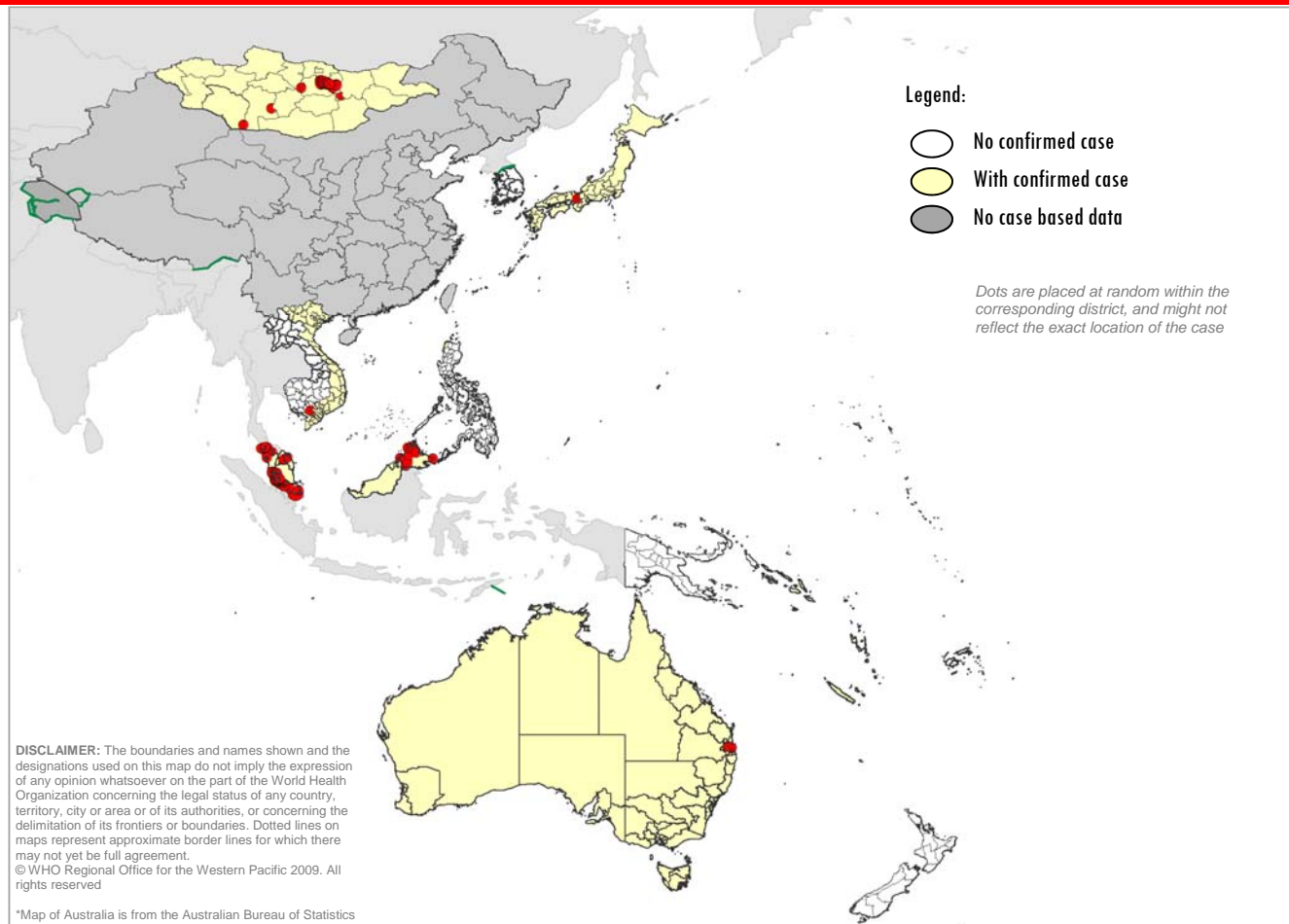


# MEASLES-RUBELLA

**Figure 1. Distribution of confirmed measles cases with rash onset 1–31 August 2015, WHO Western Pacific Region**



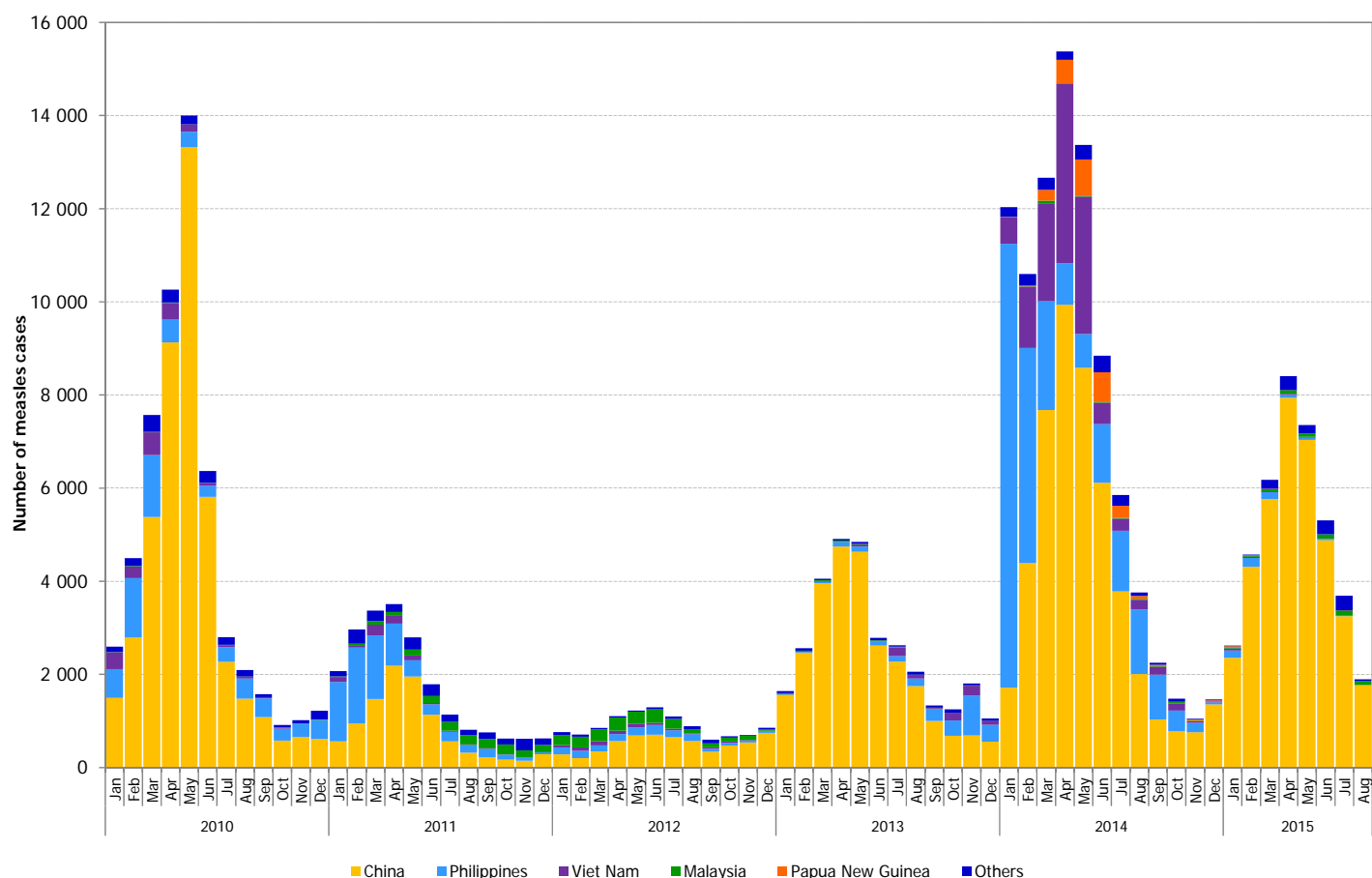
Source: Measles and rubella monthly country reports to the Western Pacific Regional Office by 20 September 2015

**Table 1. Confirmed measles cases by month of onset, September 2014 – August 2015, WHO Western Pacific Region**

Country/area	2014				2015							
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Australia	2	17	5	14	10	6	11	9	5	5	3	5
Brunei Darussalam	0	0	0	0	0	0	0	1	3	0	0	0
Cambodia	0	0	0	0	0	0	0	0	0	0	0	0
China	1033	778	755	1356	2359	4312	5767	7937	7035	4882	3249	1772
China, Hong Kong SAR	3	1	0	0	0	1	1	2	3	2	1	0
China, Macao SAR	0	0	0	0	0	0	0	0	0	0	0	0
Japan	5	2	6	2	1	2	3	11	2	3	1	2
Lao People's Democratic Republic	28	36	1	0	0	3	6	2	0	0	0	0
Malaysia	17	23	7	13	16	25	48	78	70	89	114	84
Mongolia	0	0	0	0	0	0	159	264	160	290	300	30
New Zealand	0	1	3	0	0	2	3	2	5	0	0	0
Papua New Guinea	29	10	37	21	34	4	7	2	0	0	1	0
Philippines	957	448	204	45	151	191	144	65	46	28	7	0
Republic of Korea	2	1	0	0	0	0	4	1	0	1	1	0
Singapore	0	2	0	2	2	3	2	7	2	2	8	2
Viet Nam	170	155	38	10	44	23	17	22	19	5	4	1
Pacific island countries and areas	3	2	0	0	3	2	7	2	3	0	0	0
<b>Western Pacific Region</b>	<b>2249</b>	<b>1476</b>	<b>1056</b>	<b>1463</b>	<b>2620</b>	<b>4574</b>	<b>6179</b>	<b>8405</b>	<b>7226</b>	<b>5307</b>	<b>3689</b>	<b>1896</b>

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

