

MEASLES REPORT

This report includes cases of measles notified in EpiSurv up to midnight 2 December 2011. Data were extracted from EpiSurv at 10 am, 6 December 2011.

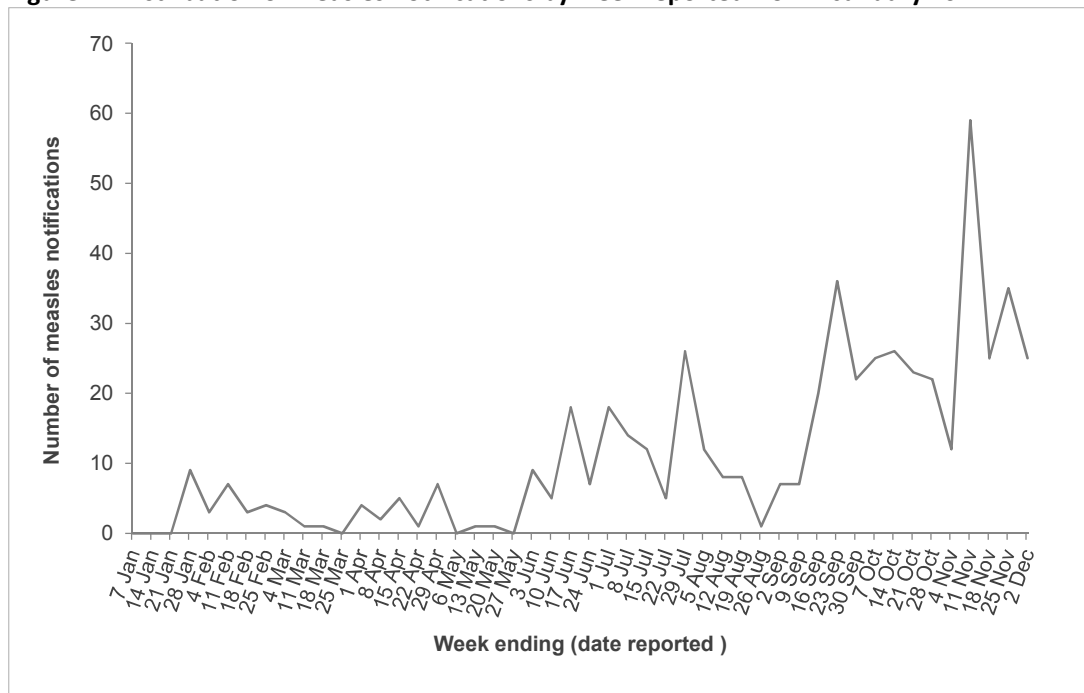
In the last week, 25 new measles cases (39 cases the previous week) were notified from the following DHBs: Auckland (10 cases), Counties Manukau (7 cases), Hutt Valley (2 cases), Waitemata, Waikato, bay of Plenty, Tairāwhiti, Capital and Coast and Nelson Marlborough (1 case each). Of these notifications, 13 were confirmed, eight are probable and four are still under investigation. There have been 539 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, 497 were confirmed cases, 31 are probable cases and 11 cases are still under investigation. Cases were reported mainly from the Auckland region (76.3% of total cases), Waikato (5.0%) and Hawke’s Bay (4.8% 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

