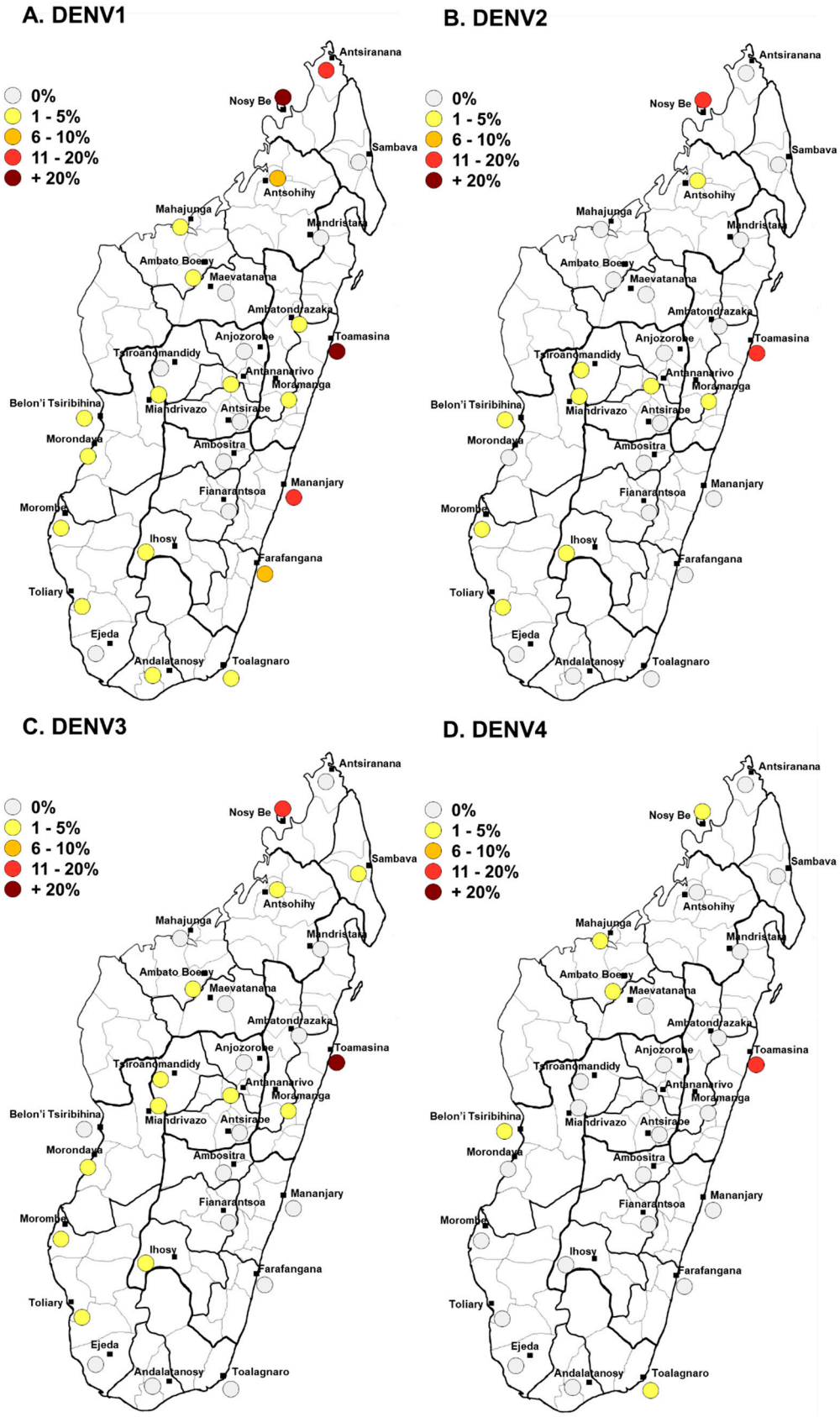
Supplementary Figure S1. Spatial distribution of seropositivity for the different DENV serotypes. (A) DENV1 serotype (B) DENV2 serotype (C) DENV3 serotype (D) DENV4 serotype.



