

This report summarises confirmed measles notifications for the previous surveillance week (Week 44: 26 October–1 November 2019) and cumulative cases for 2019. The case classification used in this report is specified on the last page.

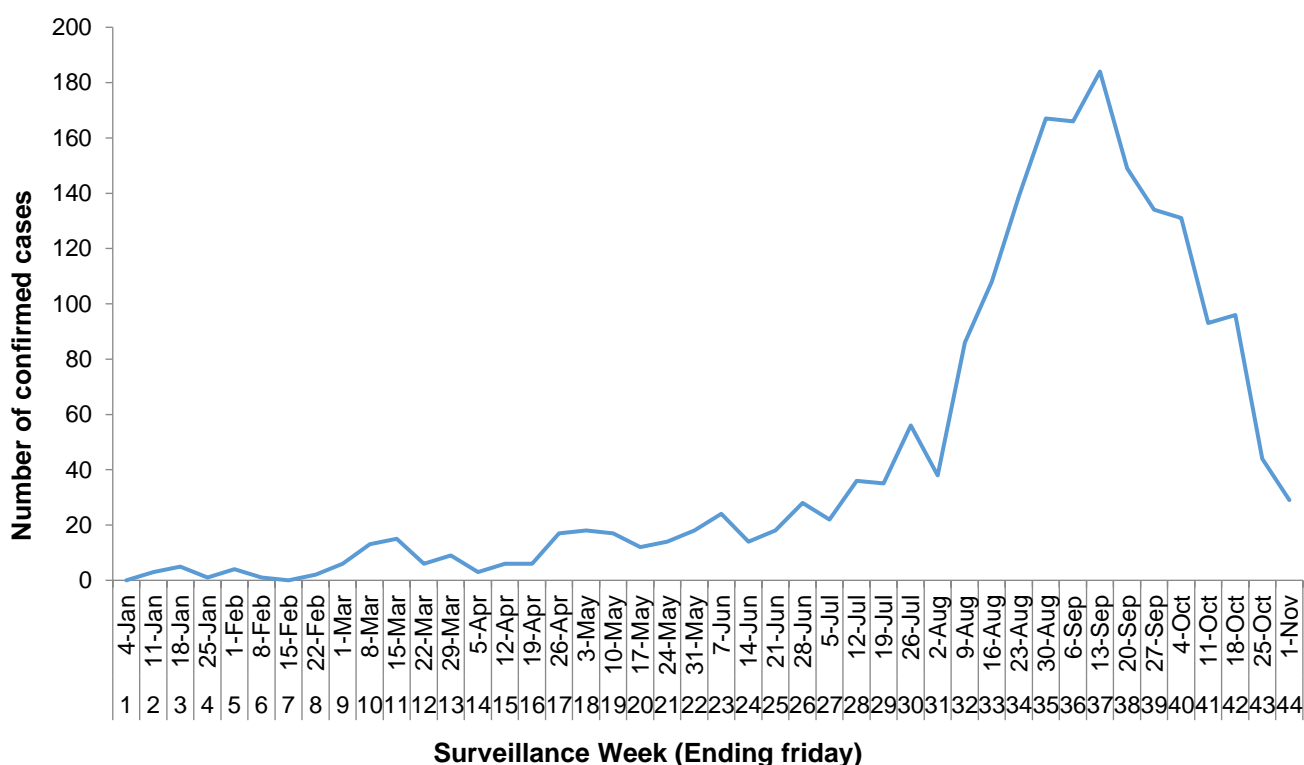
Information is based on data recorded on EpiSurv by public health service staff as at 0850, 4 November 2019. Changes made to EpiSurv data after this time will not be reflected in this report. The results presented may be updated and should be regarded as provisional.

Figures 1 and 2 and Tables 1–4 show data for 2019. Figure 3 shows historical notifications of confirmed cases from 2009 to the end of the previous surveillance month.

**Summary**

There were 29 confirmed measles cases reported for Week 44/2019, bringing the total to 1973 for the year to date with 661 (33.5%) hospitalisations. There are two ongoing outbreaks.

