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RISK OF HEPATITIS INFECTIONS AMONG FOREIGN AID VOLUNTEERS IN CALCUTTA, INDIA

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Introduction There are many anecdotal reports on hepatitis incidence among high-risk travellers to India, but no data exist on incidence rates or on vaccine coverage.

Methods: Foreign aid volunteers (n=551) of ≥ 18 years were enrolled in a longitudinal survey between December 2000 and May 2002 in the Calcutta area. Questionnaires inquiring on history of hepatitis infection, vaccinations and illness during the stay in India were collected within 3 weeks after arrival, prior to departure, and 3 months after leaving Calcutta. Paired arrival and departure sera specimens were tested for hepatitis A, B, C, and E.

Results: Overall, 471 participants (86%) completed at least the first questionnaire; 321 (68%) women, 139 (30%) men and 11 (2%) of unknown gender. Also, 443 (80%) provided paired serum samples. The median age was 25 years (range 18 to 76 years) and the median duration of stay was 42 days (range 15 to 399 days). Vaccination coverage for hepatitis A was reported by 251 (53%), while 190 (40%) volunteers have received at least two pre-travel hepatitis B vaccine doses. In 12 (3%) volunteers a hepatitis A-IgM/IgG seroconversion was detected (most after recent vaccination), while both serum samples were negative in 56 (13%) and positive in 375 (84%). No acute hepatitis B or hepatitis C infections were detected. In only one (0.2%) traveller a recent hepatitis E infection could be confirmed by performing two different hepatitis E-IgM assays.

Conclusion: Data suggest that foreign aid volunteers remain at risk of hepatitis A or B which are vaccine-preventable. Broader surveys are needed to evaluate the risk of hepatitis in specific risk groups.