Supplementary Table S1. Univariate analysis results for Dengue virus seropositivity.

Logistic regression analysis was run using xtlogit command and variables with p-value less than or equal to 0.2 (in bold) were selected for multivariate analysis. Variable "General environment" was used in multivariate models over "Distance to SHC" as it was deemed to be more representative of the direct environment. Due to possible confusion bias and incoherent results, "Frequent use of bed net" variable was excluded from multivariate models.

Tested variable	N tested[1]	Nb pos (%)	IC pos	OR	IC95% OR	p-value
Age category						
18-24 years	388	26 (6.7)	3.5-9.9	1		
25-34 years	434	28 (6.5)	3.6-9.3	0.99	0.52-1.87	1.000
35-44 years	360	23 (6.4)	3.1-9.6	1.0	0.51-1.96	
≥45 years	498	33 (6.6)	4.0-9.3	0.99	0.53-1.85	
Sex						
Male	829	51 (6.2)	4.3-8.0	1		
Female	851	59 (6.9)	4.4-9.5	1.20	0.77-1.88	0.4188
Distance from SHC						
Close to SHC	840	45 (5.4)	3.1-7.6	1		
Distant from SHC	840	65 (7.7)	4.5-10.9	1.58	0.76-3.25	**0.2168**
General environment						
Rural	714	61 (8.5)	4.9-12.2	1		
Urban	516	28 (5.4)	2.3-8.6	0.54	0.23-1.24	0.2669
Peri-urban	450	21 (4.7)	2.5-6.9	0.58	0.25-1.35	
MFA Factor 1	1 680			1.17	0.86-1.61	0.3209
MFA Factor 2	1 680			1.87	1.36-2.59	**0.0001**
MFA Factor 3	1 680			1.17	0.77-1.77	0.4589
MFA Factor 4	1 680			2.19	1.45-3.30	**0.0002**
Education level						
Never been to school	214	14 (6.7)	3.1-10.2	1		
Primary school level	626	47 (7.5)	4.8-10.2	1.16	0.56-2.40	
Secondary school	500	34 (6.8)	4.1-9.5	1.12	0.51-2.45	0.5911
High school	260	12 (4.6)	1.9-7.3	0.77	29.6-1.99	
University	80	3 (3.8)	0.0-7.9	0.44	0.10-0.52	
Outdoor profession						
No	756	48 (6.3)	3.8-8.9	1		
Yes	924	62 (6.7)	4.3-9.1	1.13	0.67-1.93	0.6462
Smoker						
No	1 336	93		1		
Yes	344	17		0.47	0.25-0.88	**0.0185**
Frequent use of bed nets						
No	466	18 (3.9)	1.6-6.1	1		
Yes	1 214	92 (7.6)	5.4-9.8	1.9	1.0-3.6	**0.0451**
Frequent work in rice fields						
No	911	77 (8.5)	5.5-11.4	1		
Yes	769	33 (4.3)	2.6-6.0	0.41	0.23-0.72	**0.0021**
Frequent activities in the forest						
No	1 084	58 (5.4)	3.4-7.3	1		
Yes	596	52 (8.7)	5.4-12.0	1.49	0.88-2.53	**0.1380**

