

Table S1: Knowledge about how dengue fever is transmitted statistics for different socio-economic parameters, by state.

| State | Variable | Mean | Count | Std | 95% CI_U | 95% CI_L | |
|--------------|----------------|--------------------|-------|-----|----------|----------|------|
| Colima | Gender | Male | 1.30 | 69 | 0.57 | 1.14 | 1.46 |
| | | Female | 1.15 | 91 | 0.43 | 1.06 | 1.25 |
| | Residence Area | Rural | 1.17 | 7 | 0.41 | 0.74 | 1.60 |
| | | Urban | 1.21 | 153 | 0.50 | 1.13 | 1.30 |
| | Kind of Home | Single-family home | 1.23 | 116 | 0.54 | 1.12 | 1.34 |
| | | *Others | 1.16 | 44 | 0.37 | 1.04 | 1.28 |
| Sonora | Gender | Male | 1.36 | 176 | 0.65 | 1.25 | 1.48 |
| | | Female | 1.27 | 346 | 0.52 | 1.21 | 1.33 |
| | Residence Area | Rural | 1.20 | 49 | 0.46 | 1.05 | 1.34 |
| | | Urban | 1.31 | 473 | 0.58 | 1.25 | 1.37 |
| | Kind of Home | Single-family home | 1.29 | 392 | 0.55 | 1.23 | 1.36 |
| | | *Others | 1.33 | 130 | 0.61 | 1.21 | 1.45 |
| Other States | Gender | Male | 1.33 | 40 | 0.48 | 1.15 | 1.51 |
| | | Female | 1.24 | 73 | 0.60 | 1.08 | 1.39 |
| | Residence Area | Rural | 1.00 | 6 | 0 | - | - |
| | | Urban | 1.29 | 107 | 0.57 | 1.16 | 1.41 |
| | Kind of Home | Single-family home | 1.25 | 65 | 0.56 | 1.10 | 1.40 |
| | | *Others | 1.30 | 48 | 0.57 | 1.11 | 1.49 |

Table S2.1: Knowledge about symptoms associated with dengue fever statistics for different socio-economic parameters by state.

| State | Variable | Mean | Count | Std | 95% CI_U | 95% CI_L | |
|--------------|----------------|--------------------|-------|------|----------|----------|-------|
| Colima | Gender | Male | 5.87 | 311 | 2.24 | 5.25 | 6.49 |
| | | Female | 5.66 | 447 | 1.95 | 5.22 | 6.09 |
| | Residence Area | Rural | 4.33 | 26 | 1.86 | 2.38 | 6.29 |
| | | Urban | 5.81 | 732 | 2.06 | 5.45 | 6.17 |
| | Kind of Home | Flats/Apartment | 4.50 | 9 | 2.12 | -14.56 | 23.56 |
| | | Semi-detached | 6.29 | 107 | 2.26 | 5.13 | 7.45 |
| | | Single family home | 5.79 | 544 | 2.06 | 5.36 | 6.21 |
| | | Townhouse | 5.11 | 92 | 1.90 | 4.16 | 6.06 |
| | *Others | 6.00 | 6 | - | - | - | |
| Sonora | Gender | Male | 5.73 | 739 | 1.85 | 5.41 | 6.05 |
| | | Female | 5.18 | 1410 | 1.77 | 4.97 | 5.40 |
| | Residence Area | Rural | 4.78 | 196 | 1.86 | 4.19 | 5.37 |
| | | Urban | 5.43 | 1953 | 1.80 | 5.24 | 5.61 |
| | Kind of Home | Flats/Apartment | 4.74 | 90 | 2.16 | 3.70 | 5.78 |
| | | Semi-detached | 5.32 | 181 | 1.84 | 4.68 | 5.96 |
| | | Single family home | 5.40 | 1637 | 1.80 | 5.20 | 5.61 |
| | | Townhouse | 5.61 | 202 | 1.68 | 5.04 | 6.18 |
| | *Others | 4.33 | 39 | 1.80 | 2.95 | 5.72 | |
| Other States | Gender | Male | 5.73 | 172 | 1.48 | 5.18 | 6.29 |
| | | Female | 5.51 | 325 | 1.99 | 4.99 | 6.03 |
| | Residence Area | Rural | 4.00 | 24 | 2.00 | 1.90 | 6.10 |
| | | Urban | 5.70 | 473 | 1.78 | 5.31 | 6.09 |
| | Kind of Home | Flats/Apartment | 4.44 | 40 | 1.13 | 3.58 | 5.31 |
| | | Semi-detached | 6.75 | 81 | 2.01 | 5.48 | 8.02 |
| | | Single family home | 5.71 | 297 | 1.83 | 5.20 | 6.22 |
| | | Townhouse | 5.25 | 63 | 1.22 | 4.48 | 6.02 |
| | *Others | 4.00 | 16 | 2.16 | 0.56 | 7.44 | |

