

Supplemental Tables and Figures

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Figure S20. Joint distributions of the frequency and mean duration of periods of time spent at institutional locations.

Figure S21. Joint distributions of the frequency and mean duration of periods of time spent at locations of some type other than those considered previously.

Table S1. Results from likelihood ratio tests for pairs of nested models of number of locations visited. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a negative binomial distribution of the number of locations that each study participant visited. Maximum-likelihood estimates of parameter values for participants with each combination of fever status and demographic category are shown in Fig. 1.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_8 = 25.1$ $p = 0.001$	$\chi^2_{16} = 144.6$ $p < 10^{-15}$	$\chi^2_{18} = 61.2$ $p < 10^{-5}$	$\chi^2_{20} = 82.1$ $p < 10^{-8}$	$\chi^2_{22} = 145.0$ $p < 10^{-15}$
F2,C4	—	$\chi^2_8 = 119.5$ $p < 10^{-15}$	—	$\chi^2_{12} = 57.0$ $p < 10^{-7}$	$\chi^2_{14} = 119.8$ $p < 10^{-15}$
F1,C4	—	—	—	—	$\chi^2_6 = 0.34$ $p = 0.99$
F3,C1	—	—	—	$\chi^2_2 = 20.9$ $p < 10^{-4}$	$\chi^2_4 = 83.8$ $p < 10^{-15}$
F2,C1	—	—	—	—	$\chi^2_2 = 62.8$ $p < 10^{-13}$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S2. Results from likelihood ratio tests for pairs of nested models of number of residential locations visited. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a Poisson distribution of the number of residential locations that each study participant visited other than her or his own home. Maximum-likelihood estimates of parameter values for participants with each combination of fever status and demographic category are shown in Fig. S4.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi_4^2 = 12.0$ $p = 0.017$	$\chi_8^2 = 19.8$ $p = 0.011$	$\chi_9^2 = 21.3$ $p = 0.012$	$\chi_{10}^2 = 24.2$ $p = 0.007$	$\chi_{11}^2 = 25.9$ $p = 0.007$
F2,C4	—	$\chi_4^2 = 7.8$ $p = 0.10$	—	$\chi_6^2 = 12.2$ $p = 0.057$	$\chi_7^2 = 13.9$ $p = 0.054$
F1,C4	—	—	—	—	$\chi_3^2 = 6.0$ $p = 0.11$
F3,C1	—	—	—	$\chi_1^2 = 2.9$ $p = 0.087$	$\chi_2^2 = 4.6$ $p = 0.10$
F2,C1	—	—	—	—	$\chi_1^2 = 1.6$ $p = 0.19$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S3. Results from likelihood ratio tests for pairs of nested models of number of commercial locations visited. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a Poisson distribution of the number of commercial locations that each study participant visited. Maximum-likelihood estimates of parameter values for participants with each combination of fever status and demographic category are shown in Fig. S5.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_4 = 7.7$ $p = 0.10$	$\chi^2_8 = 67.1$ $p < 10^{-10}$	$\chi^2_9 = 23.5$ $p = 0.005$	$\chi^2_{10} = 28.1$ $p = 0.002$	$\chi^2_{11} = 86.9$ $p < 10^{-13}$
F2,C4	—	$\chi^2_4 = 59.4$ $p < 10^{-11}$	—	$\chi^2_6 = 20.4$ $p = 0.002$	$\chi^2_7 = 79.2$ $p < 10^{-13}$
F1,C4	—	—	—	—	$\chi^2_3 = 19.8$ $p < 10^{-3}$
F3,C1	—	—	—	$\chi^2_1 = 4.6$ $p = 0.032$	$\chi^2_2 = 63.4$ $p < 10^{-13}$
F2,C1	—	—	—	—	$\chi^2_1 = 58.8$ $p < 10^{-13}$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S4. Results from likelihood ratio tests for pairs of nested models of number of recreational locations visited. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a Poisson distribution of the number of recreational locations that each study participant visited. Maximum-likelihood estimates of parameter values for participants with each combination of fever status and demographic category are shown in Fig. S6.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_4 = 5.8$ $p = 0.22$	$\chi^2_8 = 13.2$ $p = 0.10$	$\chi^2_9 = 7.4$ $p = 0.60$	$\chi^2_{10} = 9.7$ $p = 0.47$	$\chi^2_{11} = 14.1$ $p = 0.23$
F2,C4	—	$\chi^2_4 = 7.5$ $p = 0.11$	—	$\chi^2_6 = 3.9$ $p = 0.69$	$\chi^2_7 = 8.3$ $p = 0.30$
F1,C4	—	—	—	—	$\chi^2_3 = 0.9$ $p = 0.83$
F3,C1	—	—	—	$\chi^2_1 = 2.3$ $p = 0.13$	$\chi^2_2 = 6.7$ $p = 0.035$
F2,C1	—	—	—	—	$\chi^2_1 = 4.4$ $p = 0.036$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S5. Results from likelihood ratio tests for pairs of nested models of number of educational locations visited. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a Poisson distribution of the number of educational locations that each study participant visited. Maximum-likelihood estimates of parameter values for participants with each combination of fever status and demographic category are shown in Fig. S7.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_4 = 2.2$ $p = 0.69$	$\chi^2_8 = 3.1$ $p = 0.93$	$\chi^2_9 = 3.5$ $p = 0.94$	$\chi^2_{10} = 4.4$ $p = 0.93$	$\chi^2_{11} = 4.9$ $p = 0.93$
F2,C4	—	$\chi^2_4 = 0.8$ $p = 0.93$	—	$\chi^2_6 = 2.2$ $p = 0.91$	$\chi^2_7 = 2.7$ $p = 0.91$
F1,C4	—	—	—	—	$\chi^2_3 = 1.9$ $p = 0.60$
F3,C1	—	—	—	$\chi^2_1 = 0.9$ $p = 0.34$	$\chi^2_2 = 1.4$ $p = 0.50$
F2,C1	—	—	—	—	$\chi^2_1 = 0.5$ $p = 0.48$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S6. Results from likelihood ratio tests for pairs of nested models of number of religious locations visited. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a Poisson distribution of the number of religious locations that each study participant visited. Maximum-likelihood estimates of parameter values for participants with each combination of fever status and demographic category are shown in Fig. S8.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi_4^2 = 0.47$ $p = 0.98$	$\chi_8^2 = 0.99$ $p = 0.99$	$\chi_9^2 = 0.79$ $p = 0.99$	$\chi_{10}^2 = 1.0$ $p = 0.99$	$\chi_{11}^2 = 1.0$ $p = 0.99$
F2,C4	—	$\chi_4^2 = 0.5$ $p = 0.97$	—	$\chi_6^2 = 0.55$ $p = 0.99$	$\chi_7^2 = 0.6$ $p = 0.99$
F1,C4	—	—	—	—	$\chi_3^2 = 0.04$ $p = 0.99$
F3,C1	—	—	—	$\chi_1^2 = 0.2$ $p = 0.62$	$\chi_2^2 = 0.02$ $p = 0.89$
F2,C1	—	—	—	—	$\chi_1^2 < 10^{-5}$ $p = 0.99$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S7. Results from likelihood ratio tests for pairs of nested models of number of healthcare locations visited. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a Poisson distribution of the number of healthcare locations that each study participant visited. Maximum-likelihood estimates of parameter values for participants with each combination of fever status and demographic category are shown in Fig. S9.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_4 = 0.24$ $p = 0.99$	$\chi^2_8 = 1.2$ $p = 0.99$	$\chi^2_9 = 1.7$ $p = 0.99$	$\chi^2_{10} = 1.9$ $p = 0.99$	$\chi^2_{11} = 2.6$ $p = 0.99$
F2,C4	—	$\chi^2_4 = 1.0$ $p = 0.91$	—	$\chi^2_6 = 1.7$ $p = 0.95$	$\chi^2_7 = 2.4$ $p = 0.94$
F1,C4	—	—	—	—	$\chi^2_3 = 1.4$ $p = 0.71$
F3,C1	—	—	—	$\chi^2_2 = 0.2$ $p = 0.64$	$\chi^2_4 = 0.9$ $p = 0.64$
F2,C1	—	—	—	—	$\chi^2_2 = 0.7$ $p = 0.41$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S8. Results from likelihood ratio tests for pairs of nested models of number of institutional locations visited. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a Poisson distribution of the number of institutional locations that each study participant visited. Maximum-likelihood estimates of parameter values for participants with each combination of fever status and demographic category are shown in Fig. S10.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi_4^2 = 1.9$ $p = 0.75$	$\chi_8^2 = 4.5$ $p = 0.81$	$\chi_9^2 = 6.7$ $p = 0.67$	$\chi_{10}^2 = 7.5$ $p = 0.68$	$\chi_{11}^2 = 7.9$ $p = 0.72$
F2,C4	—	$\chi_4^2 = 2.5$ $p = 0.64$	—	$\chi_6^2 = 5.6$ $p = 0.47$	$\chi_7^2 = 6.0$ $p = 0.54$
F1,C4	—	—	—	—	$\chi_3^2 = 3.5$ $p = 0.32$
F3,C1	—	—	—	$\chi_1^2 = 0.8$ $p = 0.36$	$\chi_2^2 = 1.3$ $p = 0.53$
F2,C1	—	—	—	—	$\chi_1^2 = 0.4$ $p = 0.51$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S9. Results from likelihood ratio tests for pairs of nested models of number of locations of other types visited. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a Poisson distribution of the number of locations of other types that each study participant visited. Maximum-likelihood estimates of parameter values for participants with each combination of fever status and demographic category are shown in Fig. S11.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi_4^2 = 0.2$ $p = 0.99$	$\chi_8^2 = 5.8$ $p = 0.67$	$\chi_9^2 = 3.7$ $p = 0.93$	$\chi_{10}^2 = 3.7$ $p = 0.96$	$\chi_{11}^2 = 10.6$ $p = 0.47$
F2,C4	—	$\chi_4^2 = 5.7$ $p = 0.22$	—	$\chi_6^2 = 3.6$ $p = 0.73$	$\chi_7^2 = 10.5$ $p = 0.16$
F1,C4	—	—	—	—	$\chi_3^2 = 4.8$ $p = 0.19$
F3,C1	—	—	—	$\chi_1^2 < 10^{-3}$ $p = 0.98$	$\chi_2^2 = 6.9$ $p = 0.03$
F2,C1	—	—	—	—	$\chi_1^2 = 6.9$ $p = 0.01$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S10. Results from likelihood ratio tests for pairs of nested models of the distance from home of locations visited by study participants. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of exponential weighting functions for the effect of distance from home on the probability of choosing a location of a given type and distance from home. Maximum-likelihood estimates of parameter values for participants with each combination of fever status and demographic category are shown in Fig. S12.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_{32} = 68.9$ $p < 10^{-3}$	$\chi^2_{64} = 116.3$ $p < 10^{-4}$	$\chi^2_{72} = 766.4$ $p < 10^{-15}$	$\chi^2_{80} = 801.3$ $p < 10^{-15}$	$\chi^2_{88} = 836.7$ $p < 10^{-15}$