Frequent contacts to water bodies (fishing, swimming)						
No	1 564	107 (6.8)	4.8-8.9	1		
Yes	116	3 (2.6)	0.0-5.4	0.57	0.16-2.08	0.3933
Electricity in the house						
No	1 114	75 (6.7)	4.2-9.2	1		
Yes	564	35 (6.2)	3.1-9.3	0.86	0.44-1.67	0.6596
Construction materials of the house						
"Hard" materials (bricks, wood, tin)	1 085	61 (5.6)	3.8-7.5	1		
Contains "soft" materials (cob or vegetable house)	593	49 (8.3)	4.9-11.6	1.58	0.91-2.76	**0.1038**
Running water in the house						
No	1 593	108 (6.8)	4.7-8.8	1		
Yes	87	2 (2.3)	0.0-5.1	0.28	0.05-1.64	**0.1589**
Smoke in the house when cooking						
No	1 110	62 (5.5)	3.7-7.5	1		
Yes	568	48 (8.5)	5.1-11.8	1.70	1.02-2.83	**0.0400**
House targeted for Indoor Residual Spraying program (last 12 months)						
No	1 190	103 (8.7)	6.1-11.3	1		
Yes	488	7 (1.4)	0.3-2.6	0.17	0.07-0.44	**0.0003**
Biological wastes next to the house						
No	279	15 (5.4)	2.2-8.5	1		
Yes	1 399	95 (6.8)	4.6-9.0	1.02	0.49-2.09	0.9665
Non-biological wastes next to the house						
No	457	18 (3.9)	2.0-5.9	1		
Yes	1 221	92 (7.5)	5.0-10.0	1.56	0.82-2.94	**0.1732**
Cultures in the 10m around the house						
No	736	31 (4.2)	2.7-5.7	1		
Yes	942	79 (8.4)	5.3-11.5	1.64	0.93-2.90	**0.0900**
Water in the 10m around the house						
No	1 436	90 (6.3)	4.3-8.3	1		
Yes	242	20 (8.3)	2.6-13.9	1.65	0.80-3.41	**0.1740**

Supplementary Table S2. Univariate analysis results for Chikungunya virus seropositivity.

Logistic regression analysis was run using xtlogit command and variables with p-value less than or equal to 0.2 (in bold) were selected for multivariate analysis. Variable "General environment" was used in multivariate models over "Distance to SHC" as it was deemed to be more representative of the direct environment. Due to possible confusion bias and incoherent results, "Frequent use of bed net" variable was excluded from multivariate models.

Tested variable	N tested[1]	Nb pos (%)	IC pos	OR	IC95% OR	p-value
Age category						
18-24 years	388	52 (13.4)	8.4-18.4	1		
25-34 years	434	56 (12.9)	7.6-18.2	1.08	0.56-2.08	0.8143
35-44 years	360	56 (15.6)	9.9-21.2	1.30	0.66-2.54	
≥45 years	498	66 (13.3)	8.3-18.2	0.96	0.51-1.82	
Sex						
Male	829	109 (13.1)	8.7-17.6	1		
Female	851	121 (14.2)	9.8-18.6	0.99	0.63-1.57	0.9679
Distance from SHC						
Close to SHC	840	124 (14.8)	9.8-19.7	1		
Distant from SHC	840	106 (12.6)	5.9-19.3	0.45	0.14-1.44	**0.1767**
General environment						
Rural	714	104		1		
Urban	450	21		2.69	0.78-9.32	**0.0158**
Peri-urban	516	105		0.39	0.09-1.62	
MFA Factor 1	1 680			0.92	0.55-1.54	0.7531
MFA Factor 2	1 680			2.80	1.52-5.16	**0.0009**
MFA Factor 3	1 680			0.51	0.26-1.01	**0.0541**
MFA Factor 4	1 680			2.29	1.06-4.93	**0.0343**
Education level						
Never been to school	214	26 (12.1)	4.2-20.1	1		
Primary school level	626	80 (12.8)	7.5-18.1	0.81	0.37-1.78	
Secondary school	500	81 (16.2)	10.8-21.6	1.01	0.43-2.42	0.8993
High school	260	27 (10.4)	6.0-14.8	0.75	0.28-2.02	
University	80	16 (20.0)	10.7-29.3	0.96	0.29-3.16	
Outdoor profession						
No	756	134 (17.7)	12.6-22.8	1		
Yes	924	96 (10.4)	5.5-15.3	0.55	0.28-1.05	**0.0711**
Smoker						
No	1 336	179 (13.4)	9.2-17.6	1		
Yes	344	51 (14.8)	9.2-20.5	1.48	0.84-2.61	**0.1725**
Frequent use of bed nets						
No	466	34 (7.3)	3.8-10.8	1		
Yes	1 214	196 (16.1)	11.3-21.0	1.84	0.95-3.56	**0.0689**
Frequent work in rice fields						
No	911	162 (17.8)	12.8-22.7	1		
Yes	769	68 (8.8)	3.6-14.1	0.47	0.24-0.94	**0.0312**