Table S2.2: Knowledge about how dengue fever is transmitted statistics for different socio-economic parameters.

| Variable | | Mean | Count | Std | 95% CI_U | 95% CI_L |
|----------------|--------------------|------|-------|------|----------|----------|
| Gender | Male | 1.34 | 285 | 0.61 | 1.26 | 1.43 |
| | Female | 1.24 | 510 | 0.52 | 1.19 | 1.29 |
| Residence Area | Rural | 1.17 | 62 | 0.43 | 1.05 | 1.29 |
| | Urban | 1.29 | 733 | 0.56 | 1.24 | 1.33 |
| Kind of Home | Flats/Apartment | 1.33 | 40 | 0.61 | 1.11 | 1.56 |
| | Semi-detached | 1.25 | 79 | 0.57 | 1.11 | 1.40 |
| | Single family home | 1.28 | 573 | 0.55 | 1.23 | 1.33 |
| | Townhouse | 1.32 | 87 | 0.56 | 1.18 | 1.46 |
| | *Others | 1.14 | 16 | 0.36 | 0.93 | 1.35 |
| State | Colima | 1.21 | 160 | 0.49 | 1.13 | 1.30 |
| | Sonora | 1.30 | 522 | 0.57 | 1.25 | 1.36 |
| | †Other states | 1.27 | 113 | 0.56 | 1.15 | 1.39 |

*Others includes structures like Terrace, Duplex and Condominium.

†Other states include states like Morelos, Nuevo Leon, Baja California, Chiapas, Ciudad de Mexico, Durango, Jalisco, Queretaro, Puebla, San Luis Potosi, Guerrero and Zacatecas.

Table S2.3: Knowledge about how to reduce dengue transmission statistics for different socio-economic parameters.

| Variable | | Mean | Count | Std | 95% CI_U | 95% CI_L |
|----------------|--------------------|------|-------|------|----------|----------|
| Gender | Male | 4.56 | 967 | 2.19 | 4.27 | 4.86 |
| | Female | 4.34 | 1779 | 2.09 | 4.14 | 4.54 |
| Residence Area | Rural | 3.75 | 199 | 2.21 | 3.15 | 4.36 |
| | Urban | 4.48 | 2547 | 2.11 | 4.30 | 4.65 |
| Kind of Home | Flats/Apartment | 4.37 | 131 | 1.97 | 3.63 | 5.10 |
| | Semi-detached | 4.84 | 305 | 1.71 | 4.41 | 5.27 |
| | Single family home | 4.34 | 1949 | 2.20 | 4.14 | 5.27 |
| | Townhouse | 4.70 | 310 | 2.00 | 4.21 | 5.19 |
| | *Others | 3.64 | 51 | 2.10 | 2.43 | 4.85 |
| State | Colima | 4.58 | 604 | 2.33 | 4.18 | 4.98 |
| | Sonora | 4.30 | 1726 | 2.06 | 4.10 | 4.51 |
| | †Other states | 4.67 | 416 | 2.06 | 4.24 | 5.11 |

*Others includes structures like Terrace, Duplex and Condominium.

†Other states include states like Morelos, Nuevo Leon, Baja California, Chiapas, Ciudad de Mexico, Durango, Jalisco, Queretaro, Puebla, San Luis Potosi, Guerrero and Zacatecas.

