

# **Epidemiology and Risk Factors of Incident Hepatitis E Virus Infections in Rural Bangladesh**

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## **Epidemiology and Risk Factors of Incident Hepatitis E Virus Infections in Rural Bangladesh**

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## **Abstract**

Hepatitis E virus (HEV) is the most common cause of acute viral hepatitis in the world. Most of South Asia is HEV endemic, with frequent seasonal epidemics of hepatitis E and continuous sporadic cases. This author group's epidemiologic work and clinical reports suggest that Bangladesh is HEV endemic, but there have been few population-based studies of this country's HEV burden. The authors calculated HEV infection rates, over an 18-month interval between 2003 and 2005, by following a randomly selected cohort of 1,134 subjects between the ages of 1 and 88 years, representative of rural communities in southern Bangladesh. Baseline prevalence of antibody to hepatitis E virus (anti-HEV) was 22.5%. Seroincidence was 60.3 per 1,000 person-years during the first 12 months and 72.4 per 1,000 person-years from >12 to 18 months (during the monsoon season), peaking by age 50 years and with low rates during childhood. Few of the seroconverting subjects reported hepatitis-like illness. Overall incidence was calculated to be 64 per 1,000 person-years, with 1,172 person-years followed. No significant associations were found between anti-HEV incidence and demographic or socioeconomic factors for which data were available. This is the first study to document annual HEV infection rates among “healthy” and very young to elderly subjects in a rural Bangladeshi population.

**Keywords:** Asia, Bangladesh, hepatitis E, hepatitis E virus, incidence, prevalence, seroepidemiologic studies

## **Reference**

Tandon BN, Gandhi BM, Joshi YK. Etiological spectrum of viral hepatitis and prevalence of markers of hepatitis A and B virus infection in north India. Bull World Health Organ 1984; 62 : 67-73.

