

# MEASLES REPORT

This report includes cases of measles notified in EpiSurv up to midnight 25 November 2011. Data were extracted from EpiSurv at 10 am, 29 November 2011.

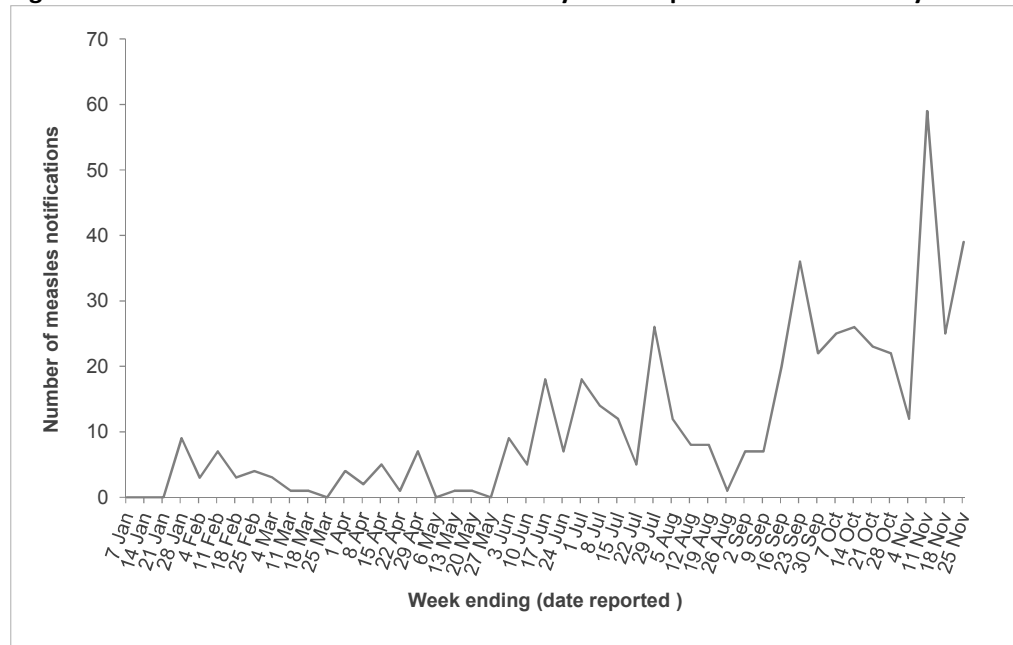
In the last week, 39 new measles cases (28 cases the previous week) were notified from the following DHBs: Waitemata (14 cases), Auckland (9 cases), Counties Manukau, Capital and Coast and Canterbury (3 cases each), Tairāwhiti, Hawke’s Bay and Southern (2 cases each) and Taranaki (1 case). Of these notifications, 29 were confirmed, three are probable and seven are still under investigation. There have been 518 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 481 are confirmed cases, 26 probable cases and 11 cases still under investigation. Cases were reported mainly from the Auckland region (75.9% of total cases), Waikato and Hawke’s Bay (5.0% 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