Table S2.4: Knowledge about symptoms associated with dengue fever statistics for different socio-economic parameters.

| Variable | | Mean | Count | Std | 95% CI_U | 95% CI_L |
|----------------|--------------------|------|-------|------|----------|----------|
| Gender | Male | 5.76 | 1222 | 1.91 | 5.51 | 6.02 |
| | Female | 5.32 | 2182 | 1.85 | 5.14 | 5.50 |
| Residence Area | Rural | 4.64 | 246 | 1.86 | 4.13 | 5.15 |
| | Urban | 5.55 | 3158 | 1.86 | 5.40 | 5.70 |
| Kind of Home | Flats/Apartment | 4.63 | 139 | 1.85 | 3.94 | 5.32 |
| | Semi-detached | 5.86 | 369 | 2.05 | 5.34 | 6.37 |
| | Single family home | 5.52 | 2478 | 1.86 | 5.35 | 5.69 |
| | Townhouse | 5.41 | 357 | 1.66 | 5.00 | 5.82 |
| | *Others | 4.36 | 61 | 1.82 | 3.30 | 5.41 |
| State | Colima | 5.74 | 758 | 2.07 | 5.39 | 6.10 |
| | Sonora | 5.36 | 2149 | 1.82 | 5.18 | 5.54 |
| | †Other states | 5.59 | 497 | 1.83 | 5.20 | 5.97 |

*Others includes structures like Terrace, Duplex and Condominium.

†Other states include states like Morelos, Nuevo Leon, Baja California, Chiapas, Ciudad de Mexico, Durango, Jalisco, Queretaro, Puebla, San Luis Potosi, Guerrero, and Zacatecas.

Table S2.5: Knowledge about climatic factors that affect dengue transmission statistics for different socio-economic parameters.

| Variable | | Mean | Count | Std | 95% CI_U | 95% CI_L |
|----------------|--------------------|------|-------|------|----------|----------|
| Gender | Male | 2.40 | 506 | 1.46 | 2.20 | 2.60 |
| | Female | 2.08 | 842 | 1.45 | 1.94 | 2.23 |
| Residence Area | Rural | 2.08 | 110 | 1.25 | 1.73 | 2.42 |
| | Urban | 2.20 | 1238 | 1.48 | 2.08 | 2.33 |
| Kind of Home | Flats/Apartment | 2.23 | 67 | 1.38 | 1.72 | 2.75 |
| | Semi-detached | 2.03 | 128 | 1.48 | 1.66 | 2.40 |
| | Single family home | 2.21 | 977 | 1.45 | 2.07 | 2.35 |
| | Townhouse | 2.24 | 148 | 1.55 | 1.86 | 2.62 |
| | *Others | 2.00 | 28 | 1.57 | 1.09 | 2.91 |
| State | Colima | 2.17 | 287 | 1.44 | 1.93 | 2.42 |
| | Sonora | 2.16 | 853 | 1.49 | 2.02 | 2.31 |
| | †Other states | 2.34 | 208 | 1.36 | 2.05 | 2.62 |

*Others includes structures like Terrace, Duplex and Condominium.

†Other states include states like Morelos, Nuevo Leon, Baja California, Chiapas, Ciudad de Mexico, Durango, Jalisco, Queretaro, Puebla, San Luis Potosi, Guerrero and Zacatecas.

Table S3: Knowledge about how to reduce dengue transmission statistics for different socio-economic parameters by state.

