



PERINATAL HEPATITIS B PROGRAM

MISSION

The mission of the Perinatal Hepatitis B Program is to prevent perinatally transmitted hepatitis B within the County of Los Angeles. The program provides comprehensive hepatitis B prevention services. These services include serological screening, vaccination, patient and health care provider education, and intensive case management of hepatitis B surface antigen positive (HBsAg+) pregnant women, i.e., hepatitis B carriers and their newborns and household contacts. The program goals are:

1. To ensure that all pregnant women are serologically screened for HBsAg.
2. To ensure that infants born to hepatitis B carriers receive hepatitis B immune globulin (HBIG) and hepatitis B vaccine (HBVac) within 12 hours of birth and that they receive the second and third dose of hepatitis B vaccine at one and six months of age, respectively.
3. To ensure that household contacts of pregnant hepatitis B carriers are serologically screened for hepatitis B core antibody (anti-HBc) and that those who are susceptible are vaccinated according to the appropriate schedule.

REPORTING

On January 1, 1991, California law mandated that all pregnant women be screened for HBsAg and positive results be reported to the local health department. In 1996, the State of California, Department of Health Services, Immunization Branch and the Los Angeles County Immunization Program surveyed delivery hospital medical records for HBsAg screening documentation. Two percent of the deliveries between January 1, 1995 through June 31, 1997 were reviewed for HBsAg documentation. Of those records reviewed 93% had documented HBsAg results.

CASES REPORTED IN 1996

In 1996, follow-up was initiated for 781 HBsAg+ pregnant women reported. Fifty-four percent of the women already knew they were hepatitis B carriers, including 17% who had been case-managed by the program during a previous pregnancy.

Source of reporting HBsAg-positive mothers: Of the 781 HBsAg+ pregnant women reported in 1996, 53% were initially reported by laboratories, 29% by delivery hospitals, 10.5% by prenatal care providers, and 7% from other sources.



Source of payment for delivery: Forty percent of women had Medi-Cal, 43% had private insurance, 3% were low-income women with no insurance, and 14% had other sources of payment. Most women (88%) delivered in private hospitals. Half of the women delivered in 11 of the 75 delivery hospitals within LAC.

Demographics: Ninety percent (90%) of the cases in 1996 were foreign-born, and the majority (61%) had a primary language other than English. Seventy-one percent of the women were Asian or Pacific Islander (specifically, 35% Chinese, 12% Vietnamese, 10% Filipino, 8% Korean, 2% Cambodian, 1% Thai, 1% Japanese, 3% Other), 16% were Hispanic, 6% were Black, 3% were White, and 5% were Other. The mean age of the mothers was 30 years.

Risk Factors: Eight percent reported occupational risk factors for hepatitis B infection, 1% reported more than one episode of a sexually transmitted disease, 1% reported injecting drug use, and 2% had a history of blood transfusion or hemodialysis. Seventy-seven percent of the women were born in countries where hepatitis B is of high or intermediate endemicity.

CASES COMPLETED FOR FOLLOW-UP IN 1996

In 1996, follow-up was completed for 859 case-women, their newborns, and household contacts (Table 1). Many of the cases completed in 1996 were reported in 1994 and 1995. Follow-up is complete only when numerous attempts have been made by the case managers to ensure that the newborn has completed the hepatitis B vaccine series by six months of age and all of the household contacts are serologically screened and vaccinated, if susceptible.

Completion of the Hepatitis B Series: Of the 859 women for whom follow-up was completed in 1996, 90% of the 784 infants born to these women received hepatitis B immune globulin (HBIG) and three doses of hepatitis B vaccine.

Among the 859 cases completed for follow-up in 1996, 1,471 household contacts were identified, an average of two contacts per case. Fifty-two percent of the household contacts already knew they had markers for hepatitis B infection including 38.5% who had been previously immunized with three doses of hepatitis B vaccine. Of the remaining contacts, 396 (27%) were serologically screened to determine their hepatitis B status, 2% were immunized without screening, and 19.5% refused screening or vaccination or were lost to follow-up.

Of the 396 household contacts serologically screened, 42% had positive markers for hepatitis B and therefore did not need vaccine (Figure 1). Fifty-eight percent of the



screened household contacts were negative, i.e., susceptible. By the time the mothers' cases were closed, 72% of the susceptible household contacts completed all three doses of hepatitis B vaccine.

Future challenges for the Perinatal Hepatitis B Program include continued education and outreach to laboratories, hospitals, and public and private medical care providers in the Los Angeles area. Activities to increase public awareness about hepatitis B and its prevention will continue, as well as public health education and activities in local hospitals and social service agencies. Through these activities and the intensive case management of pregnant carriers of hepatitis B, the program will continue to contribute to national efforts to prevent the transmission of this serious disease.

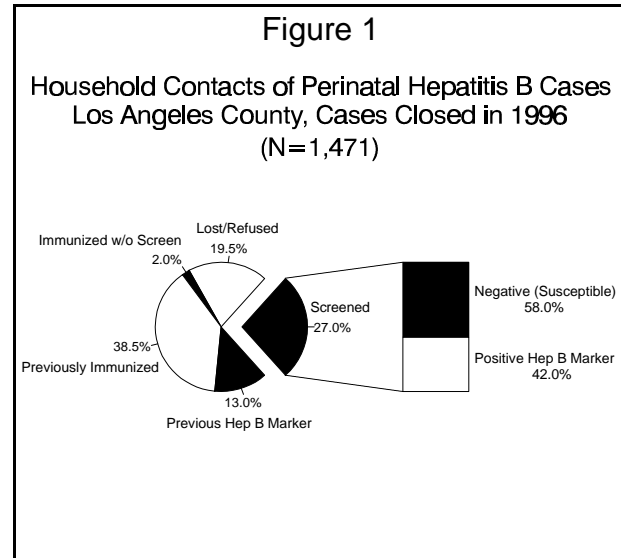


Table 1. Summary of Cases Closed in 1996, Los Angeles County

TOTAL NUMBER OF CASES CLOSED	859
Miscarriage/abortion	12
Death of baby	3
Mother was HBsAg negative	14
Mother moved out of LAC	49
TOTAL NUMBER OF INFANTS ELIGIBLE FOR FOLLOW-UP	784¹
Number of infants who completed HBIG/3 dose HBVac series	706 (90%)
Number of infants who received HBIG within 24 hours of birth ²	742 (95%)
Number of infants who received HBVac#1 within 24 hours of birth	747 (95%)

¹This includes five sets of twins and seven mothers lost to follow-up prior to delivery.

²ACIP recommends that HBIG and the first dose of HBVac be given to newborns within 12 hours of birth. Because the program did not begin collecting exact time of administration of HBIG and HBVac#1 until early 1995, these data represent doses given within 24 hours of birth. 1996 closed cases include some infants born in 1994 and 1995.