

MEASLES REPORT

This report includes confirmed and probable (unless otherwise specified) cases of measles notified in EpiSurv up to midnight 24 February 2012. Data were extracted from EpiSurv at 10 am, 28 February 2012.

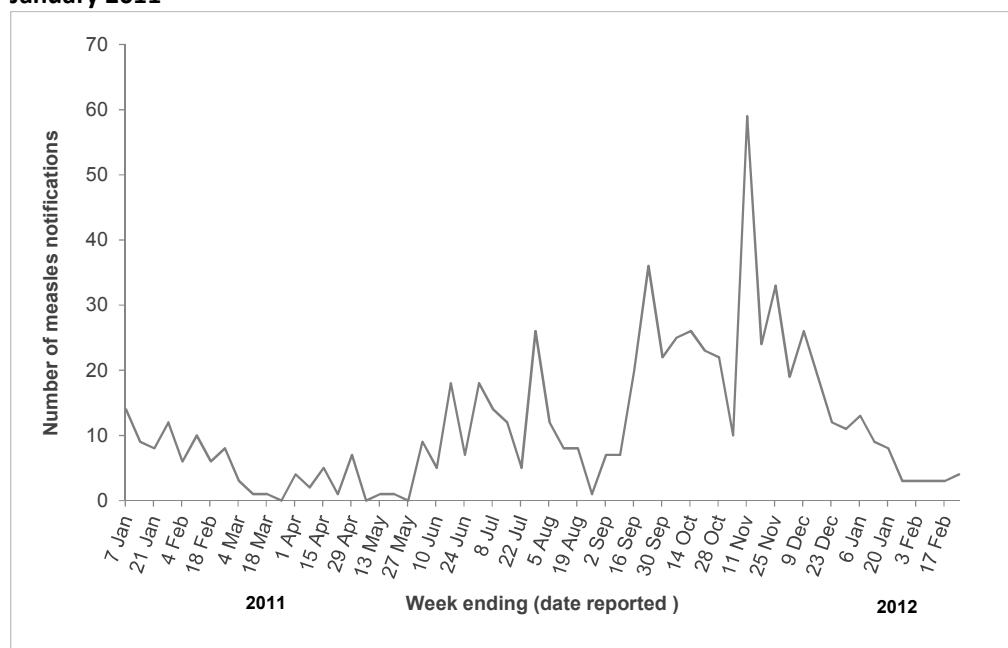
In the last week ending 24 February 2012, four new measles cases (3 cases the previous week) were reported from Counties Manukau DHB (all 4 cases were confirmed). An additional four cases currently under investigation were reported from Bay of Plenty, Hutt Valley, Wairarapa and Canterbury (1 case each) DHBs but are not included in the rest of this report. There have been 46 measles cases notified in EpiSurv since 31 December 2011¹ (compared to 26 cases for the same period in 2011 and no cases in 2010). Of the notifications reported in 2012, 40 were confirmed cases and six probable. Cases were reported mainly from the Auckland region (80.4% of total cases), and Canterbury (9.6%) and Capital and Coast (5.8%) 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 four confirmed cases notified in the last week (3 the previous week). Notifications increased in the week ending 24 February 2012. Of the 46 confirmed and probable notifications reported since 31 December 2011, six have been hospitalised. No deaths have been reported.

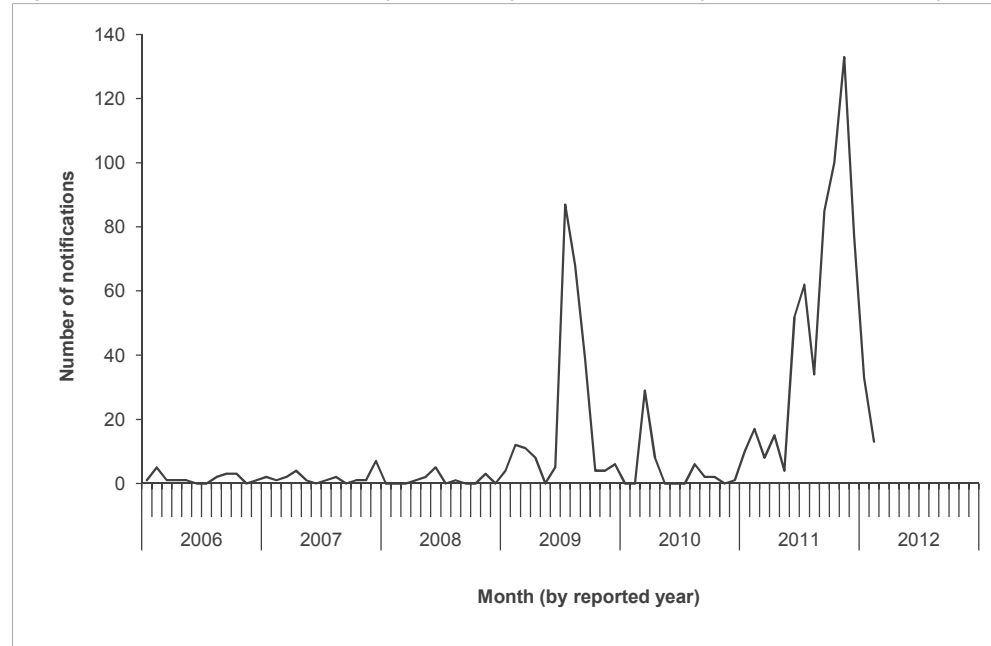
Figure 1 : Distribution of confirmed and probable measles notifications by week reported from 7 January 2011



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 24 February 2012¹)



¹Notifications for February 2012 are complete to 24 February only and do not represent the full calendar month.