F2,C4	—	$\chi^2_{32} = 47.4$ $p = 0.039$	—	$\chi^2_{48} = 732.5$ $p < 10^{-15}$	$\chi^2_{56} = 767.9$ $p < 10^{-15}$
F1,C4	—	—	—	—	$\chi^2_{24} = 720.4$ $p < 10^{-15}$
F3,C1	—	—	—	$\chi^2_8 = 35.0$ $p < 10^{-4}$	$\chi^2_{16} = 70.4$ $p < 10^{-8}$
F2,C1	—	—	—	—	$\chi^2_8 = 35.4$ $p < 10^{-4}$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S11. Results from likelihood ratio tests for pairs of nested models of time spent at home. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a bivariate lognormal distribution of frequency and mean duration of periods of time spent at home. The mean time spent at home, as well as the mean frequency and duration of bouts at home, for participants with each combination of fever status and demographic category is shown in Fig. 4.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_{20} = 55.0$ $p < 10^{-4}$	$\chi^2_{40} = 158.1$ $p < 10^{-15}$	$\chi^2_{45} = 250.5$ $p < 10^{-15}$	$\chi^2_{50} = 274.6$ $p < 10^{-15}$	$\chi^2_{55} = 292.5$ $p < 10^{-15}$
F2,C4	—	$\chi^2_{20} = 103.1$ $p < 10^{-12}$	—	$\chi^2_{30} = 219.6$ $p < 10^{-15}$	$\chi^2_{35} = 237.6$ $p < 10^{-15}$
F1,C4	—	—	—	—	$\chi^2_{15} = 134.4$ $p < 10^{-15}$
F3,C1	—	—	—	$\chi^2_5 = 24.1$ $p < 10^{-3}$	$\chi^2_{10} = 42.0$ $p < 10^{-5}$
F2,C1	—	—	—	—	$\chi^2_5 = 17.9$ $p = 0.003$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S12. Results from likelihood ratio tests for pairs of nested models of time spent at residential locations other than home. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a bivariate lognormal distribution of frequency and mean duration of periods of time spent at residential locations other than home. The mean time spent at each residential location, as well as the mean frequency and duration of visits to those locations, for participants with each combination of fever status and demographic category is shown in Fig. S14.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_{20} = 27.8$ $p = 0.11$	$\chi^2_{40} = 47.9$ $p = 0.18$	$\chi^2_{45} = 90.7$ $p < 10^{-4}$	$\chi^2_{50} = 104.8$ $p < 10^{-5}$	$\chi^2_{55} = 112.2$ $p < 10^{-5}$
F2,C4	—	$\chi^2_{20} = 20.1$ $p = 0.45$	—	$\chi^2_{30} = 77.0$ $p < 10^{-5}$	$\chi^2_{35} = 84.4$ $p < 10^{-5}$
F1,C4	—	—	—	—	$\chi^2_{15} = 64.3$ $p < 10^{-7}$
F3,C1	—	—	—	$\chi^2_5 = 14.1$ $p = 0.015$	$\chi^2_{10} = 21.6$ $p = 0.017$
F2,C1	—	—	—	—	$\chi^2_5 = 7.5$ $p = 0.19$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S13. Results from likelihood ratio tests for pairs of nested models of time spent at commercial locations. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a bivariate lognormal distribution of frequency and mean duration of periods of time spent at commercial locations. The mean time spent at each residential location, as well as the mean frequency and duration of visits to those locations, for participants with each combination of fever status and demographic category is shown in Fig. S15.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_{20} = 14.4$ $p = 0.81$	$\chi^2_{40} = 77.7$ $p < 10^{-3}$	$\chi^2_{45} = 69.3$ $p = 0.012$	$\chi^2_{50} = 69.8$ $p = 0.033$	$\chi^2_{55} = 119.4$ $p < 10^{-5}$
F2,C4	—	$\chi^2_{20} = 63.3$ $p < 10^{-5}$	—	$\chi^2_{30} = 55.4$ $p = 0.003$	$\chi^2_{35} = 105.0$ $p < 10^{-8}$
F1,C4	—	—	—	—	$\chi^2_{15} = 41.7$ $p < 10^{-3}$
F3,C1	—	—	—	$\chi^2_5 = 0.59$ $p = 0.99$	$\chi^2_{10} = 50.1$ $p < 10^{-6}$
F2,C1	—	—	—	—	$\chi^2_5 = 49.5$ $p < 10^{-8}$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S14. Results from likelihood ratio tests for pairs of nested models of time spent at recreational locations. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a bivariate lognormal distribution of frequency and mean duration of periods of time spent at recreational locations. The mean time spent at each residential location, as well as the mean frequency and duration of visits to those locations, for participants with each combination of fever status and demographic category is shown in Fig. S16.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_{20} = 9.2$ $p = 0.98$	$\chi^2_{40} = 62.4$ $p = 0.013$	$\chi^2_{45} = 55.7$ $p = 0.13$	$\chi^2_{50} = 60.3$ $p = 0.15$	$\chi^2_{55} = 117.6$ $p < 10^{-5}$
F2,C4	—	$\chi^2_{20} = 53.2$ $p < 10^{-4}$	—	$\chi^2_{30} = 51.1$ $p = 0.009$	$\chi^2_{35} = 108.4$ $p < 10^{-8}$
F1,C4	—	—	—	—	$\chi^2_{15} = 55.2$ $p < 10^{-5}$
F3,C1	—	—	—	$\chi^2_5 = 4.6$ $p = 0.46$	$\chi^2_{10} = 61.9$ $p < 10^{-8}$
F2,C1	—	—	—	—	$\chi^2_5 = 57.2$ $p < 10^{-10}$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S15. Results from likelihood ratio tests for pairs of nested models of time spent at educational locations. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a bivariate lognormal distribution of frequency and mean duration of periods of time spent at educational locations. The mean time spent at each residential location, as well as the mean frequency and duration of visits to those locations, for participants with each combination of fever status and demographic category is shown in Fig. S17.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_{20} = 30.0$ $p = 0.07$	$\chi^2_{40} = 66.7$ $p = 0.005$	$\chi^2_{45} = 277.7$ $p < 10^{-15}$	$\chi^2_{50} = 293.4$ $p < 10^{-15}$	$\chi^2_{55} = 327.2$ $p < 10^{-15}$
F2,C4	—	$\chi^2_{20} = 36.8$ $p = 0.012$	—	$\chi^2_{30} = 263.5$ $p < 10^{-15}$	$\chi^2_{35} = 297.3$ $p < 10^{-15}$
F1,C4	—	—	—	—	$\chi^2_{15} = 260.5$ $p < 10^{-15}$
F3,C1	—	—	—	$\chi^2_5 = 15.7$ $p = 0.008$	$\chi^2_{10} = 49.5$ $p < 10^{-6}$
F2,C1	—	—	—	—	$\chi^2_5 = 33.8$ $p < 10^{-5}$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S16. Results from likelihood ratio tests for pairs of nested models of time spent at healthcare locations. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a bivariate lognormal distribution of frequency and mean duration of periods of time spent at healthcare locations. The mean time spent at each residential location, as well as the mean frequency and duration of visits to those locations, for participants with each combination of fever status and demographic category is shown in Fig. S18.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_{20} = 15.3$ $p = 0.76$	$\chi^2_{40} = 51.9$ $p = 0.10$	$\chi^2_{45} = 110.8$ $p < 10^{-6}$	$\chi^2_{50} = 115.4$ $p < 10^{-6}$	$\chi^2_{55} = 154.4$ $p < 10^{-10}$
F2,C4	—	$\chi^2_{20} = 36.6$ $p = 0.013$	—	$\chi^2_{30} = 100.1$ $p < 10^{-8}$	$\chi^2_{35} = 139.2$ $p < 10^{-13}$
F1,C4	—	—	—	—	$\chi^2_{15} = 102.6$ $p < 10^{-14}$
F3,C1	—	—	—	$\chi^2_5 = 4.59$ $p = 0.47$	$\chi^2_{10} = 43.6$ $p < 10^{-5}$
F2,C1	—	—	—	—	$\chi^2_5 = 39.0$ $p < 10^{-6}$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S17. Results from likelihood ratio tests for pairs of nested models of time spent at religious locations. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a bivariate lognormal distribution of frequency and mean duration of periods of time spent at religious locations. The mean time spent at each residential location, as well as the mean frequency and duration of visits to those locations, for participants with each combination of fever status and demographic category is shown in Fig. S19.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_{20} = 20.2$ $p = 0.44$	$\chi^2_{40} = 33.6$ $p = 0.75$	$\chi^2_{45} = 42.6$ $p = 0.58$	$\chi^2_{50} = 50.5$ $p = 0.45$	$\chi^2_{55} = 53.3$ $p = 0.54$
F2,C4	—	$\chi^2_{20} = 13.3$ $p = 0.86$	—	$\chi^2_{30} = 30.3$ $p = 0.45$	$\chi^2_{35} = 33.0$ $p = 0.56$
F1,C4	—	—	—	—	$\chi^2_{15} = 19.7$ $p = 0.18$
F3,C1	—	—	—	$\chi^2_5 = 7.96$ $p = 0.16$	$\chi^2_{10} = 10.7$ $p = 0.38$
F2,C1	—	—	—	—	$\chi^2_5 = 2.7$ $p = 0.74$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S18. Results from likelihood ratio tests for pairs of nested models of time spent at institutional locations. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a bivariate lognormal distribution of frequency and mean duration of periods of time spent at institutional locations. The mean time spent at each residential location, as well as the mean frequency and duration of visits to those locations, for participants with each combination of fever status and demographic category is shown in Fig. S20.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_{20} = 27.8$ $p = 0.12$	$\chi^2_{40} = 68.9$ $p = 0.003$	$\chi^2_{45} = 75.7$ $p = 0.003$	$\chi^2_{50} = 80.0$ $p = 0.005$	$\chi^2_{55} = 100.6$ $p < 10^{-3}$
F2,C4	—	$\chi^2_{20} = 41.2$ $p = 0.004$	—	$\chi^2_{30} = 52.2$ $p = 0.007$	$\chi^2_{35} = 72.8$ $p < 10^{-3}$
F1,C4	—	—	—	—	$\chi^2_{15} = 31.6$ $p = 0.007$
F3,C1	—	—	—	$\chi^2_5 = 4.3$ $p = 0.51$	$\chi^2_{10} = 24.9$ $p = 0.006$
F2,C1	—	—	—	—	$\chi^2_5 = 20.6$ $p < 10^{-3}$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Table S19. Results from likelihood ratio tests for pairs of nested models of time spent at locations of some type other than those considered previously. The p -value associated with each test is the probability of obtaining a deviance between H_a and H_o greater than the observed value. Parameter values for each model were fitted by likelihood maximization of a bivariate lognormal distribution of frequency and mean duration of periods of time spent at locations. The mean time spent at each residential location, as well as the mean frequency and duration of visits to those locations, for participants with each combination of fever status and demographic category is shown in Fig. S21.

