

# Invasive Meningococcal Disease Monthly Report July 2023

This report summarises invasive meningococcal disease notifications and trends nationally from 1 January to 31 July 2023. Information is based on data recorded in EpiSurv and at ESR's Meningococcal Reference Laboratory as at 9 August 2023. Data presented may be further updated and should be regarded as provisional.

## Summary

Between 1 January and 31 July 2023:

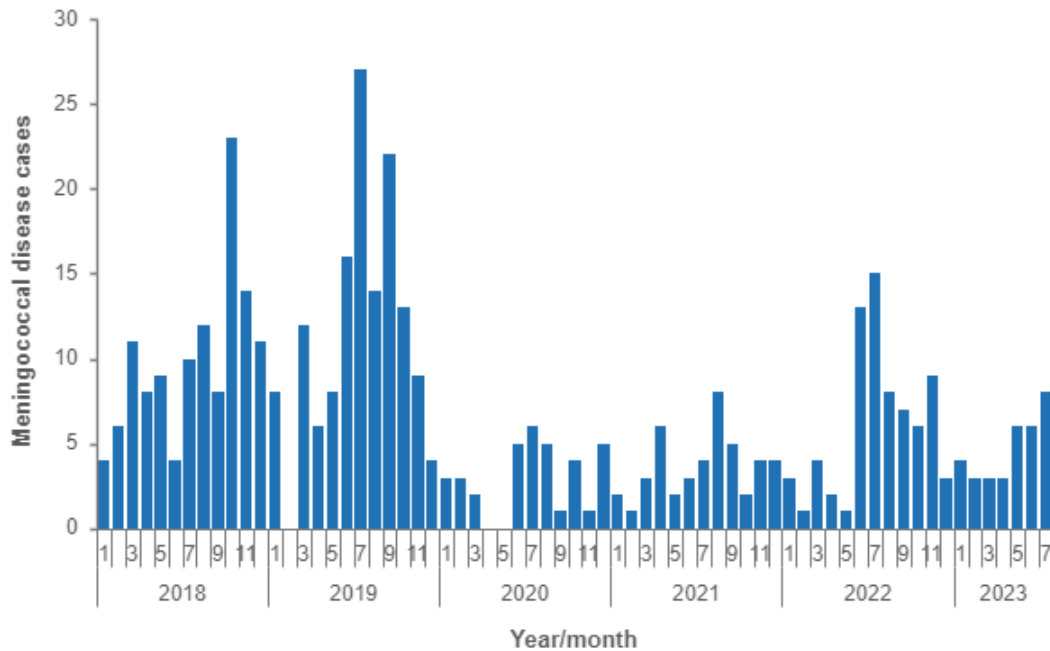
- there have been 33 cases (30 confirmed and 3 probable) of invasive meningococcal disease reported. This number is lower than the same period in 2018, 2019 and 2022 but higher than in 2020 and 2021;
- there has been one death in an adult aged 20–29 years;
- group B is the dominant group type. The group was identified in 24 cases to date in 2023: 18 (75%) were group B, three (13%) were group W, and three (13%) were group Y;
- the cases are geographically dispersed.

## National trends

Between 1 January and 31 July 2023, there were 33 cases of meningococcal disease reported (30 confirmed and 3 probable). There was one death in an adult aged 20–29 years due to group B, PorA type P1.7-2,4.

