

MEASLES REPORT

This report includes cases of measles notified in EpiSurv up to midnight 14 October 2011. Data were extracted from EpiSurv at 10 am, 18 October 2011.

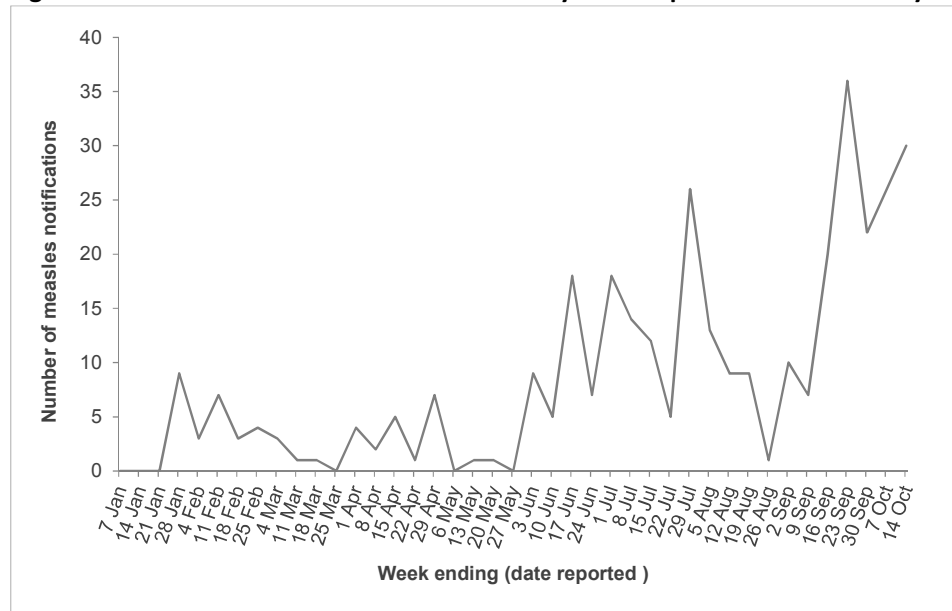
In the last week, 30 new measles cases (30 cases the previous week) were notified from the following DHBs: Auckland (15 cases), Waitemata (4 cases), Northland, Bay of Plenty, Capital and Coast, Canterbury (2 cases each), Counties Manukau, Hutt Valley and Southern (1 case each). Of these notifications, 24 were confirmed, two are probable and four are still under investigation. There have been 349 cases of measles reported in EpiSurv since January 2011 (compared to 46 cases reported the same time last year), including 332 confirmed cases, seven probable cases and 10 cases still under investigation. These were reported mainly from the Auckland region (76.8% of total cases), Waikato (8.0%) and Hawke’s Bay (6.9%). DHBs reporting cases include Waitemata (130 cases), Auckland (113 cases), Waikato (28 cases), Counties Manukau (25 cases), Hawke’s Bay (24 cases), Canterbury (10 cases), Northland and Capital and Coast (5 cases each), Bay of Plenty (4 cases), Hutt Valley, Southern (2 cases each) and West Coast (1 case).

