

Invasive Meningococcal Disease Monthly Report September 2023

This report summarises invasive meningococcal disease notifications and trends nationally from 1 January to 30 September 2023. Information is based on data recorded in EpiSurv and at ESR's Meningococcal Reference Laboratory as at 10 October 2023. Data presented may be further updated and should be regarded as provisional.

Summary

Between 1 January and 30 September 2023:

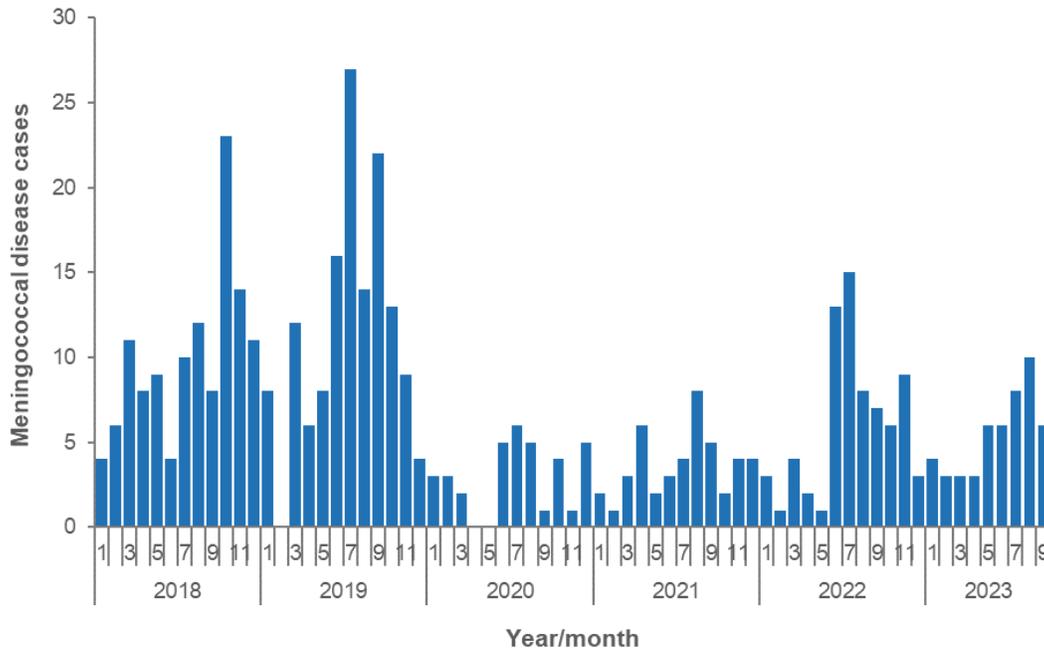
- there have been 49 cases (45 confirmed and 4 probable) of invasive meningococcal disease reported. This number is similar to the same period in 2022 and lower than in 2018 and 2019;
- there has been one death in an adult aged 20–29 years;
- group B is the dominant group type. The group was identified in 34 cases to date in 2023: 26 (76%) were group B, four (12%) were group Y, three (9%) were group W, and one (3%) was group E;
- the cases are geographically dispersed.

National trends

Between 1 January and 30 September 2023, there were 49 cases of meningococcal disease reported (45 confirmed and 4 probable). There was one death in an adult aged 20–29 years due to group B, PorA type P1.7-2,4.

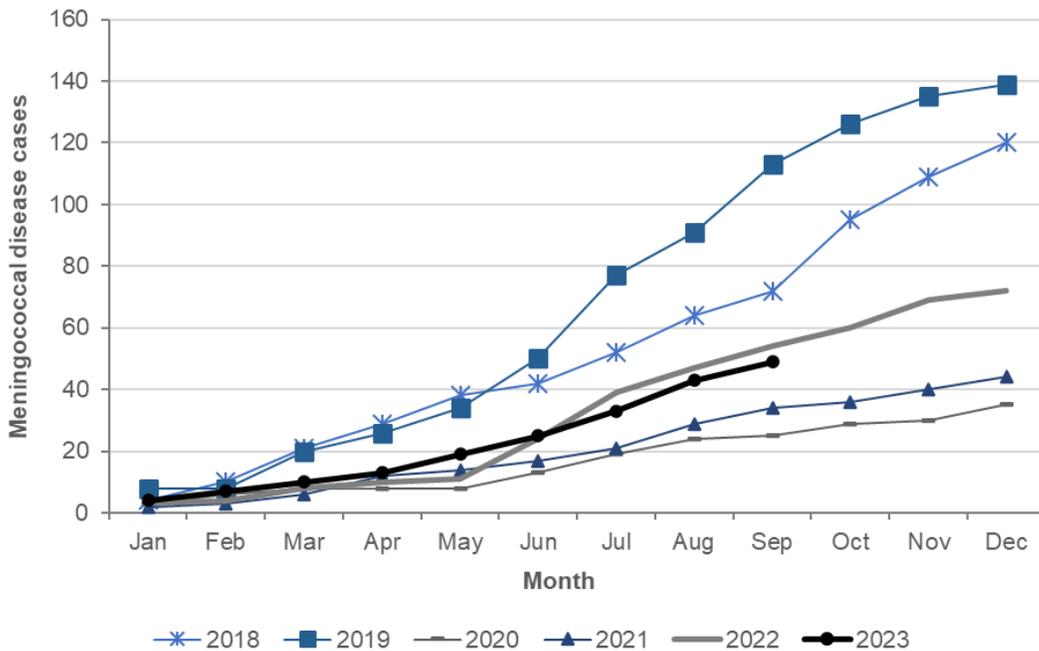
In New Zealand, meningococcal disease follows a seasonal pattern with case numbers peaking in winter and continuing into spring (Figure 1). This seasonal increase has been seen in 2023 with an increase in the number of cases reported in July (8 cases) and August (10 cases), followed by a decrease in September (6 cases).

