

# MEASLES REPORT

This report includes cases of measles notified in EpiSurv up to midnight 28 October 2011. Data were extracted from EpiSurv at 10 am, 1 November 2011.

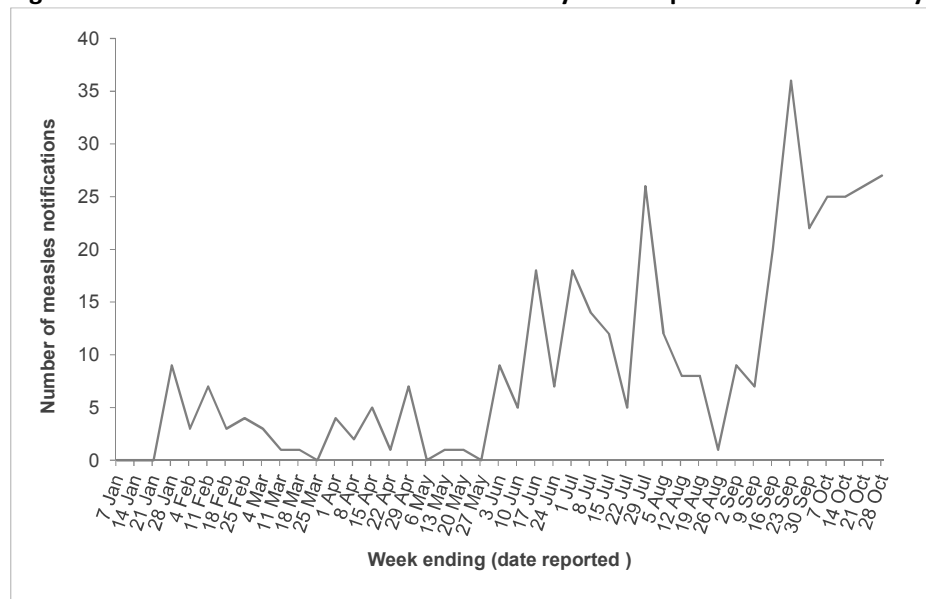
In the last week, 27 new measles cases (30 cases the previous week) were notified from the following DHBs: Auckland (13 cases), Waitemata (4 cases), Counties Manukau, Canterbury, South Canterbury (2 cases each), Bay of Plenty, Hutt Valley, Capital and Coast and Southern (1 case each). Of these notifications, 16 were confirmed, six are probable and five are still under investigation. There have been 392 cases of measles reported in EpiSurv since January 2011 (compared to 47 cases reported the same time last year), including 366 confirmed cases, 16 probable cases and 10 cases still under investigation. These were reported mainly from the Auckland region (77.0% of total cases), Waikato and Hawke’s Bay (6.1% each). DHBs reporting cases include Waitemata and Auckland (137 cases each), Counties Manukau (28 cases), Waikato and Hawke’s Bay (24 cases each), Canterbury (11 cases), Bay of Plenty and Capital and Coast (8 cases each), Northland (4 cases), South Canterbury and Southern (3 cases each), Taranaki and Hutt Valley (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

