

MEASLES REPORT

This report includes cases of measles notified in EpiSurv up to midnight 21 October 2011. Data were extracted from EpiSurv at 10 am, 25 October 2011.

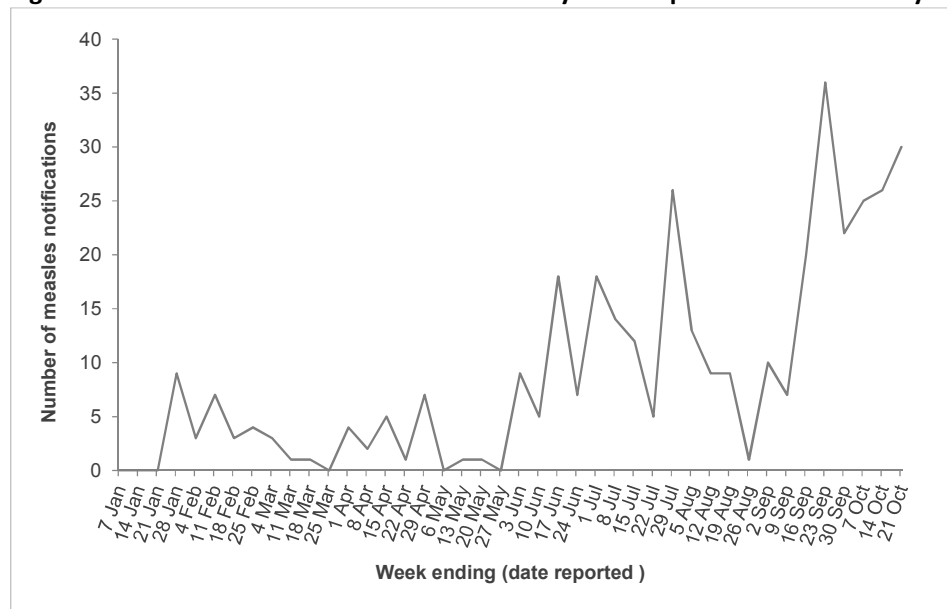
In the last week, 30 new measles cases (30 cases the previous week) were notified from the following DHBs: Auckland (12 cases), Waitemata, Capital and Coast (4 cases each), Bay of Plenty (3 cases), Northland, Counties Manukau, Lakes, Taranaki, Canterbury, South Canterbury and Southern (1 case each). Of these notifications, 17 were confirmed, eight are probable and five are still under investigation. There have been 374 cases of measles reported in EpiSurv since January 2011 (compared to 47 cases reported the same time last year), including 350 confirmed cases, 13 probable cases and 11 cases still under investigation. These were reported mainly from the Auckland region (75.9% of total cases), Waikato (7.5%) and Hawke’s Bay (6.4%). DHBs reporting cases include Waitemata (134 cases), Auckland (124 cases), Waikato (28 cases), Counties Manukau (26 cases), Hawke’s Bay (24 cases), Canterbury (10 cases), Capital and Coast (9 cases), Bay of Plenty (7 cases), Southern (2 cases) and Lakes, Taranaki, Hutt Valley, West Coast and South Canterbury (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

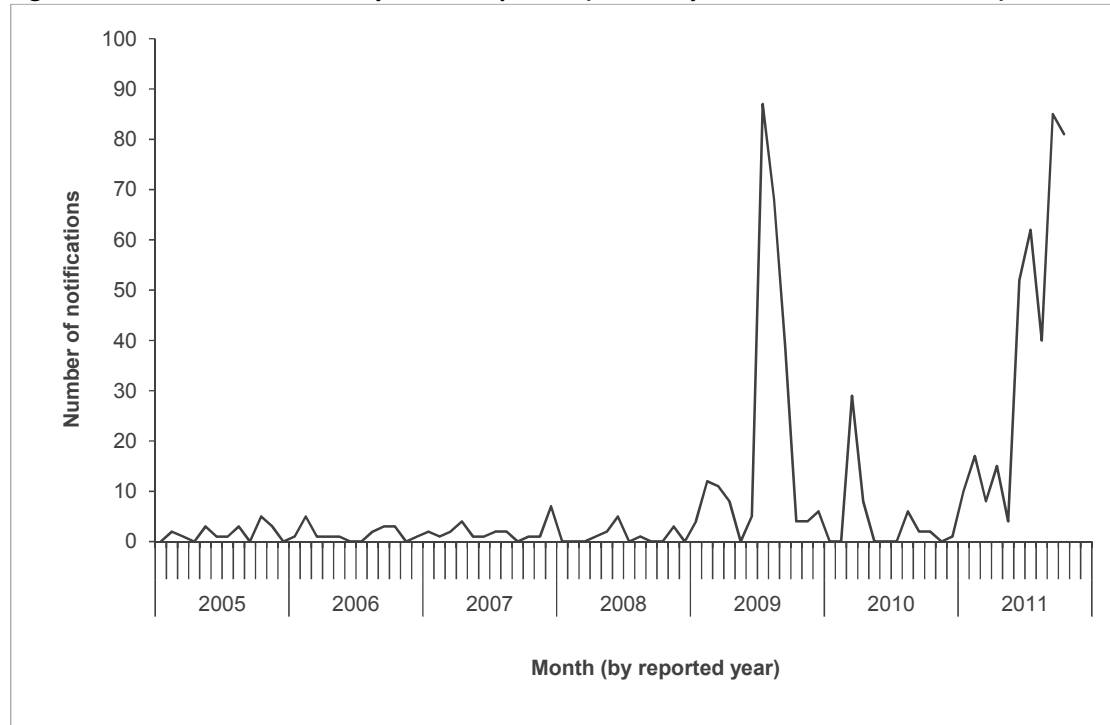
Weekly and historical measles notifications for 2011 are shown in Figure 1 and 2, respectively. There have been 30 cases notified in the last week (30 the previous week)¹. Notifications have remained constant for the past three weeks to the week ending 21 October. Of the 374 notifications since the beginning of 2011, 66 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 21 October 2011¹)