Figure 1. Number of meningococcal disease cases by month and year, 2018–2023



To date, the total number of cases in 2023 is similar to the same period in 2022 and lower than in 2018 and 2019 (Figure 2).

Figure 2. Cumulative number of meningococcal disease cases by month, January 2018 to 30 September 2023

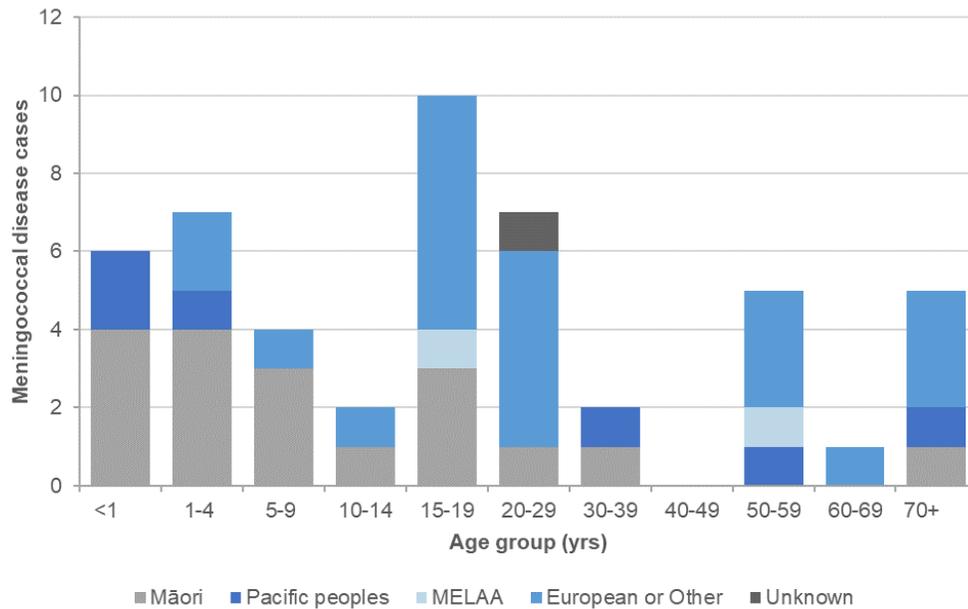


Meningococcal disease by ethnic group and age group

Overall, 46% of meningococcal disease cases in New Zealand in 2023 to date have been in European or Other ethnic groups, 38% in Māori, 13% in Pacific peoples and 4% in Middle Eastern/Latin American/African (MELAA).

The majority (85%, 11/13) of cases aged under 5 years are of Māori and Pacific ethnicity. In comparison, the majority (69%, 11/16) of cases aged 15–29 years, where ethnicity is known, are European or Other ethnicity (Figure 3).

Figure 3. Number of meningococcal disease cases by prioritised ethnicity and age group, 1 January to 30 September 2023

