

# MEASLES REPORT

This report includes cases of measles notified in EpiSurv up to midnight 4 November 2011. Data were extracted from EpiSurv at 10 am, 8 November 2011.

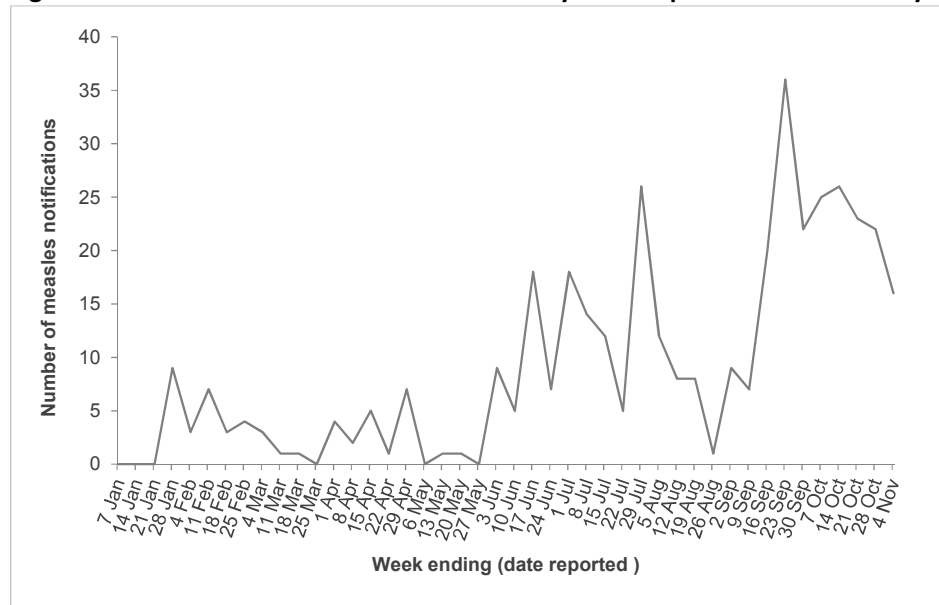
In the last week, 16 new measles cases (27 cases the previous week) were notified from the following DHBs: Auckland (9 cases), South Canterbury (2 cases), Lakes, Taranaki, Hutt Valley, Wairarapa and Southern (1 case each). Of these notifications, six were confirmed, five are probable and five are still under investigation. There have been 401 cases of measles reported in EpiSurv since January 2011 (compared to 47 cases in 2010 and 237 in 2009 for the same period), including 374 confirmed cases, 20 probable cases and seven cases still under investigation. These were reported mainly from the Auckland region (77.8% of total cases), Waikato and Hawke’s Bay (6.0% each). DHBs reporting cases include Auckland (147 cases each), Waitemata (137 cases), Counties Manukau (28 cases), Waikato and Hawke’s Bay (24 cases each), Canterbury (10 cases), Bay of Plenty and Capital and Coast (7 cases each), Northland (4 cases), Taranaki and South Canterbury (3 cases each), Hutt Valley and Southern (2 cases each) Lakes, 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

