

# MEASLES-RUBELLA

This issue of the Measles-Rubella Bulletin includes data on cases with rash onset in 2011 through December that were reported to the Regional Office in January. Detailed explanations of the indicators used in this Bulletin may be found in [Measles Bulletin Vol. 1 Issue 13 \(September 2007\)](#) and [Measles Bulletin Vol. 2 Issue 4 \(December 2008\)](#). These indicators are consistent with those recommended in the [Weekly Epidemiological Record, No. 49, 2010, 85: 489–496](#).

**Table 1A. Completeness and timeliness of epidemiologic reporting, Western Pacific Region, 2009–2011**

Country	2009		2010		2011 <sup>1</sup>												Completeness <sup>2</sup>	Timeliness <sup>3</sup>	
	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%	08 Feb	10 Mar	08 Apr	06 May	09 Jun	07 Jul	09 Aug	07 Sep	07 Oct	09 Nov	09 Dec	09 Jan	100%	100%	
Brunei Darussalam	100%	100%	100%	100%	08 Feb	09 Mar	07 Apr	09 May	07 Jun	09 Jul	09 Aug	07 Sep	08 Oct	08 Nov	08 Dec	09 Jan	100%	100%	
Cambodia	100%	83%	75%	42%	10 Feb	10 Mar	10 Apr	10 May	08 Jun	10 Jul	31 Aug	10 Sep	10 Oct	10 Nov	10 Dec	10 Jan	100%	92%	
China	92%	0%	100%	58%	14 Feb	10 Mar	12 Apr	11 May	13 Jun	10 Jul	10 Aug	13 Sep	12 Oct	15 Nov	15 Dec	15 Jan	100%	100%	
Hong Kong (China)	100%	100%	100%	100%	09 Feb	09 Mar	07 Apr	06 May	09 Jun	08 Jul	09 Aug	09 Sep	07 Oct	09 Nov	08 Dec	06 Jan	100%	100%	
Japan	100%	92%	100%	100%	04 Feb	07 Mar	05 Apr	06 May	10 Jun	08 Jul	10 Aug	10 Sep	10 Oct	09 Nov	07 Dec	10 Jan	100%	100%	
Lao PDR	58%	42%	83%	75%	09 Feb	10 Mar	08 Apr	10 May	10 Jun	10 Jul	06 Aug	05 Sep	07 Oct	09 Dec	10 Jan	92%	92%		
Macao (China)	100%	83%	100%	100%	07 Feb	04 Mar	06 Apr	05 May	07 Jun	01 Jul	05 Aug	02 Sep	07 Oct	02 Nov	05 Dec	05 Jan	100%	100%	
Malaysia	58%	42%	92%	83%	09 Feb	07 Mar	08 Apr	06 May	09 Jun	15 Jul	10 Aug	10-Sep	05 Oct	09 Nov	15 Dec	10 Jan	100%	92%	
Mongolia	100%	75%	100%	92%	09 Feb	07 Mar	09 Apr	05 May	07 Jun	10 Jul	05 Aug	09 Sep	07 Oct	10 Nov	10 Dec	09 Jan	100%	100%	
New Zealand	100%	92%	100%	92%	07 Feb	07 Mar	05 Apr	12 May	08 Jun	10 Jul	24 Aug	08 Sep	06 Oct	04 Nov	08 Dec	10 Jan	100%	83%	
Papua New Guinea	67%	17%	67%	33%	16 Feb	29 Mar					14 Jul	04 Aug	06 Sep	07 Oct	04 Nov	07 Dec	17 Jan	75%	42%
Philippines	75%	58%	100%	92%	06 Feb	14 Mar	10 Apr	03 May	03 Jun	07 Jul	03 Aug	06 Sep	10 Oct	09 Nov	03 Dec	03 Jan	100%	92%	
Republic of Korea	50%	17%	92%	92%	10 Feb	08 Mar	07 Apr	09 May	10 Jun	10 Jul	08 Aug	14 Sep	07 Oct	04 Nov	06 Dec	04 Jan	100%	92%	
Singapore	100%	67%	100%	100%	02 Feb	01 Mar	06 Apr	05 May	06 Jun	04 Jul	03 Aug	06 Sep	04 Oct	04 Nov	06 Dec	09 Jan	100%	92%	
Viet Nam	83%	25%	92%	25%	10 Feb		10 Apr		02 Jun	10 Jul	11 Aug	02 Oct	07 Oct	02 Nov		11 Jan	75%	50%	
Pacific island countries*	67%	42%	92%	58%	10 Feb	10 Mar				22 Jul	10 Aug	15 Sep	11 Oct	03 Nov	09 Dec	10 Jan	75%	67%	
Completeness	85.3%		93.6%		100%	94%	88%	82%	88%	100%	100%	100%	100%	94%	94%	100%	95.1%		
Timeliness		60.8%		78.9%	94%	88%	88%	76%	88%	88%	82%	88%	100%	94%	88%	88%		88.7%	

