Preliminary vaccine coverage estimates for the meningococcal B (MenB) immunisation programme for England, update from August to December 2017

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Introduction

This report presents Meningococcal B (MenB) vaccine coverage data for one and two doses of vaccine by six months and 12 months and three doses by 18 months of age, evaluated at the end of December 2017. It updates previous data reported for the period to end of July 2017 [1].

MenB vaccination was introduced from 1 September 2015 for infants due to receive their primary immunisations starting at two months of age on or after 1 September 2015 (i.e. those babies born on or after 1 July 2015) [2]. The vaccine is offered alongside other routine immunisations at eight and sixteen weeks of age, with a booster dose at one year of age. A limited one-off catch-up programme was also delivered targeting infants born in May and June 2015.

Key points

- Preliminary vaccine coverage estimates for the infant Meningococcal B immunisation, between August and December 2017, were 95.9% for one dose and 88.4% for two doses by six months of age.
- Children who were 12 months between August and December 2017 achieved 95.5% coverage for one dose and 92.6% for two doses.
- Children who reached 18 months of age between August and December 2017 achieved 95.0% coverage for one dose, 92.9% for two doses and 87.4% for the booster dose.

Methods

In order to rapidly assess vaccine coverage of this immunisation programme, Public Health England (PHE) uses general practice (GP) level MenB vaccine coverage data
automatically uploaded via participating GP IT suppliers to the ImmForm* website on a monthly basis. These data are then validated and analysed by PHE to check data completeness, identify and query any anomalous results and describe epidemiological trends.

Monthly MenB vaccine coverage data are collected for each cohort reaching six months (26 weeks), 12 months (52 weeks), and 18 months (78 weeks) of age in the survey month, using the following definitions:

Coverage at six months:
- **Denominator**: the number of infants in a GP practice who, in the survey month, reach 26 weeks of age;
- **Numerators**: the number of infants in the denominator who received (a) 1st dose and (b) 2nd dose of Bexsero® (MenB vaccine) from eight weeks of age up to 26 weeks of age, including vaccinations given by other healthcare providers.

Coverage at 12 months:
- **Denominator**: the number of infants in a GP practice who, in the survey month, reach 52 weeks of age;
- **Numerators**: the number of infants in the denominator who received (a) 1st dose and (b) 2nd dose of Bexsero® (MenB vaccine) from eight weeks of age up to 52 weeks of age, including vaccinations given by other healthcare providers.

Coverage at 18 months:
- **Denominator**: the number of infants in a GP practice who, in the survey month, reach 78 weeks of age;
- **Numerators**: the number of infants in the denominator who received (a) 1st dose (b) 2nd dose (c) booster dose of Bexsero® (MenB vaccine) from eight weeks of age up to 78 weeks of age, including vaccinations given by other healthcare providers.

Vaccine coverage is calculated as the total number of patients who have received the vaccination (numerators) as a percentage of the number of patients registered (denominator).

* ImmForm is the system used by Public Health England to record vaccine coverage data for some immunisation programmes and to provide vaccine ordering facilities for the NHS
Participation and data quality

MenB vaccine coverage data from one of four data suppliers representing approximately 1% of GP practices (mainly located in South West England) in the survey is consistently lower than other data suppliers, due to IT issues. These data have been omitted from this coverage report and PHE is working with ImmForm to resolve this data issue. GP practice participation between August and December 2017 ranged from 93.7% (August) to 95.6% (December).

This report presents MenB coverage data for infants evaluated at six, 12 and 18 months. It is important to note that comparisons made between these data extractions will not be based on the same cohort as:

- GPs participating in the data collections vary between months
- Date of birth range for the 26, 52 and 78 week cohorts differ
- Patients will change their GP registration as they move within England and outside the country

Data are presented by Local Team for December 2017 in this report and by Area Team and Clinical Commissioning Group for August to December 2017 in an appendix associated with this report.

Results

**MenB coverage at six months (26 weeks) of age**

National coverage at six months was 95.9% for dose one and 88.4% for dose two between August and December 2017 (figure 1).

**MenB coverage at 12 months (52 weeks) of age**

Coverage at 12 months was 95.5% for dose one and 92.6% for dose two between August and December 2017 (figure 2).

**MenB coverage at 18 months (78 weeks) of age**

Coverage at 18 months was 95.0% for dose one, 92.9% for dose two, and 87.4% for the booster dose between August and December 2017 (figure 3).
MenB coverage across NHS England Local Teams

Dose two coverage for children becoming six months of age in December 2017 ranged from 82.4% (London) to 91.3% (Wessex) (Table 1). Dose two coverage for children becoming 12 months of age in December 2017 ranged from 88.6% (London) to 95.1% (Cumbria and North East). Coverage of the booster dose for children becoming 18 months of age in December 2017 ranged from 77.1% (London) to 92.1% (Cumbria and North East).

