

# MEASLES REPORT

This report includes cases of measles notified in EpiSurv up to midnight 5 August 2011. Data were extracted from EpiSurv at 10 am, 9 August 2011.

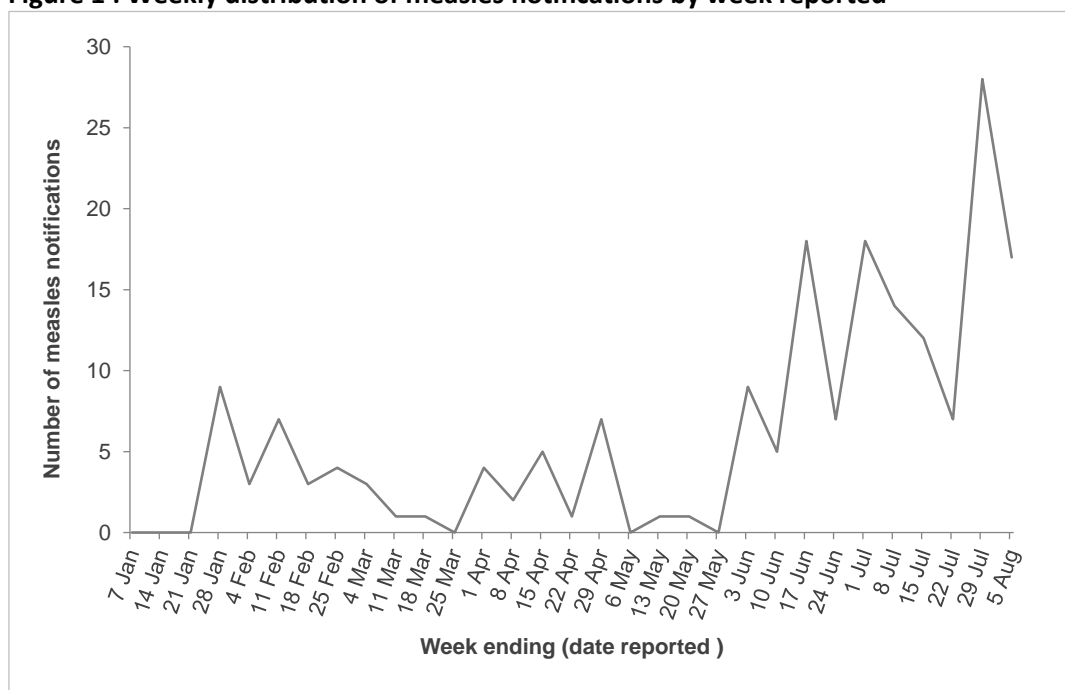
In the last week, 17 new measles cases (28 cases the previous week) were notified from the Waitemata (9 cases), Waikato (4) Northland, Auckland, Lakes and Canterbury (one case each) DHBs. Of these, 12 cases were confirmed and five are still under investigation. There have been 185 cases of measles reported in EpiSurv since January 2011 (compared to 37 cases reported the same time last year), including 174 confirmed cases, four probable cases and seven cases are still under investigation. These were reported mainly from the Auckland region (71.4% of total cases) and Hawke's Bay (13.0%). DHBs reporting cases include Waitemata (102 cases), Hawke's Bay (24 cases), Auckland (17 cases), Waikato (14 cases), Counties Manukau (13 cases), Canterbury (8 cases), Nelson Marlborough, Northland (2 cases each), Lakes, Capital and Coast, and Hutt Valley DHBs (one case each).

