

## **Abstract**

**Objective:** To study the seroepidemiology of hepatitis B virus infection in children 15 years after a mass hepatitis B vaccination program was begun in Taiwan.

**Materials and Methods ?** Serum samples from 3346 students stratified random sampled from the third year of junior high schools according to northern, central, southern, eastern area and city, urban township, rural township, aboriginal township, offshore township in Taiwan, were tested for HBV markers.

**Main Results:** There was no significant difference between male and female students in HBsAg carrier rate and infection rate, but female students had slightly higher anti-HBs positive rate than male students. The higher infection and carrier rates of students were found among those less urbanization level townships especially in those aboriginal townships. No difference in HBV markers was found among geographical locations. Compared with the seroepidemiologic study in 1993 of the same birth cohort, the carrier rate was increase from 1.7% to 2.9%, infection rate was increase from 4.3% to 7.5%, Anti-HBs positive rate was decrease from 65.4% to 49.5%

**Conclusions:** Most children in Taiwan were protected through mass vaccination program. The prevalence of HBV infection and carrier rate was higher in low urbanized area, highest in aboriginal townships. Increasing in infection and carrier rate in this 1987 birth cohort from 6 years old to 15 years old indicated some children get infection after 6years old. Continuing follow up carefully to determine if protection from HBV infection will last or if booster doses will be necessary.

**Key Word :** hepatitis B virus 、 Anti-HBs 、 Anti-HBc