

MEASLES REPORT

This report includes confirmed and probable (unless otherwise specified) cases of measles notified in EpiSurv up to midnight 9 March 2012. Data were extracted from EpiSurv at 10 am, 13 March 2012.

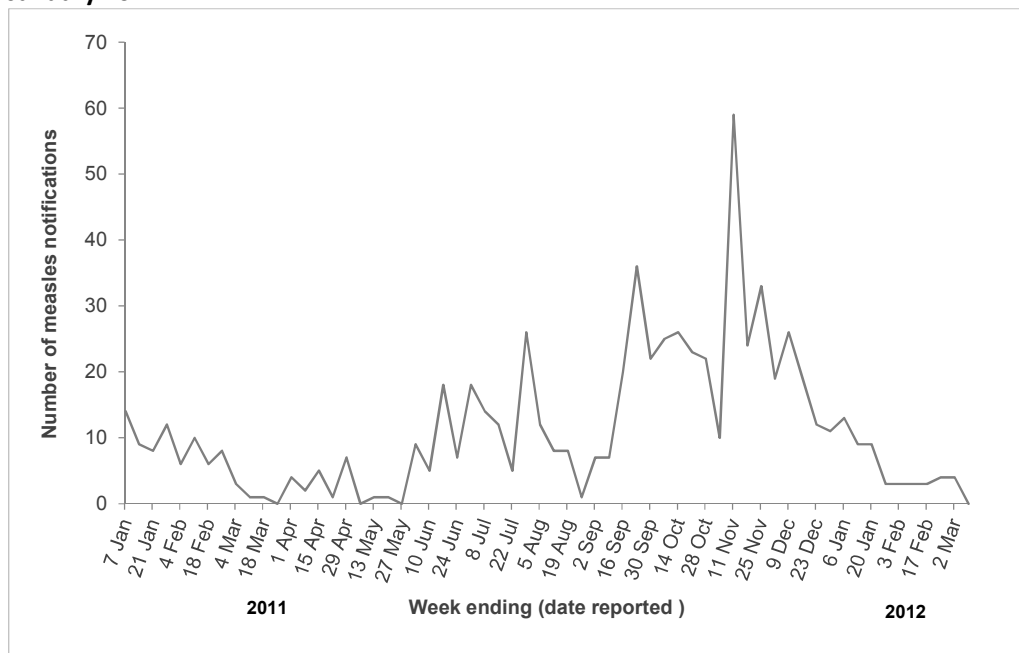
In the past two surveillance weeks (25 February to 9 March 2012), four new measles cases (4 cases in week 9, no cases were reported in week 10). Cases were reported from Counties Manukau (2 confirmed and 1 probable) and Waitemata (1 confirmed case) DHBs. An additional case, notified from Southern DHB, is currently under investigation and is not included in this report. There have been 51 measles cases notified in EpiSurv since 31 December 2011¹ (compared to 30 cases for the same period in 2011 and no cases in 2010). Of the notifications reported in 2012, 43 were confirmed cases and eight probable. Cases were reported mainly from the Auckland region (80.4% of total cases), and Canterbury (7.8%) and Capital and Coast (5.9%) district health boards (DHBs).

This report incorporates the temporal distribution of cases, since 31 December 2011, and the distribution of cases by age, ethnicity (prioritised), and 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

Weekly measles notifications for 2011-2012 are shown in Figure 1. There have been three confirmed and one probable case notified in the last two weeks (7 the previous fortnight). Notifications decreased in the week ending 9 March 2012. Of the 51 confirmed and probable notifications reported since 31 December 2011, seven have been hospitalised. No deaths have been reported.