<sup>1</sup> Monthly reports with data through December 2011

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 China may report to the Regional Office by the 15th (or the next working day) of the following month

**Table 1B. Completeness and timeliness of laboratory reporting, Western Pacific Region, 2009–2011**

Country	2009		2010		2011 <sup>1</sup>												Completeness <sup>2</sup>	Timeliness <sup>3</sup>
	Completeness	Timeliness	Completeness	Timeliness	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
					08 Feb	03 Mar	05 Apr	04 May	03 Jun	01 Jul	08 Aug	06 Sep	03 Oct	07 Nov	02 Dec	03 Jan		
Australia	100%	83%	100%	100%	08 Feb	03 Mar	05 Apr	04 May	03 Jun	01 Jul	08 Aug	06 Sep	03 Oct	07 Nov	02 Dec	03 Jan	100%	100%
Cambodia	50%	17%	42%	25%	07 Feb	07 Mar	07 Apr	09 May	09 Jun	09 Jul	05 Aug	07 Sep	08 Oct	08 Nov	09 Dec	05 Jan	100%	100%
China	0%	0%	0%	0%													0%	0%
Hong Kong (China)	100%	100%	100%	100%	09 Feb	09 Mar	09 Apr	09 May	09 Jun	09 Jul	10 Aug	09 Sep	08 Oct	10 Nov	10 Dec	09 Jan	100%	100%
Japan	0%	0%	0%	0%	04 Feb	07 Mar	05 Apr	06 May	10 Jun	08 Jul	10 Aug	10 Sep	10 Oct	09 Nov	07 Dec	10 Jan	100%	100%
Lao PDR	8%	0%	58%	58%	10 Feb	10 Mar	08 Apr	10 May	10 Jun	10 Jul	10 Aug	03 Sep	10 Oct	10 Nov	10 Dec	10 Jan	100%	100%
Macao (China)	100%	92%	100%	100%	07 Feb	04 Mar	07 Apr	05 May	08 Jun	07 Jul	05 Aug	05 Sep	08 Oct	08 Nov	05 Dec	08 Jan	100%	100%
Malaysia	75%	8%	92%	58%	09 Feb	07 Mar	08 Apr	10 May	09 Jun	10 Jul	09 Aug	09 Sep	10 Oct	08 Nov	07 Dec	10 Jan	100%	100%
Mongolia	92%	92%	100%	100%	08 Feb	04 Mar	06 Apr	04 May	07 Jun	09 Jul	05 Aug	07 Sep	07 Oct	04 Nov	09 Dec	09 Jan	100%	100%
New Zealand	83%	8%	100%	33%	09 Feb	11 Mar	08 Apr	10 May	10 Jun	07-Jul	10 Aug	08 Sep	10 Oct	10 Nov	09 Dec	10 Jan	100%	92%
Papua New Guinea	0%	0%	75%	33%	10 Feb	08 Mar	12 Apr	09 May		01 Jul	09 Aug	09 Sep	02 Oct		02 Dec	24 Jan	83%	67%
Philippines	100%	33%	100%	83%	08 Feb	10 Mar	08 Apr	10 May	25 May	10 Jul	09 Aug	09 Sep	10 Oct	10 Nov	08 Dec	05 Jan	100%	100%
Republic of Korea	75%	50%	100%	100%	10 Feb	09 Mar	08 Apr	10 May	08 Jun	10 Jul	09 Aug	09 Sep	10 Oct	10 Nov	09 Dec	10 Jan	100%	100%
Singapore	100%	100%	100%	100%	07 Feb	07 Mar	08 Apr	06 May	07 Jun	08 Jul	05 Aug	09 Sep	07 Oct	08 Nov	06 Dec	06 Jan	100%	100%
Viet Nam (northern)	92%	58%	100%	58%	08 Feb	21 Mar	09 Apr	10 May	16 Jun	12 Jul	09 Aug	09 Sep	05 Oct	07 Nov	08 Dec	09 Jan	100%	75%
Viet Nam (southern)	92%	75%	83%	50%	09 Feb	10 Mar	08 Apr	10 May	08 Jun	08 Jul	09 Aug	08 Sep	10 Oct	10 Nov	09 Dec	09 Jan	100%	100%
Fiji	67%	58%	67%	50%	09 Feb	10 Mar	11 Apr	04 May		22 Jul	10 Aug	15 Sep	11 Oct	03 Nov	09 Dec	10 Jan	92%	58%
Completeness	66.7%		77.5%		94%	94%	94%	94%	82%	94%	94%	94%	94%	88%	94%	94%	92.6%	
Timeliness		45.6%		61.8%	94%	82%	82%	94%	76%	82%	94%	88%	88%	88%	94%	88%		87.7%

