

## Supplementary Tables

**Supplementary Table S1: National-level demographic metrics and G6PDd allele frequency and population estimates (in 1,000s)**

Country	Total pop <sup>1,2</sup>	Sex-ratio <sup>3</sup>	Surveys	G6PDd allele freq (IQR) <sup>4</sup>	G6PDd males <sup>1</sup> (IQR) <sup>4</sup>	Homozygotes <sup>1,5</sup>	G6PDd females <sup>1</sup> (IQR) <sup>4</sup>
<b>African MECs<sup>6</sup></b>							
Angola	18,994	98.1	2	15.3% (10.4 - 22.2)	1,435 (980 - 2,091)	223	947 (621 - 1,468)
Benin	9,219	97.3	0	23.0% (17.0 - 30.1)	1,044 (772 - 1,366)	246	706 (490 - 984)
Botswana†	1,977	101.7	2	3.6% (2.0 - 6.5)	36 (20 - 65)	1	19 (10 - 37)
Burkina Faso	16,250	98.5	0	9.4% (5.6 - 15.0)	757 (455 - 1,206)	72	452 (256 - 772)
Burundi	8,519	96.3	0	7.2% (3.3 - 15.2)	301 (137 - 635)	23	169 (73 - 394)
Cameroon	19,957	99.7	8	12.5% (9.9 - 15.5)	1,248 (990 - 1,543)	157	750 (568 - 967)
Cape Verde†	513	98.0	0	0.1% (0.0 - 0.5)	0 (0 - 1)	0	0 (0 - 1)
Central African Republic	4,506	97.1	0	9.2% (4.7 - 17.3)	203 (103 - 383)	19	126 (59 - 258)
Chad	11,509	98.9	0	13.4% (8.5 - 20.2)	767 (488 - 1,155)	104	496 (294 - 799)
Comoros	691	101.4	0	14.0% (5.8 - 30.4)	49 (20 - 106)	7	29 (10 - 71)
Congo	3,760	100.2	1	22.5% (17.3 - 29.6)	424 (326 - 557)	95	277 (205 - 387)
Cote d'Ivoire	21,571	103.9	0	15.0% (8.5 - 25.5)	1,654 (931 - 2,800)	240	991 (514 - 1,843)
Democratic Republic of the Congo	67,829	98.9	6	19.2% (14.7 - 25.1)	6,488 (4,974 - 8,459)	1,261	4,425 (3,270 - 6,066)
Djibouti	879	100.1	0	0.8% (0.3 - 2.7)	4 (1 - 12)	0	2 (1 - 6)
Equatorial Guinea	693	105.2	0	11.4% (6.1 - 20.1)	40 (22 - 72)	4	22 (11 - 43)
Eritrea	5,204	97.1	1	4.0% (2.7 - 6.1)	103 (68 - 157)	4	56 (36 - 88)
Ethiopia	84,996	99.1	6	1.0% (0.7 - 1.5)	422 (281 - 642)	4	218 (142 - 338)
Gabon	1,501	100.6	0	12.3% (6.0 - 23.4)	92 (45 - 176)	11	56 (25 - 117)
Ghana	24,339	103.6	2	19.6% (14.2 - 27)	2,429 (1,764 - 3,341)	460	1,498 (1,031 - 2,194)
Guinea	10,323	102.1	0	11.7% (7.4 - 18.8)	611 (385 - 982)	70	357 (214 - 621)
Guinea-Bissau	1,647	98.3	0	8.4% (4.4 - 15.3)	68 (36 - 124)	6	39 (19 - 76)
Kenya	40,847	99.8	45	11.3% (9.2 - 13.7)	2,310 (1,880 - 2,805)	262	1,377 (1,092 - 1,725)
Liberia	4,102	101.0	1	9.5% (5.2 - 16.9)	196 (107 - 348)	19	112 (58 - 216)
Madagascar	20,146	99.4	1	19.4% (11.5 - 30.3)	1,952 (1,154 - 3,046)	382	1,301 (711 - 2,212)
Malawi	15,690	100.1	0	20.8% (10.2 - 36.4)	1,629 (799 - 2,858)	338	1,067 (468 - 2,105)
Mali	13,362	99.8	3	12.2% (8.6 - 17.3)	813 (574 - 1,156)	99	499 (335 - 751)
Mauritania	3,359	101.0	0	9.6% (4.6 - 18.5)	162 (78 - 312)	15	95 (43 - 205)
Mayotte	199	99.5	0	12.4% (3.9 - 32.7)	12 (4 - 32)	2	7 (2 - 22)