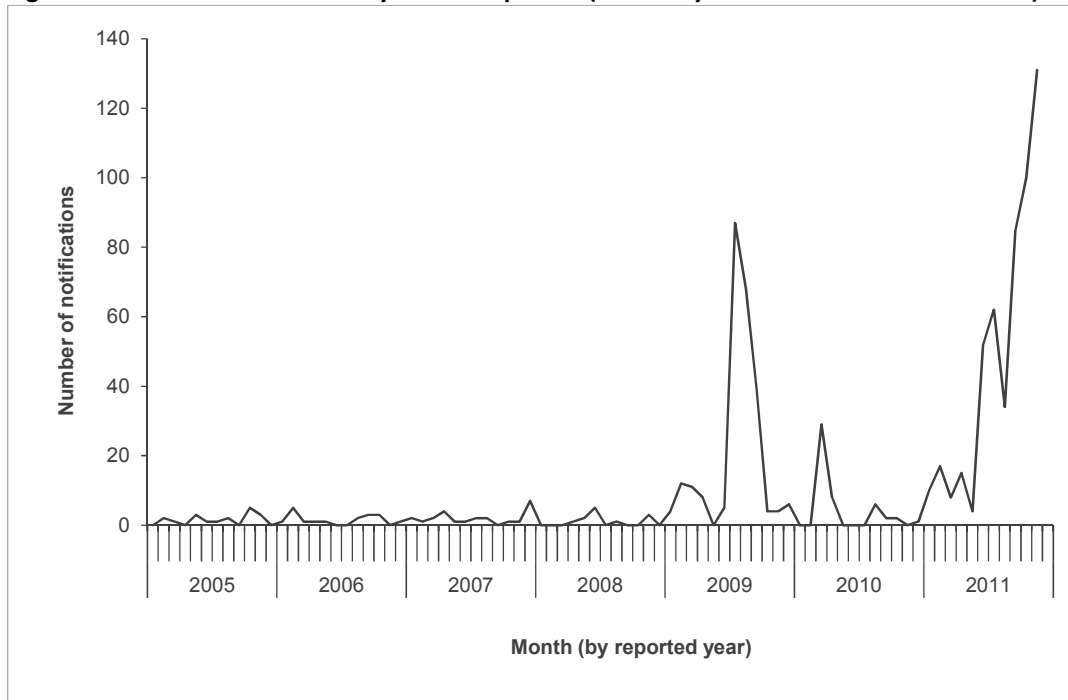
Weekly and historical measles notifications for 2011 are shown in Figure 1 and 2, respectively. There have been 39 cases notified in the last week (28 the previous week)<sup>1</sup>. Notifications have increased in the week ending 25 November 2011. Of the 518 notifications since the beginning of 2011, 88 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 last weekly report not the current count.

Figure 2: Measles notifications by month reported (1 January 2005 to 25 November 2011<sup>1</sup>)



<sup>1</sup> Notifications for November 2011 are complete to 25 November only and do not represent the full calendar month

The onset dates were recorded for 24 (85.7%) of the 28 measles cases notified in the last week, these ranged from 9 to 24 November 2011. Although reporting of onset dates is not always complete, 455 (87.8%) of 518 notifications since 1 January 2011 have onset dates available. The earliest and the most recent onset dates since January 2011 were 6 January and 24 November, respectively.

### Age and ethnicity

The age and ethnicity distributions of measles cases are shown in Table 1 and 2. Of the 481 confirmed cases with a known age (reported since 1 January 2011), 195 (40.5%) were aged under 10 years, 158 (32.8%) were aged 20 years or older and 128 (26.6%) were aged 10 to 19 years. Fifty-eight (12.1%) were aged under 15 months.

Of the 481 confirmed cases, 192 (39.9%) were aged 12 months to 12 years and 111 (23.1%) were aged 13 years to 20 years.

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

Age Group	19-25 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	4	2	0	2	0	72	58	10	4	16
15 mths-3yrs	3	1	2	0	0	64	55	9	0	4
4-9 yrs	2	2	0	0	0	84	82	1	1	5
10-19 yrs	17	15	1	1	1	133	128	3	2	14
20+ yrs	13	9	0	4	1	165	158	3	4	49
Unknown	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>39</b>	<b>29</b>	<b>3</b>	<b>7</b>	<b>2</b>	<b>518</b>	<b>481</b>	<b>26</b>	<b>11</b>	<b>88</b>
<i>12 mths-12 yrs</i>	<i>11</i>	<i>8</i>	<i>2</i>	<i>1</i>	<i>0</i>	<i>207</i>	<i>192</i>	<i>12</i>	<i>3</i>	<i>15</i>
<i>13 yrs-20 yrs</i>	<i>15</i>	<i>12</i>	<i>1</i>	<i>2</i>	<i>0</i>	<i>117</i>	<i>111</i>	<i>3</i>	<i>3</i>	<i>16</i>

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

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

Of the 481 confirmed cases reported since 1 January 2011, 471 had a known ethnicity. Of these, 316 (67.1%) were European, 83 (17.6%) were Māori, 38 (8.1%) were Pacific Peoples, and 34 (7.2%) were in the "Other" ethnic groups (Table 2). Ethnicity was recorded for 28 of the 29 confirmed cases reported in the last week, these were distributed as follows: European (20 cases), those of "Other" ethnic groups (4 cases), Māori (3 cases) and Pacific Peoples (1 case). Hospitalisations by ethnicity are also depicted in Table 2.

