

MEASLES REPORT

This report includes confirmed and probable (unless otherwise specified) cases of measles notified in EpiSurv up to midnight 23 March 2012. Data were extracted from EpiSurv at 10 am, 27 March 2012.

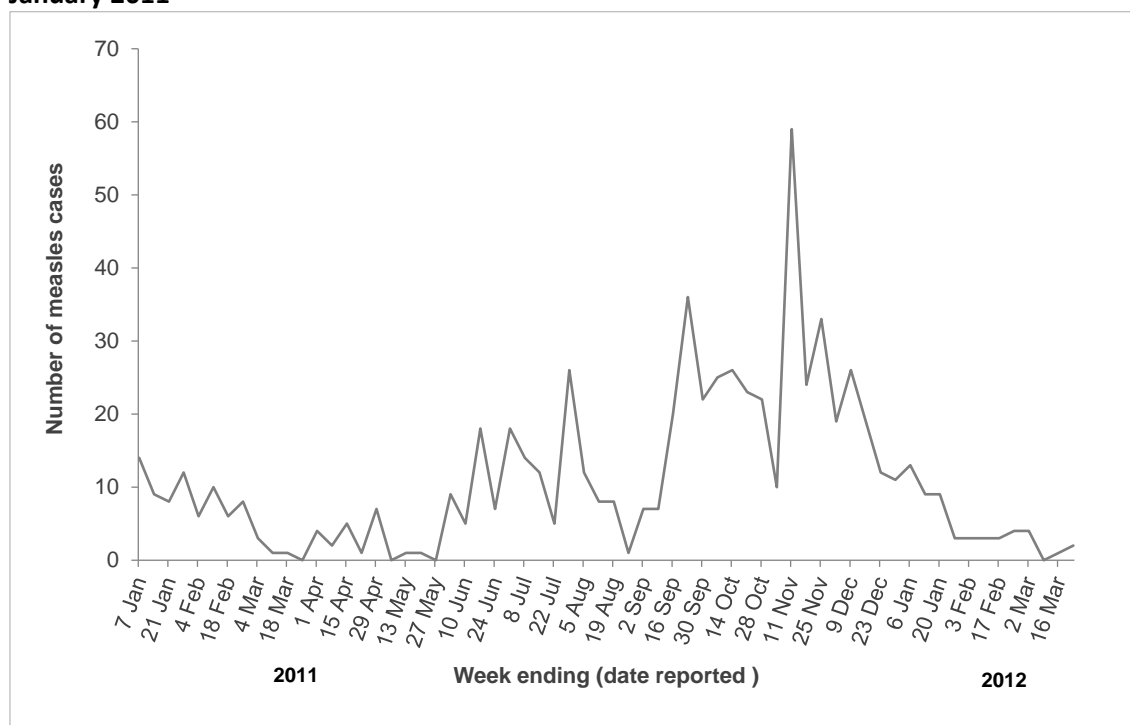
In the past two surveillance weeks (10 to 23 March 2012), three new measles cases (1 case in week 11 and 2 cases in week 12) were notified from Counties Manukau (2 confirmed cases) and Wairarapa (1 probable case) district health boards (DHBs). An additional 3 cases, notified from MidCentral (2) and Canterbury (1) DHBs are currently under investigation and were not included in this report. There have been 55 measles cases (45 confirmed and 10 probable) notified in EpiSurv since 31 December 2011 (compared to 78 cases for the same period in 2011). Cases were reported mainly from the Auckland region (78.2 of total cases), Canterbury (9.1%), and Capital and Coast (5.5%) 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 two confirmed cases and one probable case notified in the last two weeks (8 the previous fortnight). Notifications decreased in the past two weeks. Of the 55 confirmed and probable notifications reported since 31 December 2011, seven have been hospitalised. No deaths have been reported.

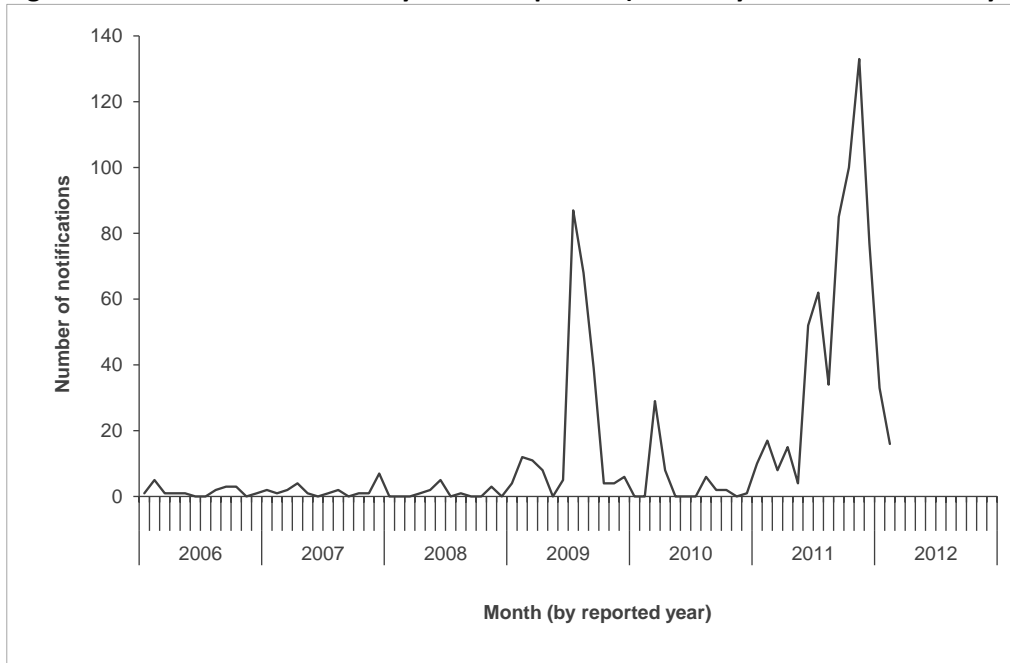
Figure 1 : Distribution of confirmed and probable measles notifications by week reported from 7 January 2011



