

## 1. Background

Perinatally acquired hepatitis B usually results in asymptomatic or subclinical chronic hepatitis in the newborn. The infants who acquire hepatitis B at birth are at very high risk of the eventual development of the complications of chronic hepatitis B. As many as 25 percent of perinatally infected infants will die as adults of chronic liver disease produced by chronic hepatitis B infection. Further, these chronically infected children remain infectious throughout their lives.

Perinatal hepatitis B can be prevented despite exposure of the newborn to maternal virus during delivery. The transmission of perinatal hepatitis B infection can be prevented in about 95 percent of infants born to HBsAg-positive mothers by early active and passive immunoprophylaxis of the infant. Prevention of perinatal hepatitis B is accomplished through the administration of post-exposure immunoprophylaxis with hepatitis B immune globulin (HBIG) given at birth (i.e. within 12 hours of birth) at the same time as the first dose of hepatitis B vaccine, and then with the remainder of the hepatitis B vaccine series given according to the recommended schedule over the next months.

As many as 1.25 million persons in the United States have chronic hepatitis B infection, and more than 24,000 infants are born to HBsAg-positive females per year. In Ohio, an average of 295 infants is born every year to HBsAg-positive females. Thus, it is paramount that these infants are protected from becoming infected.

Since 1990, the Ohio Department of Health (ODH) Perinatal Hepatitis B Prevention Program (PHBPP) has been conducting centralized case management of HBsAg-positive pregnant females and their newborns. Several years ago ODH recognized the need to transition the primary responsibility for this important case management to the local health districts (LHD). Case management is more effectively conducted at the local level for several reasons. Local health districts: a) work in close proximity to cases; b) have the ability to make home visits; c) have knowledge of and frequent contact with local primary care physicians; and d) have familiarity with local referral services.

Thus, ODH launched a new model of perinatal hepatitis B prevention. This model is one of local case management by the staff of the LHD in which an HBsAg-positive pregnant female resides. This means that LHD's assume primary responsibility for the prevention of perinatal hepatitis B within their jurisdictions. The ODH PHBPP will continue to provide guidance, technical assistance, trainings and other support.

In 2004 a group of LHD's, the Ohio Perinatal Hepatitis B Prevention Workgroup successfully began shared case management. This manual was created by that workgroup to help guide local perinatal hepatitis B prevention efforts throughout the state, and has been updated in 2007, 2009, 2010, 2012 and 2015.