



Electronic Perinatal Hepatitis B Surveillance and Case Management System

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BACKGROUND

The New Jersey Department of Health and Senior Services (DHSS) Perinatal Hepatitis B (Peri-hep) program began in 1993 as part of the national strategy to eliminate transmission of perinatal hepatitis B infection following the 1990 Congressional Vaccine and Immunization Amendments (P.L.101-502).

Prior to 2009, prenatal providers were required to report pregnant Hepatitis B Surface Antigen (HBsAg) positive (+) women to DHSS and Local Health Departments (LHDs) using the peri-hep paper report form. All case information from this form was entered into the peri-hep state registry.

In 2009, the program implemented surveillance and case management of pregnant HBsAg positive (+) women and the newborn using the DHSS electronic Communicable Disease Reporting and Surveillance System (CDRSS).

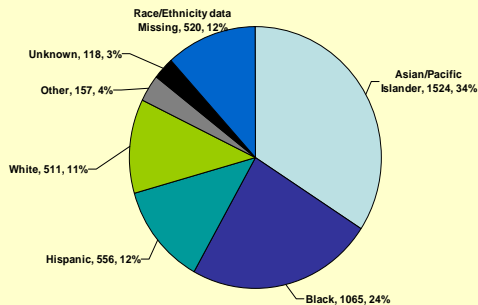
PERINATAL HEPATITIS B PROGRAM GOALS

1. Ensure all women are screened for HBsAg at each pregnancy and reported if positive.
2. Ensure all infants born to HBsAg positive mothers are identified and reported for comprehensive case management.

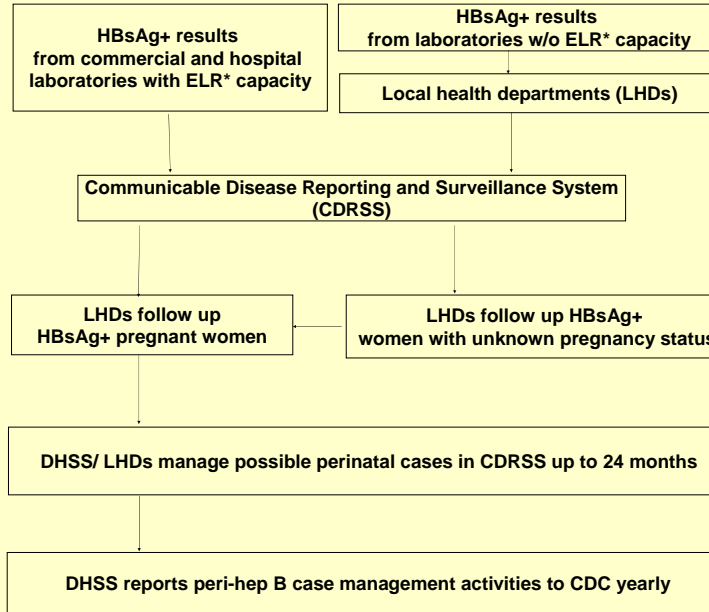
HBsAg+ PREGNANT WOMEN IN NEW JERSEY

1. During 1996-2007, a total of 4451 HBsAg+ pregnant women were reported in New Jersey.
2. Case ethnicity of HBsAg+ pregnant women: Asian/Pacific Islanders (34%), Black (24%), Hispanic (12%) and White (11%).

Total HBsAg+ Pregnant Women Managed in Peri-Hep B Program by Race/Ethnicity (1996-2007)
N=4451



ELECTRONIC PERINATAL HEPATITIS B SURVEILLANCE AND CASE MANAGEMENT ACTIVITIES



* Electronic Laboratory Reporting

PAPER REPORT FORM VS. ELECTRONIC SURVEILLANCE AND REPORTING

Case Management Criteria	Births to HBsAg+ Women	
	Reported from Paper Report Form (1996-2007)	Reported in CDRSS (2008)**
	(N=3924)	(N=347)
Completed 3 vaccine doses by 8 months	2117 (54%)	195 (56%)
Completed post vaccine serology	2127 (54%)	123 (35%)
Perinatal infection	24 (1.1%)***	2(1.6%)***
Perinatal infection prevention	1868 (88%)***	120 (97%)***

**As of March 2010

***Among births completed post vaccine serology only

DISCUSSION

1. Both DHSS and LHDs can simultaneously access the CDRSS which eliminates the paper report form transmission between health departments. LHDs are experienced users of CDRSS, therefore, the electronic peri-hep case management barriers encountered have been minimal.
2. CDRSS provides triggers for case investigation of HBsAg+ women of child bearing age with unknown pregnancy status which assures all screened pregnant women are identified.
3. DHSS reviews all CDRSS hepatitis B lab results of pregnant women to ensure accurate serologic interpretation and reduce errors in reporting anti-HBc pregnant women or negative HBsAg.
4. Improved knowledge and understanding is needed by the LHDs regarding hepatitis B infection and serology interpretation.
5. CDRSS provides integrated analytical reports for all users and provides administrative flexibility for case management. The newborn is linked to the mother's case as a case contact.
6. For the identified case contacts of the HBsAg+ women and/or women who have multiple pregnancies, each case is linked with the HBsAg+ women's case in CDRSS.
7. From 1996-2007, the annual average number of reported live births from HBsAg+ pregnant women was 357 (about 0.3% of NJ total annual births). However, this is much lower than the CDC estimation of 1% of NJ total annual births from HBsAg+ women.
8. DHSS peri-hep program is at the early stage of adopting electronic surveillance and case management system. We anticipate an increase of the number of HBsAg + pregnant women reported and improved infant outcome.

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