Figure 2. Confirmed measles cases by month of onset, WHO Western Pacific Region, 2010–2015 as of 20 September 2015



Source: Measles and rubella monthly country reports to WHO by 20 September 2015  
<sup>1</sup> Includes laboratory confirmed, epi-linked and clinically confirmed cases for 2010–2012

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

Country/area	Year verified	2014					2015				
		No. of confirmed cases	Source of infection				No. of confirmed cases	Source of infection			
			Imported	Import-related	Unknown	Endemic		Imported	Import-related	Unknown	Endemic
Australia	2014	340	139	101	100	0	54	20	24	10	0
Brunei Darussalam	2015	0	-	-	-	-	4	1	3	0	0
Cambodia	2015	0	-	-	-	-	0	-	-	-	-
China	-	48 123	0	0	48 123	0	37 313	0	0	37 313	0
China, Hong Kong SAR	-	46	4	0	42	0	10	2	0	8	0
China, Macao SAR	2014	1	1	0	0	0	0	-	-	-	-
Japan	2015	434	0	0	434	0	25	11	4	10	0
Lao People's Democratic Republic	-	70	0	0	70	0	11	0	0	11	0
Malaysia	-	213	51	14	51	97	524	2	0	298	224
Mongolia	2014	0	-	-	-	-	1 203	0	1 202	1	0
New Zealand	-	263	0	0	263	0	12	0	0	12	0
Papua New Guinea	-	2 589	0	0	2 589	0	48	0	0	48	0
Philippines	-	23 708	0	0	23 708	0	632	0	0	632	0
Republic of Korea	2014	442	21	407	14	0	7	3	1	3	0
Singapore	-	134	37	0	67	30	28	7	0	21	0
Viet Nam	-	12 223	0	0	12 223	0	135	0	0	135	0
Pacific island countries and areas	-	268	0	0	268	0	17	0	0	17	0
<b>Total</b>	-	<b>88 854</b>	<b>253</b>	<b>522</b>	<b>87 952</b>	<b>127</b>	<b>40 023</b>	<b>46</b>	<b>1 234</b>	<b>38 519</b>	<b>224</b>

