

MEASLES REPORT

This report includes cases of measles notified in EpiSurv up to midnight 11 November 2011. Data were extracted from EpiSurv at 10 am, 15 November 2011.

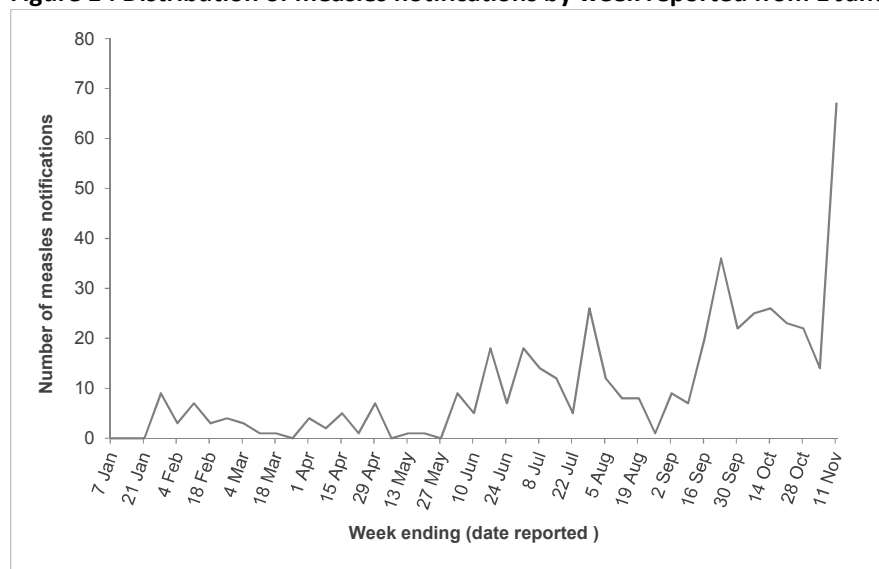
In the last week, 67 new measles cases (16 cases the previous week) were notified from the following DHBs: Auckland (26 cases), Waitemata (10 cases), Southern (12 cases), Lakes (7 cases), Capital and Coast (4 cases), Canterbury (3 cases), Waikato (2 cases), Counties Manukau, Bay of Plenty and Hutt Valley (1 case each). Of these notifications, 53 were confirmed, five are probable and nine are still under investigation. There have been 466 measles cases notified in EpiSurv since January 2011 (compared to 47 cases in 2010 and 239 in 2009 for the same period). Of the total notifications 428 are confirmed cases, 24 probable cases and 14 cases still under investigation. These were reported mainly from the Auckland region (74.7% of total cases), Waikato (5.6%) and Hawke’s Bay (5.2% each). DHBs reporting cases include Auckland (172 cases), Waitemata (147 cases), Counties Manukau (29 cases), Waikato (26 cases) and Hawke’s Bay (24 cases), Southern (14 cases), Canterbury (13 cases), Capital and Coast (11 cases), Lakes and Bay of Plenty (8 cases each), Northland (4 cases), Hutt Valley and South Canterbury (3 cases each), Taranaki (2 cases), Wairarapa and West Coast (1 case each).

This report incorporates the temporal distribution of cases, since January 2011, 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