The onset dates were recorded for all four of the confirmed measles cases notified in the last week. Onset dates for the cases ranged from 14 to 22 February 2012. Although reporting of onset dates is not always complete, 36 (78.3%) of 46 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 40 confirmed cases with a known age, 26 (65.0%) were aged under 10 years (including 10 cases who were aged under 15 months), eight (20.0%) were aged 10 to 19 years and six (15.8%) were aged 20 years or older.

Of the 40 confirmed cases, 21 (52.5%) were aged 12 months to 12 years and five (12.5%) were aged 13 years to 20 years.

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

Age Group	18-24 Feb 2012				Cumulative total 2012			
	Total	Conf	Prob	Hosp	Total	Conf	Prob	Hosp
<15 mths	1	1	0	0	11	10	1	0
15 mths-3yrs	2	2	0	1	12	10	2	3
4-9 yrs	0	0	0	0	6	6	0	0
10-19 yrs	0	0	0	0	11	8	3	2
20+ yrs	1	1	0	1	6	6	0	1
Unknown	0	0	0	0	0	0	0	0
Total	4	4	0	2	46	40	6	6
12 mths-12 yrs	2	2	0	0	24	21	3	3
13 yrs-20 yrs	0	0	0	0	7	5	2	2

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

Of the 40 confirmed cases reported in 2012, 38 had a known ethnicity. Of these, 19 (50.0%) were Pacific Peoples, 12 (31.6%) were Māori, six (15.8%) were European, and one (2.6%) was in the "Other" ethnic groups (Table 2). Ethnicity was recorded for all four of the confirmed cases reported in the last week. These were distributed as follows: Pacific Peoples (3 cases) and Māori (1 case). Hospitalisations by ethnicity are also depicted in Table 2. All hospitalisations have been in either the Pacific Peoples (4 cases) or Māori (2 cases).

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

Ethnicity (prioritised)	18-24 Feb 2012				Cumulative total 2012			
	Total	Conf	Prob	Hosp	Total	Conf	Prob	Hosp
Māori	1	1	0	0	15	12	3	2
Pacific Peoples	3	3	0	2	20	19	1	4
Other	0	0	0	0	1	1	0	0
European	0	0	0	0	8	6	2	0
Unknown	0	0	0	0	2	2	0	0
Total	4	4	0	2	46	40	6	6

Geographic distribution

Of the 46 cases reported since 31 December 2011, 40 were confirmed including 24 (60.0%) from Counties Manukau, six (15.0%) from Waitemata, three (7.5%) each from Auckland and Capital and Coast, two (5.0%) from Canterbury, and one (2.5%) 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.

All four confirmed cases last week were reported from Counties Manukau DHB.

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

DHB	18-24 Feb 2012				Cumulative total 2012			
	Total	Conf	Prob	Hosp	Total	Conf	Prob	Hosp
Northland	0	0	0	0	1	1	0	0
Waitemata	0	0	0	0	7	6	1	0
Auckland	0	0	0	0	4	3	1	2
Counties Manukau	4	4	0	2	26	24	2	3
Waikato	0	0	0	0	1	1	0	0
Lakes	0	0	0	0	0	0	0	0
Bay of Plenty	0	0	0	0	0	0	0	0
Tairāwhiti	0	0	0	0	0	0	0	0
Taranaki	0	0	0	0	0	0	0	0
Hawke's Bay	0	0	0	0	0	0	0	0
Whanganui	0	0	0	0	0	0	0	0
MidCentral	0	0	0	0	0	0	0	0
Hutt Valley	0	0	0	0	0	0	0	0
Capital and Coast	0	0	0	0	3	3	0	1
Wairarapa	0	0	0	0	0	0	0	0
Nelson Marlborough	0	0	0	0	0	0	0	0
West Coast	0	0	0	0	0	0	0	0
Canterbury	0	0	0	0	4	2	2	0
South Canterbury	0	0	0	0	0	0	0	0
Southern	0	0	0	0	0	0	0	0
New Zealand Total	4	4	0	2	46	40	6	6

Immunisation status

Table 4 shows the immunisation status of the confirmed cases reported in the last week, based on parental recall, or Wellchild book records, as recorded in EpiSurv. Two of the four confirmed measles cases reported in the past week were not vaccinated, including one case 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 (no dose info)	Not vaccinated	Unknown
<15mths	1	0	0	0	1	0
15mths-3yrs	2	2	0	0	0	0
4-9 yrs	0	0	0	0	0	0
10-19 yrs	0	0	0	0	0	0
20+ yrs	1	0	0	0	1	0
Unknown	0	0	0	0	0	0
Total	4	2	0	0	2	0

Of the 40 confirmed cases reported since 31 December 2011, 32 (80.0%) had a known vaccination status. Of these 32 cases, 24 were not vaccinated including 10 cases aged less than 15 months. Five 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 (no dose info)	Not vaccinated	Unknown
<15mths	10	0	0	0	10	0
15mths-3yrs	10	4	0	0	5	1
4-9 yrs	6	0	2	0	4	0
10-19 yrs	8	1	1	0	3	3
20+ yrs	6	0	0	0	2	4
Unknown	0	0	0	0	0	0
Total	40	5	3	0	24	8

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