Infant in Michigan Dies from Perinatal Hepatitis B Virus (HBV) Infection

A three-month-old infant died from acute HBV infection due to an error in reporting. After a review of provider and hospital records, it was determined that the infant’s mother was chronically infected with HBV and tested hepatitis B surface antigen-positive (HBsAg-positive) during her pregnancy. Unfortunately, neither the laboratory nor the prenatal care provider reported the HBsAg-positive test results to the local health department (LHD) as required by state law.

In addition, the provider inaccurately reported the mother’s results as HBsAg-negative to the delivery hospital. Since the information from the prenatal care provider indicated that the infant’s mother was negative for HBV and the birthing hospital was not offering the birth dose of hepatitis B (hepB) vaccine, the infant did not receive hepB vaccine or hepatitis B immune globulin (HBIG) as recommended for all infants born to HBsAg-positive women. At three months of age, the infant became ill and died less than two weeks later due to fulminant HBV infection.

This tragedy illustrates the necessity that all:

- prenatal care providers need to include a copy of the actual lab report with the prenatal records that are forwarded to the birthing hospital for this pregnancy
- laboratories and ordering physicians comply with Michigan law; it is critical that every HBsAg-positive result for a pregnant woman is reported to the LHD by BOTH the laboratory performing the test and the prenatal care provider who orders the test.
- birthing hospitals should administer a dose of hepB vaccine within 24 hours of birth to all infants born to an HBsAg-negative woman
- birthing hospitals should administer a dose of hepB vaccine and a dose of HBIG within 12 hours of birth to all infants born to an HBsAg-positive woman

What Happens to Infants Born to HBsAg-positive Women?

WITHOUT HepB vaccine or HBIG:

- 90% will be at risk for chronic infection
- 25% of those infected will die due to chronic liver disease

WITH HepB vaccine alone in a 3 or 4 dose series started at birth:

- 70% - 95% will be protected from getting HBV infection

WITH HepB vaccine and HBIG started at birth:

- 80% - 95% will be protected from getting HBV infection