

Invasive Meningococcal Disease Monthly Report January–December 2023

This report summarises invasive meningococcal disease notifications and trends nationally from 1 January to 31 December 2023. Information is based on data recorded in EpiSurv and at ESR's Meningococcal Reference Laboratory as at 17 January 2024. Data presented may be further updated and should be regarded as provisional.

Summary

Between 1 January and 31 December 2023:

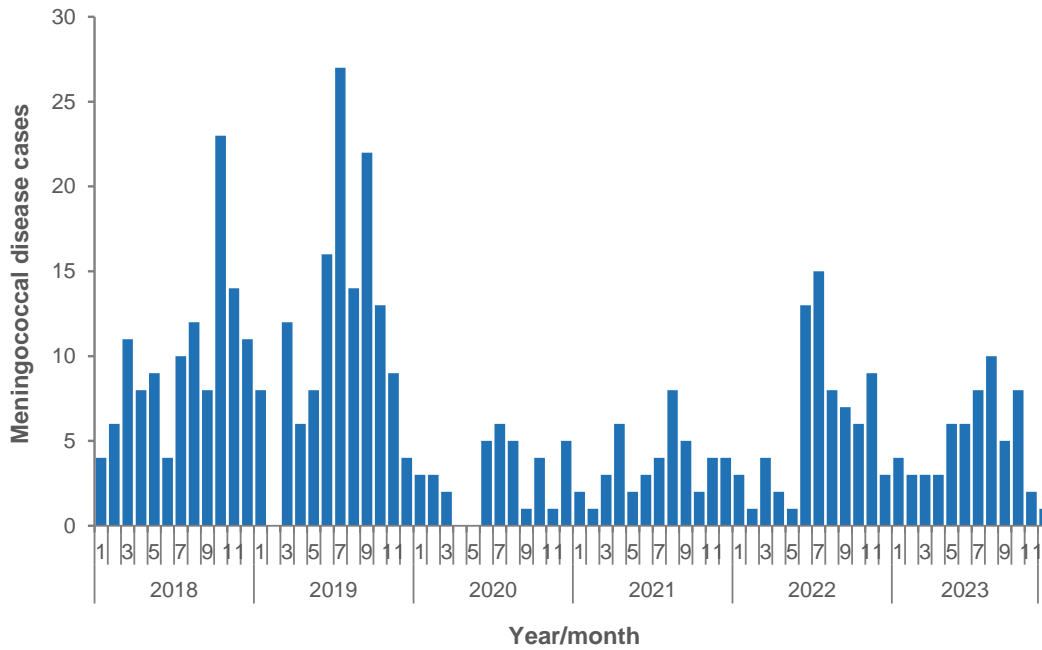
- there were 59 cases (55 confirmed and 4 probable) of invasive meningococcal disease reported. This number is higher than in 2020 and 2021 and lower than in 2018, 2019, and 2022;
- there was one death in an adult aged 20–29 years;
- most (87%) of the cases aged under 5 years were in Māori and Pacific children. In comparison, most (68%) cases aged 15–29 years were European or Other ethnicity;
- group B was the dominant group type. The group was identified in 43 cases in 2023: 31 (72%) were group B, six were group Y, three were group W, two were group C and one was group E;
- the cases were geographically dispersed.

National trends

There was a total of 59 cases of meningococcal disease reported (55 confirmed and 4 probable) notified in 2023. There was one death in an adult aged 20–29 years due to group B, PorA type P1.7-2.4.

