E/S/R
Science for Communities

Measles weekly report   Week 43: 19–25 October 2019

This report summarises confirmed measles notifications for the previous surveillance week (Week 43: 19–25 October 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 0845, 29 October 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 42 confirmed measles cases reported for Week 43/2019, bringing the total to 1942 for the year to date with 637 (32.8%) hospitalisations. There are two ongoing outbreaks.

Figure 1. Number of confirmed measles notifications by week, 1 January–25 October 2019
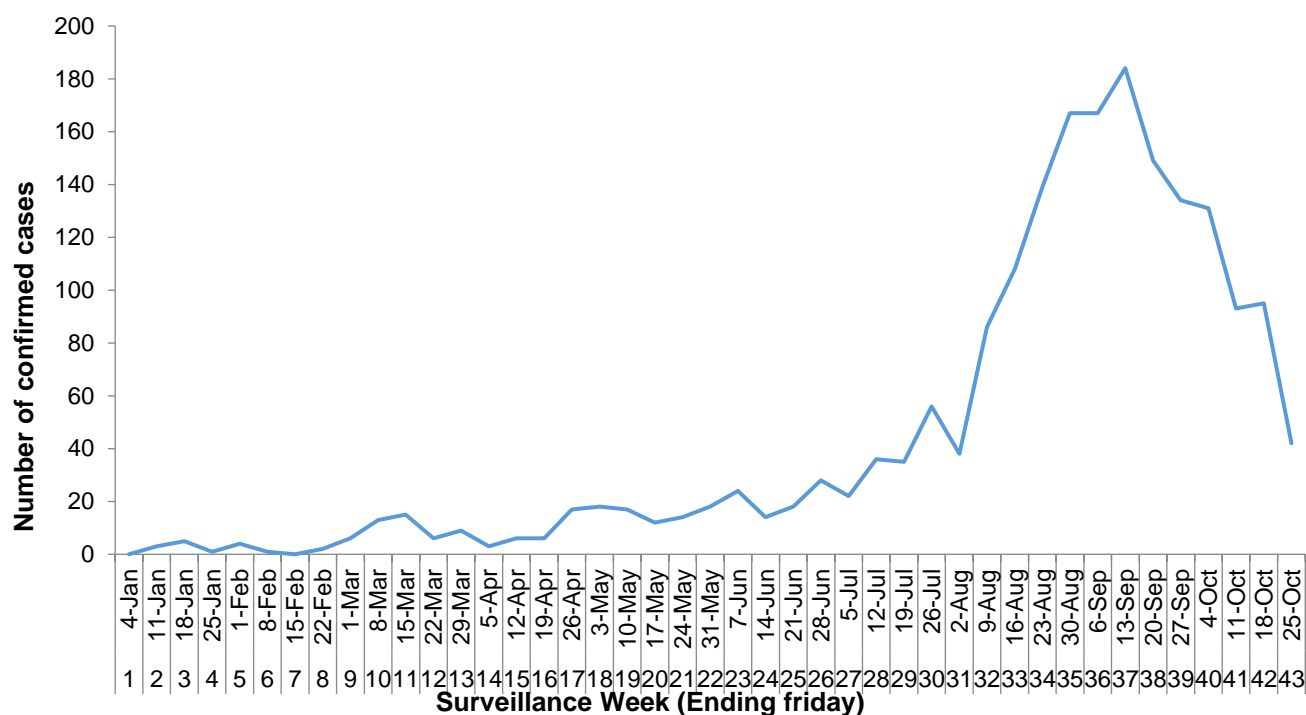
Table1: Number of confirmed measles cases for the last two surveillance weeks and cumulative number of cases for 2019 by district health board

District health board	Surveillance Week 42	Surveillance Week 43	2019 to date		
			Cumulative total	Number hospitalised	Percent hospitalised
Northland	11	1	87	16	18.4
Waitemata	16	7	271	102	37.6
Auckland	8	6	244	94	38.5
Counties Manukau	37	25	1052	356	33.8
Waikato	9	0	49	10	20.4
Lakes	1	0	24	6	25.0
Bay of Plenty	1	1	41	18	43.9
Tairawhiti	0	0	0	0	0.0
Taranaki	0	0	7	3	42.9
Hawke's Bay	1	1	9	2	22.2
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	3	1	21	5	23.8
Wairarapa	0	0	1	0	0.0
Nelson Marlborough	1	0	1	0	0.0
West Coast	0	0	0	0	0.0
Canterbury	1	0	44	17	38.6
South Canterbury	1	0	2	1	50.0
Southern	5	0	72	6	8.3
Total	**95**	**42**	**1942**	**637**	**32.8**

