National summary of neonatal hepatitis B immunisation – 2011/12



Background

This report summarises uptake and timeliness of the first three doses of hepatitis B immunisation and trends in babies who were born to hepatitis B positive mothers during 2012 and were notified to Public Health Wales Health Protection Team. Uptake and timeliness of the fourth dose of hepatitis B immunisation in babies born to hepatitis B positive mothers in 2011 is also presented.

The data in this report are taken from the All Wales Neonatal Hepatitis B immunisation database. The database was developed by Public Health Wales to assist the Public Health Wales Health Protection Team in the monitoring and follow up of hepatitis B immunisation in babies born to hepatitis B positive mothers. The database also allows the Public Health Wales Communicable Disease Surveillance Centre to monitor uptake and timeliness of hepatitis B vaccination in neonates and young children born to infected mothers. Data contained in this report were extracted on 17 February 2014.

Table 1. Uptake and timeliness of neonatal hepatitis B immunisation in Wales, babies born to hepatitis B positive mothers and resident in Wales during 2012 and 2011

	Year of birth	Babies requiring immunisation	Immunised		Immunised within recommended interval	
		(n)	(n)	(%)	(n)	(%)
HBIG ^{1,2}	2012	13	13	100	13	100
Dose 1 ²		43	43	100	43	100
Dose 2 ³		43	43	100	30	70
Dose 3 ⁴		43	42	98	20	48
Dose 4 ⁵	2011 ⁶	58	56	97	34	61

¹ Not required for all neonates

For more information on neonatal hepatitis B immunisations consult 'The Green Book' at http://immunisation.dh.gov.uk/category/the-green-book/

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² Recommended to be given on the day of birth or the next day

³ Recommended interval: within 25 - 36 days after dose 1

⁴ Recommended interval: within 25 - 36 days after dose 2

⁵ Recommended interval: within 334 - 396 days of birth

⁶ Since the 2011 national summary report, a further six babies moved away from Wales and are not included in this report

Findings

- 1. During 2012, 50 babies born to hepatitis B mothers were reported to the Health Protection Team in comparison to 71 babies in 2011. Seven babies who were born during 2012 are not included in this report, because they moved away from Wales.
- Hepatitis B immunoglobulin (HBIG) was indicated for 30% (13/43) of neonates born to hepatitis B positive mothers in Wales during 2012, an increase from 22% (14/64) in 2011.
 HBIG was delivered to 100% of these neonates and all received it on their day of birth or the next day (Table 1).
- 3. Uptake of the first dose of hepatitis B immunisation was 100% in 2012, the same as in 2011, with all neonates receiving their first dose on their day of birth or the next day (Table 1).
- 4. Uptake of the second dose of hepatitis B immunisation was 100% in 2012, also the same as in 2011. Seventy per cent of the babies received their second dose between 25 and 36 days after their first dose, an increase from 50% in 2011. Thirty per cent of babies had a period of longer than 36 days between their first and second doses, a decrease from 48% in 2011 (Table 1).
- 5. Uptake of the third dose of hepatitis B immunisation was 98%, a decrease from 100% in 2011. Forty eight per cent of the babies received their third dose between 25 and 36 days after their second dose, a decrease from 67% in 2011. Fifty per cent of babies had a period of longer than 36 days between their second and third doses, an increase from 30% in 2011 and two per cent of babies had a period of shorter than 25 days between their second and third doses (Table 1).
- 6. Uptake of the fourth dose of hepatitis B immunisation was 97% in babies born to hepatitis B positive mothers in 2011. Sixty-one per cent of the babies received their fourth dose between 334 and 396 days of birth and 39% received the dose later than 396 days from birth.

Discussion

This is the second annual report of uptake of hepatitis B immunisation in neonates born to hepatitis B positive mothers in Wales. The report contains information on the first three doses of hepatitis B vaccination for babies born during 2012 as well as on the fourth dose of the schedule for babies born during 2011. All of these babies should have received their first, second and third doses of hepatitis B vaccine if born during 2012 and the fourth dose of the vaccine if born during 2011, by the time data for this report were extracted (17 February 2014).

These data show that all of the babies born to hepatitis B positive mothers, who were resident in Wales during 2012, and notified to Public Health Wales received HBIG (if indicated) and their first two doses of the hepatitis B immunisation schedule. Two per cent of the babies did not receive their third dose of hepatitis B vaccine. An improvement in the proportion of babies receiving their second dose of the vaccine within the recommended interval was observed in 2012 compared to 2011. However, a higher proportion of babies born during 2012 received their third dose of the schedule later than the recommended interval compared to 2011.

For the first time, this report presents information on the uptake and timeliness of the fourth dose of hepatitis B vaccination. Nearly all babies born during 2011 (97%) received their fourth hepatitis B vaccine, with over half receiving the vaccine within the recommended interval.

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