H_a	H_o				
	F2,C4	F1,C4	F3,C1	F2,C1	F1,C1
F3,C4	$\chi^2_{20} = 20.6$ $p = 0.42$	$\chi^2_{40} = 46.7$ $p = 0.22$	$\chi^2_{45} = 66.5$ $p = 0.02$	$\chi^2_{50} = 78.9$ $p = 0.006$	$\chi^2_{55} = 97.4$ $p < 10^{-3}$
F2,C4	—	$\chi^2_{20} = 26.1$ $p = 0.16$	—	$\chi^2_{30} = 58.3$ $p = 0.001$	$\chi^2_{35} = 76.8$ $p < 10^{-4}$
F1,C4	—	—	—	—	$\chi^2_{15} = 50.6$ $p < 10^{-5}$
F3,C1	—	—	—	$\chi^2_5 = 12.5$ $p = 0.029$	$\chi^2_{10} = 30.9$ $p < 10^{-3}$
F2,C1	—	—	—	—	$\chi^2_5 = 18.4$ $p = 0.003$

F3 = 3 different classes with respect to fever (i.e., afebrile, febrile & DENV+, febrile & DENV-)

F2 = 2 different classes with respect to fever (i.e., afebrile, febrile)

F1 = no distinction between movement of afebrile and febrile

C4 = 4 different classes of people (i.e., school-age children, college student, homemaker / unemployed adult, working adult)

C1 = no distinction among people based on demographic category

Figure S1. Map of Iquitos showing the two neighborhoods in which study participants resided. The Maynas neighborhood is shown in blue, Tupac Amaru is shown in red, and the location of Iquitos is indicated by a yellow star.

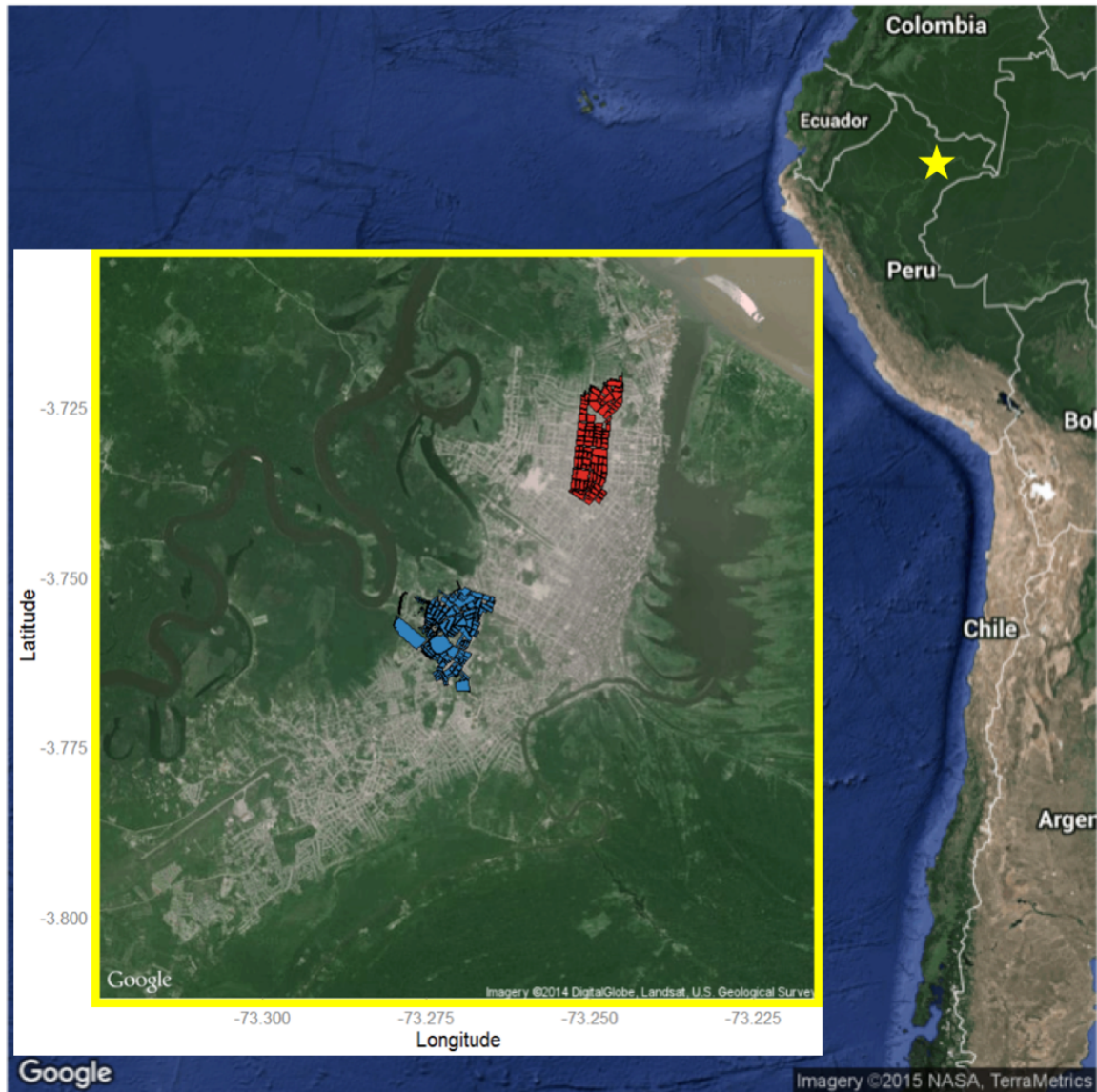


Figure S2. Dates on which semi-structured interviews took place, stratified by the fever status of study participants across the rows and binned by month. The left (right) column includes participants who participated in the semi-structured interview pertaining to time spent at home (locations other than home).

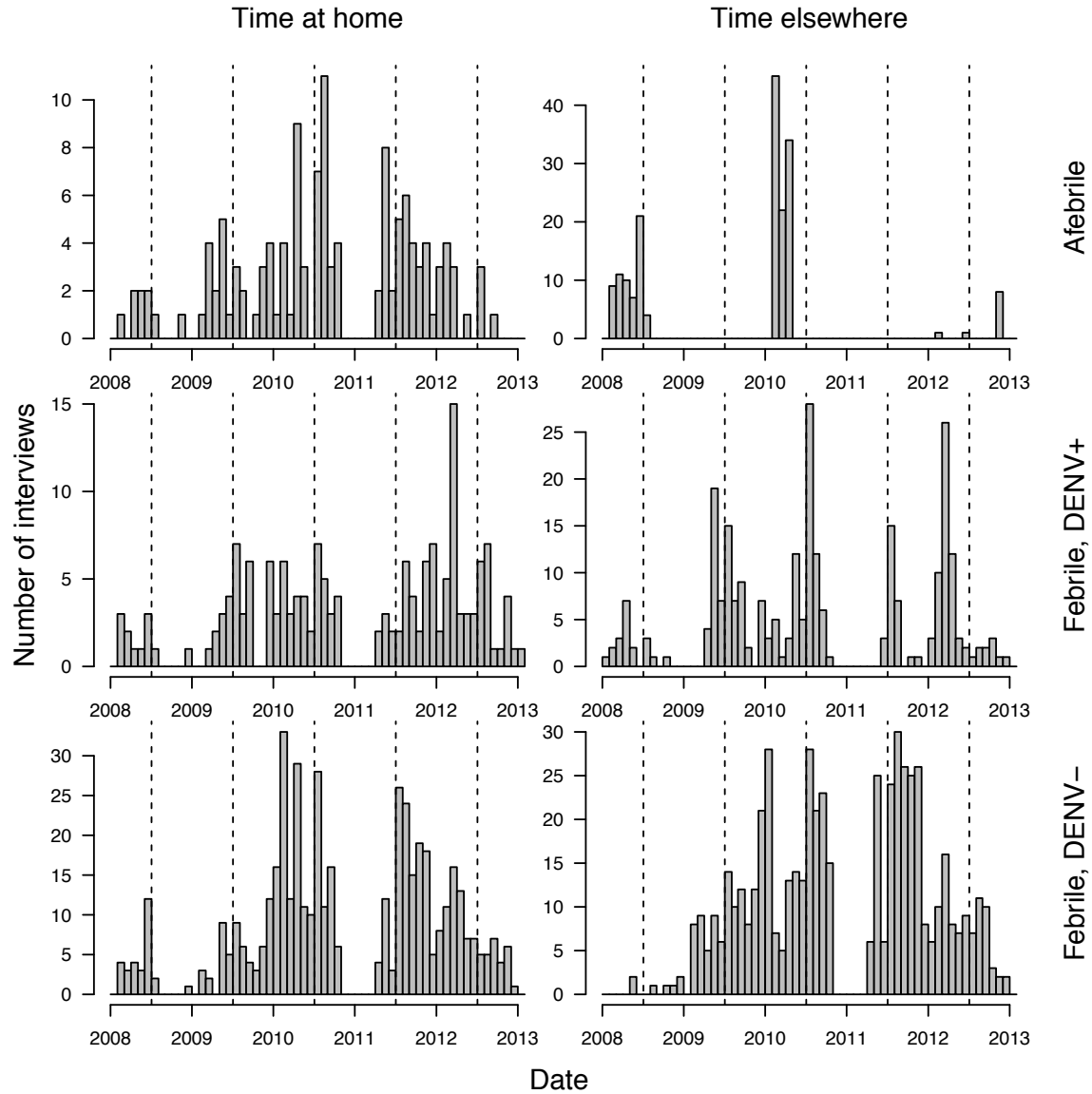


Figure S3. Age and sex distributions of study participants stratified by fever status along the columns. The top (bottom) row includes participants who participated in the semi-structured interview pertaining to time spent at home (locations other than home).