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 three (confirmed and probable) measles cases notified in the last two weeks. Onset dates for the cases were 1 and 15 March 2012. Although reporting of onset dates is not always complete, 44 (80.0%) of 55 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 45 confirmed cases with a known age, 31 (68.9%) were aged under 10 years (including 15 cases who were aged under 15 months), eight (17.8%) were aged 10 to 19 years, six (13.3%) were aged 4-9 years and six (13.3%) were aged 20 years or older.

Of the 45 confirmed cases, 21 (46.7%) were aged 12 months to 12 years and five (11.1%) were aged 13 years to 20 years.

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

| Age Group | 10-23 Mar 2012 | | | | Cumulative total 2012 | | | |
|----------------|----------------|----------|----------|----------|-----------------------|-----------|-----------|----------|
| | Total | Conf | Prob | Hosp | Total | Conf | Prob | Hosp |
| <15 mths | 2 | 2 | 0 | 0 | 18 | 15 | 3 | 0 |
| 15 mths-3yrs | 0 | 0 | 0 | 0 | 12 | 10 | 2 | 3 |
| 4-9 yrs | 1 | 0 | 1 | 0 | 7 | 6 | 1 | 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 | 3 | 2 | 1 | 0 | 55 | 45 | 10 | 7 |
| 12 mths-12 yrs | 1 | 0 | 1 | 0 | 25 | 21 | 4 | 3 |
| 13 yrs-20 yrs | 0 | 0 | 0 | 0 | 8 | 5 | 3 | 3 |

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

Of the 45 confirmed cases reported in 2012, 43 had a known ethnicity. Of these, 23 (53.5%) were Pacific Peoples, 12 (27.9%) were Māori, seven (16.3%) were European, and one (2.3%) was in the "Other" ethnic groups (Table 2). In the last two weeks ethnicity was reported for the 2 confirmed cases as follows: European and Pacific Peoples (1 case each) ethnic groups. 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) | 10-23 Mar 2012 | | | | Cumulative total 2012 | | | |
|----------------------------|----------------|----------|----------|----------|-----------------------|-----------|-----------|----------|
| | Total | Conf | Prob | Hosp | Total | Conf | Prob | Hosp |
| Māori | 0 | 0 | 0 | 0 | 17 | 12 | 5 | 3 |
| Pacific Peoples | 1 | 1 | 0 | 0 | 24 | 23 | 1 | 4 |
| Other | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| European | 2 | 1 | 1 | 0 | 10 | 7 | 3 | 0 |
| Unknown | 0 | 0 | 0 | 0 | 3 | 2 | 1 | 0 |
| Total | 3 | 2 | 1 | 0 | 55 | 45 | 10 | 7 |

Geographic distribution

Of the 55 cases reported since 31 December 2011, 45 were confirmed including 28 (62.2%) from Counties Manukau, seven (15.6%) from Waitemata, three (6.7%) each from Auckland and Capital and Coast, two (4.4%) from Canterbury, and one (2.2%) each from Northland and Waikato DHBs. (Table 3). Counties Manukau DHB has reported the highest number of cases since 31 December 2011.

The two confirmed cases reported in the past two surveillance weeks were notified from Counties Manukau DHB.

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

| DHB ¹ | 10-23 Mar 2012 | | | | Cumulative total 2012 | | | |
|--------------------------|----------------|----------|----------|----------|-----------------------|-----------|-----------|----------|
| | Total | Conf | Prob | Hosp | Total | Conf | Prob | Hosp |
| Northland | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 |
| Waitemata | 0 | 0 | 0 | 0 | 8 | 7 | 1 | 0 |
| Auckland | 0 | 0 | 0 | 0 | 4 | 3 | 1 | 2 |
| Counties Manukau | 2 | 2 | 0 | 0 | 31 | 28 | 3 | 3 |
| Waikato | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Capital and Coast | 0 | 0 | 0 | 0 | 3 | 3 | 0 | 1 |
| Wairarapa | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| Canterbury | 0 | 0 | 0 | 0 | 5 | 2 | 3 | 0 |
| New Zealand Total | 3 | 2 | 1 | 0 | 55 | 45 | 10 | 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 two confirmed cases reported in the last two weeks, based on parental recall, or Wellchild book records, as recorded in EpiSurv. Both cases were aged less than 15 months and therefore not eligible for measles immunisation.

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 | 2 | 0 | 0 | 0 | 2 | 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 | 2 | 0 | 0 | 0 | 2 | 0 |

Of the 44 confirmed cases reported since 31 December 2011, 39 (86.7%) had a known vaccination status. Of these 39 cases, 30 (76.9%) were not vaccinated including 15 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 (no dose info) | Not vaccinated | Unknown |
|--------------|-------------|----------|-----------|---------------------------|----------------|----------|
| <15mths | 15 | 0 | 0 | 0 | 15 | 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 | 45 | 6 | 3 | 0 | 30 | 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