

The Epidemiology of Hepatitis B Antigen: A Defined Urban
Thai Population; Antibody Acquisition

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OBJECTIVE: To determine the prevalence of antibody to hepatitis B antigen (HB-Ag) in a random sample of urban Bangkok residents.

BACKGROUND: For a description of the experimental design of this study see the SEATO Medical Research Laboratory Annual Progress Report 1971-1972, pp. 129-139. Data accrued as to the point prevalence of antigen in this population indicate that infection is acquired early in childhood. The early acquisition of the carrier state and the high prevalence of the antigen suggest a high rate of HB-Ag transmission through this population. Studies of antibody prevalence were undertaken.

METHOD: Sera collected from this population were submitted to the laboratory of Dr. Roger Dodd, Red Cross Research Laboratory, Bethesda, Maryland, U.S.A., for antibody assays by the passive hemagglutination method described by Vyas and Shulman.

PROGRESS: Preliminary reduction of the data on the prevalence of HB-Ag antibody among this population indicates that 311 of 655 (47%) had antibody detectable by the passive hemagglutination test (see Table 1). Breakdown of this data into age specific antibody prevalences demonstrates a 14% prevalence of antibody in the 1-4 year age group and a rapid acquisition of antibody to a plateau of about 60% in the ages above 20.

This data is undergoing statistical analysis at the time of this writing with a view towards early publication.

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Table 1.
Prevalence of Hepatitis B Antibody by Age in Urban Bangkok Residents

Age	MALE			FEMALE			TOTAL		
	No. Tested	HBAb (+)		No. Tested	HBAb (+)		No. Tested	HBAb (+)	
		No.	%		No.	%		No.	%
1-4	32	6	19	19	1	5	51	7	14
5-9	49	15	30	51	13	25	100	28	28
10-14	58	25	43	63	23	37	121	48	40
15-19	38	23	67	52	20	38	90	53	59
20-29	38	24	63	67	29	43	105	53	50
30-39	26	20	78	51	31	61	77	51	66
40	42	27	64	69	44	64	111	71	64
Total	283	140	49	372	161	43	655	311	47