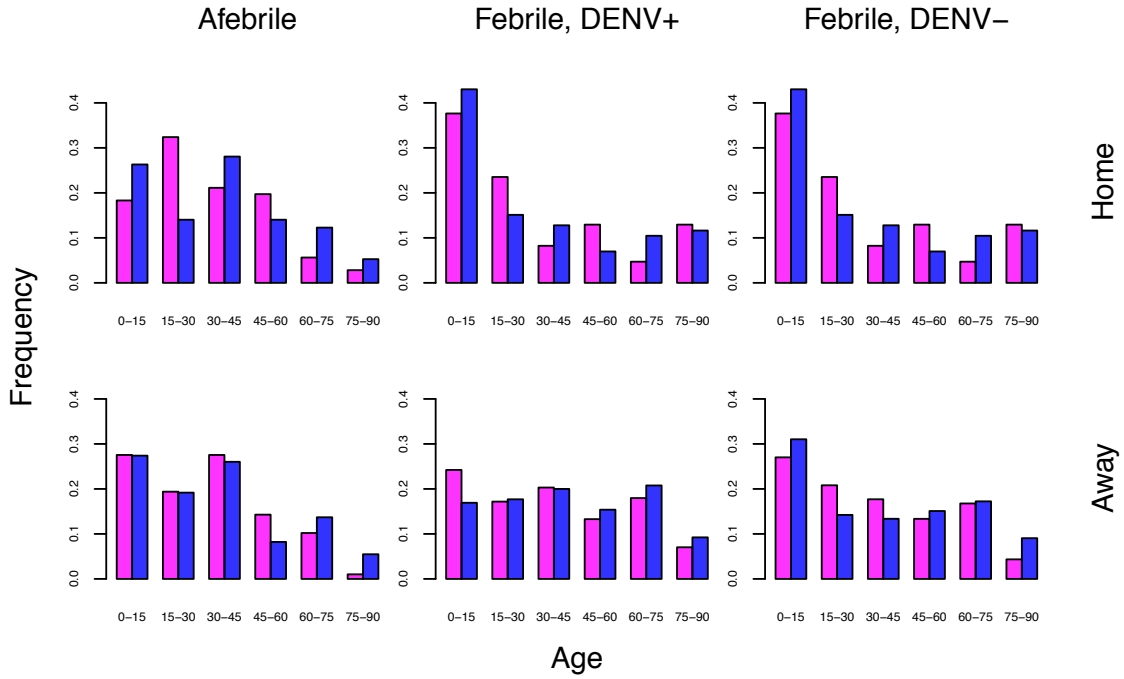


Figure S4. Number of residential locations other than home visited by study participants, stratified by participant fever status and demographic category. Gray bars show the empirical distribution, the black line shows the empirical mean, and the balls and stems show the fitted Poisson distribution with maximum-likelihood estimates of parameter values. The mean number of locations of this type that were visited is displayed in the bottom right of each panel.

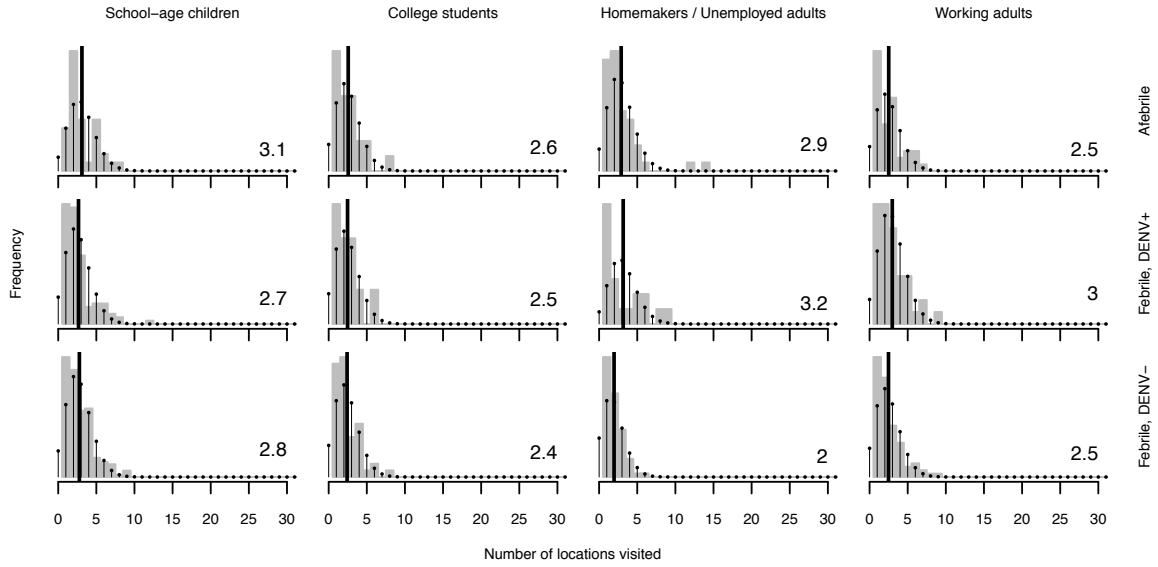


Figure S5. Number of commercial locations visited by study participants, stratified by participant fever status and demographic category. Gray bars show the empirical distribution, the black line shows the empirical mean, and the balls and stems show the fitted Poisson distribution with maximum-likelihood estimates of parameter values. The mean number of locations of this type that were visited is displayed in the bottom right of each panel.

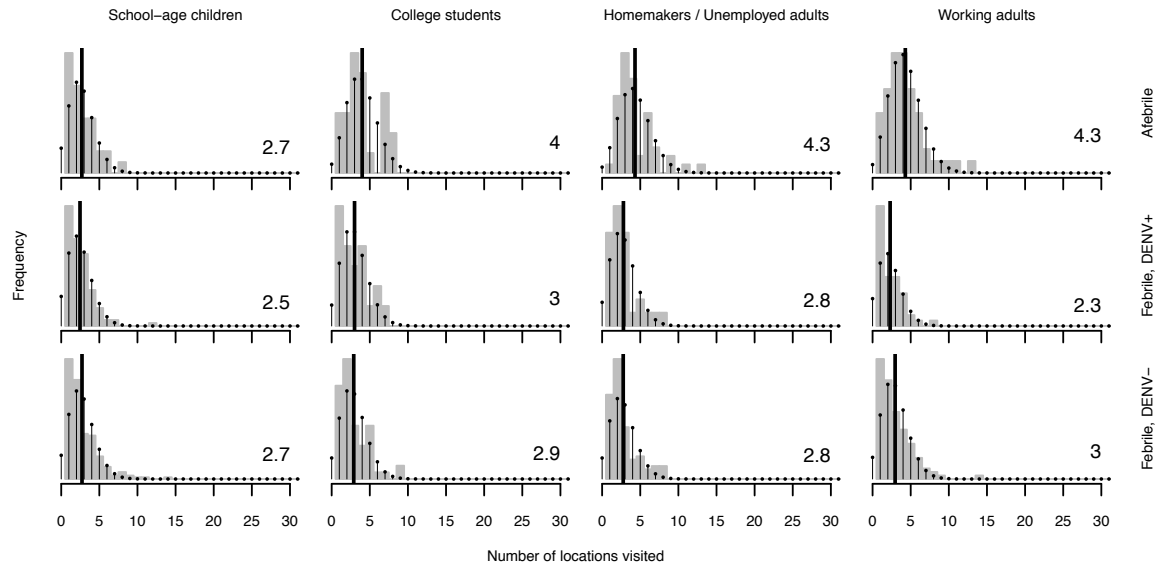


Figure S6. Number of recreational locations visited by study participants, stratified by participant fever status and demographic category. Gray bars show the empirical distribution, the black line shows the empirical mean, and the balls and stems show the fitted Poisson distribution with maximum-likelihood estimates of parameter values. The mean number of locations of this type that were visited is displayed in the bottom right of each panel.

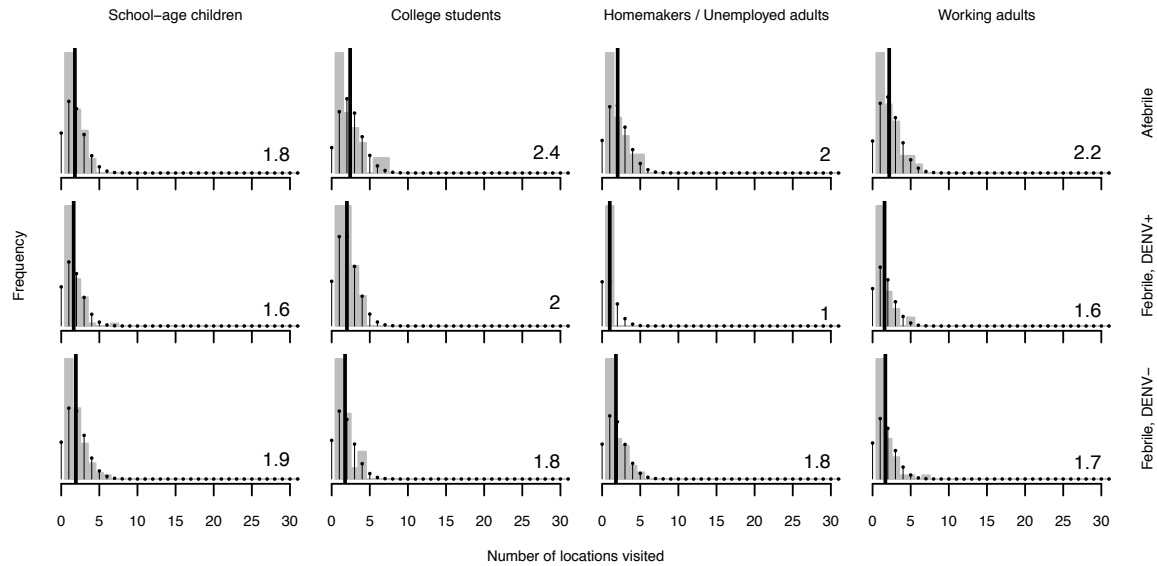


Figure S7. Number of educational locations visited by study participants, stratified by participant fever status and demographic category. Gray bars show the empirical distribution, the black line shows the empirical mean, and the balls and stems show the fitted Poisson distribution with maximum-likelihood estimates of parameter values. The mean number of locations of this type that were visited is displayed in the bottom right of each panel.