<sup>1</sup> Monthly reports with data through December 2011

<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

**Table 2A. Measles case classification and incidence, by country and area, Western Pacific Region, 2010–2011 <sup>1</sup>**

Country	2010										2011 <sup>1</sup>									
	Population (in millions) <sup>2</sup>	Suspected measles cases <sup>3</sup>	Confirmed measles cases				Discarded cases	Pending classification	Deaths due to measles	Measles incidence per 1 million pop.	Population (in millions) <sup>2</sup>	Suspected measles cases <sup>3</sup>	Confirmed measles cases				Discarded cases	Pending classification	Deaths due to measles	Measles incidence per 1 million pop.
			Lab	Epi-linked	Clinical	Total							Lab	Epi-linked	Clinical	Total				
Australia	22.27	No data	65	5	0	70	0	0	0	3.1	22.61	No data	164	24	0	188	0	0	0	8.3
Brunei Darussalam	0.40	7	0	0	0	0	7	0	0	0.0	0.41	10	3	0	0	3	6	1	0	7.4
Cambodia	14.14	3572	451	0	705	1 156	2416	0	6	81.8	14.31	3614	320	0	402	722	2883	9	1	50.5
China	1341.34	56 766	26 297	116	11 768	38 181	18 529	56	39	28.5	1347.57	35 807	9013	13	1202	10 228	25 435	144	10	7.6
Hong Kong (China)	7.05	24	4	0	7	11	13	0	0	1.6	7.12	230	6	2	5	13	214	3	0	1.8
Japan	126.54	461	306	3	121	430	31	0	0	3.4	126.50	808	321	9	79	409	399	0	0	3.2
Lao PDR	6.20	332	6	0	147	153	179	0	0	24.7	6.29	440	11	17	59	87	290	63	0	13.8
Macao (China)	0.54	28	0	0	0	0	28	0	0	0.0	0.56	16	1	0	0	1	15	0	0	1.8
Malaysia	28.40	1102	68	2	4	74	1028	0	0	2.6	28.86	4832	1277	101	92	1470	2501	861	3	50.9
Mongolia	2.76	160	0	0	7	7	153	0	0	2.5	2.80	182	0	0	0	0	182	0	0	0.0
New Zealand	4.37	No data	15	21	12	48	0	0	0	11.0	4.41	No data	419	105	65	589	0	0	0	133.4
Papua New Guinea	6.86	26	0	0	0	0	26	0	0	0.0	7.01	50	0	0	0	0	44	6	0	0.0
Philippines	93.26	10 376	2883	137	3368	6388	3988	0	34	68.5	94.85	9395	3122	164	3274	6560	2786	49	28	69.2
Republic of Korea	48.18	246	95	16	3	114	132	0	0	2.4	48.39	172	39	0	3	42	129	1	0	0.9
Singapore	5.09	No data	54	0	0	54	0	0	0	10.6	5.19	No data	141	0	0	141	0	0	0	27.2
Viet Nam	87.85	6428	757	90	979	1826	2919	1683	1	20.8	88.79	12 973	16	25	1034	1075	8978	2918	4	12.1
<b>Pacific island countries and areas</b>																				
American Samoa	0.07	0	0	0	0	0	0	0	0	0.0	0.07	0	0	0	0	0	0	0	0	0.0
Cook Islands	0.02	0	0	0	0	0	0	0	0	0.0	0.02	0	0	0	0	0	0	0	0	0.0
Fiji <sup>4</sup>	0.86	75	1	0	0	1	46	28	0	1.2	0.87	538	2	0	0	2	515	21	0	2.3
French Polynesia	0.27	0	0	0	0	0	0	0	0	0.0	0.27	0	0	0	0	0	0	0	0	0.0
Guam	0.18	0	0	0	0	0	0	0	0	0.0	0.18	0	0	0	0	0	0	0	0	0.0
Kiribati	0.10	0	0	0	0	0	0	0	0	0.0	0.10	0	0	0	0	0	0	0	0	0.0
Marshall Islands	0.05	0	0	0	0	0	0	0	0	0.0	0.05	0	0	0	0	0	0	0	0	0.0
Micronesia, Federated States of	0.11	0	0	0	0	0	0	0	0	0.0	0.11	0	0	0	0	0	0	0	0	0.0
Nauru	0.01	0	0	0	0	0	0	0	0	0.0	0.01	0	0	0	0	0	0	0	0	0.0
New Caledonia	0.25	0	0	0	0	0	0	0	0	0.0	0.25	0	0	0	0	0	0	0	0	0.0
Niue	0.00	0	0	0	0	0	0	0	0	0.0	0.00	0	0	0	0	0	0	0	0	0.0
Northern Mariana Islands	0.06	0	0	0	0	0	0	0	0	0.0	0.06	0	0	0	0	0	0	0	0	0.0
Palau	0.02	0	0	0	0	0	0	0	0	0.0	0.02	0	0	0	0	0	0	0	0	0.0
Samoa	0.18	0	0	0	0	0	0	0	0	0.0	0.18	0	0	0	0	0	0	0	0	0.0
Solomon Islands	0.54	0	0	0	0	0	0	0	0	0.0	0.55	0	0	0	0	0	0	0	0	0.0
Tokelau	0.00	0	0	0	0	0	0	0	0	0.0	0.00	0	0	0	0	0	0	0	0	0.0
Tonga	0.10	0	0	0	0	0	0	0	0	0.0	0.10	0	0	0	0	0	0	0	0	0.0
Tuvalu	0.01	0	0	0	0	0	0	0	0	0.0	0.01	0	0	0	0	0	0	0	0	0.0
Vanuatu	0.24	0	0	0	0	0	0	0	0	0.0	0.25	0	0	0	0	0	0	0	0	0.0
Wallis and Futuna	0.01	0	0	0	0	0	0	0	0	0.0	0.01	0	0	0	0	0	0	0	0	0.0
<b>Western Pacific Region</b>	<b>1798.34</b>	<b>79 603</b>	<b>31 002</b>	<b>390</b>	<b>17 121</b>	<b>48 513</b>	<b>29 495</b>	<b>1767</b>	<b>80</b>	<b>27.0</b>	<b>1808.80</b>	<b>69 067</b>	<b>14 855</b>	<b>460</b>	<b>6215</b>	<b>21 530</b>	<b>44 377</b>	<b>4076</b>	<b>46</b>	<b>11.9</b>

<sup>1</sup> Monthly reports with data through December 2011

<sup>2</sup> Population figures from United Nations World Population Prospects: The 2010 Revision

<sup>3</sup> Australia, New Zealand and Singapore report only confirmed cases

<sup>4</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 2B. Measles surveillance performance indicators, by country and area, Western Pacific Region, 2010–2011 <sup>1</sup>**

