

**Table S3. Calculation of indoor and outdoor exposure risk for users and non-users of LLINs in Pha**

**Man.**

\* PERSONAL PROTECTION PROVIDED BY AN LLIN (Mean of Okumu et al 2011 Malaria Journal 10: 208) = 0.937

*An. maculatus s.l.:*

Hours	IHLC biting rate (b <sub>pn</sub> )	OHLC biting rate (b <sub>pn</sub> )	Proportion of the population indoors	Indoor exposure without use of ITN	Indoor exposure with use of ITN*	Outdoor exposure	Indoor exposure prevented by ITN
6pm-7pm	0.08	0.42	0.66	0.06	0.00	0.14	0.05
7pm-8pm	0.33	0.92	0.74	0.25	0.02	0.24	0.23
8pm-9pm	0.33	0.25	0.88	0.29	0.02	0.03	0.27
9pm-10pm	0.42	0.00	0.94	0.39	0.02	0.00	0.37
10pm-11pm	0.17	0.33	0.86	0.14	0.01	0.05	0.13
11pm-12pm	0.08	0.00	1.00	0.08	0.01	0.00	0.08
12pm-1am	0.00	0.08	1.00	0.00	0.00	0.00	0.00
1am-2am	0.08	0.00	1.00	0.08	0.01	0.00	0.08
2am-3am	0.00	0.08	1.00	0.00	0.00	0.00	0.00
3am-4am	0.00	0.00	1.00	0.00	0.00	0.00	0.00
4am-5am	0.00	0.08	1.00	0.00	0.00	0.00	0.00
5am-6am	0.17	0.42	0.97	0.16	0.01	0.01	0.15
<b>ALL NIGHT TOTAL</b>				<b>1.46</b>	<b>0.09</b>	<b>0.47</b>	<b>1.37</b>

Proportion of human exposure occurring indoors for non-users of LLINs ( $\pi_i$ ): 0.76

Proportion of human exposure occurring indoors for users of LLINs ( $\pi_{i,n}$ ): 0.16

*An. minimus s.l.:*

Hours	IHLC biting rate (bpn)	OHLC biting rate (bpn)	Proportion of the population indoors	Indoor exposure without use of ITN	Indoor exposure with use of ITN*	Outdoor exposure	Indoor exposure prevented by ITN
6pm-7pm	0.00	0.08	0.66	0.00	0.00	0.03	0.00
7pm-8pm	0.17	0.17	0.74	0.12	0.01	0.04	0.12
8pm-9pm	0.17	0.25	0.88	0.15	0.01	0.03	0.14
9pm-10pm	0.42	0.58	0.94	0.39	0.02	0.04	0.37
10pm-11pm	1.25	1.17	0.86	1.08	0.07	0.16	1.01
11pm-12pm	0.42	0.25	1.00	0.42	0.03	0.00	0.39
12pm-1am	0.25	0.42	1.00	0.25	0.02	0.00	0.23
1am-2am	1.17	0.42	1.00	1.17	0.07	0.00	1.09
2am-3am	0.58	0.08	1.00	0.58	0.04	0.00	0.55
3am-4am	0.42	0.08	1.00	0.42	0.03	0.00	0.39
4am-5am	0.33	0.17	1.00	0.33	0.02	0.00	0.31
5am-6am	0.50	0.58	0.97	0.49	0.03	0.02	0.45
ALL NIGHT TOTAL				<b>5.39</b>	<b>0.34</b>	<b>0.32</b>	<b>5.05</b>

Proportion of human exposure occurring indoors for non-users of LLINs ( $\pi_i$ ): 0.94

Proportion of human exposure occurring indoors for users of LLINs ( $\pi_{i,n}$ ): 0.52