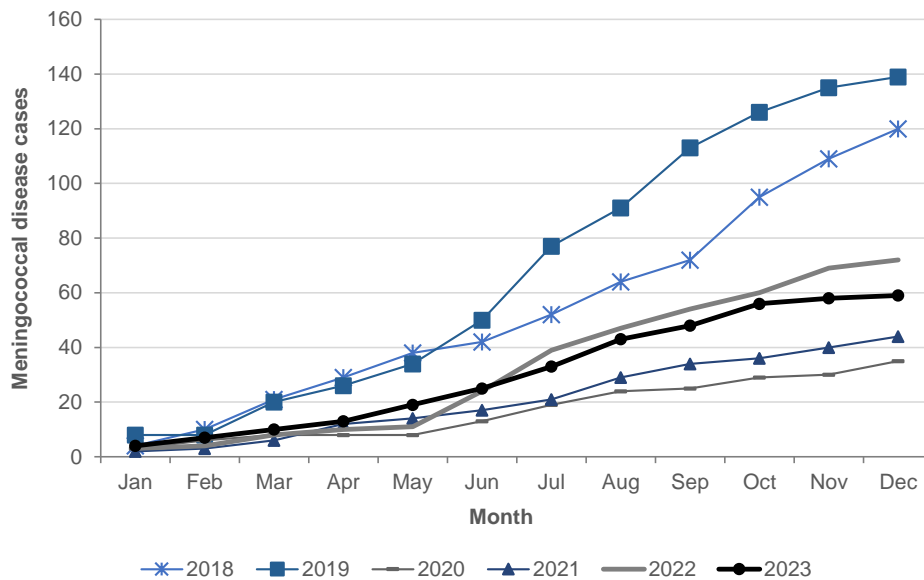
In New Zealand, meningococcal disease follows a seasonal pattern with case numbers peaking in winter and continuing into spring (Figure 1). This seasonal increase in disease was seen in 2023 with an increase in the number of cases reported between July and October.

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



The total number of cases in 2023 was lower than in 2018, 2019, and 2022 (Figure 2).

Figure 2. Cumulative number of meningococcal disease cases by month, 2023

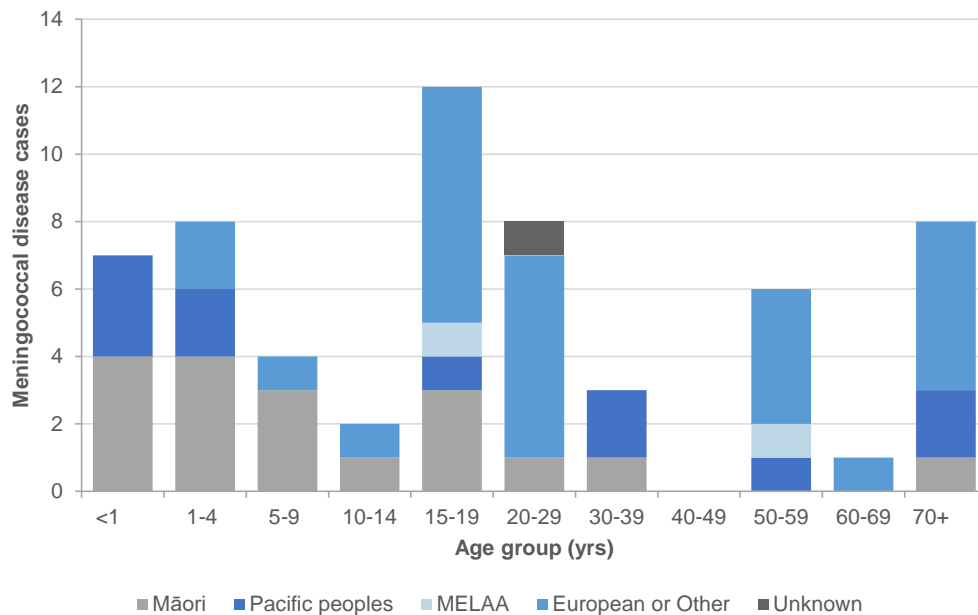


Meningococcal disease by ethnic group and age group

Almost half (47%) of the meningococcal disease cases in 2023 were of European or Other ethnicity, 31% were Māori, 19% were Pacific peoples and 3% were Middle Eastern/Latin American/African (MELAA).

In 2023, 87% (13/15) of cases aged under 5 years were Māori or Pacific peoples. In comparison, the majority (68%, 13/19) of cases aged 15–29 years were European or Other ethnicity (Figure 3).

Figure 3. Number of meningococcal disease cases by prioritised ethnicity and age group, 2023

