

Electronic Supplementary Material

Decreases in both the Seroprevalence of Serum Antibodies and Seroprotection against Japanese Encephalitis Virus among Vaccinated Children

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Supplementary Table S1 Seroprevalence of antibodies against Japanese encephalitis virus detected by ELISA.

Variable	No. of total cases	No. of total seropositive cases ^a (% in this group)	χ^2 value (<i>P</i> value)	No. of male cases	No. of male seropositive cases ^a (% in this group)	χ^2 value (<i>P</i> value)	No. of female cases	No. of female seropositive cases ^a (% in this group)	χ^2 value (<i>P</i> value)
Overall	300	138 (46%)	-						
Gender									
Male	142	65 (46%)	0.006 (1.000) ^b						
Female	158	73 (46%)							
Year post-booster vaccination^c									
0.5–1.5	17	14 (82%)	7.447 (0.006)^d	5	4 (80%)	3.979 (0.049)^d	12	10 (83%)	3.507 (0.064) ^d
1.5–2.5	34	16 (47%)		17	9 (53%)		17	7 (41%)	
2.5–3.5	62	32 (52%)		24	12 (50%)		38	20 (53%)	
3.5–4.5	58	25 (43%)		29	15 (52%)		29	10 (34%)	
4.5–5.5	46	19 (41%)		21	8 (38%)		25	11 (44%)	
5.5–6.5	40	16 (40%)		23	9 (39%)		17	7 (41%)	
6.5–7.5	23	10 (43%)		11	4 (36%)		12	6 (50%)	
7.5–8.5	20	6 (30%)		12	4 (33%)		8	2 (25%)	

^aAccording to the instructions of the ELISA kit.

^b χ^2 and *P* values were calculated with the Chi-square test. *P* < 0.05 was considered significant.

^cYears post-booster vaccination (by 1-year classes) was defined as the time to the sample collection date on 22 June 2017.

^d χ^2 and *P* values were calculated by linear-by-linear association. *P* < 0.05 was considered significant.

Table S2 Seroprevalence of antibodies against Japanese encephalitis virus detected by PRNT₅₀.

Variable	No. of total cases	No. of total seropositive cases ^a (% in this group)	χ^2 value (<i>P</i> value)	No. of male cases	No. of male seropositive cases ^a (% in this group)	χ^2 value (<i>P</i> value)	No. of female cases	No. of female seropositive cases ^a (% in this group)	χ^2 value (<i>P</i> value)
Overall	300	107 (36%)	-						
Gender									
Male	142	49 (35%)	0.158 (0.718) ^b						
Female	158	58 (37%)							
Years post-booster vaccination^c									
0.5–1.5	17	14 (82%)	10.103 (0.001)^d	5	4 (80%)	3.821 (0.055) ^d	12	10 (83%)	6.190 (0.014)^d
1.5–2.5	34	15 (44%)		17	8 (47%)		17	7 (41%)	
2.5–3.5	62	24 (39%)		24	9 (38%)		38	15 (39%)	
3.5–4.5	58	14 (24%)		29	9 (31%)		29	5 (17%)	
4.5–5.5	46	17 (37%)		21	7 (33%)		25	10 (40%)	
5.5–6.5	40	11 (28%)		23	5 (22%)		17	6 (35%)	
6.5–7.5	23	7 (30%)		11	3 (27%)		12	4 (33%)	
7.5–8.5	20	5 (25%)		12	4 (33%)		8	1 (13%)	

^aDefined as a PRNT₅₀≥1:10 using Vero cells.

^b χ^2 and *P* values were calculated using the Chi-square test. *P* < 0.05 was considered significant.

^cYears post-booster vaccination (by 1-year classes) was defined as the time to the sample collection date on 22 June 2017.

^d χ^2 and *P* values were calculated using the linear-by-linear association. *P* < 0.05 was considered significant.

Table S3 Categories of anti-JEV nAb titres against Japanese encephalitis virus.

Variable	No. of total cases	Seronegative ^a (% in this group)	Low ^a (% in this group)	Medium ^a (% in this group)	High ^a (% in this group)	Geometric mean titre
Years post-booster vaccination^b						
0.5–1.5	17	3 (18%)	10 (59%)	4 (23%)	0 (0%)	1:28.9
1.5–2.5	34	19 (56%)	12 (35%)	3 (9%)	0 (0%)	1:12.8
2.5–3.5	62	38 (61%)	20 (32%)	4 (7%)	0 (0%)	1:10.8
3.5–4.5	58	44 (76%)	14 (24%)	0 (0%)	0 (0%)	1:7.8
4.5–5.5	46	29 (63%)	15 (33%)	2 (4%)	0 (0%)	1:10
5.5–6.5	40	29 (72%)	9 (23%)	2 (5%)	0 (0%)	1:8.4
6.5–7.5	23	16 (70%)	7 (30%)	0 (0%)	0 (0%)	1:8.3
7.5–8.5	20	15 (75%)	5 (25%)	0 (0%)	0 (0%)	1:7.3

^aDefined as the PRNT₅₀ using Vero cells. Seronegative = titre range < 1:10, low = titre range 1:10-1:40, medium = titre range 1:40-1:160, high = titre range > 1:160

^bYears post-booster vaccination (by 1-year classes) were defined as the time to the sample collection date on 22 June 2017.