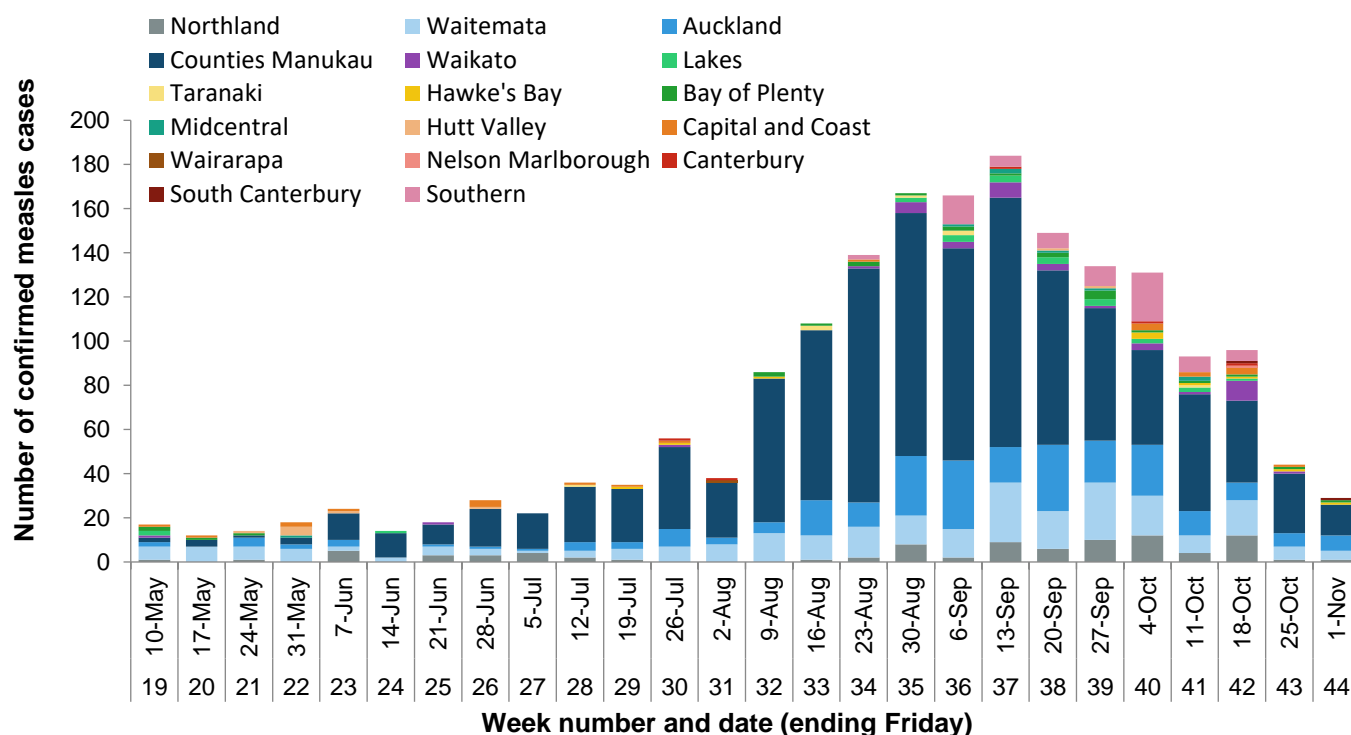
**Figure 1. Number of confirmed measles notifications by week, 1 January–1 November 2019**



**Table1: Number of confirmed measles cases for the last two surveillance weeks and cumulative number of cases for 2019 by district health board**

District health board	Surveillance Week 43	Surveillance Week 44	2019 to date		
			Cumulative total	Number hospitalised	Percent hospitalised
Northland	1	1	89	17	19.1
Waitemata	6	4	274	105	38.3
Auckland	6	7	251	98	39.0
Counties Manukau	27	14	1068	371	34.7
Waikato	1	0	50	11	22.0
Lakes	0	0	24	6	25.0
Bay of Plenty	1	1	42	18	42.9
Tairāwhiti	0	0	0	0	0.0
Taranaki	0	0	7	3	42.9
Hawke's Bay	1	1	10	3	30.0
Whanganui	0	0	0	0	0.0
MidCentral	0	0	8	0	0.0
Hutt Valley	0	0	9	1	11.1
Capital and Coast	1	0	21	5	23.8
Wairarapa	0	0	1	0	0.0
Nelson Marlborough	0	0	1	0	0.0
West Coast	0	0	0	0	0.0
Canterbury	0	0	44	17	38.6
South Canterbury	0	1	2	0	0.0
Southern	0	0	72	6	8.3
<b>Total</b>	<b>44</b>	<b>29</b>	<b>1973</b>	<b>661</b>	<b>33.5</b>