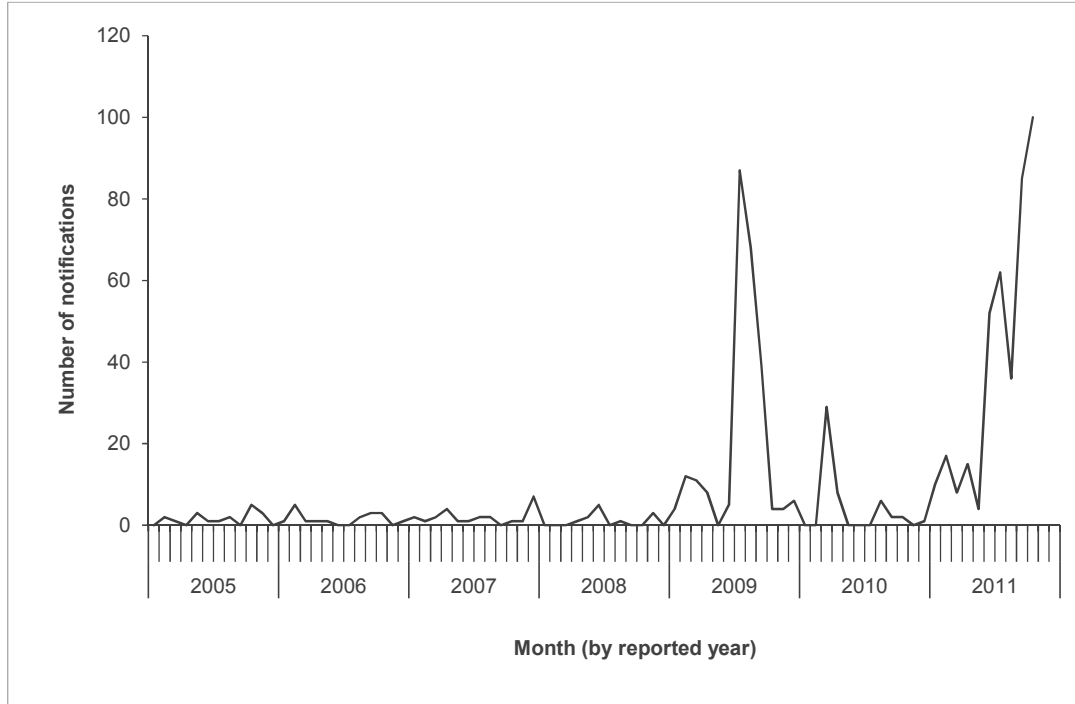
Weekly and historical measles notifications for 2011 are shown in Figure 1 and 2, respectively. There have been 16 cases notified in the last week (27 the previous week)<sup>1</sup>. Notifications have decreased in the week ending 4 November 2011. Of the 401 notifications since the beginning of 2011, 71 have been hospitalised. No deaths have been reported.

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



<sup>1</sup> 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 12 (75.0%) of the 16 measles cases notified in the last week, these ranged from 22 October to 3 November 2011. Although reporting of onset dates is not always complete, 347 (86.5%) of 401 notifications since 1 January 2011 have onset dates available. The earliest and the most recent onset dates since January 2011 were 6 January and 3 November, respectively.

### Age and ethnicity

The age and ethnicity distributions of measles cases are shown in Table 1 and 2. Of the 374 confirmed cases with a known age (reported since 1 January 2011), 157 (42.0%) were aged under 10 years, 116 (31.0%) were aged 20 years or older and 101 (27.0%) were aged 10 to 19 years. Forty-seven (12.6%) were aged under 15 months.

Of the 374 confirmed cases, 154 (41.2%) were aged 12 months to 12 years and 87 (23.3%) were aged 13 years to 20 years.

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

Age Group	29 October-4 November 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
<15 mths	8	2	2	4	0	60	47	8	5	11
15 mths-3yrs	0	0	0	0	0	52	44	7	1	3
4-9 yrs	1	0	1	0	0	68	66	2	0	5
10-19 yrs	2	1	0	1	0	103	101	1	1	13
20+ yrs	5	3	2	0	0	118	116	2	0	39
Unknown	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>16</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>401</b>	<b>374</b>	<b>20</b>	<b>7</b>	<b>71</b>
<i>12 mths-12 yrs</i>	<i>2</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>168</i>	<i>154</i>	<i>11</i>	<i>3</i>	<i>11</i>
<i>13 yrs-20 yrs</i>	<i>2</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>89</i>	<i>87</i>	<i>1</i>	<i>1</i>	<i>15</i>

<sup>1</sup> Confirmed or probable measles cases where hospitalisation was recorded as "Yes".

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

Of the 367 confirmed cases with a known ethnicity reported since 1 January 2011, 237 (64.6%) were European, 75 (20.4%) were Māori, 27 (7.4%) were Pacific Peoples, and 28 (7.6%) were in the "Other" ethnic groups (Table 2). Ethnicity was recorded for five of the six confirmed cases reported in the last week, these were distributed as follows: three European, one Pacific Peoples and one of "Other" ethnic groups. Hospitalisations by ethnicity are also depicted in Table 2.