Discussion

This is the sixth early assessment of vaccine coverage at six months of age, just two months after the second dose is scheduled, for the new routine childhood MenB programme and indicates that the vaccine has continued to be well accepted and implemented. High completed primary course coverage similar to that previously reported [1] was achieved between August and December 2017, remaining around 88% by six months of age. By 12 months of age 93% of infants have completed a two dose course indicating around 5% receive the second dose after six months of age.

This report also presents the third estimates of MenB booster coverage at 18 months of age for the routine cohorts, showing a similarly high proportion of children, around 87% of the routine cohorts, are continuing to receive their booster dose within five to six months of the vaccine being scheduled.

In parallel to the GP based coverage estimates published in this report, PHE estimates MenB coverage data from the routine quarterly COVER (Cover of vaccination evaluated rapidly) reporting scheme which evaluates two dose MenB vaccine coverage for children at 12 months of age and booster MenB coverage at 24 months of age using data extracted from Child Health Information Systems (CHISs). The July to September 2017 quarterly report was the fifth evaluation of two doses of MenB vaccine at first birthday (children born July to September 2016) and reported 92.7% coverage in England [3], similar to the ImmForm estimate for the same period (92.6% for children reaching 52 weeks of age between July to September 2017). The COVER October to December 2017 quarterly report, to be published in March 2018, will provide more complete 24 month coverage estimates for the booster dose.
The introduction of MenB immunisation has been supported by a comprehensive media and communications campaign in partnership with health partners and meningitis charities, that has led to significant reporting in national, local and parenting media and social media. New patient information leaflets and posters have also supported the campaign and comprehensive guidance has been added to the NHS Choices website. Existing children’s immunisation information booklets and leaflets have been amended to reflect the new schedule. A training factsheet and video for health professionals has also been produced [4].

References


3. PHE (December 2017). Quarterly vaccination coverage statistics for children aged up to five years in the UK (COVER programme): July to September 2017. *HPR 11*(45).

### Table 1. Meningococcal B vaccine coverage (%) for one and two doses assessed at six and 12 months of age, and one, two and three (booster) doses assessed at 18 months of age by NHS England Local Team, including the percentage of GP practices reporting: England, December 2017.

<table>
<thead>
<tr>
<th>Local Team</th>
<th>GP practices reporting (%)</th>
<th>Dose one coverage (%)</th>
<th>Dose two coverage (%)</th>
<th>Dose one coverage (%)</th>
<th>Dose two coverage (%)</th>
<th>Dose one coverage (%)</th>
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<th>Booster dose coverage (%)</th>
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**Denominators**: 7,280 52,930 52,462 56,227
Figure 1. Monthly Meningococcal B vaccine coverage evaluated at six months of age for one dose and two doses, and the percentage of GP practices reporting: England, November 2015 to December 2017*

*Data for November 2015 represent the first catch-up cohort (born between 03/05/2015 - 01/06/2015), offered one dose of vaccine. Data for December 2015 represent the second catch-up cohort (born between 02/06/2015 - 02/07/2015), offered two doses of vaccine. Data presented from January 2016 are for the routine cohort of infants (born on or after 03/07/2015). Data quality issues are described in previous reports.
Figure 2. Monthly Meningococcal B vaccine coverage evaluated at 12 months of age for one dose and two doses, and the percentage of GP practices reporting: England, May 2016 to December 2017*

*Data for May 2016 represent the first catch-up cohort (born between 03/05/2015 - 01/06/2015), offered one dose of vaccine. Data for June 2016 represent the second catch-up cohort (born between 02/06/2015 - 02/07/2015), offered two doses of vaccine. Data presented from July 2016 are for the routine cohort of infants (born on or after 03/07/2015). Data quality issues are described in previous reports.
Figure 3. Monthly Meningococcal B vaccine coverage evaluated at 18 months of age for one dose, two doses, and booster dose, and the percentage of GP practices reporting: England, November 2016 to December 2017*

*Data for November 2016 represent the first catch-up cohort (born between 03/05/2015 - 01/06/2015), offered one dose of vaccine with their infant immunisations and a booster at 12-13 months. Data for December 2016 represent the second catch-up cohort (born between 02/06/2015 - 02/07/2015), offered two doses of vaccine and a booster at 12-13 months. Data presented from January 2017 are for the routine cohort of infants (born on or after 03/07/2015). Data quality issues are described above and in previous reports.
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Immunisation, Hepatitis and Blood Safety Department, National Infection Service, PHE Colindale, 61 Colindale Avenue, London NW9 5EQ.  [MenB@phe.gov.uk](mailto:MenB@phe.gov.uk)

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