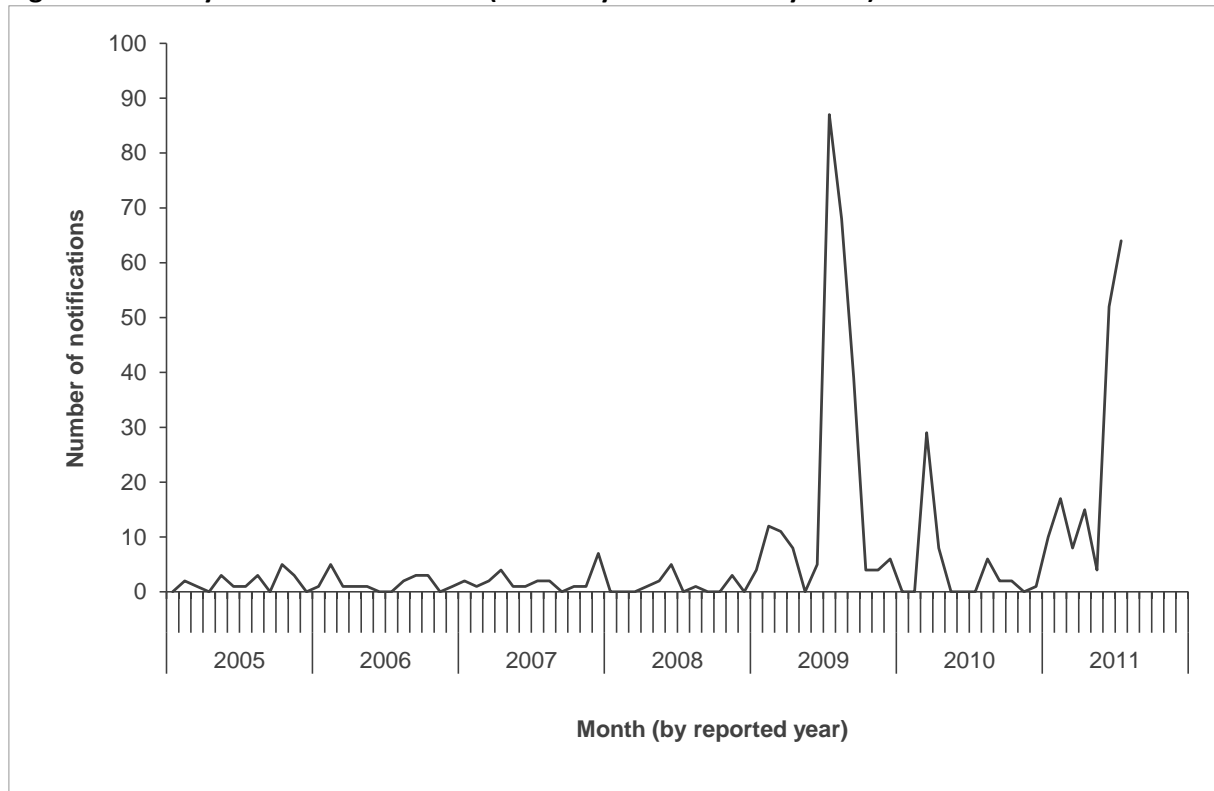
This report incorporates the temporal distribution of cases, since January 2011, and the distribution of cases by age, ethnicity (prioritised), and district health board (DHB), as well as a summary of confirmed cases by immunisation status. The case classification used in this report is specified in the appendix.

## Temporal distribution

Weekly and historical measles notifications for 2011 are shown in Figure 1 and 2, respectively. There have been 17 cases notified in the last week (28 the previous week), a considerable decrease, although there have been weekly spikes in measles cases since the end of January 2011. The number of cases has increased substantially since the end of May. Based on historical trends (e.g. years 2008 and 2009) and the recent outbreaks in the Auckland Region and Hawke's Bay DHB, we could expect more notifications during this time of the year. Of the 185 notifications since the beginning of 2011, 19 have been hospitalised. There have been no deaths.

**Figure 1 : Weekly distribution of measles notifications by week reported**



**Figure 2 Monthly measles notifications (1 January 2005 to 31 July 2011)**

The onset dates were recorded for 10 measles cases notified in the last week, and earliest date was 20 July 2011. Although reporting of onset dates is not always complete, 153 notifications (of 185) since 1 January 2011 have onset dates available. The earliest and last onset dates since January 2011 were 6 January and 1 August, respectively.

### Age and ethnicity

The age and ethnicity distributions of measles cases are shown in Table 1 and 2. Of the 174 confirmed cases with a known age reported since 1 January 2011, 82 (47.1%) were aged under 10 years, 63 (36.2%) were aged 10 to 19 years, and 29 (16.7%) were aged 20 years or older. Of the 174 cases, 87 (50.0%) were aged 12 months to 12 years and 52 (29.9%) were aged 13 years to 20 years.