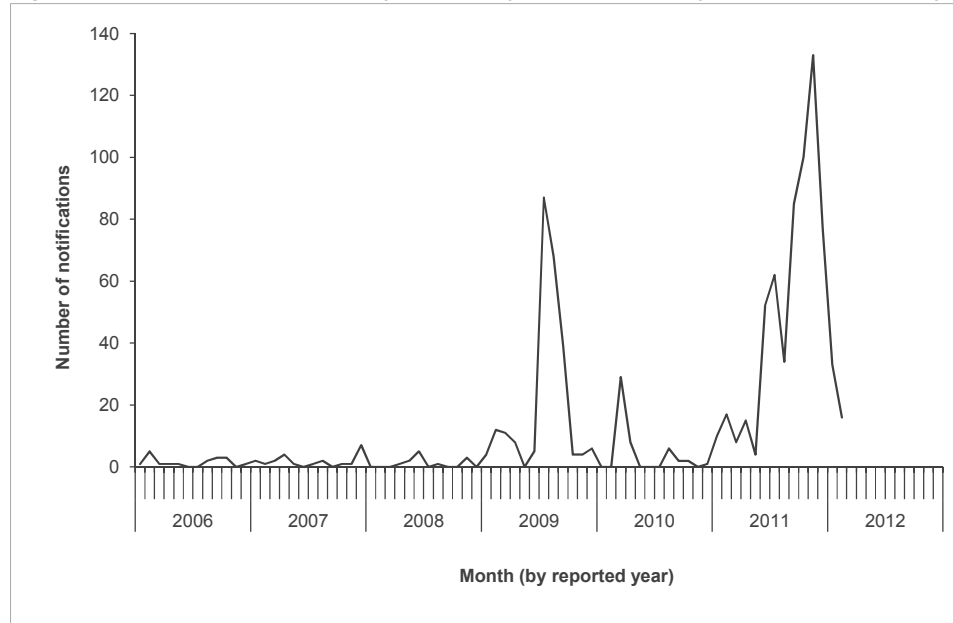
Figure 1 : Distribution of confirmed and probable measles notifications by week reported from 7 January 2011



¹ Note: EpiSurv surveillance week 1/2012 started on 31 December 2011. Cases notified on this date have been included in the 2012 analysis.

Confirmed and probable measles notifications for 2006-2012 are shown by month in Figure 2. Notifications remained consistently low up to the end of 2008 but increased from January 2009 before peaking in July 2009 due to an outbreak centred in the Canterbury region. Although notifications decreased through 2010, in the last year a substantial increase with a peak in November 2011 has been observed.

Figure 2: Measles notifications by month reported (1 January 2006 to 29 February 2012)



The onset dates were recorded for two of the confirmed and probable measles cases notified in the last two weeks. Onset dates for the cases were 22 February and 25 February 2012. Although reporting of onset dates is not always complete, 41 (80.4%) of 51 notifications reported in 2012 have onset dates available.

Age and ethnicity

The age and ethnicity distributions of measles cases are shown in Table 1 and 2. Of the 43 confirmed cases with a known age, 29 (67.4%) were aged under 10 years (including 13 cases who were aged under 15 months), eight (18.6%) were aged 10 to 19 years and six (14.0%) were aged 20 years or older.

Of the 43 confirmed cases, 21 (48.8%) were aged 12 months to 12 years and five (11.6%) were aged 13 years to 20 years.

Table 1: Age distribution of measles cases and hospitalisations, 2012

Age Group	25 Feb-9 Mar 2012				Cumulative total 2012			
	Total	Conf	Prob	Hosp	Total	Conf	Prob	Hosp
<15 mths	4	3	1	0	15	13	2	0
15 mths-3yrs	0	0	0	0	12	10	2	3
4-9 yrs	0	0	0	0	6	6	0	0
10-19 yrs	0	0	0	0	12	8	4	3
20+ yrs	0	0	0	0	6	6	0	1
Unknown	0	0	0	0	0	0	0	0
Total	4	3	1	0	51	43	8	7
<i>12 mths-12 yrs</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>24</i>	<i>21</i>	<i>3</i>	<i>3</i>
<i>13 yrs-20 yrs</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>8</i>	<i>5</i>	<i>3</i>	<i>3</i>

Conf: confirmed, **Prob:** probable, **Hosp:** hospitalised

Of the 43 confirmed cases reported in 2012, 41 had a known ethnicity. Of these, 22 (53.7%) were Pacific Peoples, 12 (29.3%) were Māori, six (14.6%) were European, and one (2.4%) was in the "Other" ethnic groups (Table 2). Ethnicity was recorded for three of the cases reported in the last two weeks. All three cases were reported to be of Pacific Peoples ethnicity. Hospitalisations by ethnicity are also depicted in Table 2. All hospitalisations have been in either the Pacific Peoples (4 cases) or Māori (3 cases).

