100%	100%
Macao (China)	100%	100%	100%	100%	09 Feb	05 Mar	05 Apr	05 May	10 Jun	07 Jul	05 Aug	08 Sep	06 Oct	07 Nov	04 Dec	07 Jan	100%	100%
Japan	100%	100%	100%	100%	12 Feb	12 Mar	13 Apr	10 May	11 Jun	13 Jul	10 Aug	11 Sep	13 Oct	07 Nov	12 Dec	10 Jan	100%	42%
Lao People's Democratic Republic	100%	92%	92%	92%	08 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	10 Oct	10 Nov	10 Dec	10 Jan	100%	100%
Malaysia	100%	58%	100%	100%	10 Feb	10 Mar	11 Apr	09 May	10 Jun	10 Jul	10 Aug	11 Sep	10 Oct	10 Nov	10 Dec	08 Jan	100%	83%
Mongolia	100%	100%	100%	100%	05 Feb	05 Mar	03 Apr	06 May	05 Jun	06 Jul	05 Aug	06 Sep	02 Oct	07 Nov	05 Dec	05 Jan	100%	100%
New Zealand	100%	100%	100%	100%	04 Feb	06 Mar	09 Apr	09 May	09 Jun	09 Jul	08 Aug	09 Sep	07 Oct	06 Nov	04 Dec	05 Jan	100%	100%
Papua New Guinea	92%	50%	83%	83%	17 Feb	05 Mar	08 Apr	08 May	10 Jun	10 Jul	08 Aug	09 Sep	10 Oct	10 Nov	10 Dec	21 Jan	100%	92%
Philippines	100%	92%	100%	100%	07 Feb	11 Mar	10 Apr	09 May	09 Jun	07 Jul	07 Aug	08 Sep	09 Oct	10 Nov	09 Dec	09 Jan	100%	92%
Republic of Korea	100%	100%	100%	100%	07 Feb	10 Mar	10 Apr	09 May	10 Jun	10 Jul	08 Aug	06 Sep	08 Oct	07 Nov	09 Dec	09 Jan	100%	100%
Singapore	100%	100%	100%	100%	10 Feb	10 Mar	07 Apr	08 May	06 Jun	08 Jul	08 Aug	09 Sep	08 Oct	07 Nov	08 Dec	09 Jan	100%	100%
Viet Nam (central)						10 Mar	10 Apr	10 May			08 Aug	10 Sep	10 Oct	12 Nov	10 Dec	31 Dec	82%	73%
Viet Nam (highlands)						10 Mar	10 Apr	10 May	10 Jun		08 Aug	10 Sep	10 Oct	12 Nov	10 Dec	31 Dec	91%	82%
Viet Nam (northern)	92%	83%	100%	50%	11 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	08 Aug	10 Sep	10 Oct	12 Nov	10 Dec	31 Dec	100%	83%
Viet Nam (southern)	83%	83%	100%	67%	10 Feb	10 Mar	10 Apr	09 May	09 Jun	10 Jul	28 Jul	09 Sep	09 Oct	07 Nov	09 Dec	08 Jan	100%	100%
Fiji	100%	100%	100%	100%	03 Feb	04 Mar	09 Apr	09 May	04 Jun	07 Jul	08 Aug	04 Sep	09 Oct	04 Nov	04 Dec	09 Jan	100%	100%
Completeness	93%		99%		100%	100%	100%	100%	95%	90%	100%	100%	100%	100%	100%	100%	99%	
Timeliness		87%		92%	83%	90%	95%	100%	90%	85%	100%	90%	95%	85%	95%	95%		92%

¹ National measles laboratory monthly reports from December 2014.

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.

Expanded Programme on Immunization
Regional Office for the Western Pacific
World Health Organization

P.O. Box 2932, 1000 Manila, Philippines
Tel. No. (63 2) 5288001
Fax No. (63 2) 5211036, 5260279

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