

Table 1. Study Population Characteristics and Distribution of PCR Positives by Species. Weighted counts and percentages for all individuals positive for each species of malaria. Weights applied are DHS sampling weights, propensity score weights, and weights to correct for over-selection of high transmission intensity clusters (transmission intensity weights). Characteristics of the included study population are also shown.

		Pf positive		Pm positive		Po positive		Pv positive		Included study population	
<i>Unweighted counts</i>		1231 (27%)		168 (3.7%)		246 (5.4%)		7.0 (0.0015%)		4595	
<i>Weighted counts</i>		813 (18%)		152 (3.3%)		237 (5.1%)		7.5 (0.0016%)		4616	
Individual level covariates											
		n	%	n	%	n	%	n	%	n	%
Sex of respondent	Male	453.4	56%	89.0	59%	128.1	54%	6.0	80%	2755.4	60%
	Female	359.5	44%	62.9	41%	108.8	46%	1.5	20%	1860.6	40%
Age group (years)	0-15	24.9	3%	1.5	1%	29.5	12%	0.0	0%	121.4	3%
	15-24	114.4	14%	14.2	9%	3.0	1%	0.8	11%	657.8	14%
	25-34	234.3	29%	43.2	28%	42.8	18%	2.8	37%	1450.1	31%
	35-44	167.3	21%	34.6	23%	72.8	31%	0.0	0%	929.9	20%
	45-54	150.3	16%	42.4	24%	50.3	20%	2.4	32%	842.5	18%
	55+	121.5	15%	16.1	11%	38.5	16%	1.5	20%	614.4	13%
Wealth Quintile	Poorest	200.3	25%	24.1	0.16	36.7	16%	2.4	33%	694.4	15%
	Poorer	163.4	20%	32.4	0.21	34.3	14%	0.3	4%	820.4	18%
	Middle	161.4	20%	29.5	0.19	34.8	15%	0.0	0%	828.3	18%
	Richer	166.7	21%	35.8	0.24	53.0	22%	4.7	63%	1027.5	22%
	Richest	121.0	15%	30.1	0.20	78.0	33%	0.0	0%	1245.5	27%
Education	None/preschool	190.0	23%	39.0	26%	40.1	17%	5.1	68%	907.2	20%
	Primary	520.7	64%	92.4	61%	140.4	59%	2.4	32%	2779.0	60%
	Secondary	72.5	9%	11.6	8%	45.2	19%	0.0	0%	723.7	16%
	Higher	29.5	4%	8.9	6%	11.2	5%	0.0	0%	205.1	4%
Owns livestock, herds, or farm animals	No	354.3	44%	71.7	47%	102.6	43%	4.8	64%	2067.7	45%
	Yes	458.6	56%	80.2	53%	134.3	57%	2.7	36%	2548.3	55%
Source of drinking water	Unpipied	756.6	93%	138.5	91%	193.1	82%	7.5	100%	3911.7	85%
	Piped	55.3	7%	13.4	9%	43.8	18%	0.0	0%	701.8	15%
Household bed net	No	134.6	17%	31.9	21%	36.5	15%	3.3	44%	797.7	17%
	Yes	678.3	83%	120.0	79%	200.4	85%	4.2	56%	3818.3	83%
Slept under LLIN last night	No	257.2	32%	59.1	39%	63.5	27%	3.3	44%	1457.8	32%

Insecticide-treated household net	Yes	555.6	68%	92.8	61%	173.4	73%	4.2	56%	3158.2	68%
	No	0.9	0%	0.0	0%	2.6	1%	0.0	0%	6.7	0%
1 bed net per 1.8 household members	Yes	616.7	76%	115.8	76%	180.4	76%	4.2	56%	3527.0	76%
	Missing data	195.2	24%	36.1	24%	53.9	23%	3.3	44%	1082.3	23%
	No	291.2	36%	61.0	41%	101.8	43%	3.3	44%	1905.0	41%
	Yes	520.9	64%	88.6	59%	135.1	57%	4.2	56%	2699.2	59%

Cluster level covariates

Region	Kigali City	70.5	9%	14.3	9%	33.2	14%	1.2	16%	699.4	15%
	South	332.8	41%	32.5	21%	75.5	32%	1.2	16%	1176.2	25%
	West	74.7	9%	37.9	25%	33.2	14%	3.0	40%	1026.3	22%
	North	42.3	5%	29.4	19%	19.1	8%	0.0	0%	776.0	17%
	East	292.6	36%	37.9	25%	75.9	32%	2.1	28%	938.1	20%
Place of residence	Urban	95.9	12%	29.3	19%	55.9	24%	1.2	16%	1096.0	24%
	Rural	717.0	88%	122.6	81%	181.0	76%	6.3	84%	3520.0	76%
Elevation (m)	500 - 1000	3.3	0%	0.8	1%	0.0	0%	0.0	0%	15.4	0%
	2 1001 - 1500	352.2	43%	47.8	31%	77.3	33%	3.3	44%	1263.3	27%
	3 1501 - 2000	412.8	51%	67.2	44%	121.0	51%	1.2	16%	2449.8	53%
	4 2000 - 2500	41.2	5%	34.3	23%	38.6	16%	1.5	20%	821.5	18%
	5 > 2500	3.3	0%	1.9	1%	0.0	0%	1.5	20%	66.0	1%
Month of data collection	Jan-15	164.0	20%	28.3	19%	42.8	18%	0.0	0%	1066.8	23%
	Feb-15	186.1	23%	26.3	17%	38.8	16%	2.0	27%	780.0	17%
	Mar-15	228.2	28%	39.5	26%	76.0	32%	2.7	37%	1100.1	24%
	Apr-15	5.5	1%	1.3	1%	1.5	1%	0.0	0%	32.3	1%
	Nov-14	95.7	9%	21.0	11%	16.9	6%	1.2	12%	456.8	8%
	Dec-14	133.4	16%	35.5	23%	60.9	26%	1.5	20%	1180.0	26%
Landcover	Moderate forest	5.8	0.01	6.4	4%	13.3	6%	0.0	0%	304.2	7%
	Sparse forest	239.6	0.29	2.3	2%	0.3	0%	0.0	0%	27.7	1%
	Woodland	508.5	0.63	33.9	22%	59.2	25%	1.3	17%	774.8	17%
	Closed grassland	33.7	0.04	100.4	66%	149.2	63%	6.2	83%	3099.2	67%
	(Perennial) cropland	25.1	0.03	8.9	6%	15.0	6%	0.0	0%	410.1	9%

Cluster level averages

Pf positive Pm positive Po positive Pv positive overall study

	<i>mean</i>	<i>SE</i>	<i>mean</i>	<i>SE</i>	<i>mean</i>	<i>SE</i>	<i>mean</i>	<i>SE</i>	<i>mean</i>	<i>SE</i>
Proportion of cluster with household bed nets	0.853	0.011	0.787	0.023	0.855	0.018	0.680	0.073	0.827	0.008
Proportion of cluster that slept under a net last night	0.697	0.014	0.631	0.027	0.741	0.024	0.560	0.064	0.684	0.010
Current month's average daily max temp (degrees C)	27.16	0.1	26.40	0.2	26.84	0.2	25.96	1.0	26.39	0.05
Prior month's precipitation (mm)	80.60	2.4	91.05	4.2	86.02	4.7	94.51	21.1	90.38	1.38