Risk factor		aOR	[95% Conf. Interval]	p-value
District	Paktha	reference	-	-
	Muang Et	1.70	0.51 to 5.65	0.386
	Nambak	0.33	0.070 to 1.61	0.171
	Khua	1.74	0.63 to 4.75	0.282
Wealth quantile	highest	reference	-	-
	middle high	2.11	0.58 to 7.61	0.254
	middle low	1.59	0.41 to 6.11	0.499
	lowest	3.38	0.95 to 12.00	0.060
Does HH own any type of net (bednet or hammock) to sleep under?	Yes	reference	-	-
	Νο	10.32	2.07 to 51.53	0.004
Have you ever heard of malaria?	Yes	reference	-	-
	No	0.73	0.32 to 1.65	0.447
	Don't know	4.21	1.06 to 16.78	0.041
Source of malaria knowledge	Not brochure or poster	reference	-	-
	Brochure or poster	14.05	2.04 to 96.96	0.007
Does anyone in HH go to forest or forest-fringe sites overnight?	No	reference	-	-
	Yes	1.74	0.71 to 4.26	0.222
Any cases in village outside household?	No	reference	-	-
	Yes	2.99	1.37 to 6.52	0.006
Any other cases in household?	No	reference	-	-
	Yes	12.04	4.97 to 29.19	< 0.001
Sex	male	reference	-	-
	female	1.18	0.61 to 2.27	0.632
Age in years	continuous	0.996	0.98 to 1.01	0.652

Additional file 3:. Multivariable Firth penalized-likelihood logistic model for PCR-based malaria parasite positivity (all species), Northern Lao PDR (N= 5,082). Note: risk factors with p < 0.05 are in boldface; HH= household.