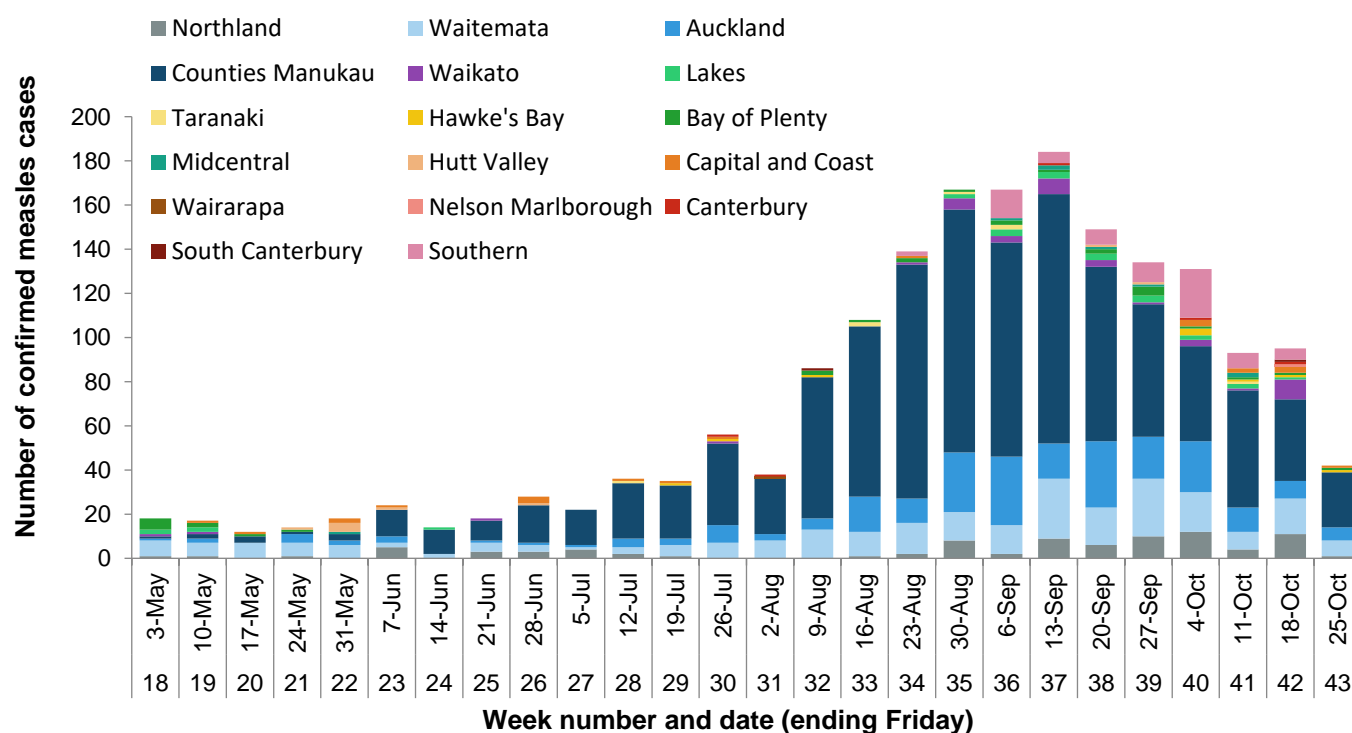## Figure 2: Number of confirmed cases by week and DHB for the last six months, 2019

Table 2. Number of confirmed measles cases for Week 43/2019 and cumulative number of cases and hospitalisations for 2019 by age group

Age group	Surveillance Week 43	2019 to date		
		Cumulative total	Number hospitalised	Percent hospitalised
<12 months	8	245	149	60.8
12 months-2 years	4	232	117	50.4
3-4 years	1	48	15	31.2
5-9 years	1	73	6	8.2
10-19 years	9	402	93	23.1
20-29 years	12	631	178	28.2
30-49 years	6	282	62	22
50+	1	29	17	58.6
Total	**42**	**1942**	**637**	**32.8**

Table 3. Number of confirmed measles cases for Week 43/2019 and cumulative number of cases and hospitalisations for 2019 by ethnic group