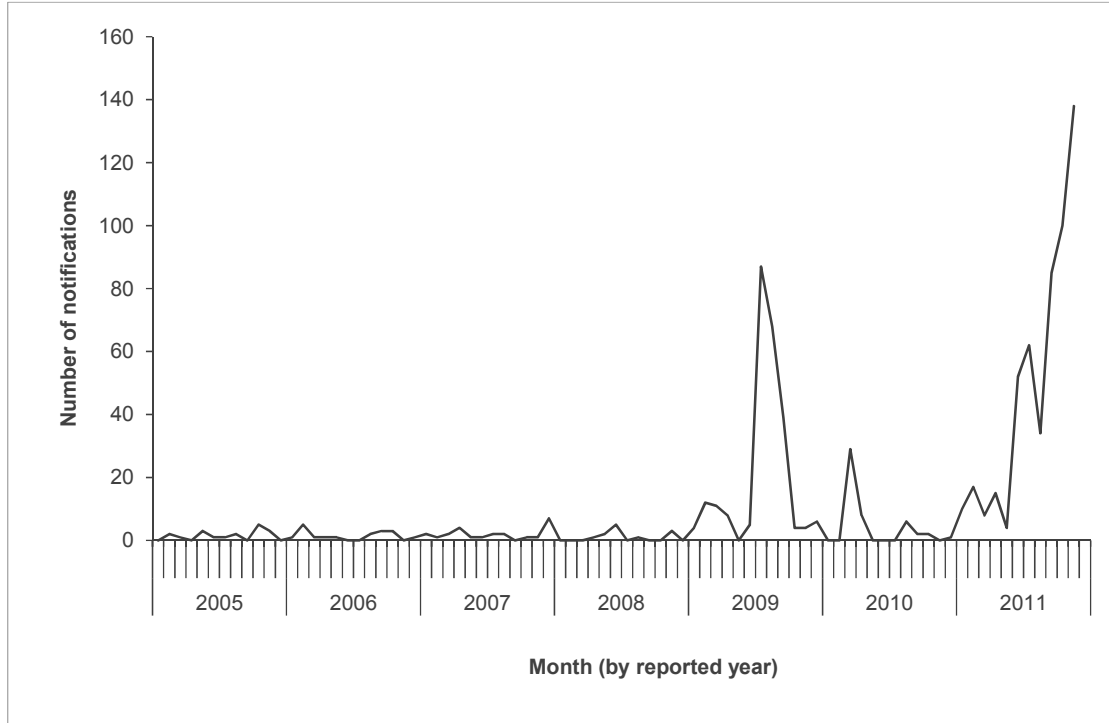
Weekly and historical measles notifications for 2011 are shown in Figure 1 and 2, respectively. There have been 25 cases notified in the last week (39 the previous week)¹. Notifications have decreased in the week ending 2 December 2011. Of the 539 notifications since the beginning of 2011, 88 have been hospitalised. No deaths have been reported.

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



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 last weekly report not the current count.

Figure 2: Measles notifications by month reported (1 January 2005 to 30 November 2011)



The onset dates were recorded for 22 (88.0%) of the 25 measles cases notified in the last week, these ranged from 29 October to 2 December 2011. Although reporting of onset dates is not always complete, 475 (88.1%) of 539 notifications since 1 January 2011 have onset dates available. The earliest and the most recent onset dates since January 2011 were 6 January and 2 December, respectively.

Age and ethnicity

The age and ethnicity distributions of measles cases are shown in Table 1 and 2. Of the 497 confirmed cases with a known age (reported since 1 January 2011), 200 (40.2%) were aged under 10 years, 162 (32.6%) were aged 20 years or older and 135 (27.2%) were aged 10 to 19 years. Fifty-nine (11.9%) were aged under 15 months.

Of the 497 confirmed cases, 201 (40.4%) were aged 12 months to 12 years and 115 (23.1%) were aged 13 years to 20 years.

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

Age Group	26 November-2 December 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp ¹	Total	Conf	Prob	Other	Hosp ¹
<15 mths	4	1	1	2	0	76	59	11	6	16
15 mths-3yrs	4	1	3	0	0	66	56	10	0	4
4-9 yrs	3	3	0	0	0	87	85	1	1	5
10-19 yrs	9	5	3	1	0	141	135	5	1	14
20+ yrs	4	3	1	0	0	168	162	4	2	49
Unknown	1	0	0	1	0	1	0	0	1	0
Total	25	13	8	4	0	539	497	31	11	88
<i>12 mths-12 yrs</i>	<i>15</i>	<i>9</i>	<i>4</i>	<i>2</i>	<i>0</i>	<i>220</i>	<i>201</i>	<i>14</i>	<i>5</i>	<i>15</i>
<i>13 yrs-20 yrs</i>	<i>4</i>	<i>2</i>	<i>2</i>	<i>0</i>	<i>0</i>	<i>119</i>	<i>115</i>	<i>4</i>	<i>0</i>	<i>16</i>

