

# MEASLES REPORT

This report includes cases of measles reported in EpiSurv up to midnight 11 December 2009. Data was extracted from EpiSurv at 10am 15 December 2009.

In the last two weeks, six new cases of measles were notified. The notified cases consisted of two confirmed cases, and four cases under investigation. There were no hospitalisations and no deaths were reported.

This report incorporates the temporal distribution of cases, and the distribution of cases by age, ethnicity (prioritised), and district health board (DHB), as well as a summary of confirmed cases by immunisation status. The case classification used in this report is specified in the appendix.

## Temporal distribution of cases

There were six total notifications in the past week, two of which were confirmed (Figure 1). However, both total and confirmed case counts for the last two weeks are likely to change as the cases are investigated. There has been a total of 226 notifications since 30 May 2009 including 161 confirmed and 53 probable cases. Nineteen (8.9%) of the confirmed and probable cases required hospitalisation. There have been no reported deaths.

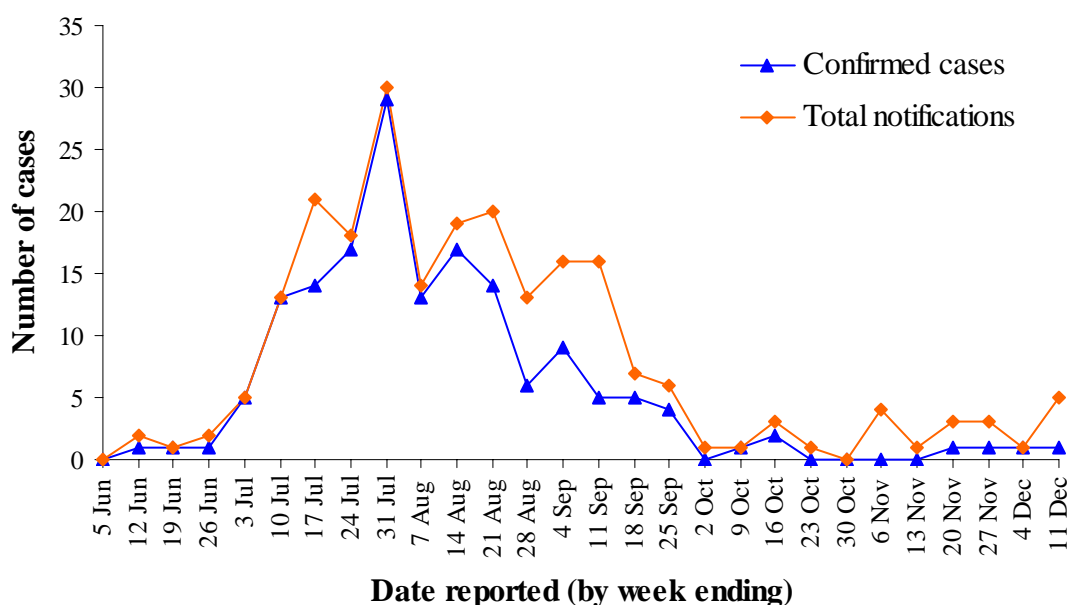


Figure 1 : Epidemic curve of confirmed and total measles cases by week reported

## Case demographics

The distribution of cases by age, ethnicity (prioritised) and district health board (DHB) is shown in Tables 1 to 3 below.

### Age group

Of the 160 confirmed cases reported with a known age since 30 May 2009, 75 (46.9%) were aged under 10 years old, 63 (39.4%) were aged 10-19 years of age, and 22 (13.8%) were aged 20 years or older. The one (100.0%) confirmed case reported with a known age in the last two weeks was aged 15 months to 3 years (Table 1).

Of the 160 confirmed cases reported with a known age since 30 May 2009, 85 (53.1%) were aged 12 months to 12 years and 40 (25.0%) were aged 13 years to 20 years. The one (100.0%) confirmed case reported in the last two weeks with a known age was aged 12 months to 12 years.

**Table 1: Age distribution of measles cases and hospitalisations**

Age Group	28 Nov - 11 Dec 2009					Cumulative total since 30 May 2009				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
<15mths	1	0	0	1	0	40	19	19	2	1
15mths-3yrs	3	1	0	2	0	63	34	23	6	5
4-9 yrs	1	0	0	1	0	28	22	3	3	0
10-19 yrs	0	0	0	0	0	70	63	6	1	6
20+ yrs	0	0	0	0	0	24	22	2	0	7
Unknown	1	1	0	0	0	1	1	0	0	0
<b>Total</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>226</b>	<b>161</b>	<b>53</b>	<b>12</b>	<b>19</b>
<i>12mths - 12yrs</i>	<i>4</i>	<i>1</i>	<i>0</i>	<i>3</i>	<i>0</i>	<i>128</i>	<i>85</i>	<i>33</i>	<i>10</i>	<i>5</i>
<i>13yrs - 20yrs</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>46</i>	<i>40</i>	<i>6</i>	<i>0</i>	<i>6</i>

<sup>1</sup> Confirmed or probable measles cases where hospitalisation was recorded as "Yes".

### Ethnicity

Of the 155 confirmed cases of measles reported since 30 May 2009 with a known ethnicity, 131 (84.5%) were European, 13 (8.4%) were of Maori ethnicity, six (3.9%) were of Other ethnicity and five (3.2%) were Pacific Peoples (Table 2). The one (100.0%) confirmed case reported in the last two weeks with a known ethnicity was Maori.