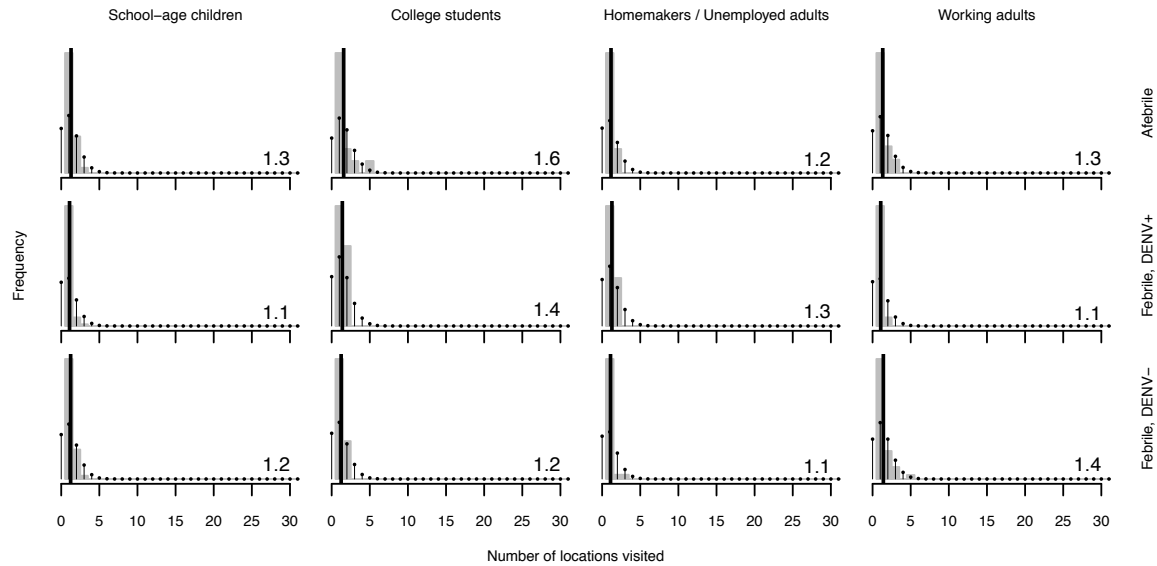


Figure S8. Number of religious locations visited by study participants, stratified by participant fever status and demographic category. Gray bars show the empirical distribution, the black line shows the empirical mean, and the balls and stems show the fitted Poisson distribution with maximum-likelihood estimates of parameter values. The mean number of locations of this type that were visited is displayed in the bottom right of each panel.

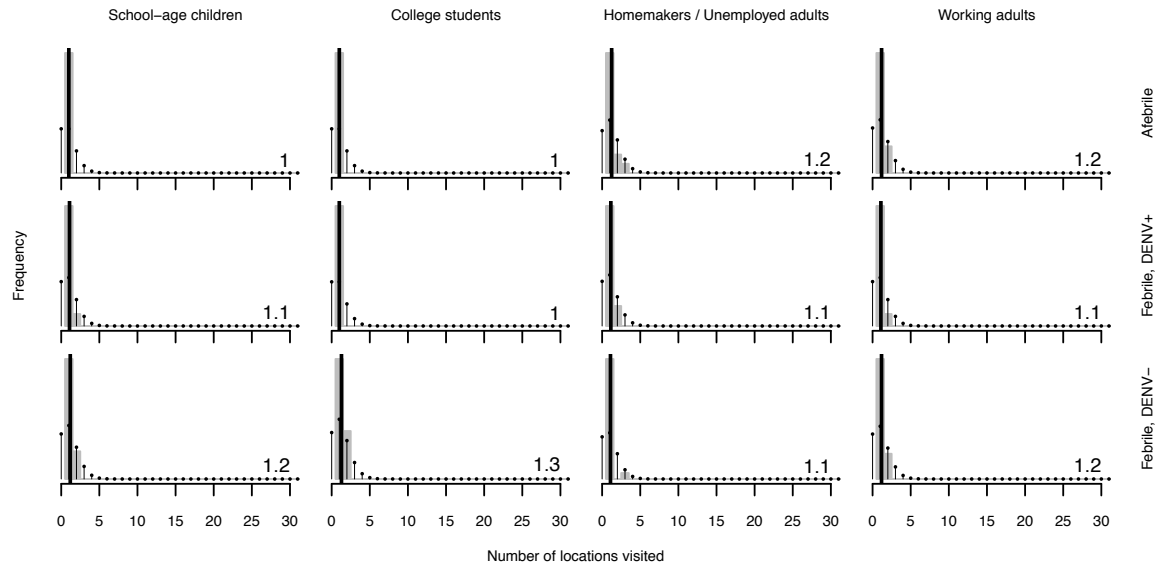


Figure S9. Number of healthcare locations visited by study participants, stratified by participant fever status and demographic category. Gray bars show the empirical distribution, the black line shows the empirical mean, and the balls and stems show the fitted Poisson distribution with maximum-likelihood estimates of parameter values. The mean number of locations of this type that were visited is displayed in the bottom right of each panel.

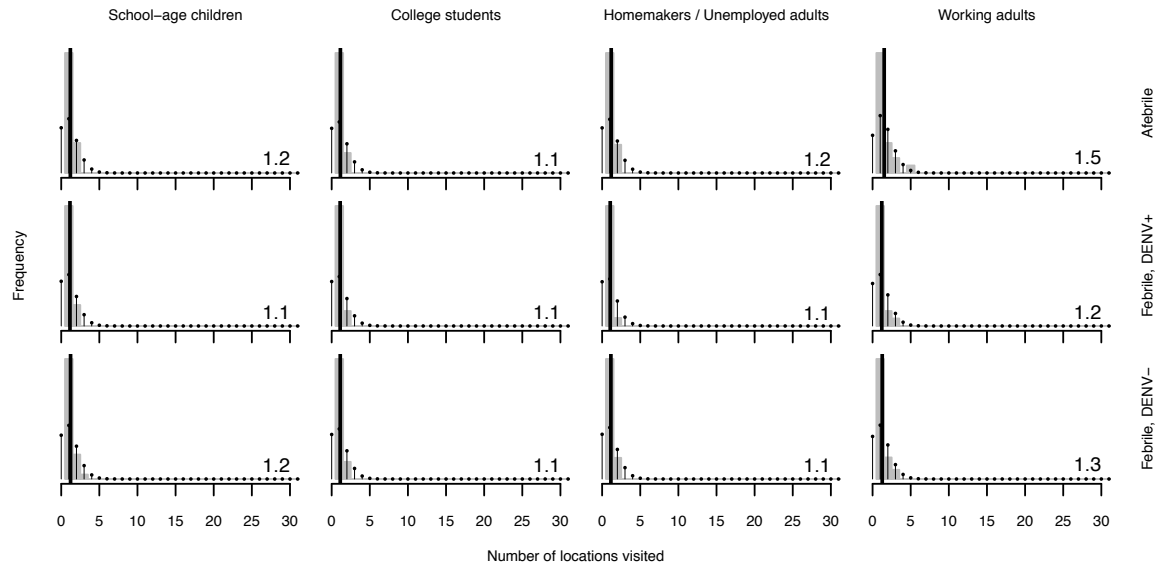


Figure S10. Number of institutional locations visited by study participants, stratified by participant fever status and demographic category. Gray bars show the empirical distribution, the black line shows the empirical mean, and the balls and stems show the fitted Poisson distribution with maximum-likelihood estimates of parameter values. The mean number of locations of this type that were visited is displayed in the bottom right of each panel.

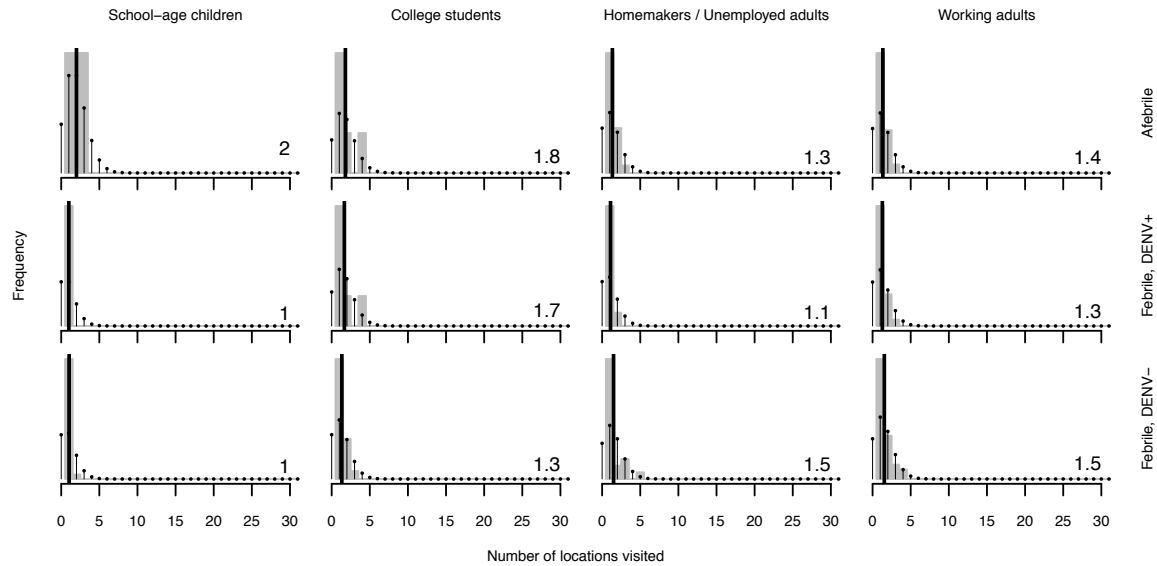


Figure S11. Number of locations of other types visited by study participants, stratified by participant fever status and demographic category. Gray bars show the empirical distribution, the black line shows the empirical mean, and the balls and stems show the fitted Poisson distribution with maximum-likelihood estimates of parameter values. The mean number of locations of this type that were visited is displayed in the bottom right of each panel.

