

MEASLES REPORT

This report includes cases of measles notified in EpiSurv up to midnight 29 July 2011. Data were extracted from EpiSurv at 10 am, 2 August 2011.

In the last week, 28 new measles cases (7 cases the previous week) were notified from the Waitemata (16 cases), Waikato (10 cases), and Nelson Marlborough (2 cases) DHBs. Of these, 18 cases were confirmed, four were probable and six are still under investigation. There have been 170 cases of measles reported in EpiSurv since January 2011 (compared to 37 cases reported the same time last year), including 154 confirmed cases, eight probable cases and eight cases are still under investigation. These were reported mainly from the Auckland region (71.8% of total cases) and Hawke's Bay (14.1%). DHBs reporting cases include Waitemata (93 cases), Hawke's Bay (24 cases), Auckland (16 cases), Counties Manukau (13 cases), Waikato (12 cases), Canterbury (7 cases), Nelson Marlborough (2 cases), Northland, 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 28 cases notified in the last week (7 the previous week), a considerable increase, 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 170 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

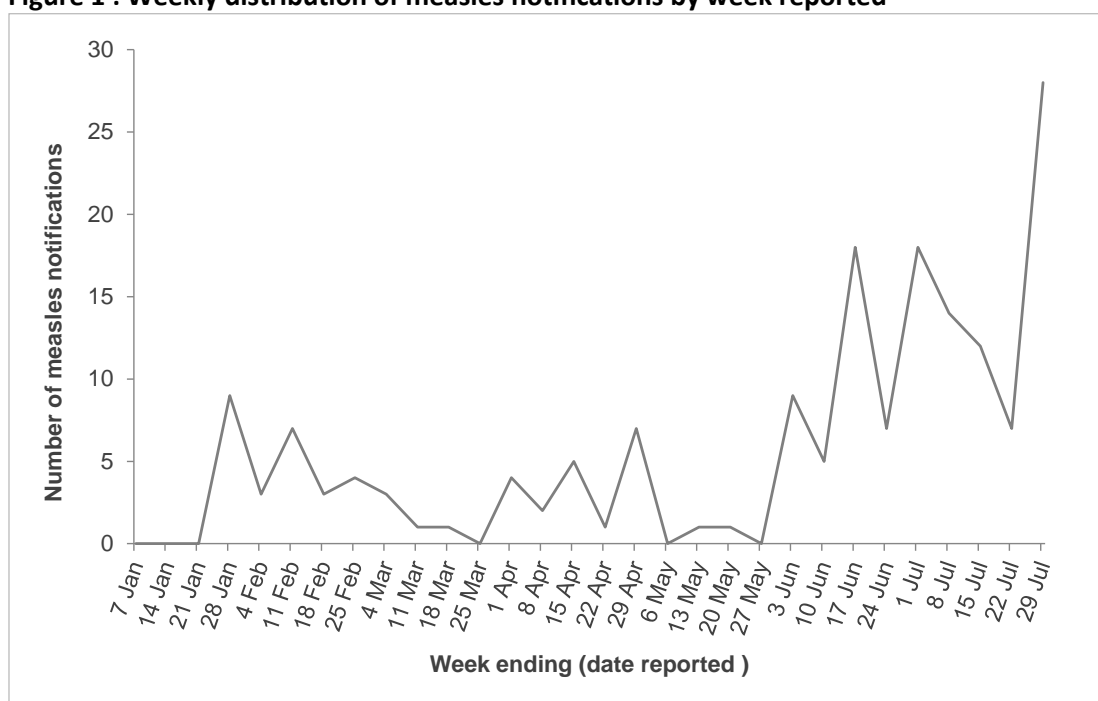
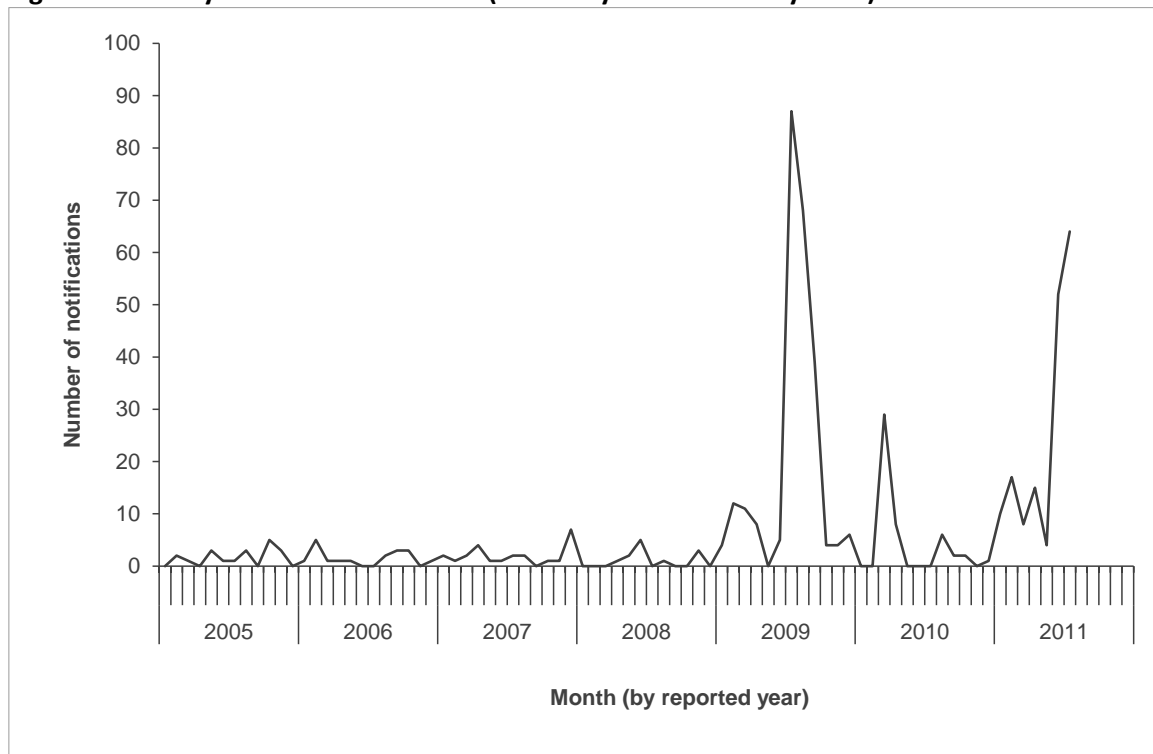