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

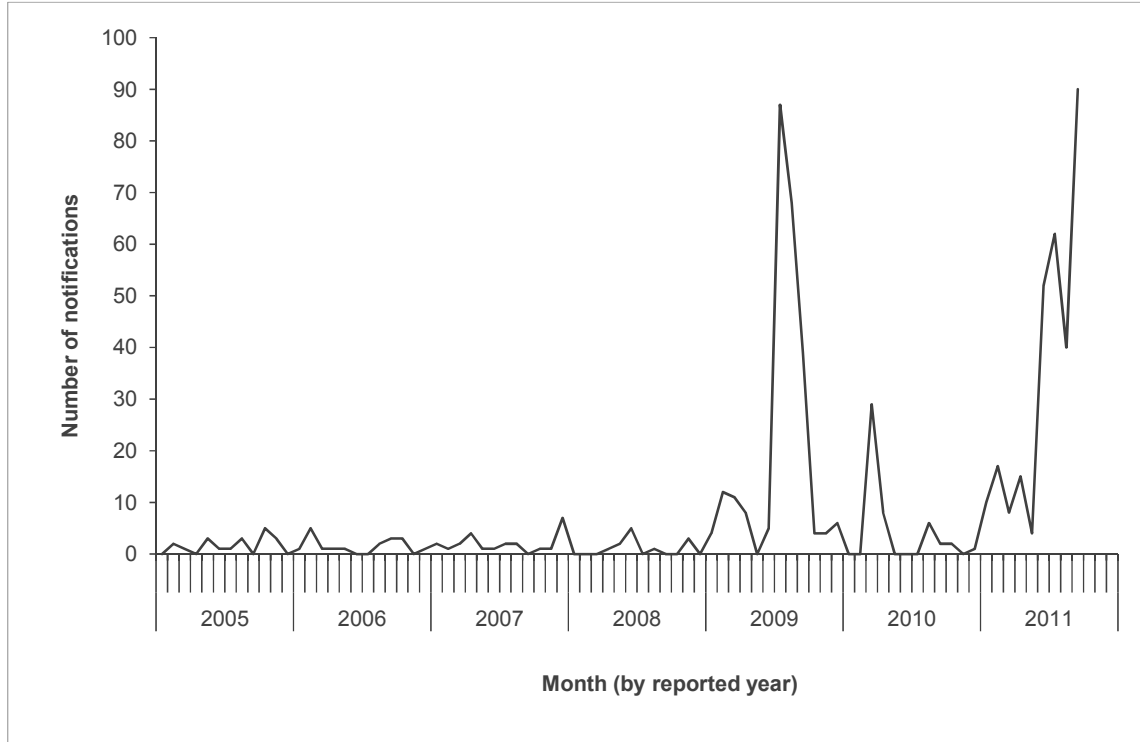
Weekly and historical measles notifications for 2011 are shown in Figure 1 and 2, respectively. There have been 30 cases notified in the last week (30 the previous week)¹. Compared to the previous week, notifications have remained constant in the last week ending 14 October. Of the 349 notifications since the beginning of 2011, 59 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 previous weekly report not the current count.

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



The onset dates were recorded for 26 (86.6%) of the 30 measles cases notified in the last week, these ranged from 1 October to 14 October 2011. Although reporting of onset dates is not always complete, 272 (84.5%) of notifications since 1 January 2011 have onset dates available. The earliest and last onset dates since January 2011 were 6 January and 14 October, respectively.

Age and ethnicity

The age and ethnicity distributions of measles cases are shown in Table 1 and 2. Of the 332 confirmed cases with a known age reported since 1 January 2011, 145 (43.7%) were aged under 10 years, 93 (28.0%) were aged 10 to 19 years, and 94 (28.3%) were aged 20 years or older. Thirty-seven (11.1%) were aged under 15 months.

Of the 332 confirmed cases, 148 (44.6%) were aged 12 months to 12 years and 77 (23.2%) were aged 13 years to 20 years. Over a quarter (28.3%, 94 cases) were aged 20 to 64 years.

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

Age Group	8-14 October 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp ¹	Total	Conf	Prob	Other	Hosp ¹
<15 mths	6	4	1	1	1	45	37	5	3	8
15 mths-3yrs	3	2	0	1	0	48	43	1	4	3
4-9 yrs	2	1	0	1	0	67	65	0	2	4
10-19 yrs	8	7	1	0	2	94	93	1	0	11
20+ yrs	11	10	0	1	2	95	94	0	1	33
Unknown	0	0	0	0	0	0	0	0	0	0
Total	30	24	2	4	5	349	332	7	10	59
<i>12 mths-12 yrs</i>	<i>10</i>	<i>7</i>	<i>1</i>	<i>10</i>	<i>0</i>	<i>159</i>	<i>148</i>	<i>3</i>	<i>8</i>	<i>9</i>
<i>13 yrs-20 yrs</i>	<i>8</i>	<i>7</i>	<i>1</i>	<i>8</i>	<i>2</i>	<i>78</i>	<i>77</i>	<i>1</i>	<i>0</i>	<i>13</i>

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

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

Of the 327 confirmed cases with a known ethnicity reported since 1 January 2011, 211 (64.5%) were European, 72 (22.0%) were Māori, 22 (6.7%) were Pacific Peoples, and 22 (6.7%) were in the "Other" ethnic groups (Table 2). Ethnicity was recorded for 23 of the 24 confirmed cases reported in the last week, these were distributed as follows: 15 (65.2%) European, four (17.4%) Māori, three (13.0%) of "Other" ethnicity and one (4.3%) Pacific Peoples. Hospitalisations by ethnicity are also depicted in Table 2.