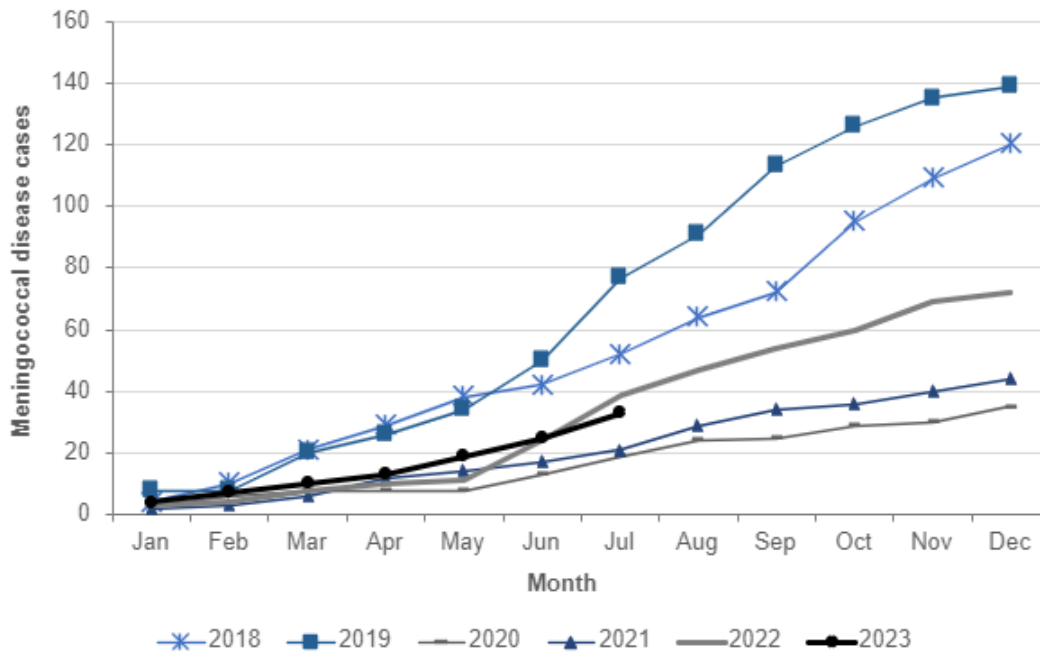
In New Zealand, meningococcal disease follows a seasonal pattern with case numbers peaking in winter and continuing into spring (Figure 1). This seasonal increase in disease has been seen in 2023 with an increase in the number of cases reported in May and June (6 cases each) and July (8 cases), compared with April (3 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 31 July 2023

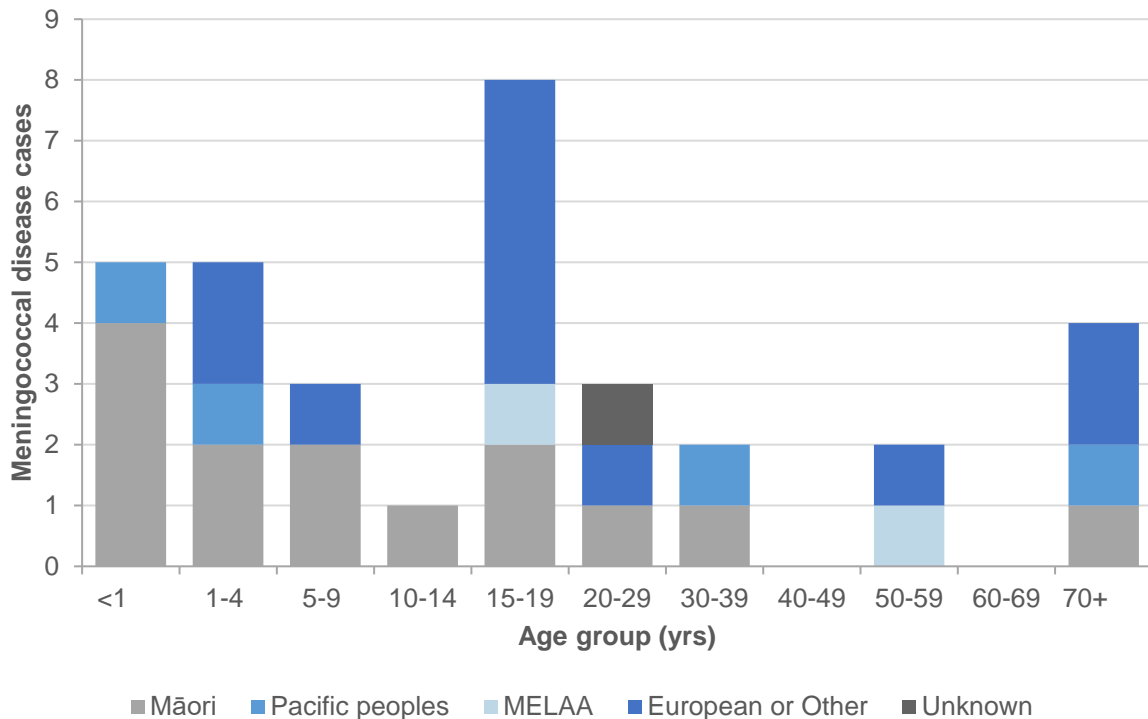


## Meningococcal disease by ethnic group and age group

Overall, 42% of meningococcal disease cases in New Zealand in 2023 to date have been in Māori, 36% are in European or Other ethnic groups, 12% are in Pacific peoples while 6% are in Middle Eastern/Latin American/African (MELAA) (Figure 3).

