

This report summarises confirmed measles notifications for the previous surveillance week (Week 37: 7–13 September 2019) and cumulative cases for 2019. The case classification used in this report is specified on the last page.

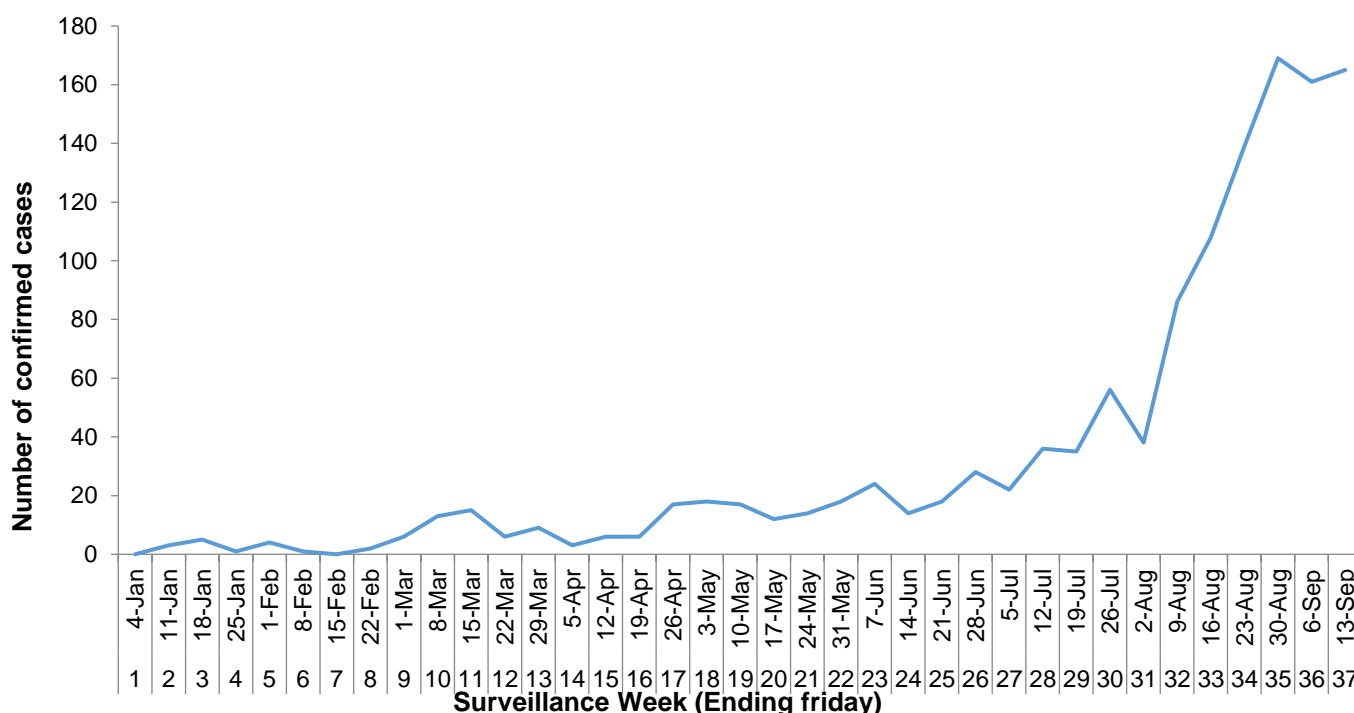
Information is based on data recorded on EpiSurv by public health service staff as at 0830, 16 September 2019. Changes made to EpiSurv data after this time will not be reflected in this report. The results presented may be updated and should be regarded as provisional.

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 165 confirmed measles cases reported for Week 37/2019, bringing the total to 1275 for the year to date with 441 (34.6%) hospitalisations. There are two ongoing outbreaks.