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

**Table 3. Measles case classification and incidence by country and area, WHO Western Pacific Region, 2011–2015 as of 20 September 2015**

Country/area	2011		2012		2013		2014		2015										Rash onset of last confirmed measles case
	Total confirmed <sup>1</sup>	Measles incidence per 1 million pop.	Total confirmed <sup>1</sup>	Measles incidence per 1 million pop.	Total confirmed <sup>2</sup>	Measles incidence per 1 million pop.	Total confirmed <sup>2</sup>	Measles incidence per 1 million pop.	Population (in millions) <sup>3</sup>	Suspected measles cases	Pending classification	Discarded cases <sup>4</sup>	Compatible cases	Confirmed measles cases				Deaths due to measles	
														Lab	Epi-linked	Total confirmed	Annualized measles incidence per 1 million pop.		
Australia	192	8.5	199	8.7	154	6.6	340	14.5	22.6	NA <sup>4</sup>	0	0	0	50	4	54	3.6	0	16-Aug-15
Brunei Darussalam	4	9.9	1	2.4	0	0.0	0	0.0	0.4	19	0	15	0	4	0	4	13.5	0	16-May-15
Cambodia	722	50.5	0	0.0	0	0.0	0	0.0	16.4	420	27	393	0	0	0	0	0.0	0	15-Nov-11
China	9 943	7.4	6 183	4.6	26912	19.8	48 123	35.3	1396.0	91 392	1 042	51 439	1 598	37 155	158	37 313	40.1	25	31-Aug-15
China, Hong Kong SAR	12	1.7	8	1.1	34	4.7	46	6.3	7.4	96	0	81	5	10	0	10	2.0	0	6-Jul-15
China, Macao SAR	1	1.8	1	1.8	3	5.2	1	1.7	0.6	7	0	7	0	0	0	0	0.0	0	3-Jun-14
Japan	411	3.2	228	1.8	141	1.1	434	3.4	125.8	241	0	214	2	23	2	25	0.3	0	19-Aug-15
Lao People's Democratic Republic	113	18.0	36	5.6	68	10.5	70	10.7	7.0	559	70	478	0	11	0	11	2.3	0	16-Apr-15
Malaysia	1 603	54.4	1 868	63.7	177	5.9	213	7.0	30.0	3 019	644	1 841	10	507	17	524	26.2	1	17-Aug-15
Mongolia	0	0.0	0	0.0	0	0.0	0	0.0	2.9	20 010	159	1 042	17 606	945	258	1 203	632.1	0	25-Aug-15
New Zealand	599	135.7	55	12.3	9	2.0	263	57.7	4.5	23	5	6	0	11	1	12	4.0	0	28-May-15
Papua New Guinea	0	0.0	0	0.0	7	1.0	2 589	345.9	7.7	137	0	89	0	48	0	48	9.4	0	22-Jul-15
Philippines	6 555	69.1	1 536	15.9	3777	38.5	23 708	237.6	101.7	2 581	4	908	1 037	568	64	632	9.3	2	18-Jul-15
Republic of Korea	43	0.9	2	0.0	107	2.2	442	9.0	49.2	262	1	254	0	7	0	7	0.2	0	14-Jul-15
Singapore	143	27.6	40	7.6	56	10.6	134	25.1	5.1	72	0	41	3	28	0	28	8.3	0	13-Aug-15
Viet Nam	745	8.4	637	5.9	895	9.9	12 223	133.5	93.6	1 262	55	920	152	135	0	135	2.2	0	9-Aug-15
Pacific island countries and areas <sup>6</sup>	2	1.0	0	0.0	0	0.0	273	83.4	3.3	171	3	151	0	17	0	17	7.8	0	29-Apr-15
Western Pacific Region	21 088	11.7	10 794	5.9	32 340	17.7	88 859	48.3	1874.1	120 271	2 010	57 879	20 413	39 519	504	40 023	32.0	28	

<sup>1</sup> Includes laboratory confirmed, epi-linked and clinically confirmed cases for 2009 to 2012.

<sup>2</sup> Includes laboratory confirmed and epi-linked confirmed cases from 2013 to 2015.

<sup>3</sup> United Nations, Department of Economic and Social Affairs, Population Division World Population Prospects.

<sup>4</sup> Australia reports confirmed cases only.