Country	2010					2011 <sup>1</sup>				
	Discarded measles rate per 100 000 pop	Second level units with ? 1 discarded cases per 100 000 pop	Suspected cases with adequate investigation	Suspected cases with adequate blood specimens <sup>2</sup>	Percent clinically confirmed cases <sup>3</sup>	Discarded measles rate per 100 000 pop	Second level units with ? 1 discarded cases per 100 000 pop (annualized)	Suspected cases with adequate investigation	Suspected cases with adequate blood specimens <sup>2</sup>	Percent clinically confirmed cases <sup>3</sup>
	? 2	? 80%	? 80%	? 80%	? 10%	? 2	? 80%	? 80%	? 80%	? 10%
Australia <sup>4</sup>	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
Brunei Darussalam	1.8	100.0%	85.7%	100.0%	Not applicable	1.5	100.0%	70.0%	90.0%	0.0%
Cambodia	17.1	75.0%	60.1%	79.3%	61.0%	20.2	75.0%	35.5%	75.2%	55.7%
China	1.4	51.6%	91.1%	72.6%	30.8%	1.9	74.2%	93.9%	87.1%	11.8%
Hong Kong (China)	0.2	0.0%	45.8%	66.7%	63.6%	3.0	100.0%	77.4%	97.4%	38.5%
Japan	0.0	0.0%	Insufficient data	Insufficient data	28.1%	0.3	4.3%	Insufficient data	Insufficient data	19.3%
Lao PDR	2.9	35.3%	19.3%	23.8%	96.1%	4.6	58.8%	40.7%	43.3%	67.8%
Macao (China)	5.2	100.0%	100.0%	100.0%	Not applicable	2.7	100.0%	100.0%	100.0%	0.0%
Malaysia	3.6	87.5%	71.7%	81.7%	5.4%	8.7	93.8%	74.3%	80.5%	6.3%
Mongolia	5.6	31.8%	65.0%	92.5%	100.0%	6.5	36.4%	61.0%	100.0%	Not applicable
New Zealand <sup>4</sup>	Insufficient data	Insufficient data	Insufficient data	Insufficient data	25.0%	Insufficient data	Insufficient data	Insufficient data	Insufficient data	11.0%
Papua New Guinea	0.4	5.0%	46.2%	100.0%	Not applicable	0.6	20.0%	42.0%	82.0%	Not applicable
Philippines	4.3	94.1%	14.5%	67.8%	52.7%	2.9	88.2%	51.5%	76.7%	49.9%
Republic of Korea	0.3	6.3%	61.8%	73.9%	2.6%	0.3	0.0%	72.7%	85.5%	7.1%
Singapore <sup>4</sup>	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data	Insufficient data
Viet Nam	3.3	53.1%	58.9%	59.8%	53.6%	10.1	68.8%	57.1%	34.7%	96.2%
<b>Pacific island countries and areas</b>										
American Samoa	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Cook Islands	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Fiji	5.3	75.0%	0.0%	Not applicable	Not applicable	59.3	100.0%	0.0%	Not applicable	Not applicable
French Polynesia	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Guam	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Kiribati	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Marshall Islands	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Micronesia, Federated States of	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Nauru	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
New Caledonia	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Niue	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Northern Mariana Islands	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Palau	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Samoa	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Solomon Islands	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Tokelau	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Tonga	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Tuvalu	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Vanuatu	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
Wallis and Futuna	0.0	0.0%	Not applicable	Not applicable	Not applicable	0.0	0.0%	Not applicable	Not applicable	Not applicable
<b>Western Pacific Region</b>	<b>1.7</b>	<b>39.3%</b>	<b>76.2%</b>	<b>71.3%</b>	<b>35.4%</b>	<b>2.5</b>	<b>48.7%</b>	<b>75.3%</b>	<b>74.3%</b>	<b>29.3%</b>

<sup>1</sup> Monthly reports with data through December 2011

<sup>2</sup> Excludes epi-linked cases

<sup>3</sup> Among all confirmed cases

<sup>4</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 indi
Red	Substantially below target