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

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

Of the 497 confirmed cases reported since 1 January 2011, 487 had a known ethnicity. Of these, 327 (67.1%) were European, 87 (17.9%) were Māori, 39 (8.0%) were Pacific Peoples, and 34 (7.0%) were in the "Other" ethnic groups (Table 2). Ethnicity was recorded for all 13 confirmed cases reported in the last week, these were distributed as follows: European (9 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)	26 November-2 December 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp ¹	Total	Conf	Prob	Other	Hosp ¹
Māori	5	3	1	1	0	92	87	4	1	13
Pacific Peoples	4	1	3	0	0	45	39	5	1	10
Other	1	0	0	1	0	38	34	3	1	8
European	14	9	4	1	0	351	327	18	6	56
Unknown	1	0	0	1	0	13	10	1	2	1
Total	25	13	8	4	0	539	497	31	11	88

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

Geographic distribution

Of the 539 cases reported since 1 January, 497 were confirmed including 186 (37.4%) from Auckland, 160 (32.2%) from Waitemata, 39 (7.8%) from Counties Manukau, 27 (5.4%) from Waikato, 24 (4.8%) from Hawke's Bay, 18 (3.6%) from Southern, 12 (2.4%) from Capital and Coast, 10 (2.0%) from Canterbury, seven (1.4%) 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 13 confirmed cases in the last week were reported from Auckland (7 cases), Counties Manukau (4 cases), Waikato and Capital and Coast (1 case each) DHBs.

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

DHB	26 November-2 December 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	4	3	1	0	1
Waitemata	1	0	0	1	0	170	160	8	2	16
Auckland	10	7	3	0	0	198	186	12	0	49
Counties Manukau	7	4	3	0	0	43	39	4	0	7
Waikato	1	1	0	0	0	27	27	0	0	2
Lakes	0	0	0	0	0	4	4	0	0	3
Bay of Plenty	1	0	1	0	0	8	7	1	0	4
Tairāwhiti	1	0	0	1	0	3	2	0	1	1
Taranaki	0	0	0	0	0	2	2	0	0	0
Hawke's Bay	0	0	0	0	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	2	0	1	1	0	3	1	1	1	0
Capital and Coast	1	1	0	0	0	12	12	0	0	0
Wairarapa	0	0	0	0	0	0	0	0	0	0
Nelson Marlborough	1	0	0	1	0	1	0	0	1	0
West Coast	0	0	0	0	0	0	0	0	0	0
Canterbury	0	0	0	0	0	15	10	4	1	0
South Canterbury	0	0	0	0	0	4	1	0	3	1
Southern	0	0	0	0	0	18	18	0	0	0
New Zealand Total	25	13	8	4	0	539	497	31	11	88

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 12 (92.3%) of the 13 confirmed measles cases reported. Of these, seven were not vaccinated including one case aged less than 15 months and therefore not eligible for vaccination. Three cases had received one dose of vaccine and two 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	1	0	0	0	1	0
15mths-3yrs	1	1	0	0	0	0
4-9 yrs	3	1	1	0	1	0
10-19 yrs	5	0	1	0	4	0
20+ yrs	3	1	0	0	1	1
Unknown	0	0	0	0	0	0
Total	13	3	2	0	7	1

Of the 497 confirmed cases reported since January 2011, 387 (77.9%) had a known vaccination status. Of these 387 cases, 297 were not vaccinated including 50 cases aged less than 15 months and therefore not eligible for vaccination. Sixty-six cases had received one dose of vaccine and a further 21 cases had completed their second dose. Three cases were vaccinated but had no dose information recorded. (Table 5).

Note: Of the 59 confirmed cases aged less than 15 months, seven had completed their first dose of vaccine.

Thirteen of the 497 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^[1], 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	59	7	0	0	50	2
15mths-3yrs	56	18	0	0	36	2
4-9 yrs	85	11	3	0	68	3
10-19 yrs	135	10	9	1	99	16
20+ yrs	162	20	9	2	44	87
Unknown	0	0	0	0	0	0
Total	497	66	21	3	297	110

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

^[1]Ministry of Health. 2011. *Immunisation Handbook 2011*. Wellington: Ministry of Health