¹ Notifications for October 2011 are complete to 21 October only and do not represent the full calendar month

The onset dates were recorded for 24 (80.0%) of the 30 measles cases notified in the last week, these ranged from 9 October to 18 October 2011. Although reporting of onset dates is not always complete, 318 (85.0%) of notifications since 1 January 2011 have onset dates available. The earliest and last onset dates since January 2011 were 6 January and 18 October, respectively.

Age and ethnicity

The age and ethnicity distributions of measles cases are shown in Table 1 and 2. Of the 350 confirmed cases with a known age reported since 1 January 2011, 147 (42.0%) were aged under 10 years, 95 (27.1%) were aged 10 to 19 years, and 108 (30.9%) were aged 20 years or older. Thirty-eight (10.9%) were aged under 15 months.

Of the 350 confirmed cases, 149 (42.6%) were aged 12 months to 12 years and 81 (23.1%) were aged 13 years to 20 years. Almost a third (30.9%, 108 cases) were aged 20 to 64 years.

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

| Age Group | 15-21 October 2011 | | | | | Cumulative total since 1 Jan 2011 | | | | |
|----------------|--------------------|-----------|----------|----------|-------------------|-----------------------------------|------------|-----------|-----------|-------------------|
| | Total | Conf | Prob | Other | Hosp ¹ | Total | Conf | Prob | Other | Hosp ¹ |
| <15 mths | 5 | 1 | 2 | 2 | 1 | 48 | 38 | 6 | 4 | 9 |
| 15 mths-3yrs | 5 | 1 | 3 | 1 | 0 | 52 | 44 | 4 | 4 | 3 |
| 4-9 yrs | 1 | 0 | 0 | 1 | 0 | 67 | 65 | 0 | 2 | 4 |
| 10-19 yrs | 4 | 2 | 2 | 0 | 1 | 97 | 95 | 2 | 0 | 12 |
| 20+ yrs | 15 | 13 | 1 | 1 | 5 | 110 | 108 | 1 | 1 | 38 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 30 | 17 | 8 | 5 | 7 | 374 | 350 | 13 | 11 | 66 |
| 12 mths-12 yrs | 9 | 1 | 4 | 9 | 0 | 165 | 149 | 6 | 10 | 9 |
| 13 yrs-20 yrs | 6 | 4 | 2 | 6 | 1 | 83 | 81 | 2 | 0 | 14 |

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

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

Of the 345 confirmed cases with a known ethnicity reported since 1 January 2011, 224 (64.9%) were European, 73 (21.2%) were Māori, 22 (6.4%) were Pacific Peoples, and 26 (7.5%) were in the "Other" ethnic groups (Table 2). Ethnicity was recorded for all of the 17 confirmed cases reported in the last week, these were distributed as follows: 12 (70.6%) European, four (23.5%) of "Other" ethnicity and one (5.9%) Māori. Hospitalisations by ethnicity are also depicted in Table 2.