**Figure 2: Number of confirmed cases by week and DHB for the last six months, 2019**



**Table 2. Number of confirmed measles cases for Week 44/2019 and cumulative number of cases and hospitalisations for 2019 by age group**

Age group	Surveillance Week 44	2019 to date		
		Cumulative total	Number hospitalised	Percent hospitalised
<12 months	6	251	154	61.4
12 months-2 years	1	233	121	51.9
3-4 years	1	49	16	32.7
5-9 years	4	77	6	7.8
10-19 years	6	407	95	23.3
20-29 years	7	640	185	28.9
30-49 years	4	287	67	23.3
50+	0	29	17	58.6
<b>Total</b>	<b>29</b>	<b>1973</b>	<b>661</b>	<b>33.5</b>

**Table 3. Number of confirmed measles cases for Week 44/2019 and cumulative number of cases and hospitalisations for 2019 by ethnic group**

Ethnic group (prioritised)	Surveillance Week 44	2019 to date		
		Cumulative total	Number hospitalised	Percent hospitalised
Māori	9	469	187	39.9
Pacific peoples	11	788	299	37.9
Asian	1	139	39	28.1
MELAA <sup>1</sup>	0	27	8	29.6
European or Other	7	508	122	24
Unknown	1	42	6	14.3
<b>Total</b>	<b>29</b>	<b>1973</b>	<b>661</b>	<b>33.5</b>

<sup>1</sup> Middle Eastern/Latin American/African

**Table 4. Immunisation status\* of confirmed cases of measles, 1 January–1 November 2019**

Age group	Not vaccinated <sup>1</sup>	Partially vaccinated <sup>2</sup>	Fully vaccinated <sup>3</sup>	Unknown	Total number of cases
<12 months	246	0	0	5	251
12 months-2 years	212	0	13	8	233
3-4 years	42	0	6	1	49
5-9 years	63	3	5	6	77
10-19 years	252	18	49	88	407
20-29 years	304	22	58	256	640
30-49 years	100	17	7	163	287
50+	10	1	0	18	29
<b>Total</b>	<b>1229</b>	<b>61</b>	<b>138</b>	<b>545</b>	<b>1973</b>