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

Age Group	30 July - 05 August 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
<15mths	2	1	0	1	0	20	14	3	3	5
15mths-3yrs	3	1	0	2	0	24	21	1	2	1
4-9 yrs	1	1	0	0	0	47	47	0	0	2
10-19 yrs	8	7	0	1	0	64	63	0	1	4
20+ yrs	3	2	0	1	0	30	29	0	1	7
Unknown	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>17</b>	<b>12</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>185</b>	<b>174</b>	<b>4</b>	<b>7</b>	<b>19</b>
12mths - 12yrs	6	3	0	3	0	91	87	1	3	4
13yrs - 20yrs	7	7	0	0	0	52	52	0	0	4

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

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

Of the 166 confirmed cases with a known ethnicity reported since 1 January 2011, 113 (68.1%) were European, 43 (25.9%) were Maori, eight (4.8%) were Pacific Peoples, and two (1.2%) were in the "Other" ethnic groups (Table 2). Of the 12 confirmed cases reported in the last week, ethnicity was recorded for nine, including European (7 cases) and Maori and Pacific People (one case each). Hospitalisations by ethnicity are also depicted in Table 2.

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

Ethnicity (prioritised)	30 July - 05 August 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
Maori	2	1	0	1	0	45	43	1	1	6
Pacific Peoples	1	1	0	0	0	9	8	0	1	2
Other	0	0	0	0	0	2	2	0	0	1
European	11	7	0	4	0	120	113	2	5	10
Unknown	3	3	0	0	0	9	8	1	0	0
<b>Total</b>	<b>17</b>	<b>12</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>185</b>	<b>174</b>	<b>4</b>	<b>7</b>	<b>19</b>

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

### Geographic distribution

Of the 174 confirmed cases reported since 1 January, 101 (58.0%) were reported from Waitemata, 24 (13.8%) from Hawke's Bay, 17 (9.8%) from Auckland, 13 (7.5%) from Counties Manukau, four (2.3%) from Canterbury, 11 (6.3%) from Waikato, and one each (0.6%) from Northland, Lakes, Capital and Coast, and Hutt Valley DHBs.

The 12 confirmed cases in the last week were reported from Waitemata (9 cases), Auckland, Waikato and Lakes (one case each) DHBs.

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

DHB	30 July - 05 August 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
Northland	1	0	0	1	0	2	1	0	1	0
Waitemata	9	9	0	0	0	102	101	1	0	10
Auckland	1	1	0	0	0	17	17	0	0	2
Counties Manukau	0	0	0	0	0	13	13	0	0	3
Waikato	4	1	0	3	0	14	11	0	3	1
Lakes	1	1	0	0	0	1	1	0	0	0
Bay of Plenty	0	0	0	0	0	0	0	0	0	0
Tairāwhiti	0	0	0	0	0	0	0	0	0	0
Taranaki	0	0	0	0	0	0	0	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	0	0	0	0	0	1	1	0	0	0
Wairarapa	0	0	0	0	0	0	0	0	0	0
Nelson Marlborough	0	0	0	0	0	2	0	0	2	0
West Coast	0	0	0	0	0	0	0	0	0	0
Canterbury	1	0	0	1	0	8	4	3	1	0
South Canterbury	0	0	0	0	0	0	0	0	0	0
Southern	0	0	0	0	0	0	0	0	0	0
<b>New Zealand Total</b>	<b>17</b>	<b>12</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>185</b>	<b>174</b>	<b>4</b>	<b>7</b>	<b>19</b>

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

## Immunisation status

Immunisation status of the confirmed cases, as recorded in EpiSurv, is shown in Table 4. Of the 174 confirmed cases reported since January 2011, 159 (91.4%) had a known vaccination status. Of these 159 cases, 143 were not vaccinated including 13 cases aged less than 15 months and therefore not eligible for vaccination. Fifteen cases had received one dose of vaccine but none of these had completed their second dose, and one case was vaccinated but no dose information was recorded.

**Table 4: 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	14	1	0	0	13	0
15mths-3yrs	21	3	0	0	18	0
4-9 yrs	47	5	0	0	40	2
10-19 yrs	63	4	0	1	54	4
20+ yrs	29	2	0	0	18	9
Unknown	0	0	0	0	0	0
<b>Total</b>	<b>174</b>	<b>15</b>	<b>0</b>	<b>1</b>	<b>143</b>	<b>15</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

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