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

| Ethnicity (prioritised) | 15-21 October 2011 | | | | | Cumulative total since 1 Jan 2011 | | | | |
|----------------------------|--------------------|-----------|----------|----------|-------------------|-----------------------------------|------------|-----------|-----------|-------------------|
| | Total | Conf | Prob | Other | Hosp ¹ | Total | Conf | Prob | Other | Hosp ¹ |
| Māori | 1 | 1 | 0 | 0 | 0 | 75 | 73 | 2 | 0 | 12 |
| Pacific Peoples | 1 | 0 | 1 | 0 | 1 | 23 | 22 | 1 | 0 | 8 |
| Other | 4 | 4 | 0 | 0 | 1 | 26 | 26 | 0 | 0 | 7 |
| European | 24 | 12 | 7 | 5 | 5 | 244 | 224 | 9 | 11 | 38 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 1 | 0 | 1 |
| Total | 30 | 17 | 8 | 5 | 7 | 374 | 350 | 13 | 11 | 66 |

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

Geographic distribution

Of the 350 confirmed cases reported since 1 January, 130 (37.1%) were reported from Waitemata, 121 (34.6%) from Auckland, 26 (7.4%) from Counties Manukau, 25 (7.1%) from Waikato, 24 (6.9%) from Hawke's Bay, six (1.7%) each from Bay of Plenty, Capital and Coast and Canterbury, three (0.7%) from Northland and one (0.3%) each from Taranaki, Hutt Valley and Southern DHBs.

The 17 confirmed cases in the last week were reported from Auckland (9 cases), Capital and Coast (3 cases), Bay of Plenty (2 cases), Waitemata, Counties Manukau and Taranaki, (1 case each) DHBs.

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

| DHB | 15-21 October 2011 | | | | | Cumulative total since 1 Jan 2011 | | | | |
|--------------------------|--------------------|-----------|----------|----------|-------------------|-----------------------------------|------------|-----------|-----------|-------------------|
| | Total | Conf | Prob | Other | Hosp ¹ | Total | Conf | Prob | Other | Hosp ¹ |
| Northland | 1 | 0 | 1 | 0 | 1 | 5 | 3 | 2 | 0 | 2 |
| Waitemata | 4 | 1 | 2 | 1 | 0 | 134 | 130 | 3 | 1 | 13 |
| Auckland | 12 | 9 | 3 | 0 | 5 | 124 | 121 | 3 | 0 | 39 |
| Counties Manukau | 1 | 1 | 0 | 0 | 0 | 26 | 26 | 0 | 0 | 5 |
| Waikato | 0 | 0 | 0 | 0 | 0 | 28 | 25 | 0 | 3 | 1 |
| Lakes | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 |
| Bay of Plenty | 3 | 2 | 0 | 1 | 1 | 7 | 6 | 0 | 1 | 3 |
| Tairāwhiti | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Taranaki | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 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 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| Capital and Coast | 4 | 3 | 1 | 0 | 0 | 9 | 6 | 1 | 2 | 0 |
| Wairarapa | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 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 | 1 | 0 | 0 | 1 | 0 | 10 | 6 | 3 | 1 | 0 |
| South Canterbury | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |
| Southern | 1 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 1 | 0 |
| New Zealand Total | 30 | 17 | 8 | 5 | 7 | 374 | 350 | 13 | 11 | 66 |

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 5 (29.4%) of the confirmed measles cases reported. Of the 5 cases, three were not vaccinated. One case had received one dose of vaccine and another case had completed their second dose.

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 | 1 | 0 | 0 | 0 | 0 | 1 |
| 15mths-3yrs | 1 | 1 | 0 | 0 | 0 | 0 |
| 4-9 yrs | 0 | 0 | 0 | 0 | 0 | 0 |
| 10-19 yrs | 2 | 0 | 0 | 0 | 1 | 1 |
| 20+ yrs | 13 | 0 | 1 | 0 | 2 | 10 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 17 | 1 | 1 | 0 | 3 | 12 |

Of the 350 confirmed cases reported since January 2011, 283 (80.9%) had a known vaccination status. Of these 283 cases, 225 were not vaccinated including 32 cases aged less than 15 months and therefore not eligible for vaccination. Forty-four cases had received one dose of vaccine; 13 cases had completed their second dose. One case was vaccinated but had no dose information recorded.

Four of the 350 confirmed cases were aged 42 years or older (adults born prior to 1969 are assumed to have been exposed to measles and are considered immune², however, one of the four 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 | 38 | 4 | 0 | 0 | 32 | 2 |
| 15mths-3yrs | 44 | 13 | 0 | 0 | 30 | 1 |
| 4-9 yrs | 65 | 6 | 2 | 0 | 55 | 2 |
| 10-19 yrs | 95 | 8 | 4 | 0 | 73 | 10 |
| 20+ yrs | 108 | 13 | 7 | 1 | 35 | 52 |
| Unknown | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 350 | 44 | 13 | 1 | 225 | 67 |

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

²Ministry of Health. 2011. *Immunisation Handbook 2011*. Wellington: Ministry of Health