Country	Total pop <sup>1,2</sup>	Sex-ratio <sup>3</sup>	Surveys	G6PDd allele freq (IQR) <sup>4</sup>	G6PDd males <sup>1</sup> (IQR) <sup>4</sup>	Homozygotes <sup>1,5</sup>	G6PDd females <sup>1</sup> (IQR) <sup>4</sup>
Mozambique	23,418	94.8	4	21.1% (14.7 - 29.8)	2,404 (1,670 - 3,394)	535	1,703 (1,112 - 2,587)
Namibia†	2,212	98.7	5	2.8% (1.8 - 4.6)	31 (20 - 51)	1	17 (11 - 29)
Niger	15,885	101.2	0	5.3% (2.6 - 10.3)	426 (211 - 819)	22	236 (111 - 497)
Nigeria	158,255	102.5	6	16.9% (14.1 - 20.2)	13,515 (11,317 - 16,185)	2,224	8,464 (6,898 - 10,477)
Rwanda	10,277	96.4	0	5.8% (3.3 - 10.1)	294 (169 - 509)	18	163 (90 - 298)
Sao Tome and Principe†	165	98.1	0	7.4% (2.3 - 20.8)	6 (2 - 17)	0	3 (1 - 11)
Senegal	12,866	98.4	1	15.1% (11.3 - 20.3)	966 (720 - 1,295)	148	598 (424 - 847)
Sierra Leone	5,837	95.5	0	7.9% (3.4 - 17.0)	226 (98 - 485)	19	132 (53 - 313)
Somalia	9,359	98.4	0	3.1% (1.2 - 7.7)	145 (56 - 356)	5	80 (29 - 215)
South Africa†	50,523	98.1	0	3.3% (1.8 - 6.2)	830 (438 - 1,563)	28	482 (242 - 960)
Sudan	43,204	101.5	8	15.3% (12.7 - 18.2)	3,322 (2,763 - 3,964)	499	2,118 (1,691 - 2,623)
Swaziland†	1,195	96.7	0	8.7% (4.6 - 15.5)	51 (27 - 91)	5	29 (15 - 57)
The Gambia	1,751	97.6	2	11.5% 8.1 - 15.9)	99 (70 - 138)	12	58 (39 - 85)
Togo	6,774	98.1	3	21.2% (16.7 - 26.6)	712 (560 - 893)	154	463 (346 - 616)
Uganda	33,798	99.9	12	14.5% (12.8 - 16.5)	2,457 (2,162 - 2,785)	358	1,468 (1,263 - 1,706)
United Republic of Tanzania	45,028	99.8	10	16.4% (11.9 - 22.3)	3,685 (2,671 - 5,019)	605	2,372 (1,643 - 3,431)
Zambia	13,254	100.5	1	21.0% (14.6 - 29.4)	1,393 (971 - 1,950)	291	923 (606 - 1,393)
Zimbabwe	12,645	97.2	2	14.8% (11.2 - 19.4)	924 (698 - 1,212)	141	586 (421 - 808)
<b>American MECs<sup>6</sup></b>							
Argentina†	40,668	95.8	1	0.9% (0.5 - 1.6)	169 (98 - 313)	2	92 (51 - 181)
Belize†	313	97.3	0	2.2% (0.9 - 5.1)	3 (1 - 8)	0	2 (1 - 4)
Bolivia	9,995	99.5	0	0.2% (0.1 - 0.8)	11 (3 - 41)	0	6 (2 - 21)
Brazil	195,453	96.9	14	4.8% (3.6 - 6.5)	4,647 (3,501 - 6,213)	232	2,758 (1,994 - 3,897)
Colombia	46,305	96.8	2	4.9% (3.4 - 7.3)	1,118 (764 - 1,667)	57	638 (419 - 1,008)
Costa Rica†	4,640	103.1	3	0.4% (0.2 - 1.0)	9 (4 - 23)	0	4 (2 - 11)
Dominican Republic†	10,225	100.7	0	3.0% (0.9 - 10.0)	154 (44 - 511)	5	79 (22 - 288)
Ecuador	13,775	100.3	2	4.2% (2.4 - 7.5)	292 (166 - 519)	12	157 (87 - 294)
El Salvador†	6,201	90.5	1	3.3% (2.4 - 4.8)	98 (69 - 140)	4	56 (39 - 81)
French Guiana	231	100.3	0	0.7% (0.3 - 1.6)	1 (0 - 2)	0	0 (0 - 1)
Guatemala	14,378	95.1	0	2.7% (1.5 - 5.1)	189 (103 - 355)	5	102 (54 - 199)
Guyana	761	100.9	0	3.0% (1.4 - 6.4)	11 (5 - 25)	0	6 (3 - 13)
Haiti	10,188	98.4	0	5.2% (1.9 - 13.2)	261 (94 - 665)	14	141 (48 - 395)
Honduras	7,609	99.9	0	2.9% (1.5 - 5.8)	111 (55 - 219)	3	58 (28 - 118)

