

## **“B” Smart about Hepatitis B**

With the introduction of new vaccines and combination vaccines, it is becoming increasingly difficult for healthcare providers to keep track of minimum dosing intervals. The New Jersey Department of Health (NJDOH) would like to stress the importance of maintaining appropriate age and dose spacing intervals to ensure that children develop and maintain adequate antibody levels and meet the vaccination requirements for school attendance.

There has been confusion regarding the hepatitis B vaccine schedule for children. NJDOH supports the recommendation of the Centers for Disease Control and Prevention (CDC) to vaccinate children at birth. Please note the following minimum intervals after the birth dose:

- The minimum interval between the first and second dose:
  - Weeks after first dose - 1 month or 4 weeks or 28 days
- There are three minimum intervals that must be met for the third dose:
  - Weeks after first dose - 4 months or 16 weeks or 112 days
  - Weeks after second dose - 2 months or 8 weeks or 56 days
  - Weeks after birth - 6 months or 24 weeks or 168 days

When determining compliance with school immunization requirements for hepatitis B, use weeks instead of days or months for calculating the minimum age and dose spacing intervals. There is a four-day grace period for all vaccines. Poorer immune responses are seen in infants who complete the vaccination series prior to six months of age.

Either Engerix-B® (GlaxoSmithKline) or Recombivax-HB® (Merck) can be used as the monovalent hepatitis B birth dose. The combination vaccine Pediarix® (GlaxoSmithKline) should not be given to infants under the age of six weeks. The use of Pediarix prior to age 6 weeks can result in suppression of the immune response to the acellular pertussis component of the vaccine.

It is acceptable to give a four-dose schedule of hepatitis B vaccine to infants. The use of this four-dose hepatitis B vaccine schedule is necessary when giving the monovalent hepatitis B vaccine birth dose followed by the use of the combination vaccine. The use of a four-dose regimen does not increase vaccine reactogenicity and results in higher final antibody titers that may correlate with longer duration of detectable antibody. The federal Vaccines for Children (VFC) Program provides up to four doses of hepatitis B vaccine for VFC-eligible children. You may still use monovalent hepatitis B vaccine in a three-dose series.

NJDOH recommends the use of a customized vaccine scheduler to ensure that all vaccines are administered according to recommended guidelines such as those available through the New Jersey Immunization Information System (NJIIS) at <https://njiis.nj.gov/njiis/> or through the CDC at [https://www2a.cdc.gov/nip/kidstuff/newscheduler\\_le/](https://www2a.cdc.gov/nip/kidstuff/newscheduler_le/).

For additional information about Vaccine Preventable Diseases visit the NJDOH website <http://www.nj.gov/health/cd/vpdp.shtml>.