**Table 2 : Ethnic (prioritised) distribution of measles cases and hospitalisations**

Ethnicity (prioritised)	28 Nov - 11 Dec 2009					Cumulative total since 30 May 2009				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
Maori	1	1	0	0	0	23	13	8	2	1
Pacific Peoples	0	0	0	0	0	6	5	1	0	2
Other	1	0	0	1	0	8	6	1	1	1
European	2	0	0	2	0	179	131	42	6	14
Unknown	2	1	0	1	0	10	6	1	3	1
<b>Total</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>226</b>	<b>161</b>	<b>53</b>	<b>12</b>	<b>19</b>

<sup>1</sup> Confirmed or probable measles cases where hospitalisation was recorded as "Yes".

## Geographical distribution

Of the 161 confirmed cases reported since 30 May 2009, 125 (77.6%) were reported from Canterbury DHB, 21 (13.0%) from the Auckland region (covered by Waitemata, Auckland and Counties Manukau DHBs), five (3.1%) from West Coast DHB, four (2.5%) from Otago DHB, three (1.9%) from Northland DHB, and one each (0.6%) from Hawke's Bay, Nelson Marlborough, and Southland DHBs (Table 3). One (50.0%) confirmed case reported in the last two weeks was from Auckland DHB, and one (50.0%) confirmed case from West Coast (50.0%) DHB.

**Table 3 : Geographical distribution of measles cases and hospitalisations**

DHB	28 Nov - 11 Dec 2009					Cumulative total since 30 May 2009				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
Northland	0	0	0	0	0	5	3	1	1	1
Waitemata	0	0	0	0	0	13	12	1	0	3
Auckland	3	1	0	2	0	9	7	0	2	0
Counties Manukau	0	0	0	0	0	3	2	1	0	0
Waikato	0	0	0	0	0	1	0	1	0	0
Lakes	0	0	0	0	0	2	0	0	2	0
Bay of Plenty	0	0	0	0	0	2	0	1	1	0
Tairāwhiti	0	0	0	0	0	0	0	0	0	0
Taranaki	0	0	0	0	0	0	0	0	0	0
Hawke's Bay	0	0	0	0	0	3	1	0	2	0
Whanganui	0	0	0	0	0	1	0	1	0	0
MidCentral	0	0	0	0	0	1	0	1	0	0
Hutt Valley	0	0	0	0	0	0	0	0	0	0
Capital and Coast	1	0	0	1	0	1	0	0	1	0
Wairarapa	0	0	0	0	0	0	0	0	0	0
Nelson	0	0	0	0	0	1	1	0	0	0
Marlborough	0	0	0	0	0	1	1	0	0	0
West Coast	1	1	0	0	0	6	5	1	0	0
Canterbury	1	0	0	1	0	170	125	43	2	15
South Canterbury	0	0	0	0	0	2	0	1	1	0
Otago	0	0	0	0	0	4	4	0	0	0
Southland	0	0	0	0	0	2	1	1	0	0
<b>New Zealand Total</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>226</b>	<b>161</b>	<b>53</b>	<b>12</b>	<b>19</b>

<sup>1</sup> Confirmed or probable measles cases where hospitalisation was recorded as "Yes".

## Immunisation status

The immunisation status as reported to Public Health Service staff for confirmed measles cases is shown in Table 4 and Table 5.

Vaccination status was known for one of the confirmed measles cases reported in the last two weeks. One case, aged 15 months to 3 years, had one dose of vaccine.

**Table 4 : Immunisation status of measles cases (confirmed) notified in the last two weeks**

Age Group	Total cases	One dose	Two doses	Vaccinated (no dose info)	Not vaccinated	Unknown
<15mths	0	0	0	0	0	0
15mths- 3yrs	1	1	0	0	0	0
4-9 yrs	0	0	0	0	0	0
10-19 yrs	0	0	0	0	0	0
20+ yrs	0	0	0	0	0	0
Unknown	1	0	0	0	0	1
<b>Total</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

Of the 161 confirmed cases reported since 30 May 2009, 152 (94.4%) had a known vaccination status. Of these 152 cases, 85 were not vaccinated including 15 cases aged less than 15 months and therefore not eligible for vaccination. Thirty nine cases had received one dose of vaccine which includes four cases aged less than 15 months who had received their first dose (due at 15 months) early and 23 cases aged 15 months to 3 years who were only eligible for one dose of vaccine. Eighteen cases reported having completed measles vaccination.

**Table 5 : Immunisation status of measles cases (confirmed) notified since 30 May 2009**

Age Group	Total cases	One dose	Two doses	Vaccinated (no dose info)	Not vaccinated	Unknown
<15mths	19	4	0	0	15	0
15mths- 3yrs	34	23	2	0	8	1
4-9 yrs	22	2	2	0	18	0
10-19 yrs	63	7	12	4	38	2
20+ yrs	22	3	2	6	6	5
Unknown	1	0	0	0	0	1
<b>Total</b>	<b>161</b>	<b>39</b>	<b>18</b>	<b>10</b>	<b>85</b>	<b>9</b>

## Appendix

### Case classification:

<b>Confirmed</b>	A clinically compatible illness that is epidemiologically linked to a confirmed case or is laboratory confirmed
<b>Probable</b>	A clinically compatible illness with all of the following symptoms: <ul style="list-style-type: none"> <li>• a fever <math>\geq 38^{\circ}\text{C}</math></li> <li>• a generalised maculopapular rash lasting three or more days</li> <li>• cough, or coryza, or conjunctivitis, or Koplik spots</li> </ul>
<b>Other</b>	Status recorded as <i>under investigation</i> or cases where there was insufficient information to define the status

This report is available on the internet from [www.surv.esr.cri.nz](http://www.surv.esr.cri.nz)