

MEASLES REPORT

This report includes cases of measles reported in EpiSurv up to midnight 9 April 2010. Data was extracted from EpiSurv at 10am 13 April 2010.

In the last two weeks, 27 new cases of measles were notified. The notified cases consisted of 14 confirmed cases, eight probable, and five 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 27 measles notifications in the last two weeks, 14 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 spike in notifications in week 14 can be observed (Figure 1). There have been a total of 31 notifications since 26 December 2009 (the beginning of surveillance week 1 for 2010) including 15 confirmed, nine probable and seven cases under investigation. There have been no reported hospitalisations or deaths.

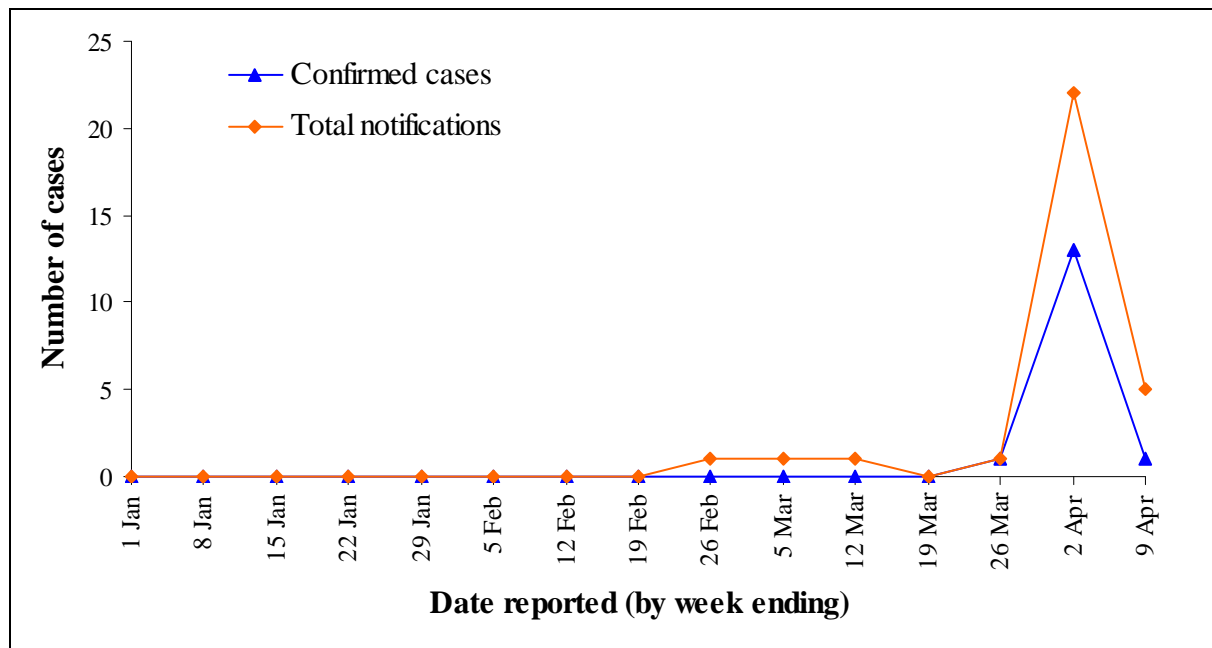


Figure 1 : Epidemic curve of confirmed and total measles cases by week reported

Of the 14 confirmed measles cases reported in the last two weeks, onset dates range from 1 March to 25 March 2010 (Figure 2). The most common onset date for confirmed cases reported in the last two weeks is 22 March 2010 (3 cases). Reporting of onset dates is not always complete (three of the 31 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.