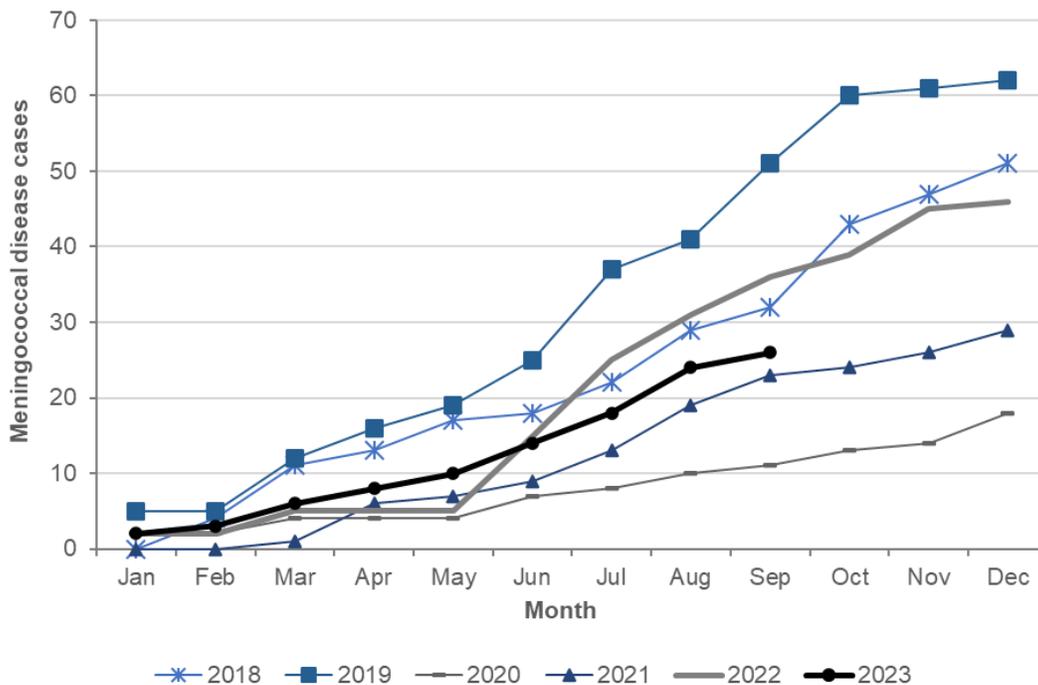


Meningococcal disease by group

The group was identified in 34 (69%) of the 49 cases notified from 1 January to 30 September 2023. Group B was the dominant group type accounting for 26 (76%) cases, four (12%) were group Y, three (9%) were group W, and one (3%) was group E.

For group B cases, the number of cases to date is lower than for the same period in 2018, 2019 and 2022 but higher than in 2020 and 2021 (Figure 4).

Figure 4. Cumulative number of group B meningococcal disease cases by month, January 2018 to September 2023



The number of group W cases in 2023 (3 cases) is lower than for the same period in 2018, 2019 and 2020 (19, 30, and 10 cases respectively) and similar to the same period in 2021 and 2022.

The number of cases due to group Y in 2023 (4 cases) is lower than for the same period in 2018, 2019 and 2022 (7, 10 and 5 cases respectively) and higher than the same period in 2020 and 2021 (2 and 0 cases respectively).

There was one case due to group E reported in September 2023. The previous case of group E was reported in 2019. There have been no cases of group C since 2020.

Meningococcal disease by district and group

Meningococcal cases in 2023 to date are geographically dispersed throughout the country (Table 1). The highest number of cases have been reported from the Auckland region (13 cases) followed by Canterbury district (10 cases).

Table 1. Number of meningococcal disease cases by group and district, 1 January to 30 September 2023

District	Group ¹				Group unknown ²	Not lab-confirmed	Total
	B	E	W	Y			
Northland	0	0	0	0	3	0	3
Waitemata	2	0	0	1	1	0	4
Auckland	3	0	0	0	3	0	6
Counties Manukau	2	0	0	1	0	0	3
Waikato	3	0	0	0	1	0	4
Lakes	0	0	1	0	1	0	2
Bay of Plenty	0	0	0	0	1	0	1
Tairāwhiti	1	0	0	0	0	0	1
Taranaki	0	0	0	0	0	1	1
Hawke's Bay	3	0	1	0	0	0	4
Whanganui	2	0	0	0	0	0	2
MidCentral	0	0	0	0	0	0	0
Hutt Valley	2	0	0	0	1	0	3
Capital & Coast	2	0	0	0	0	0	2
Wairarapa	0	1	0	0	0	0	1
Nelson Marlborough	2	0	0	0	0	0	2
West Coast	0	0	0	0	0	0	0
Canterbury	4	0	1	2	2	1	10
South Canterbury	0	0	0	0	0	0	0
Southern	0	0	0	0	0	0	0
Total	26	1	3	4	13	2	49

¹ There were no cases of group C

² Includes non-groupable and laboratory-confirmed cases where a sample was not received by ESR

Group B trends

Table 2 shows the trends in selected group B PorA types since 2018. The PorA types included in the table are those detected to date in 2023 as well as those that were most common in previous years.

Table 2. Number of group B meningococcal disease cases by selected PorA type, 2018 to 30 September 2023

PorA type	Year					
	2018	2019	2020	2021	2022	2023 ¹
P1.7-12,14	3	14	3	12	14	9
P1.7-2,4	16	19	9	8	14	6
P1.22,14	3	5	0	2	2	4
P1.19-1,15	0	0	0	0	1	2
P1.7,4-46	0	0	0	0	0	1
P1.7,16-26	2	4	0	1	2	1
P1.18-1,34	3	3	0	0	2	1
P1.19,15	0	1	1	1	0	1
P1.22,14-49	0	0	0	0	0	1
P1.7-36,14	0	0	2	0	2	0
P1.5,2	0	0	0	1	1	0
P1.18-1,3	0	2	0	0	1	0
P1.7-13,14	0	1	0	0	1	0
P1.17,16-3	2	0	1	1	0	0
P1.7,16-53	2	2	0	1	0	0
P1.5-2,10-1	5	1	0	1	0	0
P1.22,9	1	1	0	1	0	0
P1.19-1,26	3	1	0	0	0	0

¹ Data to 30 September 2023

Nine different PorA types have been identified across the 26 group B cases in 2023 to date, and these have been geographically dispersed.

The most common PorA types are B:P1.7-12,14 and B:P1.7-2,4.

The B:P1.7-12,14 strain was first detected in New Zealand in 2009 and, while rare internationally, has risen steadily to become a common group B strain.