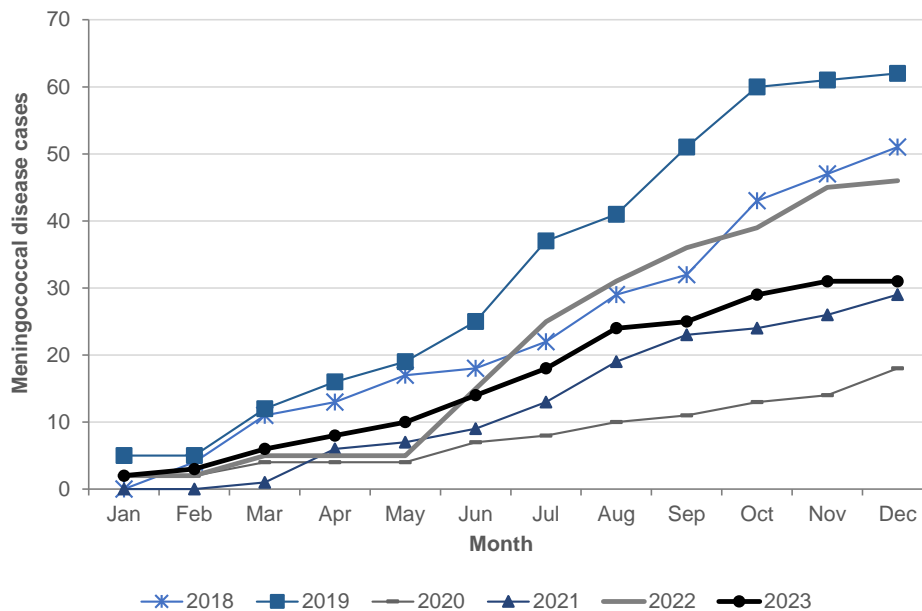


Meningococcal disease by group

The group was identified in 43 (73%) of the 59 cases notified in 2023. Group B was the dominant group type accounting for 31 (72%) cases, six (14%) were group Y, three (7%) were group W, two (5%) were group C and one (2%) was group E.

For group B cases, the number of cases in 2023 was lower than in 2018, 2019 and 2022 but higher than in 2020 and similar to 2021 (Figure 4).

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



The number of cases due to group Y in 2023 (6 cases) was lower than in 2018, 2019 and similar to 2022 (16, 16, and 8 cases, respectively) and higher than in 2020 and 2021 (2 and 0 cases, respectively).

The number of group W cases in 2023 (3 cases) was lower than in 2018, 2019 and 2020 (33, 36, and 11 cases, respectively) and similar to 2021 and 2022.

There were two group C cases and one group E case reported in 2023. The previous group C case was in 2020 and the previous group E case was in 2019.

Meningococcal disease by district and group

Meningococcal cases in 2023 were geographically dispersed throughout the country (Table 1). The highest number of cases was in the Auckland region (consisting of Waitemata, Auckland, and Counties Manukau districts) (18 cases) followed by Canterbury district (11 cases).

Table 1. Number of meningococcal disease cases by group and district, 2023

District	Group					Group unknown ¹	Not lab-confirmed	Total
	B	C	E	Y	W			
Northland	1	0	0	0	0	3	0	4
Waitemata	2	2	0	1	0	1	0	6
Auckland	2	0	0	0	0	3	0	5
Counties Manukau	4	0	0	3	0	0	0	7
Waikato	4	0	0	0	0	1	0	5
Lakes	0	0	0	0	1	1	0	2
Bay of Plenty	0	0	0	0	0	1	0	1
Tairāwhiti	1	0	0	0	0	0	0	1
Taranaki	0	0	0	0	0	0	1	1
Hawke's Bay	4	0	0	0	1	0	0	5
Whanganui	2	0	0	0	0	0	0	2
MidCentral	1	0	0	0	0	0	0	1
Hutt Valley	2	0	0	0	0	1	0	3
Capital & Coast	2	0	0	0	0	0	0	2
Wairarapa	0	0	1	0	0	0	0	1
Nelson Marlborough	2	0	0	0	0	0	0	2
West Coast	0	0	0	0	0	0	0	0
Canterbury	4	0	0	2	1	3	1	11
South Canterbury	0	0	0	0	0	0	0	0
Southern	0	0	0	0	0	0	0	0
Total	31	2	1	6	3	14	2	59

¹ 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 in 2023 as well as those that were most common in previous years.

Nine different PorA types were identified among the 31 group B cases in 2023, and these were 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.

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

PorA type	Year					
	2018	2019	2020	2021	2022	2023
P1.7-12,14	3	14	3	12	14	11
P1.7-2,4	16	19	9	8	14	8
P1.22,14	3	5	0	2	2	4
P1.19-1,15	0	0	0	0	1	2
P1.22,14-49	0	0	0	0	0	2
P1.7,16-26	2	4	0	1	2	1
P1.19,15	0	1	1	1	0	1
P1.7,4-46	0	0	0	0	0	1
P1.18-1,30-8	0	0	0	0	0	1
P1.7-36,14	0	0	2	0	2	0
P1.18-1,34	3	3	0	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