Ethnic group (prioritised)	Surveillance Week 43	2019 to date		
		Cumulative total	Number hospitalised	Percent hospitalised
Māori	10	455	175	38.5
Pacific peoples	18	771	288	37.4
Asian	3	137	37	27
MELAA[1]	0	27	8	29.6
European or Other	10	502	120	23.9
Unknown	1	50	9	18
Total	**42**	**1942**	**637**	**32.8**

[1] Middle Eastern/Latin American/African

Table 4. Immunisation status* of confirmed cases of measles, 1 January–25 October 2019

| Age group	Not vaccinated[1]	Partially vaccinated[2]	Fully vaccinated[3]	Unknown	Total number of cases
<12 months	240	0	0	5	245
12 months-2 years	209	0	14	9	232
3-4 years	41	0	6	1	48
5-9 years	58	3	5	7	73
10-19 years	229	18	48	107	402
20-29 years	245	22	56	308	631
30-49 years	75	17	7	183	282
50+	9	1	0	19	29
Total	**1106**	**61**	**136**	**639**	**1942**

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

[1] **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 95 cases who received one dose of vaccine in the 14 days prior to onset.)

[2] **Partially vaccinated:** A person aged over 4 years who was reported to have received one dose of vaccine.

[3] **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 September 2019
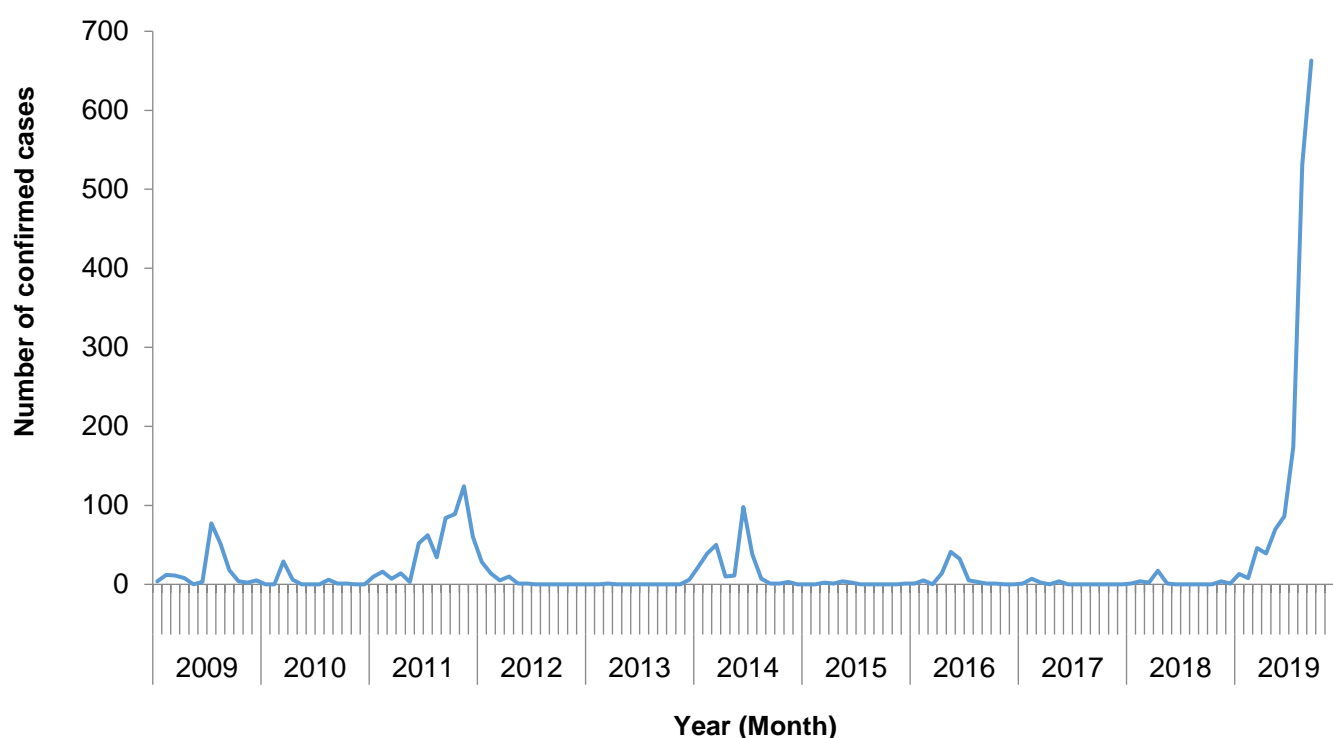
Case classification for measles notification in New Zealand

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 38⁰C 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