| State | Variable | Mean | Count | Std | 95% CI_U | 95% CI_L | |
|--------------|----------------|--------------------|-------|------|----------|----------|-------|
| Colima | Gender | Male | 4.49 | 238 | 2.38 | 3.83 | 5.15 |
| | | Female | 4.63 | 366 | 2.30 | 4.12 | 5.15 |
| | Residence Area | Rural | 4.33 | 26 | 2.34 | 1.88 | 6.79 |
| | | Urban | 4.59 | 578 | 2.33 | 4.18 | 5.00 |
| | Kind of Home | Flats/Apartment | 6.00 | 12 | 1.41 | -6.71 | 18.71 |
| | | Semi-detached | 5.47 | 93 | 1.81 | 4.54 | 6.40 |
| | | Single family home | 4.39 | 413 | 2.39 | 3.90 | 4.88 |
| | | Townhouse | 4.61 | 83 | 2.40 | 3.42 | 5.81 |
| | *Others | 3.00 | 3 | - | - | - | |
| Sonora | Gender | Male | 4.53 | 584 | 2.14 | 4.15 | 4.90 |
| | | Female | 4.20 | 1142 | 2.02 | 3.96 | 4.44 |
| | Residence Area | Rural | 3.95 | 162 | 2.22 | 3.25 | 4.65 |
| | | Urban | 4.34 | 1564 | 2.04 | 4.13 | 4.56 |
| | Kind of Home | Flats/Apartment | 4.32 | 82 | 2.16 | 3.27 | 5.36 |
| | | Semi-detached | 4.32 | 147 | 1.57 | 3.78 | 4.87 |
| | | Single family home | 4.28 | 1298 | 2.13 | 4.04 | 4.52 |
| | | Townhouse | 4.58 | 165 | 1.83 | 3.97 | 5.20 |
| | *Others | 3.78 | 34 | 2.33 | 1.98 | 5.57 | |
| Other States | Gender | Male | 4.83 | 145 | 2.07 | 4.06 | 5.61 |
| | | Female | 4.59 | 271 | 2.07 | 4.05 | 5.13 |
| | Residence Area | Rural | 1.83 | 11 | 0.75 | 1.04 | 2.62 |
| | | Urban | 4.88 | 405 | 1.97 | 4.45 | 5.31 |
| | Kind of Home | Flats/Apartment | 4.11 | 37 | 1.62 | 2.87 | 5.35 |
| | | Semi-detached | 5.52 | 65 | 1.56 | 4.42 | 6.41 |
| | | Single family home | 4.58 | 238 | 2.23 | 3.96 | 5.20 |
| | | Townhouse | 5.17 | 62 | 1.95 | 3.93 | 6.40 |
| | *Others | 3.50 | 14 | 2.08 | 0.19 | 6.81 | |

Table S4: Knowledge, Attitude, and Practice about Climate change and dengue fever

| Variable | | P-Value | | |
|-----------|--|---------|----------------|--------|
| | | Gender | Residence Area | State |
| Knowledge | Heard about Climate change | 0.1436 | 0.8834 | 0.6339 |
| | Perception that climate change is occurring | 0.3794 | 0.0116 | 0.3247 |
| | The perception that climate change affects the transmission of DF | 0.0828 | 0.5497 | 0.2018 |
| Attitude | Need for education programs on mitigation strategies related to climate change | 0.0446 | 0.2876 | 0.0199 |
| | Need for education programs on early warning signs related to climate change | 0.3093 | 0.3228 | 0.0939 |
| | Need for increased knowledge of how climate change can affect dengue fever | 0.0275 | 0.1741 | 0.8588 |
| | Need to reduce the risk of dengue caused by climate change | 0.1982 | 0.7079 | 0.1391 |
| | Need for government to take action to mitigate dengue fever risk that may be because of climate change | 0.1934 | 0.2171 | 0.0081 |
| Practice | Measures were taken to eliminate mosquitos in respondent's household in the last year. | 0.9034 | 0.9125 | 0.1166 |
| | Sprayed interior wall in the past 12 months | 0.9695 | 0.9312 | 0.4061 |
| | Used mosquito control against larvae in household | 0.6926 | 0.1227 | 0.0368 |
| | Used adult mosquito control in household | 0.9790 | 0.6111 | 0.3996 |

Table S5.1: Measures taken by respondents in the previous year to control mosquitoes statistics for different socio-economic parameters.