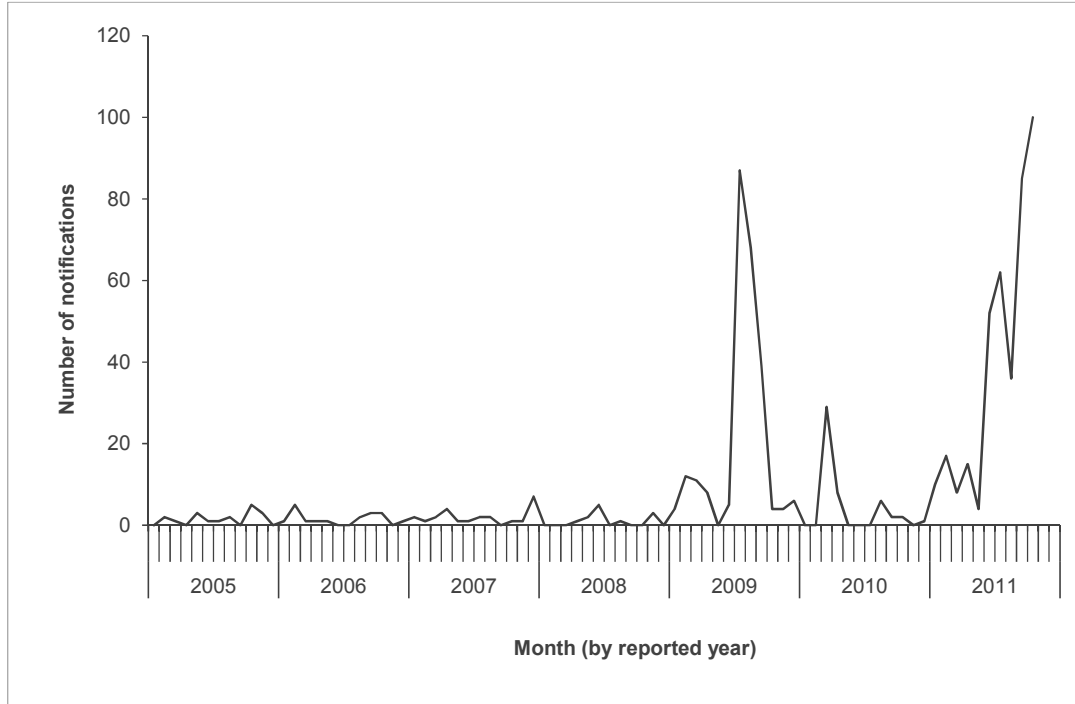
Weekly and historical measles notifications for 2011 are shown in Figure 1 and 2, respectively. There have been 67 cases notified in the last week (16 the previous week)¹. Notifications have increased considerably in the week ending 11 November 2011. Of the 466 notifications since the beginning of 2011, 81 have been hospitalised. No deaths have been reported.

Figure 1 : Distribution of measles notifications by week reported from 1 January 2011



¹ The total number of notifications may change as cases are investigated further and some are reclassified ‘not a case’. The previous week’s count is as reported in the previous weekly report not the current count.

Figure 2 Measles notifications by month reported (1 January 2005 to 31 October 2011)



The onset dates were recorded for 61 (91.0%) of the 67 measles cases notified in the last week, these ranged from 25 October to 10 November 2011. Although reporting of onset dates is not always complete, 407 (87.3%) of 466 notifications since 1 January 2011 have onset dates available. The earliest and the most recent onset dates since January 2011 were 6 January and 10 November, respectively.

Age and ethnicity

The age and ethnicity distributions of measles cases are shown in Table 1 and 2. Of the 428 confirmed cases with a known age (reported since 1 January 2011), 179 (41.8%) were aged under 10 years, 141 (32.9%) were aged 20 years or older and 108 (25.2%) were aged 10 to 19 years. Fifty-two (12.1%) were aged under 15 months.

Of the 428 confirmed cases, 175 (40.9%) were aged 12 months to 12 years and 94 (22.0%) were aged 13 years to 20 years.