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

Ethnicity (prioritised)	8-14 October 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp ¹	Total	Conf	Prob	Other	Hosp ¹
Māori	5	4	1	0	2	75	72	3	0	12
Pacific Peoples	2	1	0	1	0	23	22	0	1	7
Other	4	3	0	1	2	23	22	0	1	6
European	18	15	1	2	1	222	211	3	8	33
Unknown	1	1	0	0	0	6	5	1	0	1
Total	30	24	2	4	5	349	332	7	10	59

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

Geographic distribution

Of the 332 confirmed cases reported since 1 January, 129 (38.9%) were reported from Waitemata, 112 (33.7%) from Auckland, 25 (8.2%) from Waikato, 25 (7.5%) from Hawke's Bay, 25 (7.5%) from Counties Manukau, six (1.8%) from Canterbury, four (1.2%) from Bay of Plenty, three (0.9%) from Capital and Coast, two (0.6%) from Northland and one (0.3%) each from Hutt Valley and Southern DHBs.

The 24 confirmed cases in the last week were reported from Auckland (14 cases), Waitemata (4 cases), Bay of Plenty (2 cases), Counties Manukau, Capital and Coast, Canterbury and Southern (1 case each) DHBs.

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

DHB	8-14 October 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp ¹	Total	Conf	Prob	Other	Hosp ¹
Northland	2	0	1	1	0	5	2	2	1	1
Waitemata	4	4	0	0	1	130	129	1	0	13
Auckland	15	14	0	1	4	113	112	0	1	34
Counties Manukau	1	1	0	0	0	25	25	0	0	5
Waikato	0	0	0	0	0	28	25	0	3	1
Lakes	0	0	0	0	0	0	0	0	0	0
Bay of Plenty	2	2	0	0	0	4	4	0	0	2
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	1	0	1	0	0	2	1	1	0	0
Capital and Coast	2	1	0	1	0	5	3	0	2	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	1	0	0	1	0
Canterbury	2	1	0	1	0	10	6	3	1	0
South Canterbury	0	0	0	0	0	0	0	0	0	0
Southern	1	1	0	0	0	2	1	0	1	0
New Zealand Total	30	24	2	4	5	349	332	7	10	59

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 18 (75.0%) of the confirmed measles cases reported. Of the 18 cases, 13 were not vaccinated. Two cases had received one dose of vaccine and two cases had completed their second dose.

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	4	0	0	0	4	0
15mths-3yrs	2	1	0	0	1	0
4-9 yrs	1	0	0	0	1	0
10-19 yrs	7	0	1	1	5	0
20+ yrs	10	1	1	0	2	6
Unknown	0	0	0	0	0	0
Total	24	2	2	1	13	6

Of the 332 confirmed cases reported since January 2011, 277 (83.4%) had a known vaccination status. Of these 277 cases, 221 were not vaccinated including 32 cases aged less than 15 months and therefore not eligible for vaccination. Forty-two cases had received one dose of vaccine; nine cases had completed their second dose. Five cases were vaccinated but had no dose information recorded.

Four of the 332 confirmed cases were aged 42 years or older (adults born prior to 1969 are assumed to have been exposed to measles and are considered immune², however, one of the four 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	37	4	0	0	32	1
15mths-3yrs	43	12	0	0	30	1
4-9 yrs	65	6	2	0	55	2
10-19 yrs	93	8	2	2	72	9
20+ yrs	94	12	5	3	32	42
Unknown	0	0	0	0	0	0
Total	332	42	9	5	221	55

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

²Ministry of Health. 2011. *Immunisation Handbook 2011*. Wellington: Ministry of Health