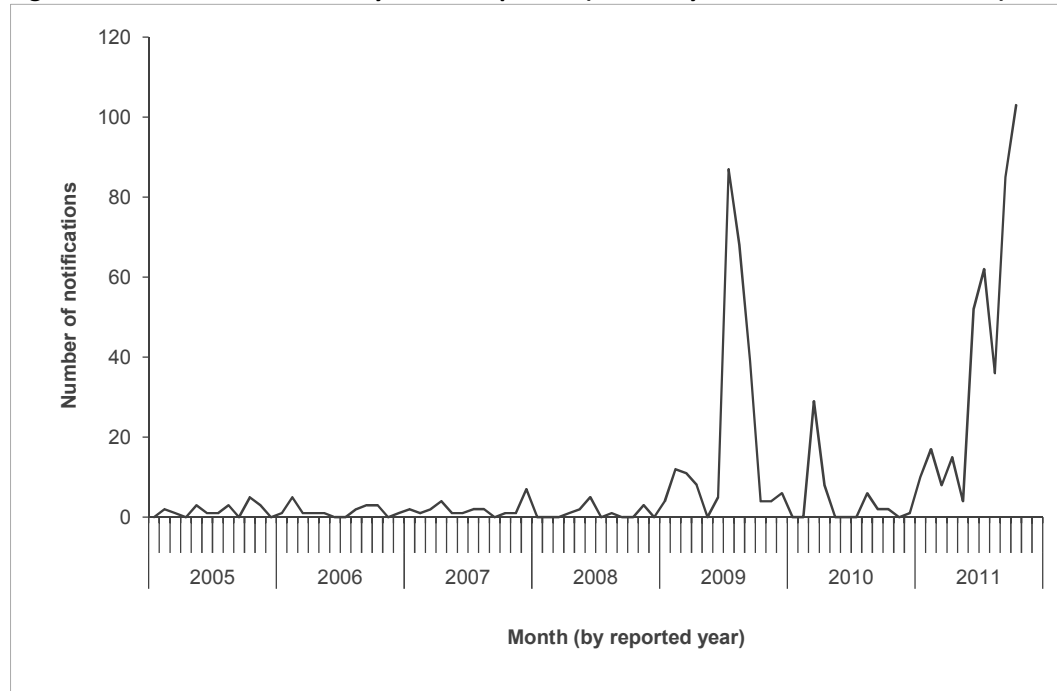
Weekly and historical measles notifications for 2011 are shown in Figure 1 and 2, respectively. There have been 27 cases notified in the last week (30 the previous week)<sup>1</sup>. Notifications have remained constant for the past four weeks to the week ending 28 October. Of the 391 notifications since the beginning of 2011, 70 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 previous weekly report not the current count.

Figure 2 Measles notifications by month reported (1 January 2005 to 28 October 2011<sup>1</sup>)



<sup>1</sup> Notifications for October 2011 are complete to 28 October only and do not represent the full calendar month

The onset dates were recorded for 25 (92.6%) of the 27 measles cases notified in the last week, these ranged from 16 October to 26 October 2011. Although reporting of onset dates is not always complete, 337 (86.0%) of 392 notifications since 1 January 2011 have onset dates available. The earliest and the most recent onset dates since January 2011 were 6 January and 26 October, respectively.

### Age and ethnicity

The age and ethnicity distributions of measles cases are shown in Table 1 and 2. Of the 366 confirmed cases with a known age (reported since 1 January 2011), 154 (42.1%) were aged under 10 years, 112 (30.6%) were aged 20 years or older and 100 (27.3%) were aged 10 to 19 years. Forty-five (12.3%) were aged under 15 months.

Of the 366 confirmed cases, 153 (41.8%) were aged 12 months to 12 years and 86 (23.5%) were aged 13 years to 20 years.

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

Age Group	22-28 October 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	8	6	2	0	3	54	45	7	2	11
15 mths-3yrs	4	0	3	1	0	52	43	7	2	3
4-9 yrs	2	1	1	0	1	68	66	1	1	5
10-19 yrs	6	5	0	1	1	102	100	1	1	13
20+ yrs	7	4	0	3	0	116	112	0	4	38
Unknown	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>27</b>	<b>16</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>392</b>	<b>366</b>	<b>16</b>	<b>10</b>	<b>70</b>
12 mths-12 yrs	11	5	5	11	0	169	153	11	5	11
13 yrs-20 yrs	6	5	0	6	1	88	86	1	1	15

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

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

Of the 359 confirmed cases with a known ethnicity reported since 1 January 2011, 233 (64.9%) were European, 75 (20.9%) were Māori, 24 (6.7%) were Pacific Peoples, and 27 (7.5%) were in the "Other" ethnic groups (Table 2). Ethnicity was recorded for 14 of the 16 confirmed cases reported in the last week, these were distributed as follows: 10 (71.4%) European and two (14.3%) each of Māori and Pacific Peoples. Hospitalisations by ethnicity are also depicted in Table 2.