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

Ethnicity (prioritised)	29 October-4 November 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
Māori	2	0	2	0	0	79	75	4	0	12
Pacific Peoples	1	1	0	0	0	28	27	1	0	9
Other	3	1	1	1	0	31	28	2	1	8
European	8	3	2	3	0	254	237	12	5	41
Unknown	2	1	0	1	0	9	7	1	1	1
<b>Total</b>	<b>16</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>401</b>	<b>374</b>	<b>20</b>	<b>7</b>	<b>71</b>

<sup>1</sup> Confirmed or probable measles cases where hospitalisation was recorded as "Yes".

### Geographic distribution

Of the 374 confirmed cases reported since 1 January, 139 (37.2%) were reported from Auckland, 132 (35.3%) from Waitemata, 27 (7.2%) from Counties Manukau, 24 (6.4%) each from Waikato and Hawke's Bay, seven (1.9%) from Bay of Plenty, six (1.6%) each from Capital and Coast and Canterbury, three (0.8%) from Northland, two (0.5%) each from Taranaki and Southern, and one (0.3%) each from Hutt Valley and South Canterbury DHBs.

The six confirmed cases in the last week were reported from Auckland (5 cases) and Southern (1 case) DHBs.

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

DHB	29 October-4 November 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
Northland	0	0	0	0	0	4	3	1	0	1
Waitemata	0	0	0	0	0	137	132	5	0	13
Auckland	9	5	3	1	0	147	139	7	1	43
Counties Manukau	0	0	0	0	0	28	27	1	0	5
Waikato	0	0	0	0	0	24	24	0	0	1
Lakes	1	0	1	0	0	1	0	1	0	0
Bay of Plenty	0	0	0	0	0	7	7	0	0	4
Tairāwhiti	0	0	0	0	0	0	0	0	0	0
Taranaki	1	0	0	1	0	3	2	0	1	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	1	0	0	2	1	1	0	0
Capital and Coast	0	0	0	0	0	7	6	0	1	0
Wairarapa	1	0	0	1	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	0	0	0	0	0	10	6	4	0	0
South Canterbury	2	0	0	2	0	3	1	0	2	1
Southern	1	1	0	0	0	2	2	0	0	0
<b>New Zealand Total</b>	<b>16</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>401</b>	<b>374</b>	<b>20</b>	<b>7</b>	<b>71</b>

<sup>1</sup> 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 four (66.7%) of the six confirmed measles cases reported. Of the six cases, three were not vaccinated. One case had received one dose of vaccine.

**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	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	1	1	0	0	0	0
20+ yrs	3	0	0	0	1	2
Unknown	0	0	0	0	0	0
<b>Total</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>

Of the 374 confirmed cases reported since January 2011, 301 (80.5%) had a known vaccination status. Of these 301 cases, 239 were not vaccinated including 39 cases aged less than 15 months and therefore not eligible for vaccination. Forty-eight cases had received one dose of vaccine; 13 cases had completed their second dose. One case was vaccinated but had no dose information recorded.

Six of the 374 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<sup>2</sup>, however, one of the six 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	47	6	0	0	39	2
15mths-3yrs	44	13	0	0	30	1
4-9 yrs	66	6	2	0	57	1
10-19 yrs	101	9	4	0	76	12
20+ yrs	116	14	7	1	37	57
Unknown	0	0	0	0	0	0
<b>Total</b>	<b>374</b>	<b>48</b>	<b>13</b>	<b>1</b>	<b>239</b>	<b>73</b>

## Appendix

Case classification:	
<b>Confirmed</b>	A clinically compatible illness that is epidemiologically linked to a confirmed case or is laboratory confirmed
<b>Probable</b>	A clinically compatible illness with all of the following symptoms: <ul style="list-style-type: none"> <li>• a fever <math>\geq 38^{\circ}\text{C}</math></li> <li>• a generalised maculopapular rash lasting three or more days</li> <li>• cough, or coryza, or conjunctivitis, or Koplik spots</li> </ul>
<b>Other</b>	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](http://www.surv.esr.cri.nz)

<sup>2</sup>Ministry of Health. 2011. *Immunisation Handbook 2011*. Wellington: Ministry of Health