| Variable | Mean | Count | Std | 95% CI_U | 95% CI_L |
|----------------|--------------------|-------|------|----------|----------|
| Gender | Male | 763 | 2.13 | 9.06 | 10.01 |
| | Female | 1269 | 2.22 | 9.45 | 10.22 |
| Residence Area | Rural | 167 | 3.21 | 7.24 | 10.34 |
| | Urban | 1865 | 2.05 | 9.52 | 10.11 |
| Kind of Home | Flats/Apartment | 101 | 2.67 | 7.38 | 10.98 |
| | Semi-detached | 270 | 2.25 | 9.11 | 10.89 |
| | Single family home | 1450 | 2.06 | 9.40 | 10.06 |
| | Townhouse | 183 | 2.89 | 8.24 | 11.02 |
| | *Others | 28 | 2.08 | 4.16 | 14.50 |
| State | Colima | 537 | 1.83 | 9.63 | 10.64 |
| | Sonora | 1264 | 2.32 | 9.18 | 9.97 |
| | †Other states | 231 | 2.12 | 8.73 | 10.52 |

*Others includes structures like Terrace, Duplex and Condominium.

†Other states include states like Morelos, Nuevo Leon, Baja California, Chiapas, Ciudad de Mexico, Durango, Jalisco, Queretaro, Puebla, San Luis Potosi, Guerrero and Zacatecas.

Table S5.2: Presence of items in respondent's yard statistics for different socio-economic parameters.

| Variable | | Mean | Count | Std | 95% CI_U | 95% CI_L |
|----------------|--------------------|------|-------|------|----------|----------|
| Gender | Male | 2.39 | 481 | 1.60 | 2.17 | 2.62 |
| | Female | 2.24 | 844 | 1.44 | 2.09 | 2.38 |
| Residence Area | Rural | 2.45 | 125 | 1.29 | 2.09 | 2.81 |
| | Urban | 2.28 | 1200 | 1.52 | 2.15 | 2.41 |
| Kind of Home | Flats/Apartment | 2.21 | 62 | 1.03 | 1.81 | 2.61 |
| | Semi-detached | 2.12 | 127 | 1.37 | 1.76 | 2.47 |
| | Single family home | 2.32 | 965 | 1.51 | 2.17 | 2.47 |
| | Townhouse | 2.26 | 138 | 1.73 | 1.82 | 2.71 |
| | *Others | 2.53 | 33 | 1.33 | 1.73 | 3.34 |
| State | Colima | 1.82 | 227 | 1.36 | 1.57 | 2.06 |
| | Sonora | 2.47 | 905 | 1.52 | 2.31 | 2.62 |
| | †Other states | 2.24 | 193 | 1.45 | 1.93 | 2.56 |

*Others includes structures like Terrace, Duplex and Condominium.

†Other states include states like Morelos, Nuevo Leon, Baja California, Chiapas, Ciudad de Mexico, Durango, Jalisco, Queretaro, Puebla, San Luis Potosi, Guerrero and Zacatecas.

Table S5.3: The frequency of using the measure to control adult mosquitos statistics for different socio-economic parameters.

| Variable | | Mean | Count | Std | 95% CI_U | 95% CI_L |
|----------------|--------------------|------|-------|------|----------|----------|
| Gender | Male | 1.81 | 383 | 1.44 | 1.61 | 2.00 |
| | Female | 1.91 | 783 | 1.54 | 1.76 | 2.06 |
| Residence Area | Rural | 1.79 | 95 | 1.56 | 1.36 | 2.22 |
| | Urban | 1.88 | 1071 | 1.50 | 1.76 | 2.01 |
| Kind of Home | Flats/Apartment | 2.10 | 63 | 1.67 | 1.48 | 2.73 |
| | Semi-detached | 2.21 | 139 | 1.59 | 1.81 | 2.61 |
| | Single family home | 1.85 | 829 | 1.47 | 1.71 | 1.98 |
| | Townhouse | 1.68 | 111 | 1.59 | 1.29 | 2.07 |
| | *Others | 1.71 | 24 | 1.49 | 0.85 | 2.57 |
| State | Colima | 1.68 | 222 | 1.37 | 1.45 | 1.92 |
| | Sonora | 1.86 | 746 | 1.54 | 1.71 | 2.01 |
| | †Other states | 2.22 | 198 | 1.51 | 1.91 | 2.54 |

*Others includes structures like Terrace, Duplex and Condominium.