<sup>5</sup> 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, 2014–2015 as of 20 September 2015

Country/area	2014				2015			
	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 <sup>1</sup>	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 <sup>1</sup>
	≥ 2	≥ 80%	≥ 80%	≥ 80%	≥ 2	≥ 80%	≥ 80%	≥ 80%
Australia <sup>2</sup>	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
Brunei Darussalam	3.5	100.0%	93.8%	100.0%	5.1	100.0%	100.0%	94.7%
Cambodia	4.3	83.3%	68.9%	99.4%	3.6	79.2%	84.0%	98.3%
China	4.3	71.0%	91.0%	87.6%	5.5	87.1%	95.4%	85.3%
China, Hong Kong SAR	2.1	100.0%	99.0%	92.8%	1.6	0.0%	100.0%	97.9%
China, Macao SAR	2.7	100.0%	100.0%	100.0%	1.8	0.0%	100.0%	100.0%
Japan	0.5	0.0%	Insufficient data	Insufficient data	0.3	0.0%	Insufficient data	Insufficient data
Lao People's Democratic Republic	4.1	58.8%	74.5%	74.9%	10.2	88.2%	83.5%	83.7%
Malaysia	14.3	93.8%	73.2%	91.1%	9.2	87.5%	73.0%	84.5%
Mongolia	4.7	31.8%	100.0%	100.0%	54.8	81.8%	7.5%	10.4%
New Zealand	1.0	Insufficient data	Insufficient data	Insufficient data	0.0	Insufficient data	Insufficient data	Insufficient data
Papua New Guinea	27.6	75.0%	0.0%	63.5%	1.7	20.0%	51.8%	83.2%
Philippines	4.5	58.8%	83.6%	83.6%	1.3	23.5%	61.7%	67.8%
Republic of Korea	2.4	43.8%	95.6%	63.3%	0.8	93.8%	68.3%	74.4%
Singapore	1.6	0.0%	82.5%	25.3%	1.2	0.0%	91.7%	19.4%
Viet Nam	4.9	40.6%	41.0%	76.4%	1.5	10.9%	44.7%	73.5%
Pacific island countries and areas	4.1	21.7%	0.0%	11.7%	6.9	13.0%	0.0%	64.3%
Western Pacific Region	4.2	52.0%	28.2%	84.2%	4.6	45.8%	78.7%	72.3%

<sup>1</sup> Excludes epidemiologically-linked cases.

<sup>2</sup> 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, 2014–2015 as of 20 September 2015

Country/area	2014		2015										
	Total confirmed	Annualized rubella incidence per 1 million pop.	Population (in millions) <sup>1</sup>	Investigated rubella cases	Pending classification	Discarded cases <sup>3</sup>	Compatible cases	Confirmed rubella cases				Congenital rubella syndrome	
								Lab	Epi-linked	Total confirmed	Annualized rubella incidence per 1 million pop.		
Australia	-	-	22.61	-	-	-	-	-	-	-	-	-	-
Brunei Darussalam	0	0.0	0.44	19	0	19	0	0	0	0	0	0.0	-
Cambodia	30	2.0	16.36	393	0	386	0	7	0	7	0.6	-	
China	11 887	8.7	1 396.00	91 392	0	0	0	-	-	7 757	8.3	-	
China, Hong Kong SAR	1	0.1	7.40	11	1	0	4	6	0	6	1.2	-	
China, Macao SAR	0	0.0	0.57	7	0	5	0	2	0	2	5.3	-	
Japan	-	-	125.79	-	-	-	-	-	-	-	-	-	-
Lao People's Democratic Republic	18	2.8	7.03	495	4	475	0	14	2	16	3.4	-	
Malaysia	226	7.5	30.04	3 043	644	2 373	0	23	3	26	1.3	-	
Mongolia	0	0.0	2.85	1 328	10	1 305	0	13	0	13	6.8	-	
New Zealand	-	-	4.49	-	-	-	-	-	-	-	-	-	-
Papua New Guinea	-	-	7.68	9	0	8	0	1	0	1	0.2	-	
Philippines	343	3.4	101.73	2 581	4	2 464	0	113	0	113	1.7	-	
Republic of Korea	2	0.0	49.15	270	1	267	0	2	0	2	0.1	-	
Singapore	0	0.0	5.06	13	0	12	0	1	0	1	0.3	-	
Viet Nam	50	0.5	93.65	964	67	641	76	179	0	179	2.9	-	
Pacific island countries and areas <sup>2</sup>	4	1.2	3.26	171	1	170	0	0	0	0	0.0	-	
Western Pacific Region	12 561	6.8	1 874.11	100 696	732	8 125	80	361	5	8 123	6.5	-	

<sup>1</sup> United Nations, Department of Economic and Social Affairs, Population Division World Population Prospects.

<sup>2</sup> Classification is provisional based on laboratory data only.