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Mexico†	110,568	97.3	25	1.0% (0.8 - 1.3)	555 (430 - 733)	6	291 (222 - 387)
Nicaragua†	5,822	97.9	0	1.5% (0.6 - 3.6)	43 (18 - 103)	1	22 (9 - 56)
Panama†	3,508	101.5	0	0.9% (0.4 - 2.5)	16 (6 - 44)	0	8 (3 - 22)
Paraguay†	6,462	101.8	0	3.2% (1.1 - 8.8)	105 (34 - 288)	3	54 (17 - 163)
Peru	29,493	100.4	3	0.2% (0.1 - 0.6)	33 (13 - 84)	0	17 (6 - 43)
Suriname	524	100.6	5	0.7% (0.4 - 1.3)	2 (1 - 3)	0	1 (1 - 2)
Venezuela	29,044	100.7	0	8.6% (4.0 - 18.0)	1,251 (583 - 2,617)	107	732 (316 - 1,701)
<b>Eurasian MECs<sup>6</sup></b>							
Afghanistan	29,117	107.2	5	7.4% (5.6 - 9.8)	1,115 (845 - 1,470)	77	599 (436 - 833)
Azerbaijan†	8,932	97.8	17	10.2% (8.9 - 11.7)	452 (393 - 518)	47	267 (228 - 314)
Bangladesh	164,424	102.6	0	3.8% (2.4 - 5.9)	3,168 (2,002 - 4,942)	117	1,624 (1,007 - 2,636)
Bhutan†	723	112.5	0	5.9% (3.6 - 9.6)	23 (14 - 37)	1	11 (6 - 18)
Cambodia	15,056	95.8	11	14.3% (11.8 - 17.2)	1,055 (871 - 1,268)	158	653 (522 - 811)
China†	1,381,796	108.0	11	4.7% (3.5 - 6.8)	33,675 (25,014 - 48,717)	1,464	18,555 (13,427 - 27,859)
Dem People's Rep of Korea†	23,963	96.3	0	0.1% (0.0 - 0.4)	10 (2 - 42)	0	5 (1 - 22)
Georgia†	4,221	89.0	2	1.1% (0.7 - 1.7)	21 (14 - 33)	0	12 (8 - 19)
India	1,209,105	106.8	45	8.0% (6.9 - 9.3)	50,009 (43,246 - 57,985)	3,748	27,708 (23,452 - 32,947)
Indonesia	232,544	99.5	33	7.1% (5.3 - 9.4)	8,204 (6,180 - 10,901)	583	4,856 (3,484 - 6,756)
Iran (Islamic Republic of)†	75,084	103.0	12	11.8% (9.9 - 14.1)	4,510 (3,788 - 5,356)	518	2,661 (2,186 - 3,256)
Iraq†	31,443	100.6	1	10.6% (8.1 - 13.5)	1,669 (1,279 - 2,130)	176	970 (720 - 1,297)
Korea, Rep of†	48,517	99.4	0	0.2% (0.1 - 0.6)	50 (17 - 145)	0	24 (8 - 72)
Kyrgyzstan†	5,545	97.4	0	0.3% (0.1 - 1.2)	9 (3 - 33)	0	5 (1 - 17)
Lao People's Democratic Republic	6,434	99.6	1	15.6% (11.6 - 20.5)	500 (372 - 657)	78	315 (224 - 437)
Malaysia†	27,949	103.0	12	8.0% (6.6 - 9.6)	1,129 (942 - 1,359)	87	627 (506 - 782)
Myanmar	50,503	97.2	7	6.1% (4.1 - 9.3)	1,523 (1,028 - 2,309)	96	880 (577 - 1,384)
Nepal	29,950	98.4	0	5.3% (2.9 - 9.4)	786 (436 - 1,390)	42	434 (230 - 814)
Pakistan	189,875	103.4	8	15.0% (10.8 - 20.4)	14,495 (10,393 - 19,648)	2,106	8,900 (5,984 - 13,089)
Papua New Guinea	6,887	104.1	34	7.4% (6.0 - 9.3)	261 (212 - 325)	19	143 (114 - 185)
Philippines†	93,617	100.7	636	2.5% (2.4 - 2.5)	1,151 (1,117 - 1,187)	28	580 (556 - 604)
Saudi Arabia†	26,207	124.0	19	12.4% (10.4 - 14.9)	1,794 (1,511 - 2,161)	179	899 (741 - 1,113)
Solomon Islands†	536	107.1	41	22.3% (15.7 - 30.9)	62 (43 - 86)	13	38 (25 - 56)
Sri Lanka†	20,410	97.5	84	2.9% (2.6 - 3.3)	291 (258 - 331)	9	161 (140 - 188)
Tajikistan†	7,078	96.9	0	0.8% (0.4 - 1.9)	29 (12 - 66)	0	15 (6 - 34)