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

Ethnicity (prioritised)	22-28 October 2011					Cumulative total since 1 Jan 2011				
	Total	Conf	Prob	Other	Hosp <sup>1</sup>	Total	Conf	Prob	Other	Hosp <sup>1</sup>
Māori	3	2	1	0	0	78	75	3	0	12
Pacific Peoples	3	2	1	0	2	25	24	1	0	9
Other	1	0	1	0	1	28	27	1	0	8
European	18	10	3	5	2	253	233	10	10	40
Unknown	2	2	0	0	0	8	7	1	0	1
<b>Total</b>	<b>27</b>	<b>16</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>392</b>	<b>366</b>	<b>16</b>	<b>10</b>	<b>70</b>

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

### Geographic distribution

Of the 366 confirmed cases reported since 1 January, 133 (36.3%) were reported from Auckland, 132 (36.1%) from Waitemata, 27 (7.4%) from Counties Manukau, 24 (6.6%) each from Waikato and Hawke's Bay, seven (1.9%) from Bay of Plenty, six (1.6%) each from Capital and Coast and Canterbury, three (0.8%) from Northland, two (0.5%) from Taranaki, and one (0.3%) each from Hutt Valley and Southern DHBs.

The 16 confirmed cases in the last week were reported from Auckland (12 cases), Waitemata (2 cases), Counties Manukau and Bay of Plenty, (1 case each) DHBs.

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

DHB	22-28 October 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	4	2	2	0	0	137	132	5	0	13
Auckland	13	12	1	0	4	137	133	4	0	43
Counties Manukau	2	1	1	0	0	28	27	1	0	5
Waikato	0	0	0	0	0	24	24	0	0	1
Lakes	0	0	0	0	0	0	0	0	0	0
Bay of Plenty	1	1	0	0	1	8	7	0	1	4
Tairāwhiti	0	0	0	0	0	0	0	0	0	0
Taranaki	0	0	0	0	0	2	2	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	0	1	0	2	1	0	1	0
Capital and Coast	1	0	1	0	0	8	6	1	1	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	0	1	1	0	11	6	4	1	0
South Canterbury	2	0	0	2	0	3	0	0	3	0
Southern	1	0	0	1	0	3	1	0	2	0
<b>New Zealand Total</b>	<b>27</b>	<b>16</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>392</b>	<b>366</b>	<b>16</b>	<b>10</b>	<b>70</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 14 (87.5%) of the confirmed measles cases reported. Of the 14 cases, ten were not vaccinated. Three cases had received one dose of vaccine and one case had also had the second dose.

**Table 4: Immunisation status of measles cases (confirmed) notified last week**

Age Group	Total cases	One dose	Two doses	Vaccinated		Unknown
				(no dose info)	Not vaccinated	
<15mths	6	2	0	0	4	0
15mths-3yrs	0	0	0	0	0	0
4-9 yrs	1	0	0	0	1	0
10-19 yrs	5	0	1	0	4	0
20+ yrs	4	1	0	0	1	2
Unknown	0	0	0	0	0	0
<b>Total</b>	<b>16</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>10</b>	<b>2</b>

Of the 366 confirmed cases reported since January 2011, 295 (80.6%) had a known vaccination status. Of these 295 cases, 234 were not vaccinated including 36 cases aged less than 15 months and therefore not eligible for vaccination. Forty-seven cases had received one dose of vaccine; 13 cases had completed their second dose. One case was vaccinated but had no dose information recorded.

Seven of the 366 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>2</sup>, however, one of the seven 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		Unknown
				(no dose info)	Not vaccinated	
<15mths	45	6	0	0	36	3
15mths-3yrs	43	13	0	0	29	1
4-9 yrs	66	6	2	0	57	1
10-19 yrs	100	8	4	0	76	12
20+ yrs	112	14	7	1	36	54
Unknown	0	0	0	0	0	0
<b>Total</b>	<b>366</b>	<b>47</b>	<b>13</b>	<b>1</b>	<b>234</b>	<b>71</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>2</sup>Ministry of Health. 2011. *Immunisation Handbook 2011*. Wellington: Ministry of Health