"-" No data

<1 confirmed measles case / 1 000 000 population

1-9.9 confirmed measles case / 1 000 000 population

>= 10 confirmed cases / 1 000 000 population

No data

Green

Yellow

Red

Gray

**Table 6A. Measles and rubella laboratory testing, WHO Western Pacific Region, 2014 as of 20 January 2015**

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		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	
					Samples tested for measles IgM	Measles IgM (+)		Measles IgM equiv	DBS samples		≤4 days <sup>2</sup>	≤7 days	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.						
Australia	VIDRL	312	312	226	66	42	63.6	3	0	-	100.0	100.0	0	-	258	236	207	24	0	0.0	0
Brunei Darussalam	DLS	51	51	51	51	1	2.0	0	0	-	71.2	98.1	0	-	0	-	1	52	2	3.8	0
Cambodia	NIPH	635	635	635	577	0	0.0	0	58	0	98.6	100.0	0	-	0	-	0	604	31	5.1	0
China <sup>3</sup>	CCDC	NA	105 219	105 167	105 219	45 751	43.5	-	-	-	81.0	-	-	7 863	0	-	-	-	-	-	-
China, Hong Kong SAR	PHLC	791	791	665	698	34	4.9	21	0	-	93.6	98.9	39	28	204	58	49	645	8	1.2	5
China, Macao SAR	PHL	58	58	58	58	1	1.7	0	0	-	100.0	100.0	0	-	1	1	1	57	0	0.0	0
Japan	NIID	2 396	854	854	362	172	47.5	15	0	-	-	-	9	9	780	365	190	11	2	18.2	0
Lao People's Democratic Republic	NCLE	370	370	369	370	74	20.0	9	0	-	92.6	99.7	0	-	0	-	74	366	11	3.0	28
Malaysia	NPHL	5 789	5 789	5 134	4 751	257	5.4	100	0	-	67.5	90.2	997	6	0	-	261	4 434	220	5.0	87
Mongolia	NCCD	138	138	137	137	0	0.0	0	0	-	99.3	99.3	0	-	0	-	0	137	1	0.7	1
New Zealand	CHL	787	787	704	249	45	18.1	5	0	-	98.6	99.0	15	8	519	162	181	103	4	3.9	1
Papua New Guinea	CPHL	4 595	4 595	4 591	4 583	2 270	49.5	316	0	-	67.7	88.7	0	-	37	32	2 266	2 270	89	3.9	93
Philippines	RITM	41 235	19 297	19 151	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	2 609	2 609	1 873	1 324	270	20.4	115	0	-	75.1	89.7	332	231	1 440	328	469	770	28	3.6	39
Singapore	SGH	675	675	619	222	41	18.5	13	0	-	93.6	96.9	170	6	0	-	47	278	9	3.2	4
Viet Nam (central)	PI	1 800	1 800	1 800	1 736	999	57.5	30	0	-	72.6	90.5	0	-	99	50	1 023	780	6	0.8	3
Viet Nam (highland)	NIHE	483	483	483	482	266	55.2	3	0	-	35.6	51.5	0	-	0	-	266	425	1	0.2	0
Viet Nam (northern)	NIHE	4 804	4 804	4 763	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	12 684	12 684	11 444	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	131	112	0	0.0	0	19	1	83.3	95.0	0	-	0	-	1	128	3	2.3	0
Vanuatu	FCCDC	13	13	13	13	4	30.8	2	0	-	91.7	100.0	0	-	0	-	4	13	1	7.7	3
<b>Total</b>		<b>80 356</b>	<b>162 095</b>	<b>158 868</b>	<b>155 768</b>	<b>72 516</b>	<b>46.6</b>	<b>1 700</b>	<b>441</b>	<b>188</b>	<b>31.3</b>	<b>40.7</b>	<b>4 281</b>	<b>8 734</b>	<b>5 642</b>	<b>2 024</b>	<b>28 043</b>	<b>23 800</b>	<b>689</b>	<b>2.9</b>	<b>400</b>