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

Ethnicity (prioritised)	19-25 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	5	3	2	0	0	88	83	5	0	13
Pacific Peoples	3	1	0	2	0	42	38	2	2	10
Other	4	4	0	0	0	37	34	3	0	8
European	25	20	1	4	2	339	316	15	8	56
Unknown	2	1	0	1	0	12	10	1	1	1
<b>Total</b>	<b>39</b>	<b>29</b>	<b>3</b>	<b>7</b>	<b>2</b>	<b>518</b>	<b>481</b>	<b>26</b>	<b>11</b>	<b>88</b>

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

### Geographic distribution

Of the 518 cases reported since 1 January, 481 were confirmed including 179 (37.2%) from Auckland, 160 (33.3%) from Waitemata, 35 (7.2%) from Counties Manukau, 26 (5.4%) from Waikato, 24 (5.0%) from Hawke's Bay, 18 (3.7%) from Southern, 10 (2.1%) from Capital and Coast, eight (1.7%) from Canterbury, seven (1.5%) from Bay of Plenty, four (0.8%) from Lakes, three (0.6%) from Northland, two (0.4%) each from Tairāwhiti and Taranaki, and one (0.2%) each from MidCentral, Hutt Valley and South Canterbury DHBs (Table 3).

The 29 confirmed cases in the last week were reported from Waitemata (13 cases each), Auckland (9 cases), Counties Manukau (3 cases), Tairāwhiti (2 cases) and Canterbury and Southern (1 case each) DHBs.

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

DHB	19-25 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	14	13	0	1	0	169	160	8	1	16
Auckland	9	9	0	0	0	188	179	9	0	49
Counties Manukau	3	3	0	0	1	36	35	1	0	7
Waikato	0	0	0	0	0	26	26	0	0	2
Lakes	0	0	0	0	0	4	4	0	0	3
Bay of Plenty	0	0	0	0	0	7	7	0	0	4
Tairāwhiti	2	2	0	0	1	2	2	0	0	1
Taranaki	1	0	0	1	0	3	2	0	1	0
Hawke's Bay	2	0	0	2	0	26	24	0	2	3
Whanganui	0	0	0	0	0	0	0	0	0	0
MidCentral	0	0	0	0	0	1	1	0	0	1
Hutt Valley	0	0	0	0	0	1	1	0	0	0
Capital and Coast	3	0	3	0	0	13	10	3	0	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	0	0	0	0	0
Canterbury	3	1	0	2	0	15	8	4	3	0
South Canterbury	0	0	0	0	0	4	1	0	3	1
Southern	2	1	0	1	0	19	18	0	1	0
<b>New Zealand Total</b>	<b>39</b>	<b>29</b>	<b>3</b>	<b>7</b>	<b>2</b>	<b>518</b>	<b>481</b>	<b>26</b>	<b>11</b>	<b>88</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 22 (75.9%) of the 29 confirmed measles cases reported. Of these, 15 were not vaccinated including two cases aged less than 15 months and therefore not eligible for vaccination. Two cases had received one dose of vaccine and four cases had received two doses of vaccine.

**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	1	0	0	0	1	0
4-9 yrs	2	0	0	0	1	1
10-19 yrs	15	0	3	0	10	2
20+ yrs	9	2	1	1	1	4
Unknown	0	0	0	0	0	0
<b>Total</b>	<b>29</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>15</b>	<b>7</b>

Of the 481 confirmed cases reported since January 2011, 372 (77.3%) had a known vaccination status. Of these 372 cases, 288 were not vaccinated including 49 cases aged less than 15 months and therefore not eligible for vaccination. Sixty-three cases had received one dose of vaccine and a further 19 cases had completed their second dose. One case was vaccinated but had no dose information recorded.

Note: Of the 56 confirmed cases aged less than 15 months, seven had completed their first dose of vaccine.

Thirteen of the 481 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>[1]</sup>, however, one of the 13 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 (no dose info)	Not vaccinated	Unknown
<15mths	58	7	0	0	49	2
15mths-3yrs	55	17	0	0	36	2
4-9 yrs	82	10	2	0	67	3
10-19 yrs	128	10	8	0	93	17
20+ yrs	158	19	9	2	43	85
Unknown	0	0	0	0	0	0
<b>Total</b>	<b>481</b>	<b>63</b>	<b>19</b>	<b>2</b>	<b>288</b>	<b>109</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>[1]</sup>Ministry of Health. 2011. *Immunisation Handbook 2011*. Wellington: Ministry of Health