Frequent activities in the forest						
No	1 084	133 (12.3)	8.5-16.1	1		
Yes	596	97 (16.3)	8.9-23.7	1.80	0.96-3.40	**0.0689**
Frequent contacts to water bodies (fishing, swimming)						
No	1 564	208 (13.3)	9.5-17.1	1		
Yes	116	22 (19.0)	0.0-41.8	1.71	0.47-6.25	0.4162
Electricity in the house						
No	1 114	122 (11.0)	5.8-16.1	1		
Yes	564	108 (19.1)	12.8-25.5	1.19	0.56-2.55	0.6452
Construction materials of the house						
"Hard" materials (bricks, wood, tin)	1 085	148 (13.6)	9.4-17.9	1		
Contains "soft" materials (cob or vegetable house)	593	82 (13.8)	7.9-19.7	0.61	0.32-1.18	**0.1432**
Running water in the house						
No	1 593	218 (13.7)	9.4-18.0	1		
Yes	87	12 (13.8)	3.5-24.1	1.31	0.35-4.83	0.6896
Smoke in the house when cooking						
No	1 110	168 (15.1)	10.4-19.8	1		
Yes	568	62 (10.9)	6.0-15.8	1.05	0.58-1.89	0.8818
House targeted for anti-mosquito spraying program (last 12 months)						
No	1 190	228 (19.2)	13.7-24.6	1		
Yes	488	2 (0.4)	0.0-1.0	0.02	0.00-0.23	**0.0026**
Biological wastes next to the house						
No	279	34 (12.2)	5.6-18.8	1		
Yes	1 399	196 (14.0)	9.4-18.7	1.29	0.63-2.65	0.4877
Non-biological wastes next to the house						
No	457	25 (5.5)	2.8-8.1	1		
Yes	1 221	205 (16.8)	11.6-21.9	1.95	0.99-3.84	**0.0530**
Cultures in the 10m around the house						
No	736	65 (8.8)	5.1-12.6	1		
Yes	942	165 (17.5)	11.4-23.6	1.07	0.59-1.96	0.8183
Water in the 10m around the house						
No	1 436	182 (12.7)	8.4-17.0	1		
Yes	242	48 (19.8)	10.8-28.9	1.58	0.75-3.33	0.2288

Supplementary Table S3. Univariate analysis results for West Nile virus seropositivity.

Logistic regression analysis was run using xtlogit command and variables with p-value less than or equal to 0.2 (in bold) were selected for multivariate analysis. Variable "General environment" was used in multivariate models over "Distance to SHC" as it was deemed to be more representative of the direct environment. Due to possible confusion bias and incoherent results, "Frequent use of bed net" variable was excluded from multivariate models.