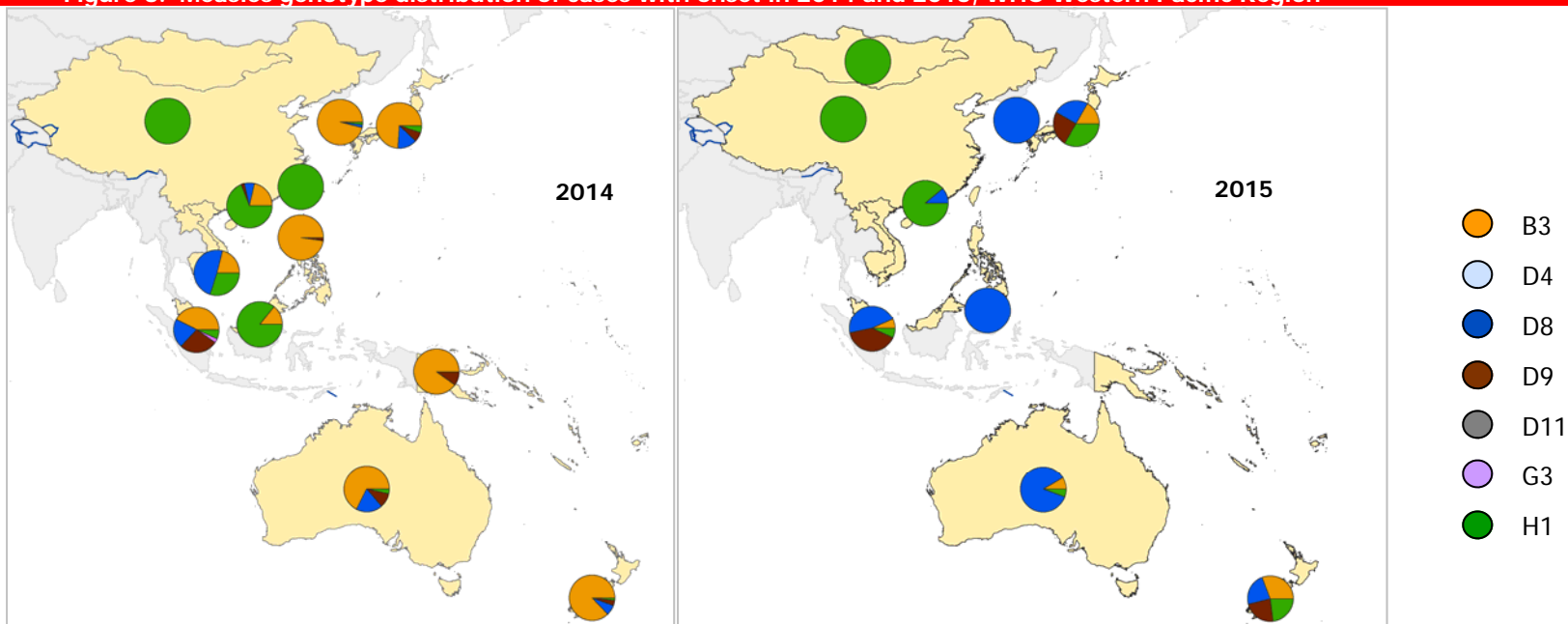
"-" No data

**Table 6B. Measles and rubella laboratory testing, WHO Western Pacific Region, 2015 as of 20 September 2015**

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		Timeliness of 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	No. received	No. (+)		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.	%	No.			
Australia	VIDRL	78	78	51	22	15	68.2	1	0	-	90.9	0	-	59	52	48	1	0	-	0
Brunei Darussalam	DLS	28	28	24	24	4	16.7	0	0	-	91.7	0	-	4	1	4	20	0	0.0	0
Cambodia	NIPH	413	413	413	335	0	0.0	0	79	0	98.8	0	-	0	-	0	413	6	1.5	0
China <sup>3</sup>	CCDC	-	-	-	-	-	-	-	-	-	90.5	-	-	-	-	-	-	-	-	-
China, Hong Kong SAR	PHLC	410	410	335	357	11	3.1	9	0	-	88.3	7	6	54	14	15	340	9	2.6	0
China, Macao SAR	PHL	27	27	27	27	0	0.0	2	0	-	100.0	0	-	0	-	0	27	1	3.7	1
Japan	NIID	350	311	241	62	10	16.1	15	0	-	-	0	-	161	16	22	0	-	-	-
Lao People's Democratic Republic	NCLE	444	444	444	444	11	2.5	12	0	-	88.3	0	-	0	-	11	438	20	4.6	38
Malaysia	NPHL	3 860	3 860	3 334	3 160	789	25.0	67	0	-	79.4	509	0	0	-	793	2 307	43	1.9	34
Mongolia	NCCD	3 271	3 271	3 151	3 080	1 300	42.2	257	0	-	94.9	9	1	194	115	1 367	1 303	16	1.2	8
New Zealand	CHL	281	281	231	107	4	3.7	1	0	-	97.2	0	-	160	8	11	56	0	0.0	0
Papua New Guinea	CPHL	175	175	175	175	54	30.9	17	0	-	54.4	0	-	0	-	54	30	2	-	0
Philippines	RITM	1 943	1 943	1 940	1 851	612	33.1	76	55	11	75.3	43	10	20	20	616	1 266	73	5.8	65
Republic of Korea	KCDC	519	519	389	316	21	6.6	16	0	-	85.7	0	-	211	4	23	182	10	5.5	9
Singapore	SGH	394	394	371	92	9	9.8	0	0	-	89.8	89	0	0	0	9	193	5	2.6	0
Viet Nam (central)	PI	206	206	206	203	6	3.0	3	0	-	51.2	0	0	3	0	6	203	9	4.4	6
Viet Nam (highland)	NIHE	33	33	33	33	7	21.2	0	0	-	69.7	0	-	0	0	7	33	2	6.1	1
Viet Nam (northern)	NIHE	253	253	253	249	52	20.9	9	0	-	93.2	4	0	4	0	52	202	8	4.0	5
Viet Nam (southern)	PI	579	579	547	547	49	9.0	7	0	-	91.6	32	0	32	0	49	547	150	27.4	8
Fiji	FCCDC	91	91	91	90	1	1.1	1	6	0	-	0	-	0	-	1	96	0	0.0	1
Vanuatu	FCCDC	76	76	76	49	15	30.6	2	27	1	-	0	-	0	-	16	76	0	0.0	0
<b>Total</b>		<b>13 431</b>	<b>13 392</b>	<b>12 332</b>	<b>11 223</b>	<b>2 970</b>	<b>26.5</b>	<b>495</b>	<b>167</b>	<b>12</b>	<b>84.9</b>	<b>693</b>	<b>17</b>	<b>902</b>	<b>230</b>	<b>3 104</b>	<b>7 733</b>	<b>354</b>	<b>4.6</b>	<b>176</b>

"-" No data

Figure 3. Measles genotype distribution of cases with onset in 2014 and 2015, 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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\* Size of the pie chart is proportional to the number of genotypes reported by the country