**Table 3. Measles and rubella laboratory performance, Western Pacific Region, 2011<sup>1</sup>**

Country	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		Results ≤ 7 days	Measles Virus isolation/ detection (swab, urine, PBMC)		Measles RT - PCR		Total number of lab confirmed cases	Samples tested for rubella IgM	Rubella IgM (+)	Rubella IgM equiv	Rubella IgM pending	
			Samples tested for measles IgM	Measles IgM (+)	Measles IgM equiv	Measles IgM (-)	Measles IgM pending	DBS samples	No. of samples tested		No. of isolates	No. of samples tested	No. of (+)	No.						No.
No.	No.	No.	No.	%	No.	No. received	No. (+)	%	No. of samples tested	No. of isolates	No. of samples tested	No. of (+)	No.	No.	No.	No.				
Australia	159	254	77	25	6	46	59.7%	0	0	-	100%	0	0	167	134	111	40	5	1	0
Cambodia	3201	3208	3038	288	2	2748	90.5%	0	170	8	55.6%	162	0	163	0	296	3038	1048	60	0
China																				
Hong Kong (China)	378	433	342	6	5	331	96.8%	0	0	-	98.2%	19	2	29	6	7	351	40	2	4
Japan																				
Lao PDR	181	181	181	12	0	169	93.4%	0	0	-	82.1%	0	0	0	0	12	181	37	21	0
Macao (China)	47	47	47	1	0	46	97.9%	0	0	-	97.9%	0	0	0	0	1	47	1	1	0
Malaysia	4923	5009	4975	1582	109	3284	66.0%	0	0	-	100%	0	0	0	0	1582	3360	383	193	1
Mongolia	182	182	182	0	0	182	100%	0	0	-	100%	0	0	0	0	0	182	14	5	1
New Zealand	1175	1424	693	161	11	520	75.0%	1	2	0	99.0%	17	2	701	389	467	95	4	1	12
Papua New Guinea	144	144	60	0	0	60	100.0%	0	84	0	30.7%	0	0	0	0	0	144	8	9	2
Philippines	7620	7620	7620	3829	424	3367	44.2%	0	0	-	72.6%	179	30	0	0	3829	3831	1115	322	0
Republic of Korea	243	288	227	41	21	165	72.7%	0	0	-	98.2%	17	1	79	13	42	227	19	32	0
Singapore	581	831	239	56	2	181	75.7%	0	0	-	97.6%	273	42	65	4	95	376	9	18	0
Viet Nam (northern)	2464	2464	1459	8	4	1411	96.7%	36	0	-	62.4%	0	0	0	0	8	2464	1386	188	13
Viet Nam (southern)	1729	1739	1475	6	9	1460	99.0%	0	0	-	92.9%	10	0	10	0	6	1721	1084	110	0
Fiji	527	528	518	2	1	515	99.4%	0	10	0	47.2%	0	0	0	0	2	527	151	57	0