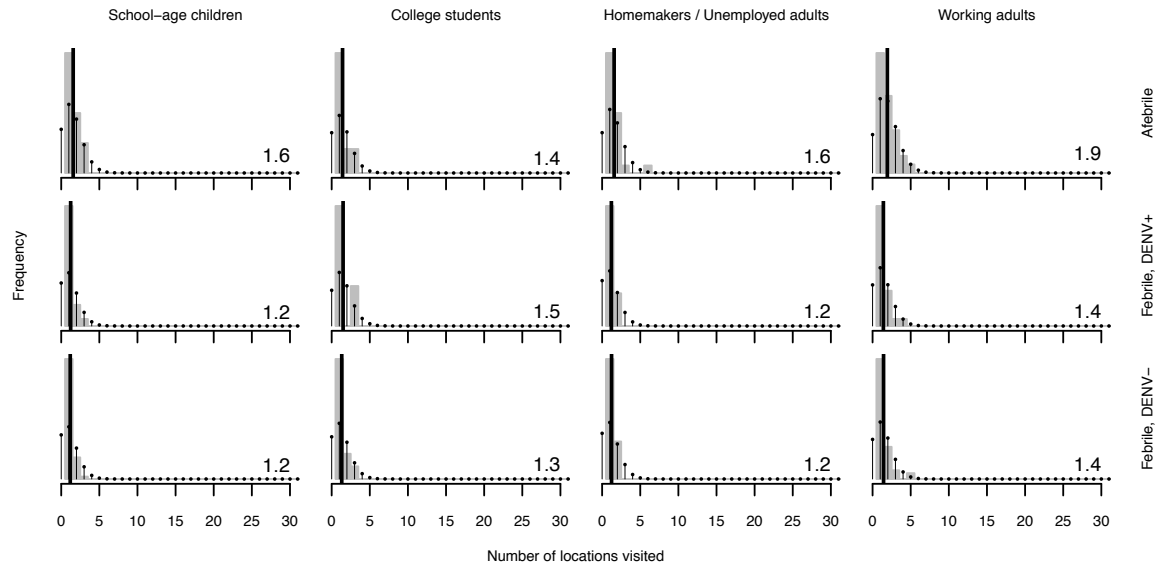


Figure S12. Maximum-likelihood estimates (MLE) of the parameter for the function that weights distance from home on one's probability of visiting a location of a given distance from home, stratified by participant fever status and demographic category. Higher values of these parameters are consistent with a stronger preference for visiting locations closer to home. The three fever status categories are indicated by color: blue = afebrile; green = febrile & DENV+; red = febrile & DENV-. The demographic categories are indicated by letters: C = school-age children; S = college student; H = homemaker / unemployed adult; W = working adult.

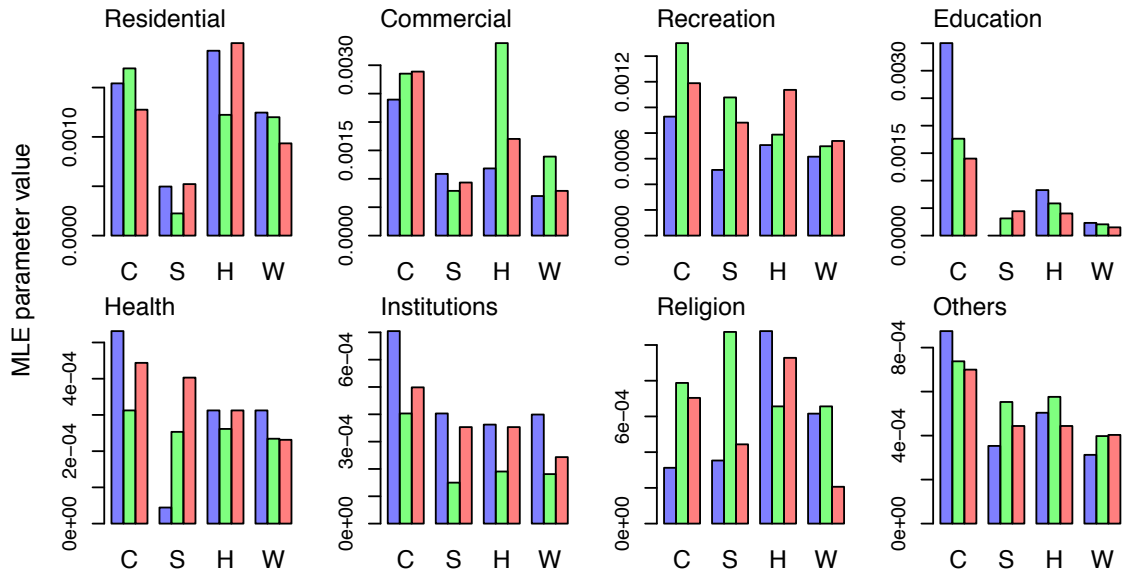


Figure S13. Mean distance from home of locations visited by study participants, stratified by participant fever status and demographic category. The three fever status categories are indicated by color: blue = afebrile; green = febrile & DENV+; red = febrile & DENV-. The demographic categories are indicated by letters: C = school-age children; S = college student; H = homemaker / unemployed adult; W = working adult.

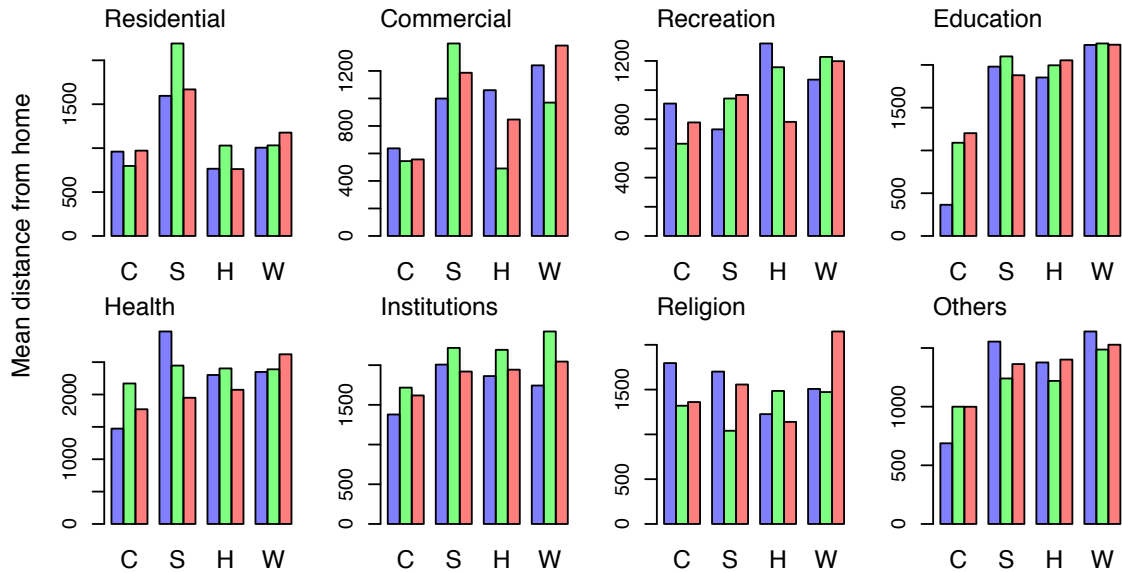


Figure S14. Joint distributions of the frequency and mean duration of periods of time spent at residential locations other than home. Colors represent continuous probabilities that range low (red), medium (orange), and high (bright yellow). Parameter values of each distribution were fitted by likelihood maximization to data from individuals from each of four groups (School-age children, College student, Homemaker / Unemployed adult, Working adult) using interviews conducted when those individuals were afebrile, febrile and DENV+, or febrile and DENV-. Sample means of duration, frequency, and proportion of total time spent at residential locations other than home for each group are noted in each panel.

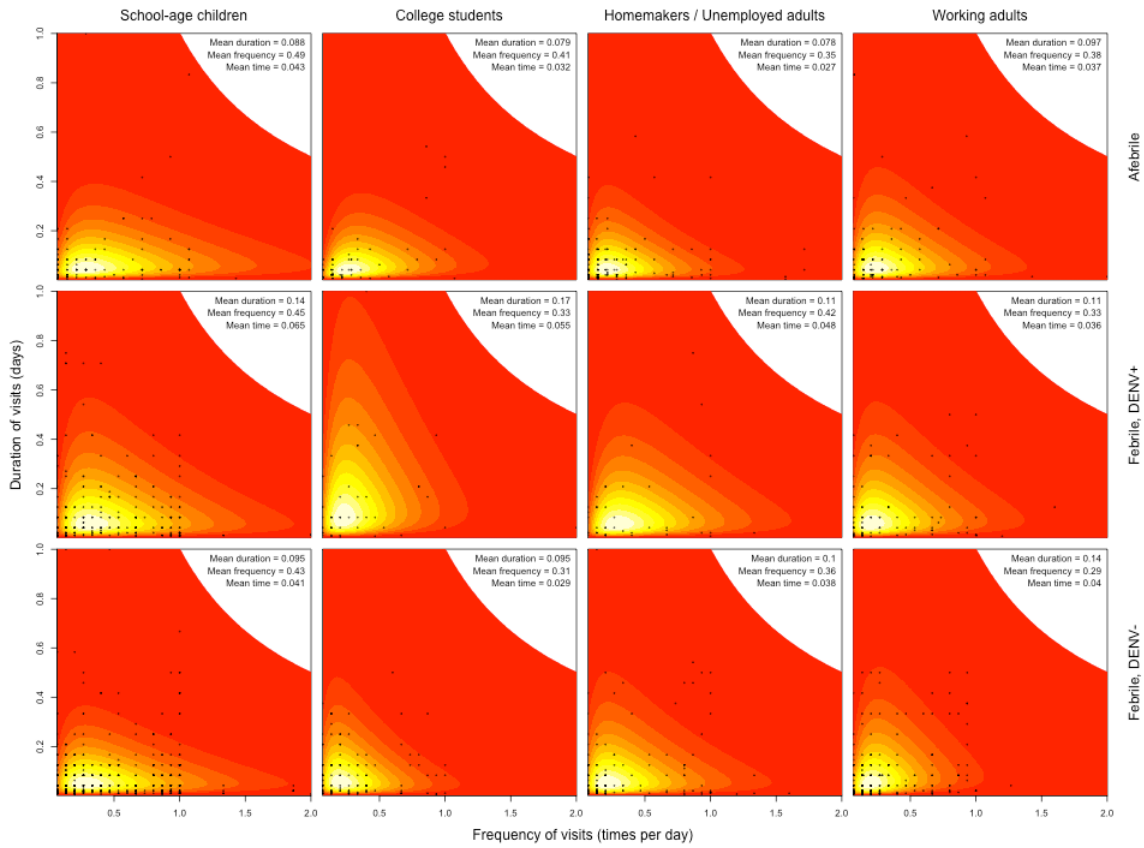


Figure S15. Joint distributions of the frequency and mean duration of periods of time spent at commercial locations. Colors represent continuous probabilities that range low (red), medium (orange), and high (bright yellow). Parameter values of each distribution were fitted by likelihood maximization to data from individuals from each of four groups (School-age children, College student, Homemaker / Unemployed adult, Working adult) using interviews conducted when those individuals were afebrile, febrile and DENV+, or febrile and DENV-. Sample means of duration, frequency, and proportion of total time spent at commercial locations for each group are noted in each panel.