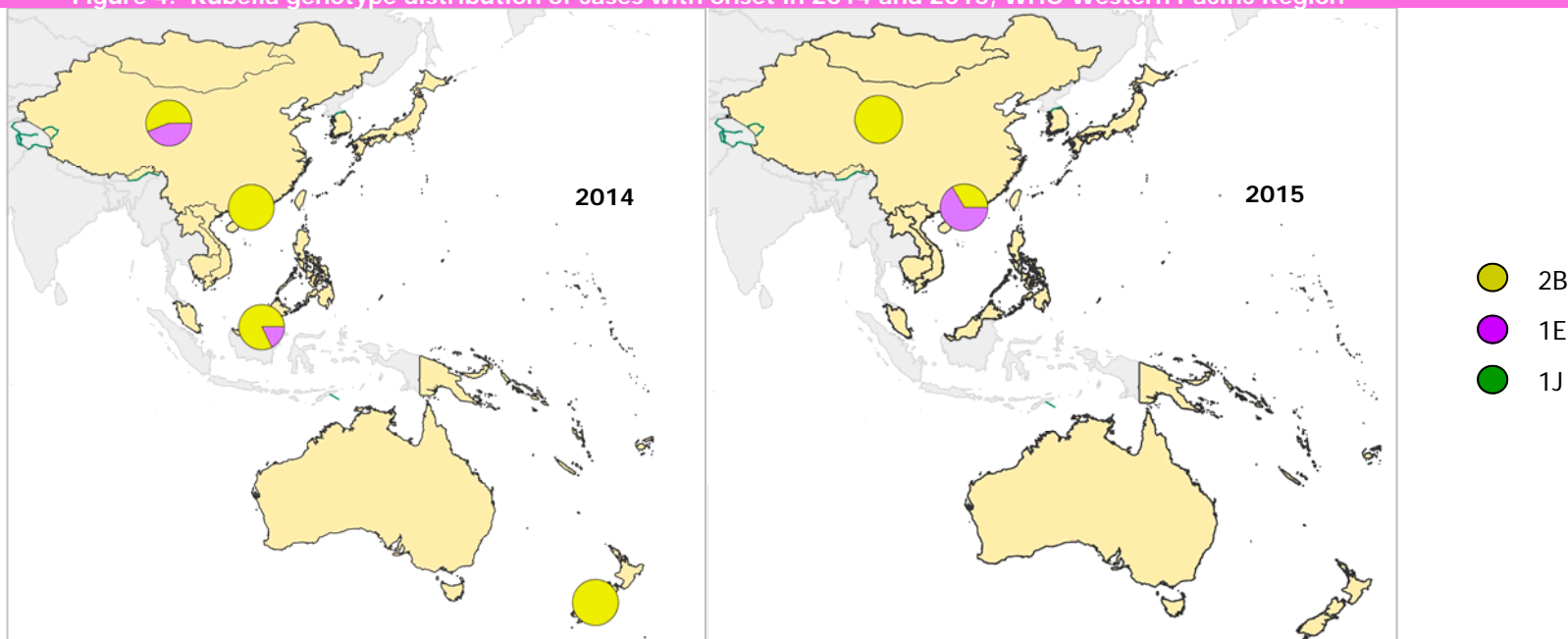
Table 7. Measles genotype distribution of cases with onset in September 2014 to August 2015, WHO Western Pacific Region

Country/area	2014																2015																																			
	Sep				Oct				Nov				Dec				Jan				Feb				Mar				Apr				May				Jun				Jul				Aug							
	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	B3	D8	D9	H1	B3	D8	D9	H1								
Australia		1			2	2	4				2						10				1	3			2	3	1		9	1							5															
Brunei Darussalam																													1																							
Cambodia																																																				
China				85				74				48				139				456				519				715				524			1	407				180				58				4				
China, Hong Kong SAR				3		1																		1		1						2				3				2												
China, Macao SAR																																																				
Japan										3				1										1		1				2	2	3				2				1												
Lao People's Democratic Republic																																																				
Malaysia																																																				
Mongolia																												16																								
New Zealand	1					1					2														1	1			2	2	3					2				1								1				
Papua New Guinea																																																				
Philippines																																																				
Republic of Korea	1					1																				1																										
Singapore																1		1										1				2				1				2												
Viet Nam				3				10																																												
Pacific island countries and areas																																																				

Sources: Includes all cases reported to the Western Pacific Regional Office by 20 September 2015 and the Measles Nucleotide Sequence online database (MeaNS).



Figure 4. Rubella genotype distribution of cases with onset in 2014 and 2015, 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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\* 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 September 2014 to August 2015, WHO Western Pacific Region

Country/area	2014												2015																							
	Sep			Oct			Nov			Dec			Jan			Feb			Mar			Apr			May			Jun			Jul			Aug		
	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											1			4			25	2		8									
China, Hong Kong SAR														1						1								1								
China, Macao SAR																																				
Japan																																				
Lao People's Democratic Republic																																				
Malaysia																																				
Mongolia																																				
New Zealand																																				
Papua New Guinea																																				
Philippines																																				
Republic of Korea																																				
Singapore																																				
Viet Nam																																				
Pacific island countries and areas																																				

Sources: Includes all cases reported to the Western Pacific Regional Office by 20 September 2015

**Table 9A. Completeness and timeliness of epidemiologic reporting, WHO Western Pacific Region, 2013–2015**

Country	2013		2014		2015 <sup>1</sup>								Completeness <sup>2</sup>	Timeliness <sup>3</sup>
	Completeness	Timeliness	Completeness	Timeliness	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		
Australia	100%	100%	100%	92%	09 Feb	06 Mar	02 Apr	05 May	05 Jun	08 Jul	10 Aug	03 Sep	100%	100%
Brunei Darussalam	100%	100%	100%	100%	07 Feb	09 Mar	09 Apr	07 May	08 Jun	07 Jul	08 Aug	07 Sep	100%	100%
Cambodia	100%	100%	100%	100%	10 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	100%	100%
China	100%	83%	100%	67%	25 Feb	15 Mar	10 Apr	15 May	10 Jun	10 Jul	10 Aug	13 Sep	100%	88%
China, Hong Kong SAR	100%	100%	100%	100%	10 Feb	10 Mar	10 Apr	08 May	10 Jun	09 Jul	10 Aug	10 Sep	100%	100%
China, Macao SAR	100%	100%	100%	100%	04 Feb	10 Mar	01 Apr	08 May	05 Jun	02 Jul	10 Aug	07 Sep	100%	100%
Japan	100%	83%	100%	17%	07 Feb	10 Mar	09 Apr	10 May	07 Jun	08 Jul	10 Aug	11 Sep	100%	88%
Lao People's Democratic Republic	100%	100%	100%	100%	10 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	100%	100%
Malaysia	100%	100%	100%	92%	09 Feb	10 Mar	06 Apr	10 May	10 Jun	09 Jul	10 Aug	10 Sep	100%	100%
Mongolia	100%	100%	100%	100%	10 Feb	09 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	100%	100%
New Zealand	100%	92%	100%	100%	03 Feb	03 Mar	10 Apr	07 May	10 Jun	07 Jul	07 Aug	04 Sep	100%	100%
Papua New Guinea	100%	92%	92%	58%	10 Feb	11 Mar	08 Apr	06 May	10 Jun	02 Jul	14 Aug	14 Sep	100%	63%
Philippines	100%	100%	100%	100%	06 Feb	09 Mar	10 Apr	08 May	10 Jun	09 Jul	07 Aug	10 Sep	100%	100%
Republic of Korea	100%	100%	100%	100%	04 Feb	06 Mar	07 Apr	05 May	02 Jun	02 Jul	06 Aug	09 Sep	100%	100%
Singapore	100%	100%	100%	92%	10 Feb	04 Mar	10 Apr	09 May	10 Jun	07 Jul	05 Aug	08 Sep	100%	100%
Viet Nam	100%	100%	100%	100%	10 Feb	03 Mar	10 Apr	10 May	09 Jun	12 Jul	10 Aug	10 Sep	100%	88%
Pacific island countries and areas	100%	100%	100%	100%	04 Feb	05 Mar	10 Apr	05 May	09 Jun	08 Jul	05 Aug	09 Sep	100%	100%
Completeness	100%		100%		100%	100%	100%	100%	100%	100%	100%	100%	100%	
Timeliness		97%		90%	94%	94%	100%	100%	100%	94%	94%	88%		96%