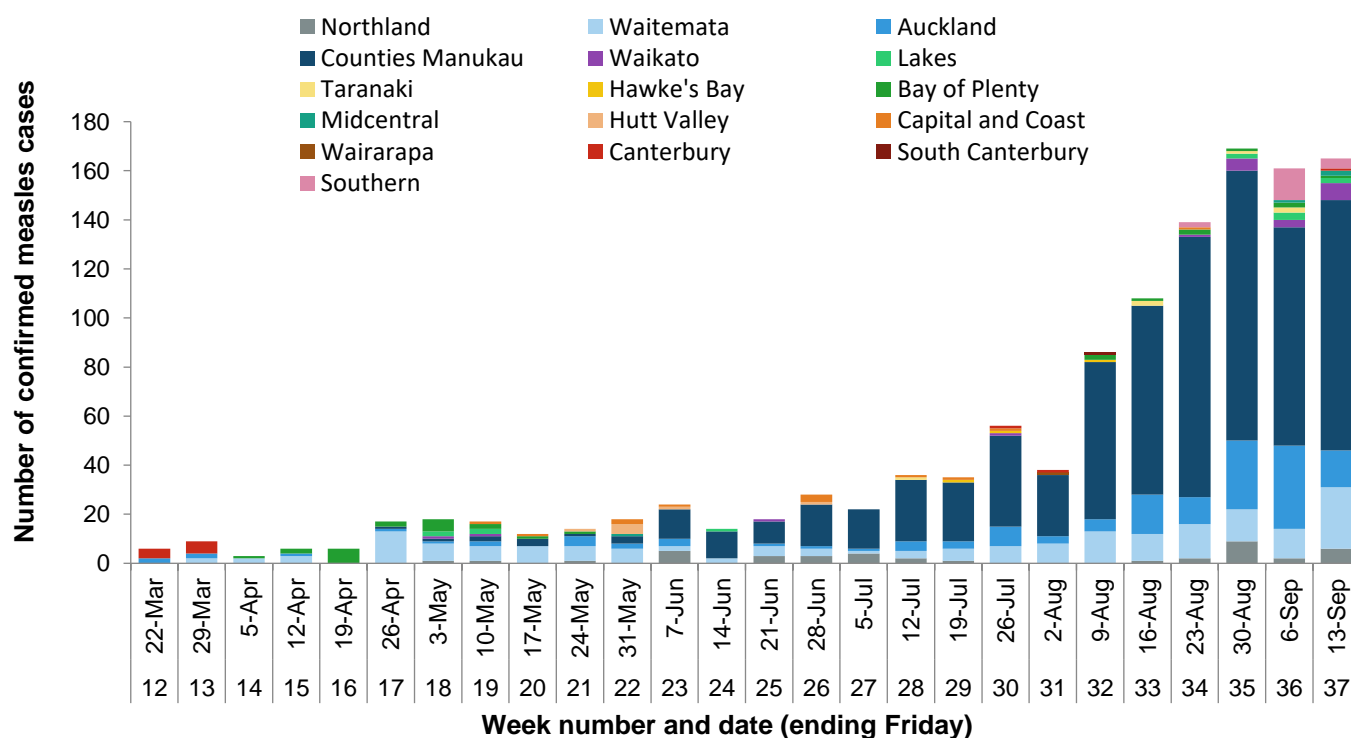
**Figure 1. Number of confirmed measles notifications by week, 1 January–13 September 2019**



**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 36	Surveillance Week 37	2019 to date		
			Cumulative total	Number hospitalised	Percent hospitalised
Northland	2	6	41	9	22
Waitemata	12	25	176	84	47.7
Auckland	34	15	150	54	36
Counties Manukau	89	102	736	243	33
Waikato	3	7	32	8	25
Lakes	3	2	12	2	16.7
Bay of Plenty	2	1	31	15	48.4
Tairāwhiti	0	0	0	0	0.0
Taranaki	2	0	6	1	16.7
Hawke's Bay	0	0	3	1	33.3
Whanganui	0	0	0	0	0.0
MidCentral	1	2	4	0	0.0
Hutt Valley	0	0	7	1	14.3
Capital and Coast	0	0	12	3	25
Wairarapa	0	0	1	0	0.0
Nelson Marlborough	0	0	0	0	0.0
West Coast	0	0	0	0	0.0
Canterbury	0	1	42	17	40.5
South Canterbury	0	0	1	1	100
Southern	13	4	21	2	9.5
<b>Total</b>	<b>161</b>	<b>165</b>	<b>1275</b>	<b>441</b>	<b>34.6</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 37/2019 and cumulative number of cases and hospitalisations for 2019 by age group**

Age group	Surveillance Week 37	2019 to date		
		Cumulative total	Number hospitalised	Percent hospitalised
<12 months	32	176	102	58.0
12 months-2 years	17	165	85	51.5
3-4 years	4	36	11	30.6
5-9 years	5	40	3	7.5
10-19 years	32	250	62	24.8
20-29 years	49	414	127	30.7
30-49 years	25	175	41	23.4
50+	1	19	10	52.6
<b>Total</b>	<b>165</b>	<b>1275</b>	<b>441</b>	<b>34.6</b>

**Table 3. Number of confirmed measles cases for Week 37/2019 and cumulative number of cases and hospitalisations for 2019 by ethnic group**