Almost a quarter (24%, 8/33) of the cases in 2023 to date are in Māori and Pacific children aged under 5 years. This proportion is lower than that seen in 2022 when 44% of cases were in Māori and Pacific children aged under 5 years. This change is due to an increase in the proportion of cases aged 15–29 years; 33% (11/33) in 2023 to date compared with 21% (15/72) in 2022.

**Figure 3. Number of meningococcal disease cases by prioritised ethnicity and age group, 1 January to 31 July 2023**

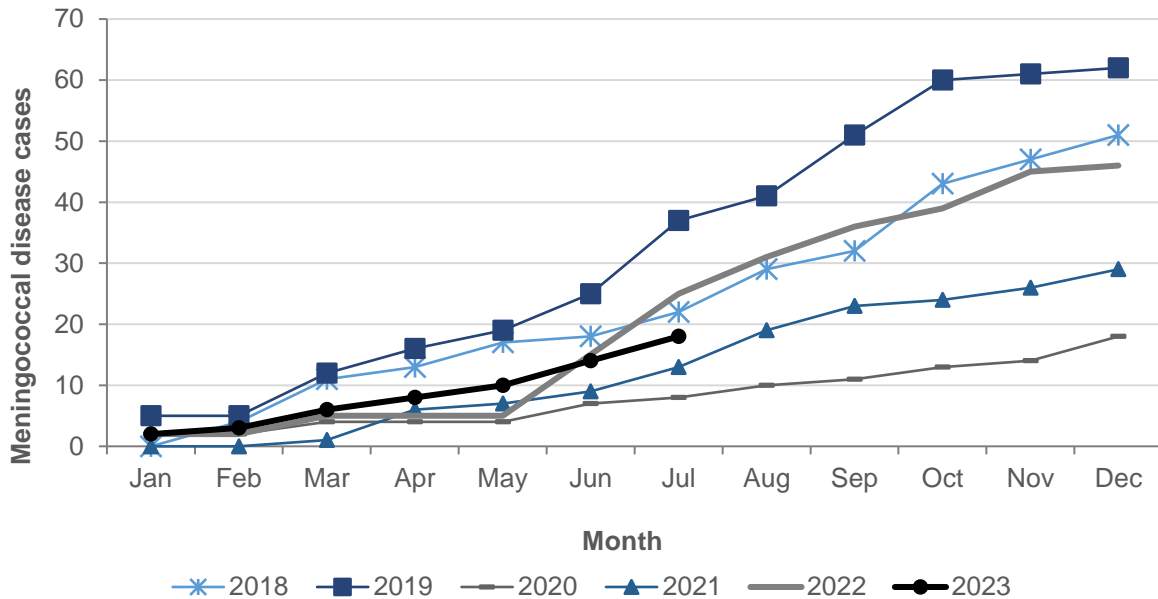


## Meningococcal disease by group

Of the 33 cases notified from 1 January to 31 July 2023, the group was identified in 24 (73%) cases: 18 (75%) were group B, three (13%) were group W, and three (13%) were group Y. These proportions are similar to those seen in 2022.

