

# MEASLES REPORT

This report includes cases of measles reported in EpiSurv up to midnight 23 April 2010. Data was extracted from EpiSurv at 10am 27 April 2010.

In the last two weeks, eight new cases of measles were notified. The notified cases consisted of four confirmed cases, one probable, and three cases under investigation. There were no hospitalisations or deaths 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 have been a total of eight measles notifications in the last two weeks, four of which were confirmed. However, both total and confirmed case counts for the last two weeks are likely to change as the cases are investigated. Following relatively low numbers of notifications from mid February to mid March 2010 a significant spike in notifications in week 14 can be observed followed by a smaller peak in week 16 (Figure 1). There have been a total of 44 notifications since 26 December 2009 (the beginning of surveillance week 1 for 2010) including 27 confirmed, 11 probable and six cases under investigation. One hospitalisation and no deaths have been reported.

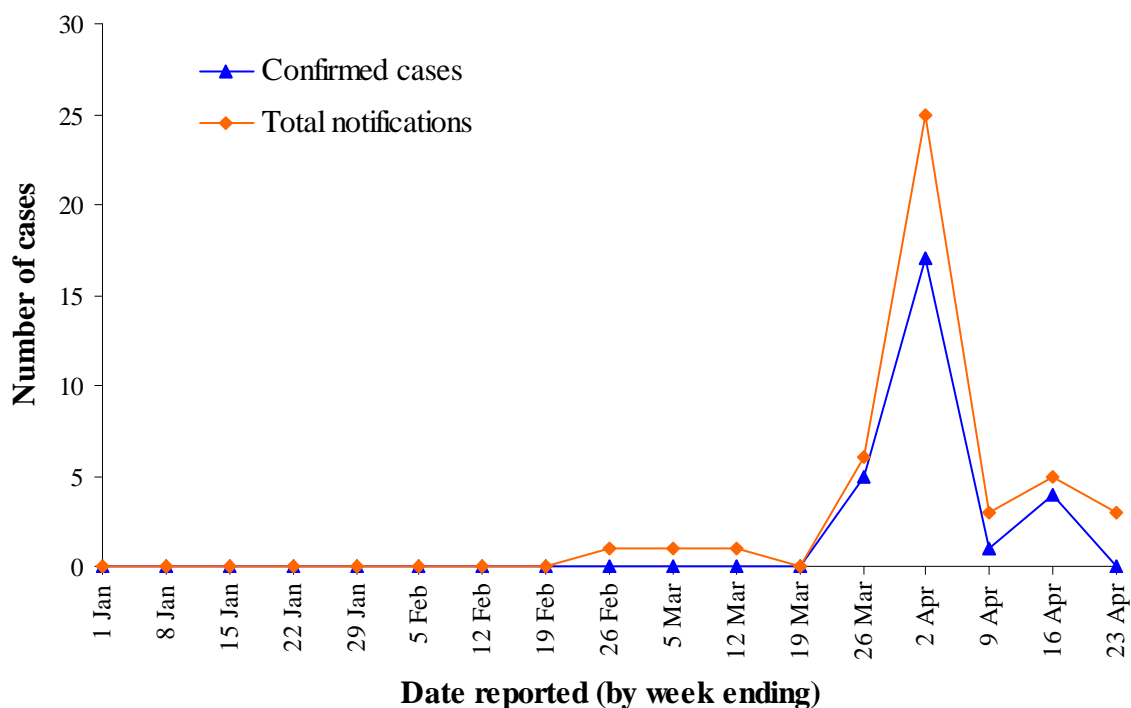


Figure 1 : Epidemic curve of confirmed and total measles cases by week reported

Of the four confirmed measles cases reported in the last two weeks, onset dates for three cases range from 3 April to 9 April 2010 (Figure 2). The onset date has not been reported for the remaining case. Reporting of onset dates is not always complete (five of the 44 notifications since 26 December 2009 do not have onset dates available). The earliest report date since 26 December 2009 is 15 February 2010 and is a probable case.