Ethnic group (prioritised)	Surveillance Week 37	2019 to date		
		Cumulative total	Number hospitalised	Percent hospitalised
Māori	40	313	127	40.6
Pacific peoples	69	509	188	36.9
Asian	12	87	24	27.6
MELAA <sup>1</sup>	3	17	3	17.6
European or Other	26	284	83	29.2
Unknown	15	65	16	24.6
<b>Total</b>	<b>165</b>	<b>1275</b>	<b>441</b>	<b>34.6</b>

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

**Table 4. Immunisation status\* of confirmed cases of measles, 1 January–13 September 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	171	0	0	5	176
12 months-2 years	148	0	9	8	165
3-4 years	31	0	4	1	36
5-9 years	25	2	5	8	40
10-19 years	120	8	22	100	250
20-29 years	107	8	33	266	414
30-49 years	27	9	2	137	175
50+	4	1	0	14	19
<b>Total</b>	<b>633</b>	<b>28</b>	<b>75</b>	<b>539</b>	<b>1275</b>

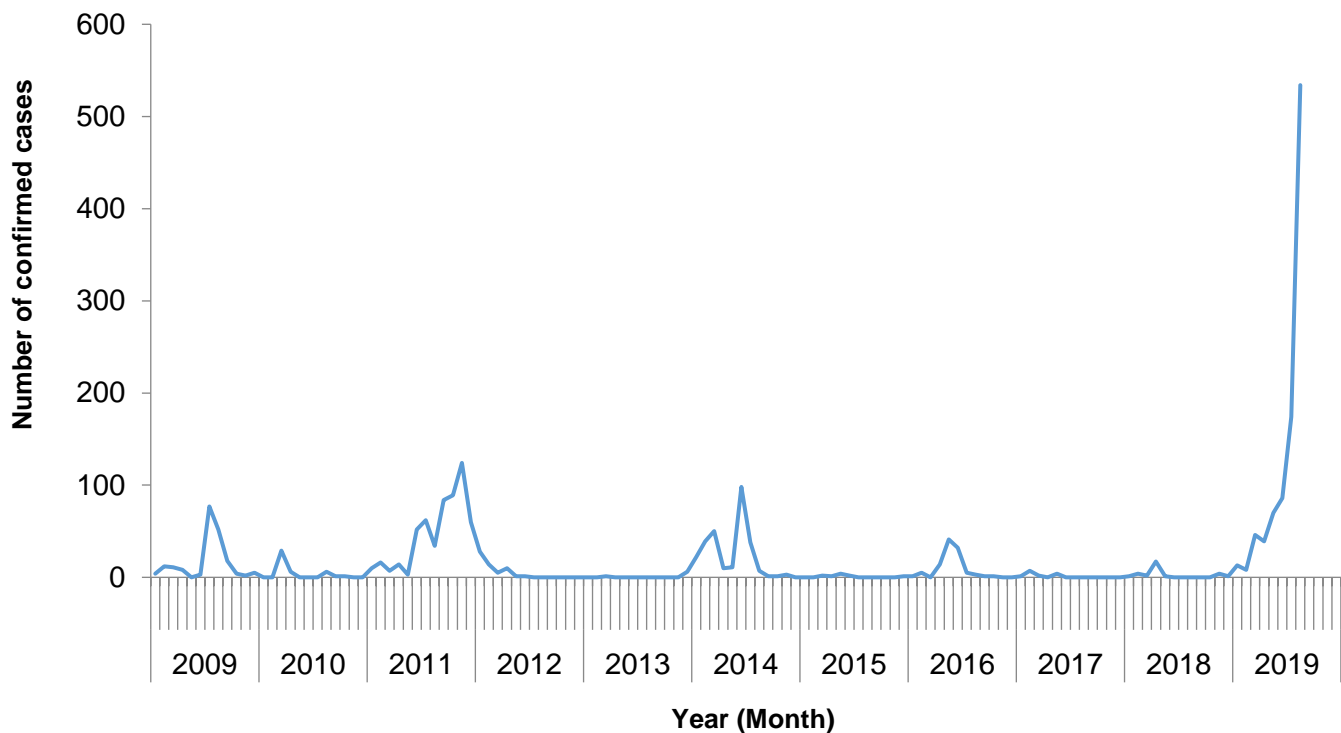
\***Note:** Immunisation status in EpiSurv is based on either documentation or patient/caregiver recall.

<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 31 cases in the <3 years age groups 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 August 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>