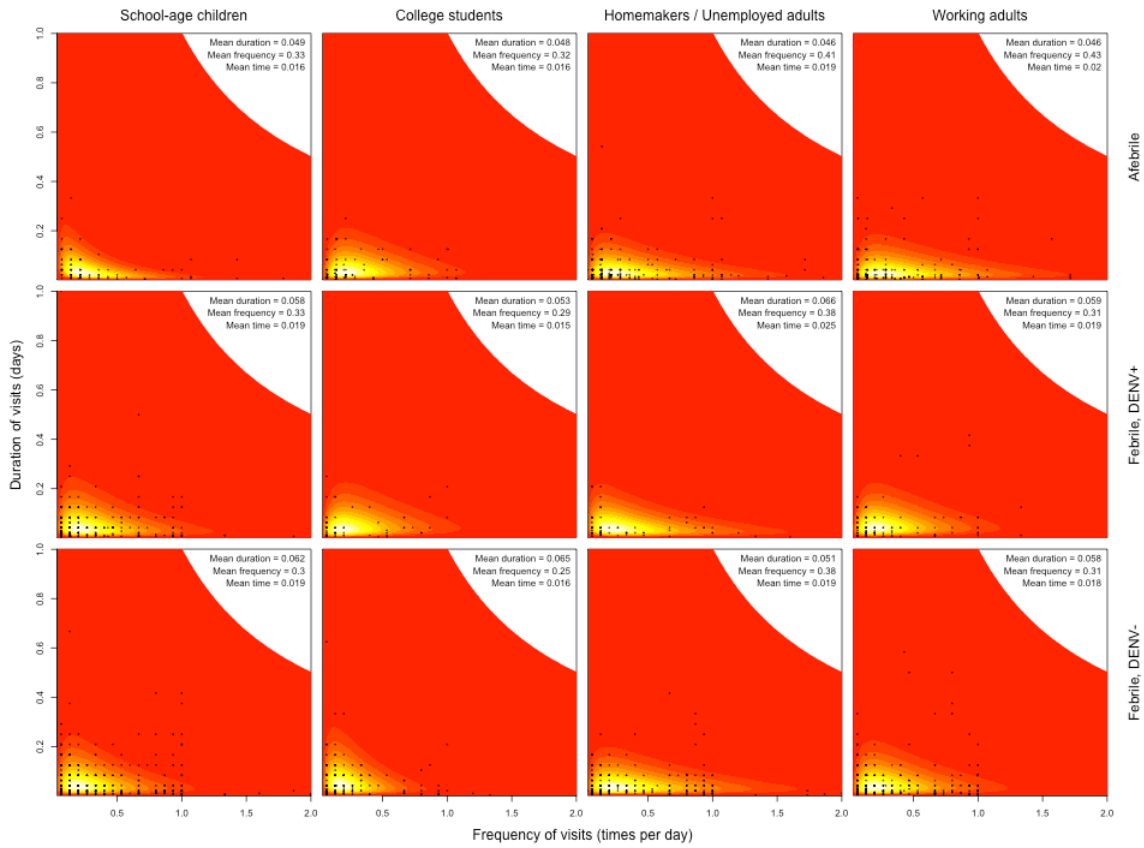


Figure S16. Joint distributions of the frequency and mean duration of periods of time spent at recreational locations. Colors represent continuous probabilities that range low (red), medium (orange), and high (bright yellow). Parameter values of each distribution were fitted by likelihood maximization to data from individuals from each of four groups (School-age children, College student, Homemaker / Unemployed adult, Working adult) using interviews conducted when those individuals were afebrile, febrile and DENV+, or febrile and DENV-. Sample means of duration, frequency, and proportion of total time spent at recreational locations for each group are noted in each panel.

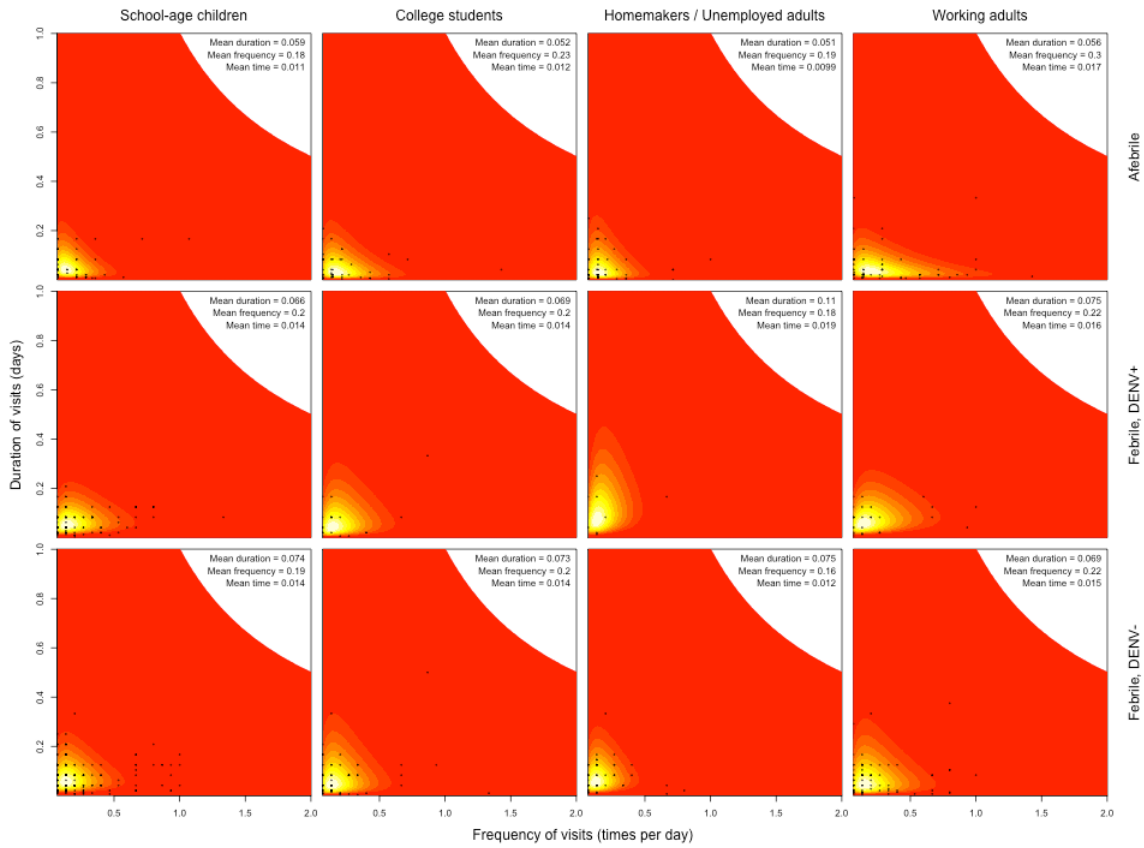


Figure S17. Joint distributions of the frequency and mean duration of periods of time spent at educational locations. Colors represent continuous probabilities that range low (red), medium (orange), and high (bright yellow). Parameter values of each distribution were fitted by likelihood maximization to data from individuals from each of four groups (School-age children, College student, Homemaker / Unemployed adult, Working adult) using interviews conducted when those individuals were afebrile, febrile and DENV+, or febrile and DENV-. Sample means of duration, frequency, and proportion of total time spent at educational locations for each group are noted in each panel.

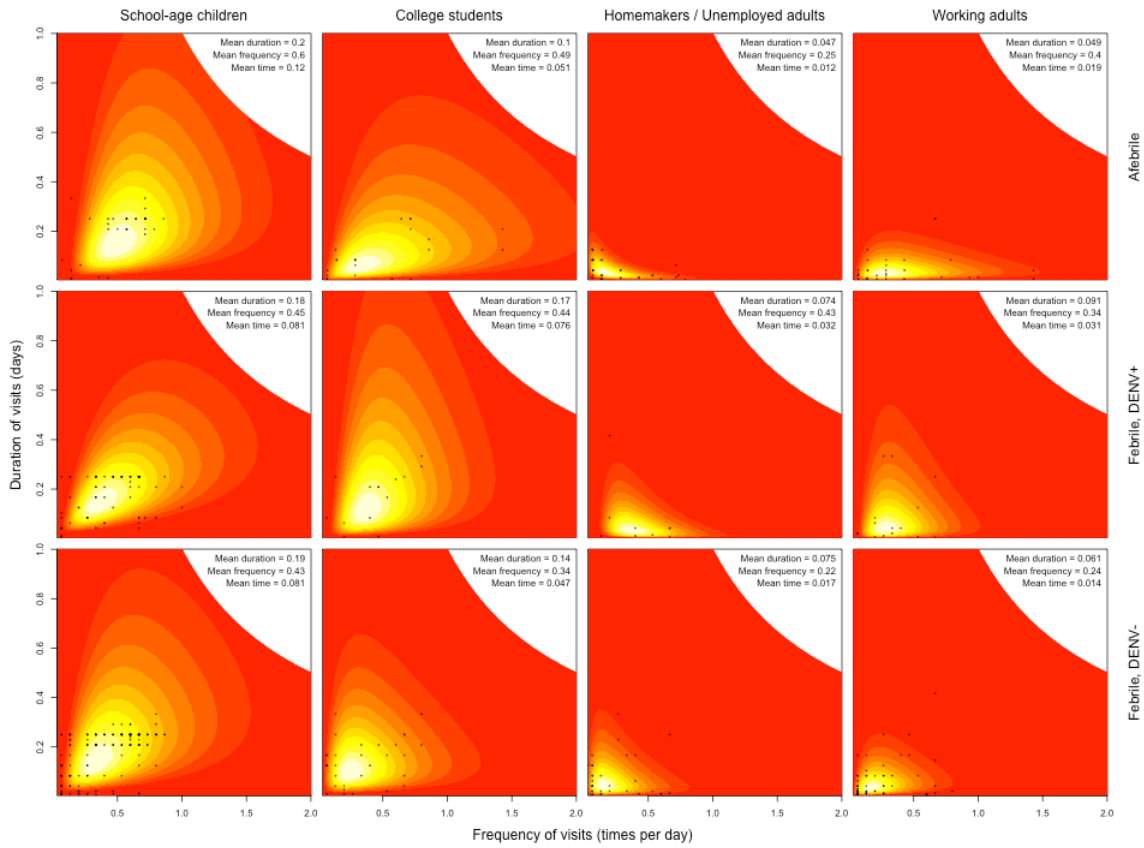


Figure S18. Joint distributions of the frequency and mean duration of periods of time spent at healthcare locations. Colors represent continuous probabilities that range low (red), medium (orange), and high (bright yellow). Parameter values of each distribution were fitted by likelihood maximization to data from individuals from each of four groups (School-age children, College student, Homemaker / Unemployed adult, Working adult) using interviews conducted when those individuals were afebrile, febrile and DENV+, or febrile and DENV-. Sample means of duration, frequency, and proportion of total time spent at healthcare locations for each group are noted in each panel.