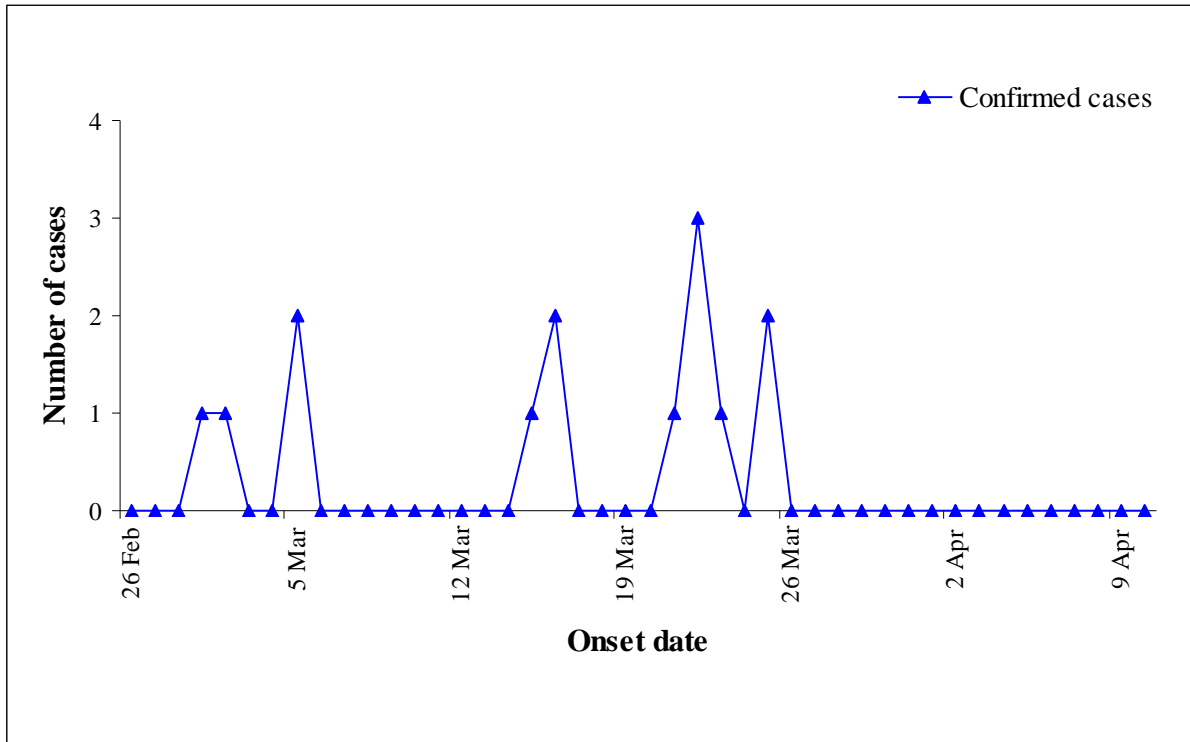


Figure 2: Onset dates of confirmed measles cases reported during the last two weeks

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 15 confirmed cases reported since 26 December 2010, three (20.0%) were aged under 10 years, 10 (66.7%) were aged 10 to 19 years, and two (13.3%) were aged 20 years or older. The 14 confirmed cases reported with a known age in the last two weeks were aged 4 to 9 years (2 cases), 10 to 19 years (10 cases) and 20 years or older (2 cases) (Table 1).

Of the 15 confirmed cases reported since 26 December 2009, eight (53.3%) were aged 12 months to 12 years and six (40.0%) were aged 13 years to 20 years. Of the 14 confirmed cases reported with a known age in the last two weeks, six (42.9%) were aged 12 months to 12 years and six (42.9%) were aged 13 years to 20 years.

Table 1: Age distribution of measles cases and hospitalisations

Age Group	27 March – 9 April 2010					Cumulative total since 26 December 2010				
	Total	Conf	Prob	Other	Hosp ¹	Total	Conf	Prob	Other	Hosp ¹
<15mths	1	0	0	1	0	1	0	0	1	0
15mths-3yrs	4	0	1	3	0	6	1	1	4	0
4-9 yrs	5	2	3	0	0	7	2	4	1	0
10-19 yrs	12	10	1	1	0	12	10	1	1	0
20+ yrs	5	2	3	0	0	5	2	3	0	0
Unknown	0	0	0	0	0	0	0	0	0	0
Total	27	14	8	5	0	31	15	9	7	0
<i>12mths - 12yrs</i>	<i>13</i>	<i>6</i>	<i>4</i>	<i>3</i>	<i>0</i>	<i>18</i>	<i>8</i>	<i>5</i>	<i>5</i>	<i>0</i>
<i>13yrs - 20yrs</i>	<i>8</i>	<i>6</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>8</i>	<i>6</i>	<i>1</i>	<i>1</i>	<i>0</i>

¹ Confirmed or probable measles cases where hospitalisation was recorded as "Yes".