Table 2 : Ethnic (prioritised) distribution of measles cases and hospitalisations, 2012

Ethnicity (prioritised)	25 Feb-9 Mar 2012				Cumulative total 2012			
	Total	Conf	Prob	Hosp	Total	Conf	Prob	Hosp
Māori	0	0	0	0	16	12	4	3
Pacific Peoples	3	3	0	0	23	22	1	4
Other	0	0	0	0	1	1	0	0
European	0	0	0	0	8	6	2	0
Unknown	1	0	1	0	3	2	1	0
Total	4	3	1	0	51	43	8	7

Geographic distribution

Of the 51 cases reported since 31 December 2011, 43 were confirmed including 26 (60.5%) from Counties Manukau, seven (16.3%) from Waitemata, three (7.0%) each from Auckland and Capital and Coast, two (4.7%) from Canterbury, and one (2.3%) each from Northland and Waikato DHBs. (Table 3). Counties Manukau DHB has reported the highest number of cases since 31 December 2011 representing a shift from last year (mid to late 2011) where Auckland followed by Waitemata DHBs reported the majority of cases.

The four cases reported in the past two surveillance weeks were notified from Counties Manukau (3 cases) and Waitemata (1 case) DHBs.

Table 3: Geographical distribution of measles cases and hospitalisations, 2012

DHB ¹	25 Feb-9 Mar 2012				Cumulative total 2012			
	Total	Conf	Prob	Hosp	Total	Conf	Prob	Hosp
Northland	0	0	0	0	2	1	1	1
Waitemata	1	1	0	0	8	7	1	0
Auckland	0	0	0	0	4	3	1	2
Counties Manukau	3	2	1	0	29	26	3	3
Waikato	0	0	0	0	1	1	0	0
Capital and Coast	0	0	0	0	3	3	0	1
Canterbury	0	0	0	0	4	2	2	0
New Zealand Total	4	3	1	0	51	43	8	7

¹Only DHBs reporting cases of measles since 31 December 2011 have been included in this table.

Immunisation status

Table 4 shows the immunisation status of the confirmed cases reported in the last two weeks, based on parental recall, or Wellchild book records, as recorded in EpiSurv. None of the three confirmed measles cases reported in the past two weeks were vaccinated. All three cases were aged less than 15 months.

Table 4: Immunisation status of measles cases (confirmed) notified last week

Age Group	Total cases	One dose	Two doses	Vaccinated		Unknown
				(no dose info)	Not vaccinated	
<15mths	0	0	0	0	3	0
15mths-3yrs	0	0	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	0	0	0	0	0	0
Total	0	0	0	0	3	0

Of the 43 confirmed cases reported since 31 December 2011, 37 (86.0%) had a known vaccination status. Of these 37 cases, 28 were not vaccinated including 13 cases aged less than 15 months. Six cases had received one dose of vaccine and a further three cases had completed their second dose (Table 5).

Table 5: Immunisation status of measles cases (confirmed) notified since 31 December 2011

Age Group	Total cases	One dose	Two doses	Vaccinated		Unknown
				(no dose info)	Not vaccinated	
<15mths	13	0	0	0	13	0
15mths-3yrs	10	4	0	0	6	0
4-9 yrs	6	0	2	0	4	0
10-19 yrs	8	2	1	0	3	2
20+ yrs	6	0	0	0	2	4
Unknown	0	0	0	0	0	0
Total	43	6	3	0	28	6

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 will be available online from www.surv.esr.cri.nz