Tested variable	N tested[1]	Nb pos (%)	IC pos	OR	IC95% OR	p-value
Age category						
18-24 years	388	47 (12.1)	8.5-15.8	1		
25-34 years	434	48 (11.3)	8.1-14.5	0.83	0.51-1.35	0.2498
35-44 years	360	51 (14.2)	10.1-18.2	1.33	0.81-2.17	
≥45 years	498	67 13.5)	9.8-17.1	1.17	0.74-1.86	
Sex						
Male	829	106 (12.8)	10.0-15.6	1		
Female	851	108 (12.7)	9.8-15.5	1.06	0.76-1.46	0.7432
Distance from SHC						
Close to SHC	840	71 (8.5)	6.3-10.6	1		
Distant from SHC	840	143 (17.0)	12.8-21.2	2.48	1.49-4.13	**0.0005**
General environment						
Rural	714	118 (16.5)	11.9-21.1	1		
Urban	450	59 (7.2)	4.5-9.9	0.37	0.20-0.68	**0.0052**
Peri-urban	516	37 (13.1)	9.0-17.2	0.79	0.44-1.42	
MFA Factor 1	1 680			1.07	0.84-1.36	0.5736
MFA Factor 2	1 680			1.48	1.15-1.90	**0.0020**
MFA Factor 3	1 680			1.62	1.20-2.17	**0.0014**
MFA Factor 4	1 680			1.09	0.77-1.55	0.6127
Education level						
Never been to school	214	40 (19.0)	13.1-25.0	1		
Primary school level	626	103 (16.5)	12.4-20.6	0.96	0.60-1.54	
Secondary school	500	48 (9.6)	6.7-12.5	0.56	0.33-0.96	**0.0051**
High school	260	22 (8.5)	4.9-12.0	0.52	0.27-1.00	
University	80	1 (1.3)	0.0-3.7	0.07	0.01-52.5	
Outdoor profession						
No	756	69 (9.1)	6.4-11.8	1		
Yes	924	145 (15.7)	12.4-19.0	1.87	1.26-2.77	**0.0019**
		Smoker				
No	1 336	171 (12.8)	10.2-15.4	1		
Yes	344	43 (12.5)	8.8-16.2	0.93	0.62-1.40	0.7214
Frequent use of bed nets						
No	466	32 (6.9)	4.1-9.6	1		
Yes	1 214	182 (15.0)	12.0-18.0	1.86	1.17-2.96	**0.0085**
Frequent work in rice fields						
No	911	95 (10.4)	7.8-13.0	1		
Yes	769	119 (15.5)	11.8-19.2	1.57	1.05-2.34	**0.0268**

Frequent activities in the forest						
No	1 084	108 (10.0)	7.8-12.1	1		
Yes	596	106 (17.8)	13.4-22.5	1.64	1.13-2.37	**0.0089**
Frequent contacts to water bodies (fishing, swimming)						
No	1 564	195 (12.5)	10.0-14.9	1		
Yes	116	19 (16.4)	8.1-24.6	2.12	1.10-4.09	**0.0242**
Electricity in the house						
No	1 114	180 (16.2)	12.8-19.5	1		
Yes	564	34 (6.0)	3.7-8.3	0.33	0.20-0.55	**0.0000**
Construction materials of the house						
"Hard" materials (bricks, wood, tin)	1 085	97 (8.9)	6.9-10.9	1		
Contains "soft" materials (cob or vegetable house)	593	117 (19.7)	15.1-24.4	2.03	1.37-3.02	**0.0005**
Running water in the house						
No	1 593	210 (13.2)	10.6-15.7	1		
Yes	87	4 (4.6)	0.6-8.6	0.43	12.3-1.49	**0.1822**
Smoke in the house when cooking						
No	1 110	140 (12.6)	9.7-15.5	1		
Yes	568	74 (13.0)	9.5-16.5	0.99	0.61-1.62	0.4808
House targeted for anti-mosquito spraying program (last 12 months)						
No	1 190	156 (13.1)	103-15.9	1		
Yes	488	58 (11.9)	7.7-16.1	0.73	0.44-1.21	0.2194
Biological wastes next to the house						
No	279	25 (9.0)	4.9-13.0	1		
Yes	1 399	189 (13.5)	10.8-16.2	1.29	0.74-2.24	0.3634
Non-biological wastes next to the house						
No	457	52 (11.3)	7.4-15.3	1		
Yes	1 221	162 (13.3)	10.5-16.1	0.92	0.60-1.42	0.7118
Cultures in the 10m around the house						
No	736	62 (8.4)	6.1-10.8	1		
Yes	942	152 (16.1)	12.6-19.7	1.62	1.06-2.46	**0.0252**
Water in the 10m around the house						
No	1 436	187 (13.0)	10.4-15.6	1		
Yes	242	27 (11.1)	6.5-15.9	1.00	0.55-1.82	0.9873