

Hepatitis B Vaccine Schedule for Infants Born to Hepatitis B Carrier Mothers

TIMING	REQUIREMENT	DOSE	ADMINISTERED BY
Within 12 hours of birth	Hepatitis B Immune Globulin	0.5 ml IM	hospital
Within 12 hours of birth	Engerix or Recombivax- HB	0.5 ml IM	hospital
1 month of age	Engerix or Recombivax- HB	0.5 ml IM	primary care physician
6 months of age	Engerix or Recombivax- HB	0.5 ml IM	primary care physician
9 - 15 months of age	Post-vaccination serology (HBsAg and anti-HBs)		primary care physician

- Pre-term infants, except those less than 2000 grams, should follow the above schedule. Pre-term infants less than 2000g require an additional dose of hepatitis B vaccine. A schedule of 0, 1, 2, and 6 months is recommended.
- The initial hepatitis B vaccine and hepatitis B immune globulin can be given at the same time but at separate sites.
- The 6 month hepatitis B vaccine can be administered at the same time as the third Pediacel (and Pevnar for high risk infants) injections but at a different site.

Post Vaccination Serology:

- The tests that should be completed in this serology screen are **hepatitis B surface antigen (HBsAg) and antibody to hepatitis B surface antigen (anti-HBs or HBsAb)**.
- If **HBsAg** is positive, the child is likely a carrier and prophylaxis was unsuccessful.
- If the child is positive for **anti-HBs** (≥ 10 IU/L) and negative for HBsAg, the prophylaxis successfully prevented hepatitis B.
- If the infant's serology is **negative for both HBsAg and anti-HBs** (anti-HBs < 10 IU/L), the infant is considered a non-responder. A series of three additional doses of hepatitis B vaccine should be started immediately and post-vaccination serology completed at least one month after the completion of this second vaccination series.

For more information, please contact the Middlesex-London Health Unit's Infectious Disease Control Team at 519-663-5317 ext. 2330 or visit:

www.healthunit.com

References:

Heymann, D. (ed). (2015). *Control of Communicable Diseases Manual* (20th ed) pp291. American Public Health Association.

Canadian Immunization Guide (2014). Public Health Agency of Canada. Retrieved March 24, 2014 from <http://www.phac-aspc.gc.ca/publicat/cig-gci/index-eng.php> accessed March 24, 2014

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