<b>Total</b>	<b>23 554</b>	<b>24 352</b>	<b>21 133</b>	<b>6017</b>	<b>594</b>	<b>14 485</b>	<b>68.5%</b>	<b>37</b>	<b>266</b>	<b>8</b>	<b>78.6%</b>	<b>677</b>	<b>77</b>	<b>1214</b>	<b>546</b>	<b>6458</b>	<b>16 584</b>	<b>5304</b>	<b>1020</b>	<b>33</b>

<sup>1</sup> Monthly reports with data through December 2011

**Table 4A. Measles genotypes distribution, Western Pacific Region, 2010–2011<sup>1</sup>**

Country	2010												2011 <sup>1</sup>											
	Total confirmed cases <sup>2</sup>	Total Lab confirmed <sup>2</sup>	GENOTYPES <sup>3</sup>								Pending	Total	Total confirmed cases <sup>2</sup>	Total Lab confirmed <sup>2</sup>	GENOTYPES <sup>3</sup>								Pending	Total
			B3	D4	D8	D9	D11	G3	H1	A					B3	D4	D8	D9	D11	G3	H1	A		
Australia	70	65	7	3	4	21	-	-	2	1	9	47	188	164	-	31	25	38	-	-	1	5	3	103
Brunei Darussalam	0	0	-	-	-	-	-	-	-	-	-	0	3	3	-	-	-	-	-	-	-	-	-	0
Cambodia	1156	451	-	-	-	11	-	-	-	-	-	11	722	320	-	-	-	-	-	-	-	-	-	0
China	38 181	26 297	-	-	-	2	2	-	277	2	-	283	10228	9013	-	-	-	-	1	-	175	2	-	178
Hong Kong (China)	11	4	1	-	1	1	-	-	2	-	-	5	13	6	-	-	1	3	-	-	1	-	-	5
Japan	430	306	-	-	1	4	-	-	1	-	-	6	409	321	-	51	7	35	-	1	-	4	-	98
Lao PDR	153	6	-	-	-	-	-	-	5	-	-	5	87	11	-	-	-	-	-	-	6	-	-	6
Macao (China)	0	0	-	-	-	-	-	-	-	-	-	0	1	1	-	-	1	-	-	-	-	-	-	1
Malaysia	75	69	1	-	-	1	-	3	-	2	-	7	1,470	1,277	-	-	-	43	-	1	-	2	-	46
Mongolia	7	0	-	-	-	-	-	-	-	-	-	0	0	0	-	-	-	-	-	-	-	-	-	0
New Zealand	48	15	-	-	3	-	-	-	-	2	-	5	589	419	-	22	3	12	-	-	-	-	-	37
Papua New Guinea	0	0	-	-	-	-	-	-	-	-	-	0	0	0	-	-	-	-	-	-	-	-	-	0
Philippines	6384	2881	-	-	-	11	-	-	-	-	-	11	6560	3122	-	-	-	24	-	-	-	1	-	25
Republic of Korea	114	95	-	-	-	-	-	-	38	1	-	39	42	39	-	-	-	12	-	-	-	1	-	13
Singapore	54	54	-	-	-	13	-	2	1	-	-	16	141	141	-	1	9	31	-	1	-	-	2	44
Viet Nam	1823	757	-	-	-	-	-	-	13	-	-	13	1,075	16	-	-	-	-	-	-	-	-	-	0
Pacific island countries	0	0	-	-	-	-	-	-	-	-	-	0	2	2	-	-	-	-	-	-	-	-	-	0
<b>Total</b>	<b>48 506</b>	<b>31 000</b>	<b>9</b>	<b>3</b>	<b>9</b>	<b>64</b>	<b>2</b>	<b>5</b>	<b>339</b>	<b>8</b>	<b>9</b>	<b>448</b>	<b>21 530</b>	<b>14 855</b>	<b>-</b>	<b>105</b>	<b>46</b>	<b>198</b>	<b>1</b>	<b>3</b>	<b>183</b>	<b>15</b>	<b>5</b>	<b>556</b>