<sup>1</sup> National measles surveillance monthly reports from August 2015.

Legend: black = timely report; red = untimely report

<sup>2</sup> 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.

<sup>3</sup> 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, 2013–2015**

Country/area	2013		2014		2015 <sup>1</sup>								Completeness <sup>2</sup>	Timeliness <sup>3</sup>
	Completeness	Timeliness	Completeness	Timeliness	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		
Australia	100%	100%	100%	100%	05 Feb	02 Mar	02 Apr	04 May	02 Jun	07 Jul	04 Aug	01 Sep	100%	100%
Brunei Darussalam	100%	78%	100%	100%	07 Feb	28 Feb	06 Apr	30 Apr	03 Jun	30 Jun	03 Aug	05 Sep	100%	100%
Cambodia	100%	100%	100%	100%	10 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	100%	100%
China	100%	100%	100%	100%	02 Feb	02 Mar	08 Apr	07 May	02 Jun	07 Jul	05 Aug	08 Sep	100%	100%
China, Hong Kong SAR	100%	100%	100%	100%	06 Feb	06 Mar	08 Apr	08 May	09 Jun	08 Jul	06 Aug	08 Sep	100%	100%
China, Macao SAR	100%	100%	100%	100%	04 Feb	10 Mar	01 Apr	08 May	09 Jun	03 Jul	04 Aug	07 Sep	100%	100%
Japan	100%	100%	100%	42%	07 Feb	10 Mar	09 Apr	10 May	07 Jun	08 Jul	10 Aug	11 Sep	100%	88%
Lao People's Democratic Republic	92%	92%	100%	100%	10 Feb	10 Mar	10 Apr	10 May	10 Jun	10 Jul	10 Aug	10 Sep	100%	100%
Malaysia	100%	100%	100%	83%	09 Feb	10 Mar	08 Apr	08 May	11 Jun	10 Jul	14 Aug	10 Sep	100%	75%
Mongolia	100%	100%	100%	100%	09 Feb	05 Mar	10 Apr	15 May	06 Jun	17 Jul	08 Aug	03 Sep	100%	75%
New Zealand	100%	100%	100%	100%	09 Feb	09 Mar	10 Apr	07 May	07 Jun	07 Jul	07 Aug	04 Sep	100%	100%
Papua New Guinea	83%	83%	100%	92%	11 Feb	17 Mar	07 Apr	08 May	05 Jun	28 Jul	10 Aug	10 Sep	100%	63%
Philippines	100%	100%	100%	92%	10 Feb	09 Mar	08 Apr	06 May	08 Jun	02 Jul	04 Aug	02 Sep	100%	100%
Republic of Korea	100%	100%	100%	100%	09 Feb	09 Mar	10 Apr	07 May	07 Jun	09 Jul	07 Aug	09 Sep	100%	100%
Singapore	100%	100%	100%	100%	09 Feb	07 Mar	08 Apr	08 May	07 Jun	07 Jul	05 Aug	08 Sep	100%	100%
Viet Nam (central)	-	-	82%	73%	11 Feb	16 Mar	04 Apr	15 May	08 Jun	07 Jul	10 Aug	03 Sep	100%	63%
Viet Nam (highlands)	-	-	91%	82%	11 Feb	16 Mar	04 Apr	15 May	08 Jun	07 Jul	10 Aug	03 Sep	100%	63%
Viet Nam (northern)	100%	50%	100%	83%	11 Feb	16 Mar	04 Apr	15 May	08 Jun	07 Jul	10 Aug	03 Sep	100%	63%
Viet Nam (southern)	100%	67%	100%	100%	09 Feb	10 Mar	08 Apr	07 May	08 Jun	08 Jul	07 Aug	07 Sep	100%	100%
Fiji	100%	100%	100%	100%	04 Feb	05 Mar	10 Apr	05 May	09 Jun	08 Jul	05 Aug	09 Sep	100%	100%
Completeness	99%		99%		100%	100%	100%	100%	100%	100%	100%	100%	100%	
Timeliness		92%		92%	89%	80%	100%	80%	90%	95%	95%	95%		89%

<sup>1</sup> National measles laboratory monthly reports from August 2015.

Legend: black = timely report; red = untimely report

<sup>2</sup> 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.

<sup>3</sup> 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**

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Please send your comments and monthly data before the 10th of the month to:  
[WPR\\_EPIdata@wpro.who.int](mailto:WPR_EPIdata@wpro.who.int)