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National Reference Centre for Meningococci and *Haemophilus influenzae* (NRZMHi)



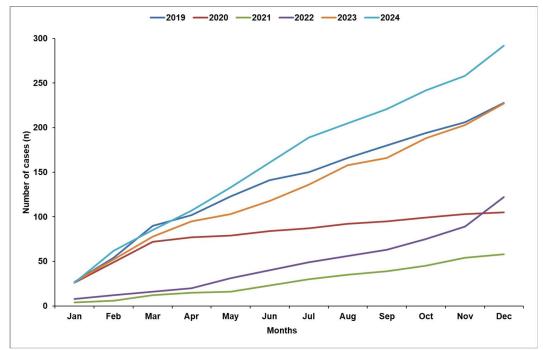
Data of the laboratory surveillance of meningococci (2024)

Introduction

The German National Reference Centre for Meningococci and *Haemophilus influenzae* (NRZMHi) has been assigned for the laboratory surveillance of invasive meningococcal disease (IMD) by the Robert Koch Institute (RKI). In 2024, 463 samples from 418 individuals were submitted to the NRZMHi. *Neisseria meningitidis* was confirmed in samples of 321 patients, 292 of them were from primarily sterile compartments (latter figure corresponds to the number of cases with IMD). In 67 samples (clinical samples and non-viable meningococci) detection of meningococci was carried out exclusively by molecular methods (23% out of 292). During the same period, 342 IMD cases were notified to the RKI (data as of 18.01.2025, SurvStat@RKI). Given that all IMD cases processed at the NRZMHi were notified retrospectively, a 85% coverage of IMD cases at the NRZMHi is assumed (90% in 2023).

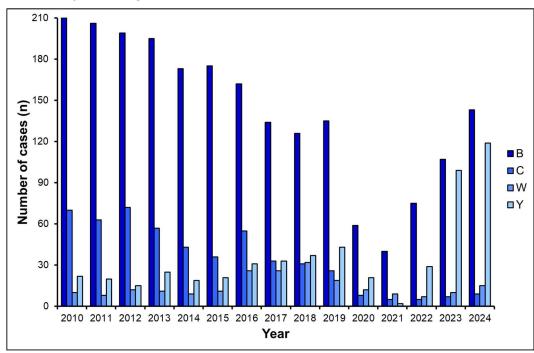
In 2024, the incidence of IMD in Germany (0.41/100,000, data as of 18.01.2025, SurvStat@RKI) increased again compared to the previous year (2023: 0.3/100,000).





Cumulative graph of the number of IMD cases processed at the NRZMHi 2019 - 2024.

The number of IMD cases submitted to the NRZMHi was significantly higher than 2023.



Frequency of serogroups B, C, W and Y (2010-2024)

MenB and MenY remained the prevalent serogroups in 2024.

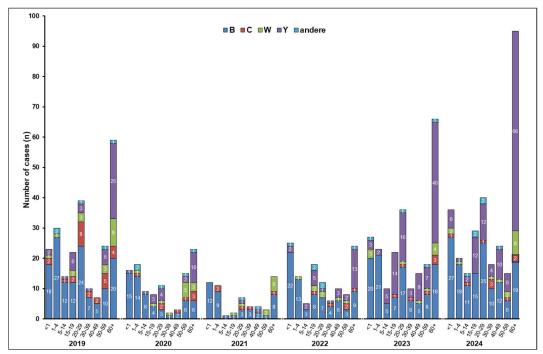
	Serogroups						
Federal states	в	С	w	Y	others*	IMD cases analysed at the NRZMHi	Incidence/ 100.000
BW	16	1	3	16	1	37	0,4
BY	23	2		23	2	50	0,44
BE	7	1	1	4		13	0,56
BB	1			3		4	0,23
HB	1			1		2	0,44
НН	4			1		5	0,63
HE	9	1	4	6		20	0,42
MV			1	1		2	0,12
NI	17		1	7	1	26	0,37
NW	31	3	4	28	2	68	0,44
RP	7			6		13	0,41
SL	2			2		4	0,5
SN	3			5		8	0,22
ST	2	1		4		7	0,41
SH	4			2		6	0,3
TH	3			3		6	0,38
unkn.	8			7		15	
abroad	5		1			6	

Serogroups according to federal states (2024)

*others comprise MenE cases (n=2) and two cases without capsule genes (cnl= capsule null locus).. Furthermore, in two cases the serogroup could not be determined.

BW: Baden-Wuerttemberg, BY: Bavaria, BE: Berlin, BB: Brandenburg, HB Bremen, HH: Hamburg, HE: Hesse, MV: Mecklenburg-Western Pomerania, NI: Lower Saxony, NW: North Rhine-Westphalia, RP: Rhineland-Palatinate, SL: Saarland, SN: Saxony, ST: Saxony-Anhalt, SH: Schleswig-Holstein, TH: Thuringia, unkn: unknown

IMD cases according to age groups (2019 - 2024)



The number of MenY cases significantly increased in the age group older than 60 years.

Antimicrobial susceptibility of invasive meningococcal isolates

Antibiotics	susceptible	resistant	
Penicillin	198	27 (12%)	
Cefotaxime	224	1	
Ciprofloxacin	222	3	
Rifampicin	225		

(According to EUCAST breakpoints 2024)

In comparison to previous years (2022: 7.2%, 2023: 8.8%), the proportion of penicillin-resistant isolates increased significantly. One isolate harboured a β -lactamase and another two isolates were resistant to Pen and Cip and to Pen and Ctx, respectively.

Disclaimer

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