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Thailand†	68,141	96.7	20	13.6% (11.9 - 15.5)	4,544 (3,981 - 5,188)	638	2,830 (2,428 - 3,312)
Timor-Leste	1,168	104.0	0	5.0% (2.5 - 9.7)	29 (15 - 58)	1	15 (7 - 31)
Turkey†	75,699	99.5	79	3.8% (3.0 - 4.9)	1,437 (1,128 - 1,850)	55	783 (601 - 1,034)
Uzbekistan†	27,790	98.8	0	1.0% (0.4 - 2.4)	132 (53 - 330)	1	68 (27 - 179)
Vanuatu†	246	103.8	17	8.0% (6.9 - 9.3)	10 (9 - 12)	1	5 (4 - 6)
Viet Nam†	89,016	97.7	6	8.9% (6.0 - 13.9)	3,902 (2,625 - 6,102)	354	2,310 (1,488 - 3,922)
Yemen	24,324	101.3	0	4.6% (1.9 - 10.9)	565 (238 - 1,329)	26	308 (121 - 781)

<sup>1</sup> All population estimates are in 1,000s

<sup>2</sup> Source: GRUMP-adjusted UN population projected population estimates for 2010; World Population Prospects, the 2008 Revision.

<sup>3</sup> Number of males per 100 females in 2010. Source: United Nations Department of Economics and Social Affairs (2011) World Population Prospects, the 2010 Revision. <http://esa.un.org/unpd/wpp/Excel-Data/population.htm>.

<sup>4</sup> Interquartile range of the posterior predictive distribution for each G6PDd population estimate

<sup>5</sup> Homozygous female estimates are derived directly from the median allele frequency estimates, so are not given with modelled IQRs

<sup>6</sup> Malaria Endemic Countries (Protocol S1.6)

† Countries targetting malaria elimination