Table 1: Age distribution of measles cases and hospitalisations, 2011

| Age Group | 5-11 November 2011 | | | | | Cumulative total since 1 Jan 2011 | | | | |
|-----------------------|--------------------|-----------|----------|----------|-------------------|-----------------------------------|------------|-----------|-----------|-------------------|
| | Total | Conf | Prob | Other | Hosp ¹ | Total | Conf | Prob | Other | Hosp ¹ |
| <15 mths | 11 | 5 | 1 | 5 | 3 | 70 | 52 | 9 | 9 | 14 |
| 15 mths-3yrs | 8 | 6 | 1 | 1 | 1 | 60 | 50 | 8 | 2 | 4 |
| 4-9 yrs | 10 | 10 | 0 | 0 | 0 | 78 | 77 | 1 | 0 | 5 |
| 10-19 yrs | 11 | 7 | 1 | 3 | 0 | 113 | 108 | 2 | 3 | 13 |
| 20+ yrs | 27 | 25 | 2 | 0 | 6 | 145 | 141 | 4 | 0 | 45 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 67 | 53 | 5 | 9 | 10 | 466 | 428 | 24 | 14 | 81 |
| <i>12 mths-12 yrs</i> | <i>24</i> | <i>20</i> | <i>1</i> | <i>3</i> | <i>0</i> | <i>192</i> | <i>175</i> | <i>11</i> | <i>6</i> | <i>14</i> |
| <i>13 yrs-20 yrs</i> | <i>10</i> | <i>7</i> | <i>1</i> | <i>2</i> | <i>0</i> | <i>98</i> | <i>94</i> | <i>2</i> | <i>2</i> | <i>15</i> |

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

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

Of the 421 confirmed cases with a known ethnicity reported since 1 January 2011, 278 (66.0%) were European, 80 (19.0%) were Māori, 33 (7.8%) were Pacific Peoples, and 30 (7.1%) were in the “Other” ethnic groups (Table 2). Ethnicity was recorded for all of the 53 confirmed cases reported in the last week, these were distributed as follows: European (41 cases), Pacific Peoples (6 cases), Māori (4 cases) and “Other” ethnic groups (2 cases). Hospitalisations by ethnicity are also depicted in Table 2.

Table 2 : Ethnic (prioritised) distribution of measles cases and hospitalisations, 2011

| Ethnicity (prioritised) | 5-11 November 2011 | | | | | Cumulative total since 1 Jan 2011 | | | | |
|----------------------------|--------------------|-----------|----------|----------|-------------------|-----------------------------------|------------|-----------|-----------|-------------------|
| | Total | Conf | Prob | Other | Hosp ¹ | Total | Conf | Prob | Other | Hosp ¹ |
| Māori | 5 | 4 | 0 | 1 | 0 | 84 | 80 | 3 | 1 | 12 |
| Pacific Peoples | 8 | 6 | 1 | 1 | 1 | 36 | 33 | 2 | 1 | 10 |
| Other | 5 | 2 | 1 | 2 | 0 | 35 | 30 | 3 | 2 | 8 |
| European | 49 | 41 | 3 | 5 | 9 | 303 | 278 | 15 | 10 | 50 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 8 | 7 | 1 | 0 | 1 |
| Total | 67 | 53 | 5 | 9 | 10 | 466 | 428 | 24 | 14 | 81 |

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

Geographic distribution

Of the 428 confirmed cases reported since 1 January, 163 (38.1%) were reported from Auckland, 140 (32.7%) from Waitemata, 28 (6.5%) from Counties Manukau, 26 (6.1%) from Waikato, 24 (5.6%) and Hawke’s Bay, 14 (3.3%) from Southern, eight (1.9%) from Capital and Coast, seven (1.6%) each from Bay of Plenty and Canterbury, four (0.9%) from Lakes, three (0.7%) from Northland, two (0.5%) from Taranaki, and one (0.2%) each from Hutt Valley and South Canterbury DHBs.

The 53 confirmed cases in the last week were reported from Auckland (24 cases), Southern (12 cases), Waitemata (8 cases), Lakes (3 cases) Waikato and Capital and Coast (2 cases each), Counties Manukau and Canterbury (1 case each) DHBs.

