

## **Health Protection Report**

weekly report

### Infection report

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#### **Immunisation**

# Invasive meningococcal disease (laboratory confirmed reports in England): April to June 2015

In England, the national Public Health England (PHE) Meningococcal Reference Unit (MRU) confirmed 173 cases of invasive meningococcal disease (IMD) between April and June 2015 [1]. IMD cases were 20% higher in this quarter than the 144 cases confirmed in the equivalent quarter in 2014 (table 1). There were 279 cases confirmed in the January to March 2015 period [2].

The distribution of meningococcal capsular groups causing IMD by age is summarised in table 2, with capsular group B (MenB) accounting for 58% (101/173) of all cases, followed by MenW (n=43, 25%), MenY (n=23, 13%) and MenC (n=3, 2%). The number of MenW cases in the first two quarters of 2015 combined (n=112 was 2.2 times higher than the 52 cases confirmed during the same period in 2014, whilst MenY increased by 53% from 45 to 69 cases. MenB cases increased from 234 in the first quarter of 2014 to 252 cases (7% increase) in the same quarter of 2015 and the number of MenC cases fell from 18 to 13 cases (28% decrease). During the first two quarters of 2015, there were no reported cases for capsular groups A, X and Z/E (table 1) in England.

In quarter 2 of 2015 MenB was responsible for the majority of IMD cases in infants (33/41, 80%) and toddlers (31/40, 78%) but contributed to a lower proportion of cases in older age groups (table 2). The introduction of a routine national MenB immunisation programme for infants was announced in June [3] with immunisation of infants starting from 1 September 2015.

Capsular groups other than MenB were more prevalent in older age groups (table 2). However, 30% of the 43 MenW cases were in children under 5 years with 44% in adults aged 65+ years, and 9% in 15-24 year-olds. The previously reported increase in MenW cases [4,5] has continued and has led to the introduction of MenACWY conjugate vaccine to the national immunisation programme in England. [6,7]. MenACWY vaccine replaced the existing time-limited 'freshers' programme from August 2015 and will directly substitute MenC vaccine in the routine adolescent schools programme (school year 9 or 10) from Autumn 2015. In addition a

catch-up campaign is being implemented offering MenACWY vaccine to all adolescents aged 14 to 18 years (to school year 13); 2015 school leavers (aged 17/18) have been prioritised for the first phase of the catch-up.

Table 1. Invasive meningococcal disease in England by capsular group and laboratory testing method: April – June (Q2), 2015

Capsular groups ~		L	aboratory	То	tal	Cumulative total				
	CULTURE	AND PCR	CULTURE ONLY		PCR ONLY			lotai		
	2014 (Q2)	2015 (Q2)	2014 (Q2)	2015 (Q2)	2014 (Q2)	2015 (Q2)	2014 (Q2)	2015 (Q2)	2014 (Q1-Q2)	2015 (Q1-Q2)
Α	_	-	_	-	1	_	1	-	1	_
В	20	23	28	27	54	51	102	101	234	252
С	1	-	6	2	1	1	8	3	18	13
W	_	4	15	33	4	6	19	43	52	112
Υ	3	3	8	15	1	5	12	23	45	69
Ungrouped*	-	-	_	-	2	1	2	1	5	2
Ungroupable*	_	_	-	2	_	_	-	2	_	4
Total	24	30	57	79	63	64	144	173	355	452

<sup>~</sup> Note: No cases capsular groups A, X or Z/E were confirmed during any of the periods summarised in the table.

Table 2. Invasive meningococcal disease in England by capsular group and age group at diagnosis: April – June (Q2), 2015

Age groups	Capsular group ~											Total		2015 total	
	В		С		w		Y		Other *		Q2		Q1-Q2		
	Total %		Total %		Total %		Total %		Total %		Total %				
<1 year	33	(33)	0	-	7	(16)	1	(4)	0	_	41	(24)	79	(17)	
1-4 years	31	(31)	0	-	6	(14)	3	(13)	0	-	40	(23)	101	(22)	
5-9 years	9	(9)	2	(67)	1	(2)	2	(9)	0	-	14	(8)	31	(7)	
10-14 years	4	(4)	0	-	0	(–)	1	(4)	0	-	5	(3)	12	(3)	
15-19 years	8	(8)	0	_	3	(7)	4	(17)	0	_	15	(9)	36	(8)	
20-24 years	2	(2)	0	_	1	(2)	0	_	1	(33)	4	(2)	21	(5)	
25-44 years	7	(7)	0	_	1	(2)	2	(9)	1	(33)	11	(6)	27	(6)	
45-64 years	5	(5)	1	(33)	5	(12)	3	(13)	0	_	14	(8)	65	(14)	
>=65 years	2	(2)	0	_	19	(44)	7	(30)	1	(33)	29	(17)	80	(18)	
Total	101		3 43		23		3		173		452				

<sup>~</sup> Note: No cases capsular groups A, X or Z/E were confirmed during any of the periods summarised in the table.

<sup>\*</sup> 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.

<sup>\*</sup> Other includes Ungroupable and Ungrouped.

#### References

- 1. Data source: PHE Meningococcal Reference Unit.
- 2. Health Protection Report 9(22), 26 June 2015.
- 3. PHE and NHS England (2015). <u>Introduction of MenB immunisation for infants</u> (bipartite letter), 22 June.
- 4. Health Protection Report 9(7), 27 February 2015.
- 5. "Freshers told 'it's not too late' for meningitis C vaccine", PHE press release, 27 Nov. 2014.
- 6. PHE and NHS England (2015). <u>Meningococcal ACWY conjugate vaccination (MenACWY)</u> (bipartite letter), 22 June.
- 7. Meningococcal ACWY (MenACWY) vaccination programme webpages.