<sup>1</sup> Monthly reports with data through December 2011

<sup>2</sup> Source: National measles surveillance reports (Table 2A)

<sup>3</sup> Sources: National and regional reference laboratory reports to WHO and to the Measles Nucleotide Sequence online database (MeANS), whichever has the greater number

**Table 4B. Rubella genotypes distribution, Western Pacific Region, 2010–2011<sup>1</sup>**

Country	2010						2011 <sup>1</sup>						
	Samples tested for rubella IgM <sup>2</sup>	Rubella IgM positive <sup>2</sup>	Genotypes <sup>3</sup>			Total	Samples tested for rubella IgM <sup>2</sup>	Rubella IgM positive <sup>2</sup>	Genotypes <sup>3</sup>			Pending	Total
			1E	1j	2B				1E	1j	2B		
Australia	56	12	-	-	-	0	40	5	-	-	-	-	0
Brunei Darussalam	-	-	-	-	-	0			-	-	-	-	0
Cambodia	2580	71	-	-	4	4	3038	1,048	-	-	-	-	0
China	-	-	52	2	-	54			154	-	18	-	172
Hong Kong (China)	120	11	6	2	-	8	351	40	7	-	8	-	15
Japan	-	-	1	-	-	1			2	1	2		5
Lao PDR	84	26	5	-	-	5	181	37	1	-	-	-	1
Macao (China)	57	2	-	-	-	0	47	1	-	-	-	-	0
Malaysia	844	110	-	-	-	0	3360	383	-	-	2	-	2
Mongolia	156	7	2	-	-	2	182	14	-	-	-	-	0
New Zealand	62	1	-	-	-	0	95	4	-	-	5	-	5
Papua New Guinea	34	5	-	-	-	0	144	8	-	-	2	-	2
Philippines	4327	1440	-	3	1	4	3831	1115	-	-	-	-	0
Republic of Korea	202	15	-	-	-	0	227	19	-	-	-	-	0
Singapore	770	47	-	-	1	1	376	9	-	-	-	-	0
Viet Nam	5018	2302	-	-	-	0	4185	2470	-	-	-	-	0
Pacific island countries	48	1	-	-	-	0	527	151	-	-	2	-	2
<b>Total</b>	<b>14 358</b>	<b>4050</b>	<b>66</b>	<b>7</b>	<b>6</b>	<b>79</b>	<b>16 584</b>	<b>5304</b>	<b>164</b>	<b>1</b>	<b>39</b>	<b>0</b>	<b>204</b>

<sup>1</sup> Monthly reports with data through December 2011

<sup>2</sup> Source: National laboratory reports to WHO (Table 3)

<sup>3</sup> Sources: National and regional reference laboratory reports to WHO and to the Measles Nucleotide Sequence online database (MeaNS), whichever has the greater number

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