†Other states include states like Morelos, Nuevo Leon, Baja California, Chiapas, Ciudad de Mexico, Durango, Jalisco, Queretaro, Puebla, San Luis Potosi, Guerrero and Zacatecas.

Table S6: Level of self-efficacy toward dengue prevention practices statistics for different socio-economic parameters.

| Variable | | Mean | Count | Std | 95% CI_U | 95% CI_L |
|----------------|--------------------|--------|-------|-------|----------|----------|
| Gender | Male | 118.54 | 24894 | 20.03 | 115.82 | 121.27 |
| | Female | 117.70 | 48021 | 17.86 | 115.96 | 119.44 |
| Residence Area | Rural | 114.51 | 6069 | 17.09 | 109.80 | 119.22 |
| | Urban | 118.31 | 66846 | 18.73 | 116.76 | 119.86 |
| Kind of Home | Flats/Apartment | 110.50 | 3315 | 19.08 | 103.37 | 117.62 |
| | Semi-detached | 118.93 | 7255 | 18.23 | 114.26 | 123.60 |
| | Single family home | 118.16 | 52817 | 18.84 | 116.41 | 119.91 |
| | Townhouse | 118.75 | 7838 | 17.55 | 114.44 | 123.07 |
| | *Others | 120.71 | 1690 | 15.21 | 111.93 | 129.50 |
| State | Colima | 120.91 | 15598 | 16.15 | 118.10 | 123.73 |
| | Sonora | 116.99 | 46797 | 19.37 | 115.09 | 118.90 |
| | †Other states | 118.20 | 10520 | 18.20 | 114.37 | 122.04 |

*Others includes structures like Terrace, Duplex and Condominium.

†Other states include states like Morelos, Nuevo Leon, Baja California, Chiapas, Ciudad de Mexico, Durango, Jalisco, Queretaro, Puebla, San Luis Potosi, Guerrero and Zacatecas.

Table S7: Univariate and multivariate multiple linear regression analysis with mosquito control measures as a dependent variable.

| Independent Variables | Univariate | | Multivariate | | |
|--|------------|---------|--------------------|-----------------------|---------|
| | β | p-value | β (Estimate) | Standardized estimate | p-value |
| Items in yard | -0.302 | 0.0007 | -0.210 | -0.167 | 0.0133 |
| Age | 0.007 | 0.5059 | 0.009 | 0.069 | 0.2996 |
| Self-efficacy | 0.045 | <.0001 | 0.038 | 0.323 | <.0001 |
| Knowledge about dengue reduction practices | 0.267 | <.0001 | 0.246 | 0.316 | <.0001 |

Table S8a: The results of multiple logistic regression analysis on predicting the odds of taking measures against mosquitoes the previous year.

| Independent Variables | β | S. E | Significance | Prevalence OR | 95% CI |
|-----------------------|---------|-------|--------------|---------------|---------------|
| Constant | -2.260 | 0.818 | 0.0057 | - | - |
| Gender | | | | | |
| Female | 0.019 | 0.139 | 0.8890 | 1.040 | 0.603 - 1.792 |
| Male | 0.000 | - | - | 1 | - |
| Age | 0.062 | 0.013 | <.0001 | 1.064 | 1.036 - 1.092 |
| Self-efficacy | 0.020 | 0.007 | 0.0024 | 1.020 | 1.007 - 1.033 |

Table S8b: Univariate and multivariate multiple logistic regression analysis on predicting the odds of taking measures against mosquitoes the previous year.

| Independent Variables | Univariate | | | Multivariate | | |
|-----------------------|------------|---------|---------------|--------------|---------|---------------|
| | OR | p-value | 95% CI | AOR | p-value | 95% CI |
| Gender | | | | | | |
| Female | 1.092 | 0.7404 | 0.648 - 1.840 | 1.040 | 0.8890 | 0.603 - 1.792 |
| Male | | | | | | |
| Age | 1.067 | <.0001 | 1.040 - 1.096 | 1.064 | <.0001 | 1.036 - 1.092 |
| Self-efficacy | 1.022 | 0.0004 | 1.010 - 1.034 | 1.020 | 0.0024 | 1.007 - 1.033 |