

Health Protection Report

weekly report

Infection report

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Invasive meningococcal disease (laboratory reports in England): October to December 2014

In England, the national Public Health England (PHE) Meningococcal Reference Unit (MRU) confirmed 178 cases of invasive meningococcal disease (IMD) between October and December 2014 [1]. This compares to 183 cases (3% decrease) reported in the equivalent quarter in 2013 (table 1). There were 95 cases of IMD reported from July to September 2014.

The distribution of capsular groups causing IMD by age group is summarised in table 2, with capsular group B (MenB) accounting for 60% (107/178) of all cases, followed by MenW (n=41, 23%), MenY (n=16, 9%) and MenC (n=11, 6%). The number of MenW cases reported in the fourth quarter of 2014 (n=41) was 46% higher than the same period in 2013 (n=28) and MenC cases were 45% higher (11 cases in Q4 2014 versus 6 in Q4 2013). MenB cases fell from 119 in the third quarter of 2013 to 107 cases (10% decrease) in the same quarter of 2014 whilst MenY IMD decreased by 45%, from 29 to 16 cases. During the fourth quarter of 2014 there were no reported cases for capsular groups A, X and Z/E (table 1) in England. During the same period four IMD cases were reported to PHE from Wales; two were MenY, one MenC and one MenB.

An increase in cases of IMD in university students, which began in the third quarter of 2014 resulted in an extension to the MenC vaccination programme for university students until March 2015 [2].

In the fourth quarter of 2014, MenB was responsible for the majority of IMD cases in infants (87%) and toddlers (90%) but contributed to a lower proportion of cases in older age groups, where other capsular groups were more prevalent (table 2). Thirty-four percent of MenW cases were in older adults aged 65+ years, 20% of cases were diagnosed in children younger than five years and 32% were aged 15-24 years. The previously reported increase in group W cases [3] has continued and the situation is being kept under review [4].

Table 1. Invasive meningococcal disease in England by capsular group and laboratory testing method, weeks 40-52 (Q4): 2013 and 2014

Capsular groups ~		М	ethod of d	Total		Cumulative				
	CULTURE	AND PCR	CULTUR		PCR ONLY				total	
	2013 (Q4)	2014 (Q4)	2013 (Q4)	2014 (Q4)	2013 (Q4)	2014 (Q4)	2013 (Q4)	2014 (Q4)	2013 (Q1-4)	2014 (Q1-4)
A	-	-	-	-	-	-	-	-	-	1
В	31	30	29	25	59	52	119	107	535	400
С	2	1	1	6	3	4	6	11	29	33
W	7	7	18	23	3	11	28	41	76	117
Y	5	2	20	12	4	2	29	16	77	69
Ungrouped	-	-	-	-	1	2	1	2	3	7
Ungroupable*	_	_	_	1	_	_	-	1	6	1
Total	45	40	68	67	70	71	183	178	726	628

~ Note: No cases capsulargroups X or Z/E were confirmed during any of the periods summarised in the table.

* Ungroupable refers to invasive clinical meningococcal isolates that were non-groupable, while ungrouped cases refers to culture-negative but PCR screen (*ctrA*) positive and negative for the four genogroups [B, C, W and Y] routinely tested for.

Table 2. Invasive meningococcal disease in England by group and age at diagnosis, weeks 40-52 (Q4): 2014

	Capsular Group~										Total		2014 Total	
Age groups	В		С		w		Y		Other*		Q4		Q1 - Q4	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%
<1 year	27	(25)	-	(0)	4	(10)	-	(0)	_	(0)	31	(17)	129	(21)
1-4 years	38	(35)	-	(0)	4	(10)	_	(0)	_	(0)	42	(24)	124	(20)
5-9 years	9	(8)	_	(0)	_	(0)	1	(6)	1	(33)	11	(6)	34	(5)
10-14 years	3	(3)	_	(0)	1	(2)	1	(6)	-	(0)	5	(3)	13	(2)
15-19 years	13	(12)	2	(18)	11	(27)	2	(13)	1	(33)	29	(16)	68	(11)
20-24 years	3	(3)	-	(0)	2	(5)	1	(6)	_	(0)	6	(3)	31	(5)
25-44 years	3	(3)	6	(55)	3	(7)	_	(0)	_	(0)	12	(7)	52	(8)
45-64 years	5	(5)	1	(9)	2	(5)	2	(13)	-	(0)	10	(6)	61	(10)
>=65 years	6	(6)	2	(18)	14	(34)	9	(56)	1	(33)	32	(18)	116	(18)
Total	107		11		41		16		3		178		628	

~ Note: No cases capsulargroups X or Z/E were confirmed during any of the periods summarised in the table.

* Other includes Ungroupable and Ungrouped.

References

1. Data source: PHE Meningococcal Reference Unit.

2. "<u>Freshers told 'it's not too late' for meningitis C vaccine</u>", PHE press release, 27 November 2014.

3. PHE (2014). Invasive meningococcal disease (laboratory reports in England): July to September 2014 (Q3/2014). <u>HPR 8(48):13-14</u>.

4. Continuing increase in Meningococcal Group W disease in England, *HPR* **6**(7): infection (news) report, 27 February 2015. See PHE website: <u>Meningococcal disease: laboratory</u> <u>confirmed cases in England and Wales</u>.