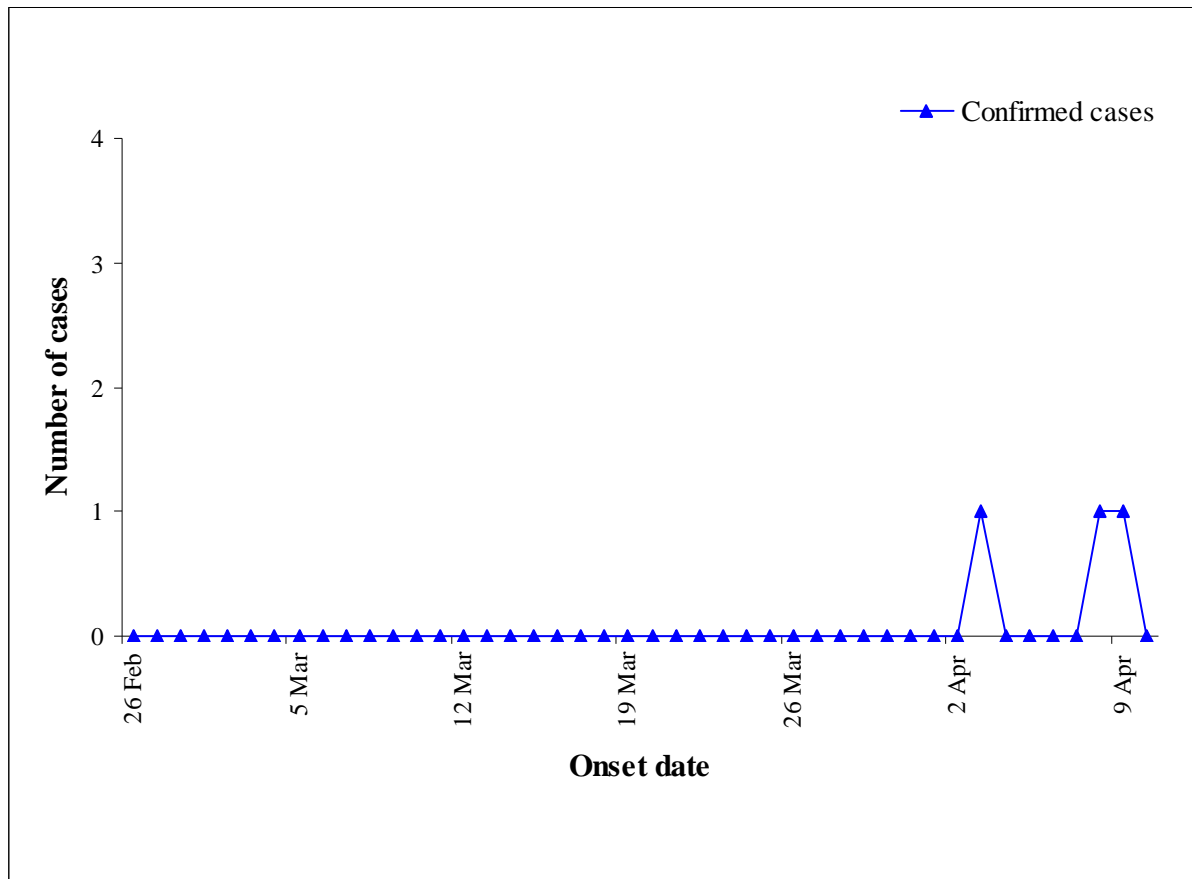


Figure 2: Onset dates of confirmed measles cases reported during the last two weeks

### 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 26 confirmed cases reported since 26 December 2010 with a known age, eight (30.8%) were aged under 10 years, 14 (53.8%) were aged 10 to 19 years, and four (15.4%) were aged 20 years or older. The four confirmed cases reported with a known age in the last two weeks were aged less than 15 months (1 case), 15 months to 3 years (1 case), and 20 years or older (2 cases) (Table 1).

Of the 26 confirmed cases with a known age reported since 26 December 2009, 11 (42.3%) were aged 12 months to 12 years and 10 (38.5%) were aged 13 years to 20 years. Of the four confirmed cases reported with a known age in the last two weeks, two (50.0%) were aged 12 months to 12 years.

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

Age Group	10 - 23 April 2010					Cumulative total since 26 December 2010				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
<15mths	2	1	0	1	0	5	2	1	2	1
15mths-3yrs	1	1	0	0	0	7	4	1	2	0
4-9 yrs	1	0	1	0	0	8	2	6	0	0
10-19 yrs	2	0	0	2	0	17	14	1	2	0
20+ yrs	2	2	0	0	0	6	4	2	0	0
Unknown	0	0	0	0	0	1	1	0	0	0
<b>Total</b>	<b>8</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>44</b>	<b>27</b>	<b>11</b>	<b>6</b>	<b>1</b>
<i>12mths - 12yrs</i>	<i>5</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>0</i>	<i>22</i>	<i>11</i>	<i>7</i>	<i>4</i>	<i>0</i>
<i>13yrs - 20yrs</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>12</i>	<i>10</i>	<i>1</i>	<i>1</i>	<i>0</i>

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

### Ethnicity

Of the 27 confirmed cases of measles reported since 26 December 2009, 25 (92.6%) were European and two (7.4%) were Maori (Table 2). Of the four confirmed cases reported in the last two weeks three were European (75.0%) and one was Maori (25.0%).