Figure 2 Monthly measles notifications (1 January 2005 to 29 July 2011)

The onset dates were recorded for 10 measles cases notified in the last week, and earliest date was 19 July 2011. Although reporting of onset dates is not always complete, 144 notifications (of 170) since 1 January 2011 have onset dates available. The earliest and last onset dates since January 2011 were 6 January and 26 July, respectively.

Age and ethnicity

The age and ethnicity distributions of measles cases are shown in Table 1 and 2. Of the 154 confirmed cases with a known age reported since 1 January 2011, 79 (51.3%) were aged under 10 years, 48 (31.2%) were aged 10 to 19 years, and 27 (17.5%) were aged 20 years or older.

Of the 154 cases, 84 (54.5%) were aged 12 months to 12 years and 37 (24.0%) were aged 13 years to 20 years.

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

Age Group	23 - 29 July 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp ¹	Total	Conf	Prob	Other	Hosp ¹
<15mths	2	0	0	2	0	18	13	3	2	5
15mths-3yrs	1	1	0	0	0	23	20	1	2	1
4-9 yrs	6	5	1	0	0	47	46	1	0	2
10-19 yrs	17	10	3	4	1	55	48	3	4	4
20+ yrs	2	2	0	0	1	27	27	0	0	7
Unknown	0	0	0	0	0	0	0	0	0	0
Total	28	18	4	6	2	170	154	8	8	19
<i>12mths - 12yrs</i>	<i>9</i>	<i>8</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>88</i>	<i>84</i>	<i>2</i>	<i>2</i>	<i>4</i>
<i>13yrs - 20yrs</i>	<i>15</i>	<i>8</i>	<i>3</i>	<i>4</i>	<i>1</i>	<i>44</i>	<i>37</i>	<i>3</i>	<i>4</i>	<i>4</i>

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

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

Of the 149 confirmed cases with a known ethnicity reported since 1 January 2011, 100 (67.1%) were European, 44 (26.8%) were Maori, seven (4.7%) were Pacific Peoples, and two (1.3%) were in the "Other" ethnic groups (Table 2). Of the 18 confirmed cases reported in the last week, ethnicity was recorded for 16, including 11 Europeans and five Maori. Hospitalisations by ethnicity are also depicted in Table 2.

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

Ethnicity (prioritised)	23 - 29 July 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp ¹	Total	Conf	Prob	Other	Hosp ¹
Maori	6	5	0	1	0	44	40	1	3	6
Pacific Peoples	1	0	0	1	0	8	7	0	1	2
Other	0	0	0	0	0	2	2	0	0	1
European	18	11	4	3	2	109	100	6	3	10
Unknown	3	2	0	1	0	7	5	1	1	0
Total	28	18	4	6	2	170	154	8	8	19

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

Geographic distribution

Of the 154 confirmed cases reported since 1 January, 92 (59.7%) were reported from Waitemata, 24 (15.6%) from Hawke's Bay, 16 (10.4%) from Auckland, 13 (8.4%) from Counties Manukau, four (2.6%) from Canterbury, two (1.3%) from Waikato, and one each (0.6%) from Northland, Capital and Coast, and Hutt Valley DHBs.

The 18 confirmed cases in the last week were reported from Waitemata (16 cases) and Waikato (2 cases) DHBs.

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

DHB	23 - 29 July 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	1	1	0	0	0
Waitemata	16	16	0	0	1	93	92	1	0	9
Auckland	0	0	0	0	0	16	16	0	0	2
Counties Manukau	0	0	0	0	0	13	13	0	0	3
Waikato	10	2	4	4	1	12	2	4	6	0
Lakes	0	0	0	0	0	0	0	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	2	0	0	2	0	2	0	0	2	0
West Coast	0	0	0	0	0	0	0	0	0	0
Canterbury	0	0	0	0	0	7	4	3	0	0
South Canterbury	0	0	0	0	0	0	0	0	0	0
Southern	0	0	0	0	0	0	0	0	0	0
New Zealand Total	28	18	4	6	2	170	154	8	8	17

¹ 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 154 confirmed cases reported since January 2011, 138 (89.6%) had a known vaccination status. Of these 138 cases, 124 were not vaccinated including 12 cases aged less than 15 months and therefore not eligible for vaccination. Thirteen 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	13	1	0	0	12	0
15mths-3yrs	20	3	0	0	17	0
4-9 yrs	46	5	0	0	40	1
10-19 yrs	48	2	0	1	39	6
20+ yrs	27	2	0	0	16	9
Unknown	0	0	0	0	0	0
Total	154	13	0	1	124	16

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