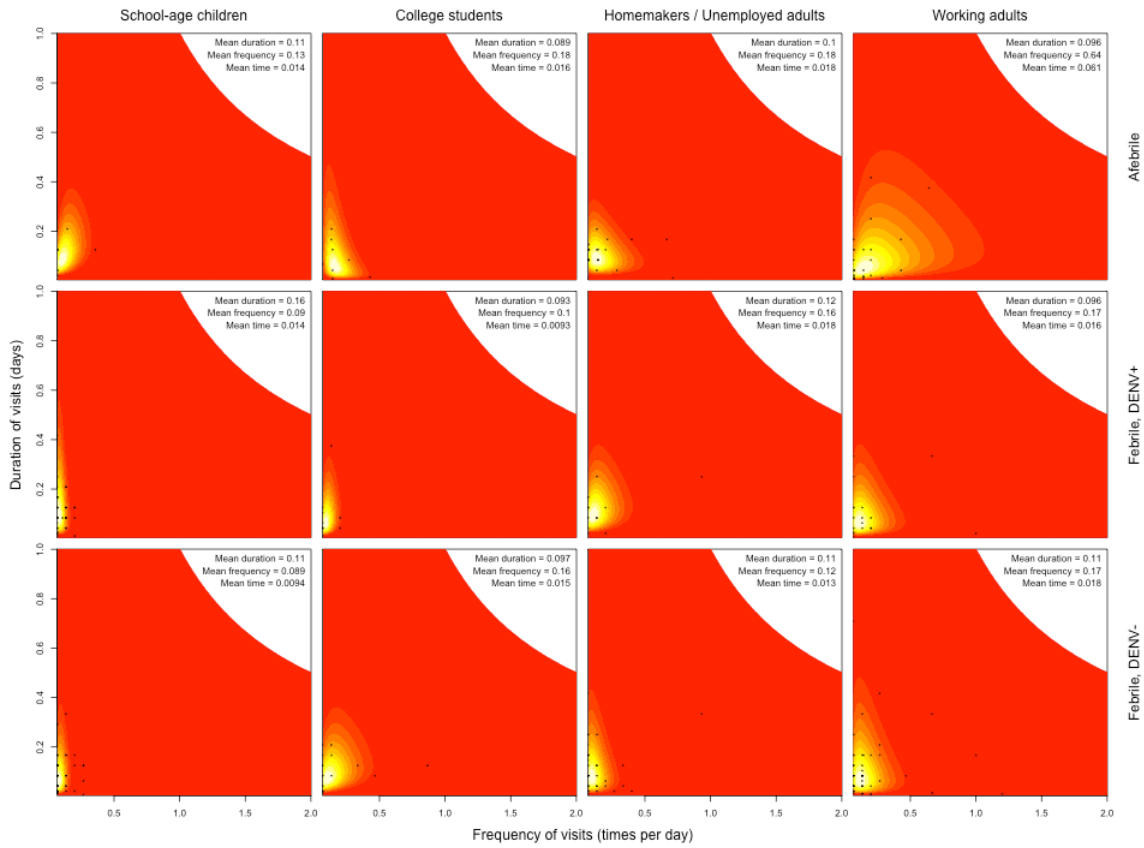


Figure S19. Joint distributions of the frequency and mean duration of periods of time spent at religious locations. Colors represent continuous probabilities that range low (red), medium (orange), and high (bright yellow). Parameter values of each distribution were fitted by likelihood maximization to data from individuals from each of four groups (School-age children, College student, Homemaker / Unemployed adult, Working adult) using interviews conducted when those individuals were afebrile, febrile and DENV+, or febrile and DENV-. Sample means of duration, frequency, and proportion of total time spent at religious locations for each group are noted in each panel.

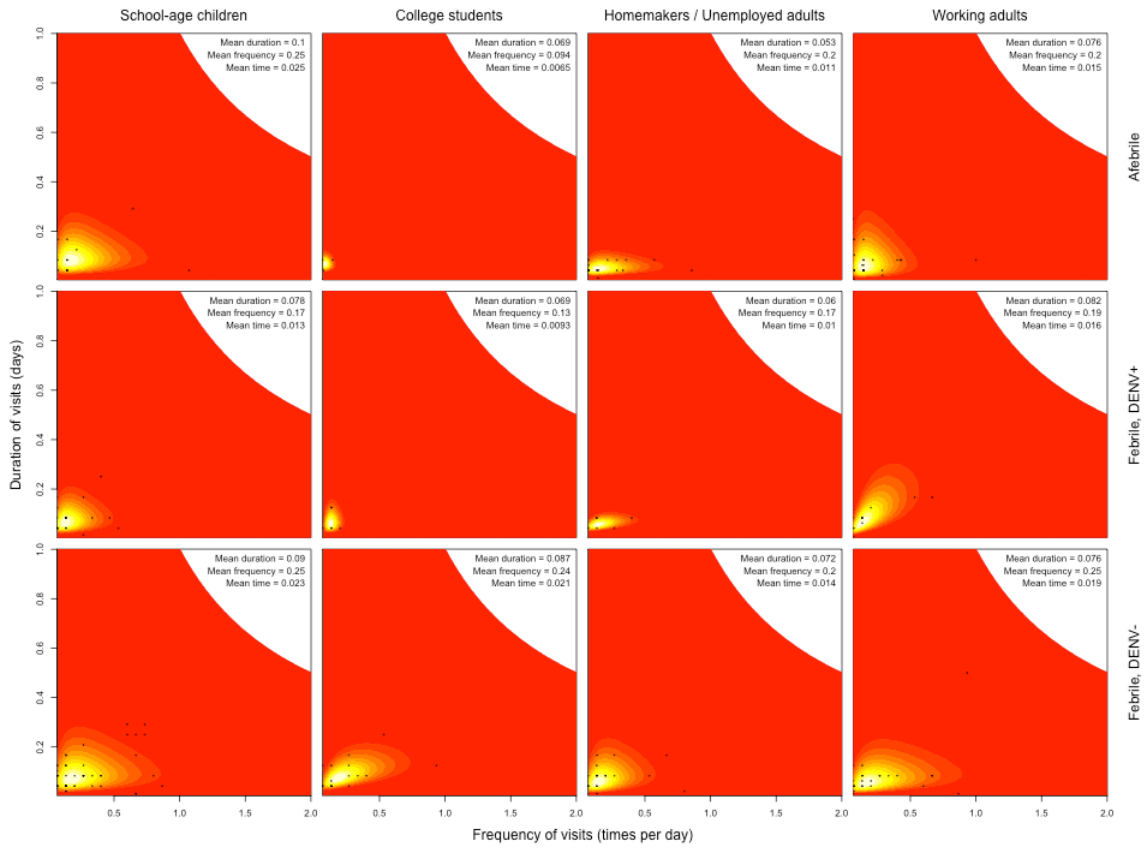


Figure S20. Joint distributions of the frequency and mean duration of periods of time spent at institutional locations. Colors represent continuous probabilities that range low (red), medium (orange), and high (bright yellow). Parameter values of each distribution were fitted by likelihood maximization to data from individuals from each of four groups (School-age children, College student, Homemaker / Unemployed adult, Working adult) using interviews conducted when those individuals were afebrile, febrile and DENV+, or febrile and DENV-. Sample means of duration, frequency, and proportion of total time spent at institutional locations for each group are noted in each panel.

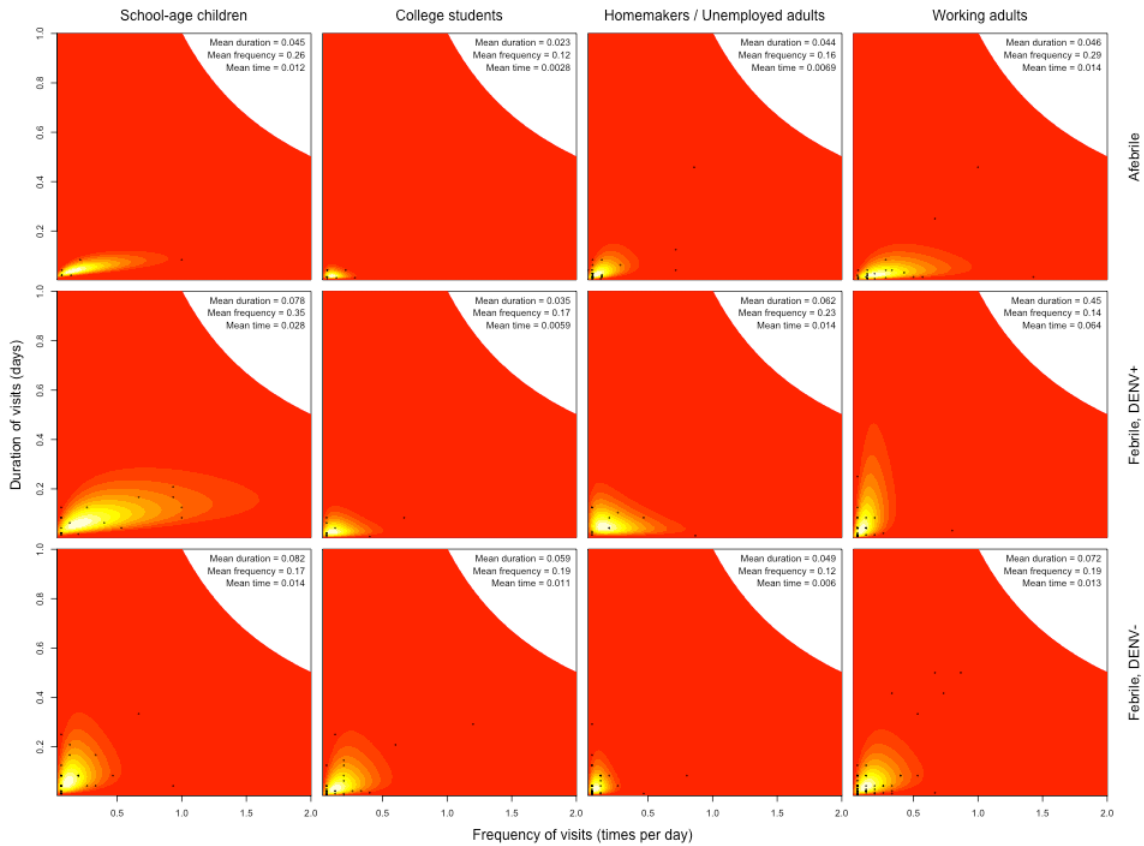


Figure S21. Joint distributions of the frequency and mean duration of periods of time spent at locations of some type other than those considered previously. Colors represent continuous probabilities that range low (red), medium (orange), and high (bright yellow). Parameter values of each distribution were fitted by likelihood maximization to data from individuals from each of four groups (School-age children, College student, Homemaker / Unemployed adult, Working adult) using interviews conducted when those individuals were afebrile, febrile and DENV+, or febrile and DENV-. Sample means of duration, frequency, and proportion of total time spent at locations of some type other than those considered previously for each group are noted in each panel.