Ethnicity

Of the 15 confirmed cases of measles reported since 26 December 2009, all (100.0%) were European (Table 2). The 14 confirmed cases reported in the last two weeks were all (100.0%) of European ethnicity.

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

Ethnicity (prioritised)	27 March – 9 April 2010					Cumulative total since 26 December 2010				
	Total	Conf	Prob	Other	Hosp ¹	Total	Conf	Prob	Other	Hosp ¹
Maori	3	0	1	2	0	4	0	2	2	0
Pacific Peoples	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
European	23	14	7	2	0	26	15	7	4	0
Unknown	1	0	0	1	0	1	0	0	1	0
Total	27	14	8	5	0	31	15	9	7	0

¹ Confirmed or probable measles cases where hospitalisation was recorded as "Yes".

Geographical distribution

Of the 15 confirmed cases reported since 26 December, 14 (93.3%) were reported from Northland DHB and one (6.7%) from Capital and Coast DHB (Table 3). Of the 14 confirmed cases in the last two weeks, 13 (92.9%) were reported from Northland DHB and one (7.1%) from Capital and Coast DHB. 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	27 March – 9 April 2010					Cumulative total since 26 December 2010				
	Total	Conf	Prob	Other	Hosp ¹	Total	Conf	Prob	Other	Hosp ¹
Northland	20	13	6	1	0	22	14	7	1	0
Waitemata	0	0	0	0	0	0	0	0	0	0
Auckland	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0
Bay of Plenty	0	0	0	0	0	1	0	0	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	0	0	0	0	0
Whanganui	0	0	0	0	0	0	0	0	0	0
MidCentral	1	0	1	0	0	1	0	1	0	0
Hutt Valley	0	0	0	0	0	0	0	0	0	0
Capital and Coast	4	1	1	2	0	4	1	1	2	0
Wairarapa	1	0	0	1	0	1	0	0	1	0
Nelson	1	0	0	1	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
New Zealand Total	27	14	8	5	0	31	15	9	7	0

¹ 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 14 confirmed cases reported in the last two weeks, 12 (85.7%) had a known vaccination status. Of these 12 cases, 11 were not vaccinated. One case aged 10 to 19 years had received 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	0	0	0	0	0	0
4-9 yrs	2	0	0	0	2	0
10-19 yrs	10	1	0	0	8	1
20+ yrs	2	0	0	0	1	1
Unknown	0	0	0	0	0	0
Total	14	1	0	0	11	2

Of the 15 confirmed cases reported since 26 December 2009, 13 (86.7%) had a known vaccination status. Of these 13 cases, 12 were not vaccinated including one case aged less than 15 months and therefore not eligible for vaccination. One case aged 10 to 19 years had received one dose of vaccine.

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	1	0	0	0	1	0
15mths-3yrs	2	0	0	0	2	0
4-9 yrs	0	0	0	0	0	0
10-19 yrs	10	1	0	0	8	1
20+ yrs	2	0	0	0	1	1
Unknown	0	0	0	0	0	0
Total	15	1	0	0	12	2

Appendix

Case classification:

Confirmed	A clinically compatible illness that is epidemiologically linked to a confirmed case or is laboratory confirmed
Probable	A clinically compatible illness with all of the following symptoms: <ul style="list-style-type: none"> • a fever $\geq 38^{\circ}\text{C}$ • a generalised maculopapular rash lasting three or more days • cough, or coryza, or conjunctivitis, or Koplik spots
Other	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