Table 3 : Geographical distribution of measles cases and hospitalisations, 2011

| DHB | 5-11 November 2011 | | | | | Cumulative total since 1 Jan 2011 | | | | |
|--------------------------|--------------------|-----------|----------|----------|-------------------|-----------------------------------|------------|-----------|-----------|-------------------|
| | Total | Conf | Prob | Other | Hosp ¹ | Total | Conf | Prob | Other | Hosp ¹ |
| Northland | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 1 | 0 | 1 |
| Waitemata | 10 | 8 | 2 | 0 | 1 | 147 | 140 | 7 | 0 | 14 |
| Auckland | 26 | 24 | 2 | 0 | 3 | 172 | 163 | 9 | 0 | 46 |
| Counties Manukau | 1 | 1 | 0 | 0 | 1 | 29 | 28 | 1 | 0 | 6 |
| Waikato | 2 | 2 | 0 | 0 | 1 | 26 | 26 | 0 | 0 | 2 |
| Lakes | 7 | 3 | 1 | 3 | 3 | 8 | 4 | 1 | 3 | 3 |
| Bay of Plenty | 1 | 0 | 0 | 1 | 0 | 8 | 7 | 0 | 1 | 4 |
| Tairāwhiti | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Taranaki | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 |
| Hawke's Bay | 0 | 0 | 0 | 0 | 0 | 24 | 24 | 0 | 0 | 3 |
| Whanganui | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MidCentral | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hutt Valley | 1 | 0 | 0 | 1 | 0 | 3 | 1 | 1 | 1 | 0 |
| Capital and Coast | 4 | 2 | 0 | 2 | 0 | 11 | 8 | 0 | 3 | 0 |
| Wairarapa | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Nelson Marlborough | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| West Coast | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Canterbury | 3 | 1 | 0 | 2 | 1 | 13 | 7 | 4 | 2 | 1 |
| South Canterbury | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 2 | 1 |
| Southern | 12 | 12 | 0 | 0 | 0 | 14 | 14 | 0 | 0 | 0 |
| New Zealand Total | 67 | 53 | 5 | 9 | 10 | 466 | 428 | 24 | 14 | 81 |

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

Immunisation status

Table 4 shows the immunisation status of the confirmed cases reported in the last week, as recorded in EpiSurv. This was known for 31 (58.5%) of the 53 confirmed measles cases reported. Of the 31 cases, 18 were not vaccinated including four cases aged less than 15 months and therefore not eligible for vaccination. Of the five cases aged less than 15 months one had received the first dose of vaccine. Overall across all age groups 11 cases had received one dose of vaccine and two cases had received two doses.

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 | 5 | 1 | 0 | 0 | 4 | 0 |
| 15mths-3yrs | 6 | 3 | 0 | 0 | 2 | 1 |
| 4-9 yrs | 10 | 4 | 0 | 0 | 6 | 0 |
| 10-19 yrs | 7 | 1 | 1 | 0 | 3 | 2 |
| 20+ yrs | 25 | 2 | 1 | 0 | 3 | 19 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 53 | 11 | 2 | 0 | 18 | 22 |

Of the 428 confirmed cases reported since January 2011, 333 (77.8%) had a known vaccination status. Of these 333 cases, 258 were not vaccinated including 43 cases aged less than 15 months and therefore not eligible for vaccination. Fifty-nine cases had received one dose of vaccine and a further 15 cases had completed their second dose. One case was vaccinated but had no dose information recorded.

Note: Of the 52 confirmed cases aged less than 15 months, seven had completed their first dose of vaccine.

Twelve of the 428 confirmed cases were aged 42 years or older (adults born prior to 1969 are assumed to have been exposed to measles and are considered immune^[1], however, one of the 12 cases had received one dose of vaccine).

Table 5: Immunisation status of measles cases (confirmed) notified since 1 January 2011

| Age Group | Total cases | One dose | Two doses | Vaccinated | | Unknown |
|--------------|-------------|-----------|-----------|----------------|----------------|-----------|
| | | | | (no dose info) | Not vaccinated | |
| <15mths | 52 | 7 | 0 | 0 | 43 | 2 |
| 15mths-3yrs | 50 | 16 | 0 | 0 | 32 | 2 |
| 4-9 yrs | 77 | 10 | 2 | 0 | 64 | 1 |
| 10-19 yrs | 108 | 10 | 5 | 0 | 79 | 14 |
| 20+ yrs | 141 | 16 | 8 | 1 | 40 | 76 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 428 | 59 | 15 | 1 | 258 | 95 |

^[1]Ministry of Health. 2011. *Immunisation Handbook 2011*. Wellington: Ministry of Health

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