# PERINATAL HEPATITIS B PREVENTION PROGRAM

CRUDE DATA		Figure 42		
Number of Infants Born to HBsAg- Positive Mothers	756	Infants Born to HBsAg-Postive Mothers Incidence Rates by Year LAC, 1995-1999		
Annual Incidence <sup>a</sup>		Cases per 100,000		
LA County California United States	487 NA NA			
Age of Mother at Time of Infant's Birth		200		
Mean Median Range	32 30 17-47 yrs			
Case Fatality LA County United States	0.0% NA	95 96 97 98 99 Year Incidence rates prior to 1995 are unknown.		

<sup>a</sup>Incidence based on number of infants born to HBsAg-positive mothers per 100,000 live births.

# ETIOLOGY

Hepatitis B virus (HBV).

# DISEASE ABSTRACT

The Immunization Program's Perinatal Hepatitis B Prevention Program (PHBPP) conducts case management of chronic hepatitis B surface antigen (HBsAg)-positive pregnant women, their newborns and household contacts.

#### STRATIFIED DATA

**Trends:** In 1999, 756 infants (including 12 sets of twins) were born to 744 HBsAg positive women. The incidence of infants born to HBsAg-positive mothers increased by 11% from 433 per 100,000 infants born in 1998 to 487 per 100,000 infants born in 1999 (Figure 42).

**Race/Ethnicity:** The majority of the cases were Asia/Pacific Islanders where hepatitis B disease is endemic. Five hundred fifty-six (75%) of the women were Asian/ Pacific Islander (API), 99 (13%) were Hispanic, 55 (7%) were Black and 34 (5%) were White (Figure 43).Of the 556 API women, 276 (50%) were Chinese, 95 (17%) Vietnamese, 73 (13%) Filipino, 54 (10)% Korean, 15 (3%) Cambodian, 10 (2%) Samoan, 8 (1%) Thai, and 25 (5%) other API. (Figure 44).



# CASES COMPLETED FOR FOLLOW-UP IN 1999

In 1999, case management was completed for 632 women, their newborns, and household contacts. Seventy-two mothers were excluded (37 mothers miscarried, nine moved out of LAC prior to delivery, and 26 were retested and found to be HBsAg negative). Case management protocol includes (1) educating pregnant HBsAg-positive women about HBV disease, transmission, and infant vaccinations, (2) identifying and referring household contacts for screening and vaccination, (3) notifying hospitals of the expected deliveries and requesting that the hospitals return documentation after the infant's birth with the dates and times of the administration of HBVac #1 and HBIG, (4) notifying the infant's health care provider about the need for HBVac #2 at 1-2 months and HBVac #3 at six months of age, (5) reminding parents about these needed vaccinations, and (6) sending postvaccination serology letters to pediatric health care providers. Numerous attempts are made by case managers to complete follow up of infants and household contacts therefore some of the cases completed in 1999 were reported in 1997 and 1998.

**Infant Immunoprophylaxis Completion Rates:** A total of 642 infants (including 10 sets of twins) were born to 632 mothers, 96% of who received HBVac#1 and 95% received HBIG within 24 hours of birth. Of these infants, 29 moved out of the county before six months of age, leaving a total of 613 infants who were eligible to complete the hepatitis B vaccine series. Of these 613 remaining infants, 91% (555) received HBIG and a complete three-dose series of hepatitis B vaccine (Table 2).

# Table 2. Summary of Infant Hepatitis B ImmunoprophylaxisLos Angeles County, 1999

Hepatitis B Immunoprophylaxis	Number of Infants	Number of Eligible Infants	Percent
Infants who received HBVac#1 within 24 hours of birth	613	642	96%
Infants who received HBIG within 24 hours of birth	607	642	95%
Infants who completed HBIG/3-dose HBVac series	555	613	91%

**Household and Sexual Contacts Completion Rates:** A household contact was defined as an individual with anticipated continuous household exposure for greater than one year (often limited to nuclear family). Of 1,060 household and sexual contacts identified, 589 (55%) had already been vaccinated against hepatitis B, and 112 (11%) were known to have serologic evidence of hepatitis B infection. Of the remaining 359 (33%) contacts, 168 were screened for serologic evidence of hepatitis B infection or immunity, and 191 (18%) refused screening or vaccination or were lost to follow-up. Of the 168 household contacts who were serologically screened, 111 (66%) had positive markers for hepatitis B and therefore did not need vaccine. Fifty-seven (34%) of the screened household contacts were seronegative, i.e., susceptible to hepatitis B infection (Figure 45). At the time of completion of case management for the HBsAg-positive mother, 48 (84%) of the susceptible household contacts had completed all three doses of hepatitis B vaccine.

# COMMENTS

The mission of the PHBPP is to prevent perinatally transmitted hepatitis B within LAC. Vaccination and one dose of HBIG, administered within 24 hours after birth, are 85%-95% effective in preventing both hepatitis B virus infection and the chronic carrier state. By preventing the chronic carrier state, the vaccine also protects against long-term complications such as cirrhosis or liver cancer.