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

Ethnicity (prioritised)	10 - 23 April 2010					Cumulative total since 26 December 2010				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
Maori	1	1	0	0	0	5	2	2	1	1
Pacific Peoples	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
European	4	3	1	0	0	36	25	9	2	0
Unknown	3	0	0	3	0	3	0	0	3	0
<b>Total</b>	<b>8</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>44</b>	<b>27</b>	<b>11</b>	<b>6</b>	<b>1</b>

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

### **Geographical distribution**

Of the 27 confirmed cases reported since 26 December, 23 (85.2%) were reported from Northland DHB, two from Capital and Coast DHB (7.4%) and one each from Lakes and Taranaki DHBs (each 3.7%) (Table 3). Of the four confirmed cases in the last two weeks, there was one each (each 25.0%) reported from Northland, Lakes, Taranaki and Capital and Coast DHBs. Family connections have been established between the single case in Capital and Coast DHB and the Northland cases.

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

DHB	10 - 23 April 2010					Cumulative total since 26 December 2010				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
Northland	3	1	0	2	0	34	23	9	2	1
Waitemata	0	0	0	0	0	0	0	0	0	0
Auckland	1	0	0	1	0	1	0	0	1	0
Counties Manukau	0	0	0	0	0	0	0	0	0	0
Waikato	0	0	0	0	0	0	0	0	0	0
Lakes	1	1	0	0	0	1	1	0	0	0
Bay of Plenty	1	0	1	0	0	1	0	1	0	0
Tairāwhiti	0	0	0	0	0	0	0	0	0	0
Taranaki	1	1	0	0	0	1	1	0	0	0
Hawke's Bay	0	0	0	0	0	0	0	0	0	0
Whanganui	0	0	0	0	0	0	0	0	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	1	0	0	0	2	2	0	0	0
Wairarapa	0	0	0	0	0	1	0	0	1	0
Nelson	0	0	0	0	0	1	0	0	1	0
Marlborough	0	0	0	0	0	0	0	0	0	0
West Coast	0	0	0	0	0	0	0	0	0	0
Canterbury	0	0	0	0	0	1	0	0	1	0
South Canterbury	0	0	0	0	0	0	0	0	0	0
Otago	0	0	0	0	0	0	0	0	0	0
Southland	0	0	0	0	0	0	0	0	0	0
<b>New Zealand Total</b>	<b>8</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>44</b>	<b>27</b>	<b>11</b>	<b>6</b>	<b>1</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.

Of the four confirmed cases reported in the last two weeks, two (50.0%) had a known vaccination status. Of these two cases, one was not vaccinated and one was reported to be vaccinated but no dose information was available.

**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	1	0	0	0	1	0
15mths-3yrs	1	0	0	0	0	1
4-9 yrs	0	0	0	0	0	0
10-19 yrs	0	0	0	0	0	0
20+ yrs	2	0	0	1	0	1
Unknown	0	0	0	0	0	0
<b>Total</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>

Of the 27 confirmed cases reported since 26 December 2009, 23 (85.2%) had a known vaccination status. Of these 23 cases, 19 were not vaccinated including two cases aged less than 15 months and therefore not eligible for vaccination. One case aged 10 to 19 years and one of unknown age had received one dose of vaccine. Two cases reported being vaccinated but dose information was not available.

**Table 5 : Immunisation status of measles cases (confirmed) notified since 26 December 2009**

Age Group	Total cases	One dose	Two doses	Vaccinated (no dose info)	Not vaccinated	Unknown
<15mths	2	0	0	0	2	0
15mths-3yrs	4	0	0	0	3	1
4-9 yrs	2	0	0	0	2	0
10-19 yrs	14	1	0	1	11	1
20+ yrs	4	0	0	1	1	2
Unknown	1	1	0	0	0	0
<b>Total</b>	<b>27</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>19</b>	<b>4</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)