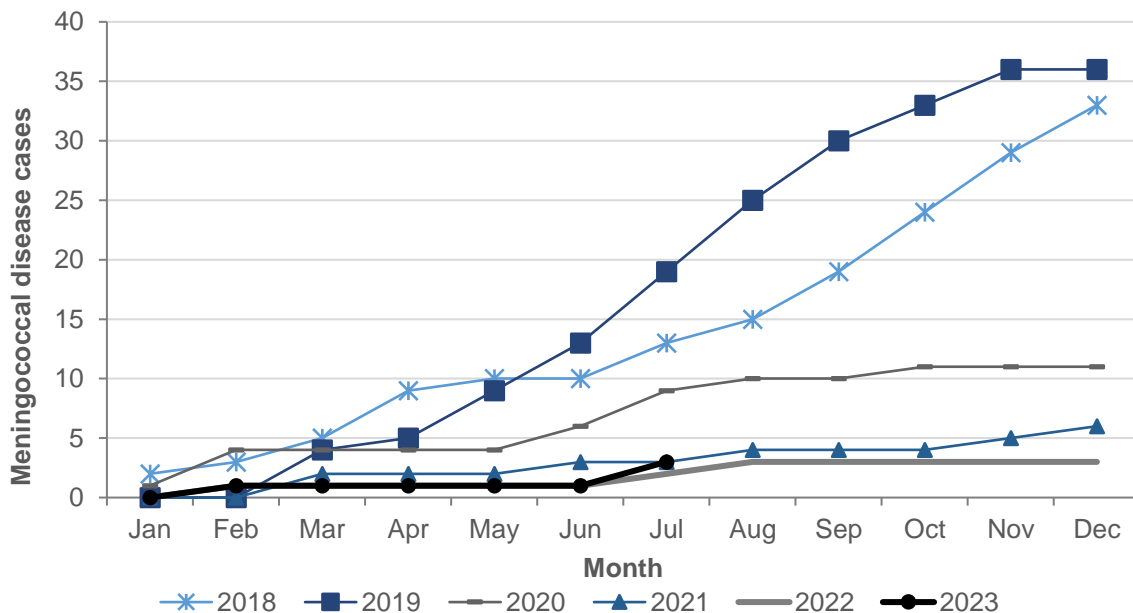
For group B cases, the number of cases to date is lower than for the same period in 2018, 2019 and 2022 but higher than in 2020 and 2021 (Figure 4).

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



The number of group W cases in 2023 to date remains low and is similar to the same period in 2021 and 2022 (Figure 5).

Figure 5. Cumulative number of group W meningococcal disease cases by month, January 2018 to July 2023



The number of cases due to group Y is higher than in 2020 and 2021, but lower than in 2018, 2019 and 2022. There have been no cases of group C since 2020, and the last case of group E was reported in 2019.

## 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 Canterbury district (7 cases), followed by Auckland (4 cases), Waitemata and Hutt Valley (3 cases each).

**Table 1. Number of meningococcal disease cases by group and district, 1 January to 31 July 2023**

District	Group <sup>1</sup>			Group unknown <sup>2</sup>	Not lab-confirmed	Total
	B	W	Y			
Northland	0	0	0	1	0	1
Waitemata	2	0	1	0	0	3
Auckland	2	0	0	2	0	4
Counties Manukau	1	0	1	0	0	2
Waikato	1	0	0	1	0	2
Lakes	0	1	0	0	0	1
Bay of Plenty	0	0	0	1	0	1
Tairāwhiti	1	0	0	0	0	1
Taranaki	0	0	0	0	1	1
Hawke's Bay	0	1	0	0	0	1
Whanganui	2	0	0	0	0	2
MidCentral	0	0	0	0	0	0
Hutt Valley	2	0	0	1	0	3
Capital & Coast	2	0	0	0	0	2
Wairarapa	0	0	0	0	0	0
Nelson Marlborough	2	0	0	0	0	2
West Coast	0	0	0	0	0	0
Canterbury	3	1	1	2	0	7
South Canterbury	0	0	0	0	0	0
Southern	0	0	0	0	0	0
<b>Total</b>	<b>18</b>	<b>3</b>	<b>3</b>	<b>8</b>	<b>1</b>	<b>33</b>

<sup>1</sup> There were no cases of group C and E

<sup>2</sup> 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 31 July 2023**

PorA type	Year					
	2018	2019	2020	2021	2022	2023 <sup>1</sup>
P1.7-12,14	3	14	3	12	14	6
P1.7-2,4 <sup>1</sup>	16	19	9	7	14	6
P1.22,14	3	5	0	2	2	2
P1.19-1,15	0	0	0	0	1	2
P1.7,16-26	2	4	0	1	2	1
P1.19,15	0	1	1	1	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
P1.5-1,10-7	0	0	0	0	1	0
P1.7-6,4	0	0	0	0	1	0
P1.7-12,15	0	0	0	0	1	0
P1.7-12,16-3	0	0	0	0	1	0
P1.17,16-4	0	0	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
P1.22-11,15-25	0	1	0	0	0	0

<sup>1</sup> Data to 31 July 2023

<sup>2</sup> 1991 to 2007 New Zealand epidemic strain

Six different PorA types have been identified across the 18 group B cases in 2023 to date, and these have been geographically dispersed.

The most common PorA types are B:P1.7-2,4 (the 1991–2007 New Zealand epidemic strain) and B:P1.7-12,14.

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.