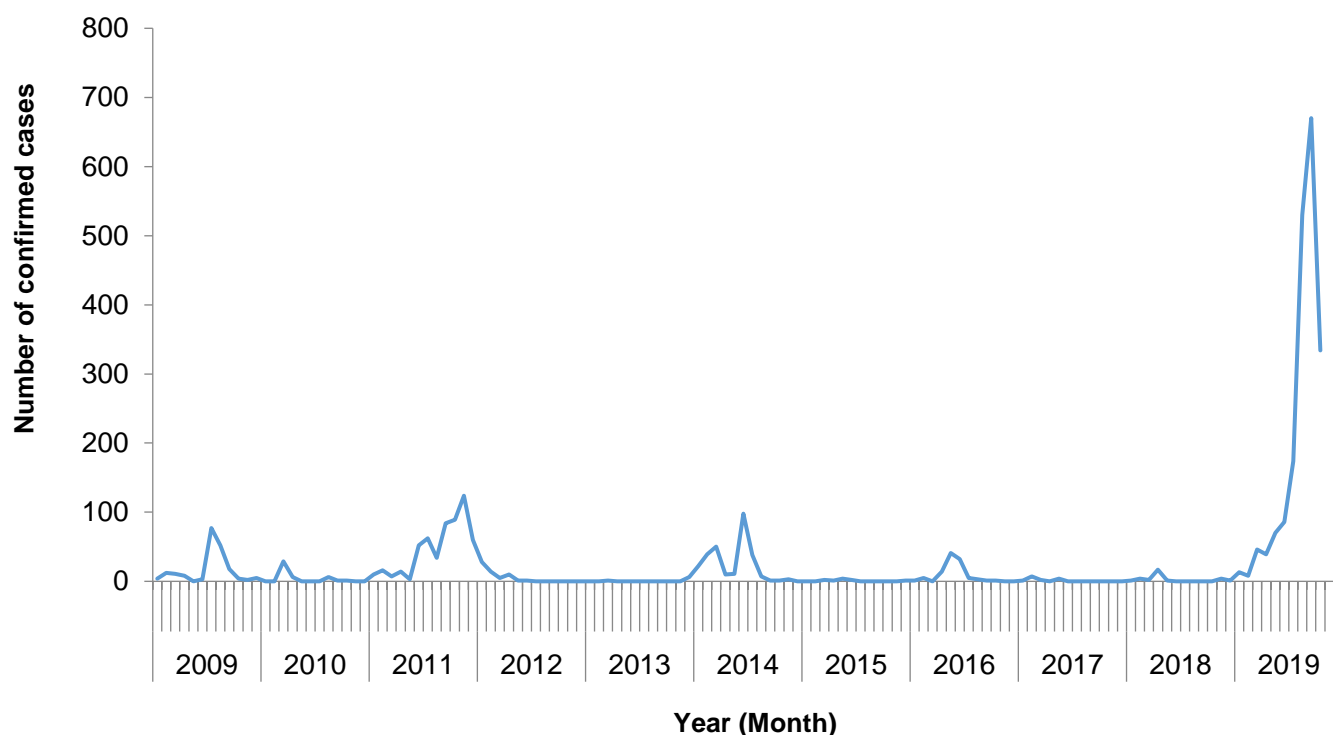
\***Note:** Immunisation status in EpiSurv is based on either documentation or patient/caregiver recall.

<sup>1</sup>**Not vaccinated:** A person who was reported not to have received any doses of vaccine, or a person who was reported to have received one dose of vaccine within 14 days of the onset of disease. (Includes 96 cases who received one dose of vaccine in the 14 days prior to onset.)

<sup>2</sup>**Partially vaccinated:** A person aged over 4 years who was reported to have received one dose of vaccine.

<sup>3</sup>**Fully vaccinated:** A child aged between 12 months and 4 years who was reported to have received one dose of vaccine or a person aged over 4 years who was reported to have received two doses of vaccine.

**Figure 3. Number of measles notifications by month reported, January 2009 to October 2019**



## Case classification for measles notification in New Zealand

**Confirmed** A clinically compatible illness that is laboratory-confirmed or epidemiologically-linked to a confirmed case.

**Probable** A clinically compatible illness.

**Under investigation** A case that has been notified, but information is not yet available to classify it as probable or confirmed.

**Note:** Any notifications that are found to be due to a vaccine strain are considered not to be measles cases and are removed from the analysis.

### Clinical description

An illness characterised by **all** of the following:

1. generalised maculopapular rash, starting on the head and neck
2. fever (at least 38°C if measured) present at the time of rash onset
3. cough or coryza or conjunctivitis or Koplik's spots present at the time of rash onset.

### Laboratory test for diagnosis

If the case **received a vaccine** containing the measles virus in the 6 weeks prior to symptom onset then **laboratory confirmation requires**:

- evidence of infection with a wild-type virus strain obtained through genetic characterisation.

If the case **did not receive a vaccine** containing the measles virus in the 6 weeks prior to symptom onset, then **laboratory confirmation requires** at least one of the following:

- detection of IgM antibody specific to the virus
- IgG seroconversion or a significant rise (four-fold or greater) in antibody level for the virus between paired sera tested in parallel where the convalescent serum was collected 10 to 14 days after the acute serum
- isolation of measles virus by culture
- detection of measles virus nucleic acid.

See: <https://www.health.govt.nz/our-work/diseases-and-conditions/communicable-disease-control-manual/measles>