American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN
Georgia Chapter

Eliminating Perinatal Hepatitis B: Here's the Scoop!

The American Academy of Pediatrics Recommends First Hepatitis B Dose Within 24 Hours of Birth

The American Academy of Pediatrics (AAP) recently released a policy statement recommending all medically stable newborns with a minimum birth weight of 2000 grams (about 4 pounds 6 ounces) receive the first Hepatitis B dose within the first 24 hours of birth.[1] This updated statement comes as an effort to reach the US Department of Health and Human Services' goal of zero perinatal hepatitis B transmission in the United States by 2020.[2] According to Harry Keyserling, MD, FAAP and Infectious Disease Committee Chair for the Georgia Chapter of the AAP, "This new policy will be an essential step toward eradicating perinatal hepatitis B infection and reaching the 2020 goal."

Hepatitis B is a viral infection attacking the liver and resulting in acute and possibly chronic disease. Chronic infection can lead to liver damage, failure, cancer, and eventually death. The virus can be transmitted perinatally if the mother has the virus. There are approximately 1000 new cases of perinatal hepatitis B infection identified annually in the United States.[1] New cases have been attributed to gaps in prenatal testing, obtaining or interpreting test results, and communicating test results to the nursery. Further, the incidence of new hepatitis B infections has increased in some states due to the opioid epidemic in the United States.[3]

Prevention of perinatal transmission of hepatitis B begins with the routine testing of all pregnant women for hepatitis B during the pregnancy and treating those who test positive before delivery. The mother's hepatitis B status should be communicated at the time of birth and documented in the newborn's records.

Infants born to hepatitis B negative mothers should be given the first dose of hepatitis B vaccine within 24 hours after birth. The first dose is delayed until one month after birth or at the time of discharge (whichever comes first) for an infant below 2000 grams.

The birth dose can prevent infection of infants born to infected mothers in cases where the mother's results were never obtained or were misinterpreted or falsely negative. The dose also

covers inaccurate transcription or reporting errors to the infant care team as well as protects infants at risk from household exposure after the perinatal period.

If the mother is hepatitis B positive, the first dose should be given within 12 hours after birth followed by hepatitis B immunoglobin regardless of weight or other health issues. Prenatal antiviral therapy and newborn prophylaxis with hepatitis B vaccine and immunoglobin have been shown to significantly reduce perinatal hepatitis B virus transmission. [4]

Finally, it is important that infant vaccination is documented accurately in hospital records and in the appropriate CDC immunization information systems and state immunization registries. All healthcare providers involved in newborn care should be educated concerning the new hepatitis B recommendations and protocols to ensure every newborn is protected.

**The Georgia Chapter of the America Academy of Pediatrics offers free CME and CNE approved in-office immunization training through its EPIC (Educating Physicians in Their Communities) program. Please view our website www.gaEPIC.org to schedule a training.*

Cordia Starling, EdD, MS, BSN, RN
EPIC Immunization Program Director
Georgia Chapter-American Academy of Pediatrics

REFERENCES

1. American Academy of Pediatrics. *Pediatrics*. 2017;140(3):e20171870

2. US Department of Health and Human Services. Action plan for the prevention, care, & treatment of viral hepatitis. Updated 2014-2016. Available at: https://www.hhs.gov/sites/default/files/viral-hepatitis-acion-plan.pdf. Accessed October 16, 2017

3. Harris AM, Iqbal K, Schillie S, et al. Increases in acute hepatitis b virus infections – Kentucky, Tennessee, and West Virginia, 2006-2013. *MMWR Morbidity and Mortality Weekly Report*. 2016;65(3):47-50

4. Chen HL, Lee CN, Chang CH, et al; Taiwan Study Group for the Prevention of Mother-to-Infant Transmission of HBV (PreMIT) Study; Taiwan Study Group for the Prevention of Mother-to-Infant Transmission of HBV PremMIT Study. Efficacy of maternal tenofovir disoproxil fumarate in interrupting mother-to-infant transmission of hepatitis B virus. *Hepatology*. 2015;62(2):375-386