Supplementary Material

# Supplementary Tables

Table 1. Beta regression results – Dependent variable: Poor general health

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| Violation event | 0.014\*\*\* |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (0.005) |  |  |  |  |  |  |  |  |  |  |  |  |
| Violations |  | 0.001\*\*\* |  |  |  |  |  |  |  |  |  |  |  |
|  |  | (0.000) |  |  |  |  |  |  |  |  |  |  |  |
| Pop affected by violations |  |  | 0.089\*\*\* |  |  |  |  |  |  |  |  |  |  |
|  |  |  | (0.013) |  |  |  |  |  |  |  |  |  |  |
| Violations duration |  |  |  | 0.000 |  |  |  |  |  |  |  |  |  |
|  |  |  |  | (0.000) |  |  |  |  |  |  |  |  |  |
| T1 violations |  |  |  |  | 0.003\*\*\* |  |  |  |  |  |  |  |  |
|  |  |  |  |  | (0.001) |  |  |  |  |  |  |  |  |
| Pop affected by T1 violations |  |  |  |  |  | 0.071\*\*\* |  |  |  |  |  |  |  |
|  |  |  |  |  |  | (0.016) |  |  |  |  |  |  |  |
| T1 violations duration |  |  |  |  |  |  | 0.000\* |  |  |  |  |  |  |
|  |  |  |  |  |  |  | (0.000) |  |  |  |  |  |  |
| T1 violations (pathogens) |  |  |  |  |  |  |  | 0.003\* |  |  |  |  |  |
|  |  |  |  |  |  |  |  | (0.002) |  |  |  |  |  |
| Pop affected by T1 violations (pathogens) |  |  |  |  |  |  |  |  | 0.070\*\*\* |  |  |  |  |
|  |  |  |  |  |  |  |  |  | (0.017) |  |  |  |  |
| Pathogens violations duration |  |  |  |  |  |  |  |  |  | 0.000 |  |  |  |
|  |  |  |  |  |  |  |  |  |  | (0.000) |  |  |  |
| T2 violations |  |  |  |  |  |  |  |  |  |  | 0.001\*\*\* |  |  |
|  |  |  |  |  |  |  |  |  |  |  | (0.000) |  |  |
| Pop affected by T2 violations |  |  |  |  |  |  |  |  |  |  |  | 0.090\*\*\* |  |
|  |  |  |  |  |  |  |  |  |  |  |  | (0.014) |  |
| T2 violations duration |  |  |  |  |  |  |  |  |  |  |  |  | 0.000 |
|  |  |  |  |  |  |  |  |  |  |  |  |  | (0.000) |
| Education | -1.189\*\*\* | -1.183\*\*\* | -1.180\*\*\* | -1.183\*\*\* | -1.183\*\*\* | -1.185\*\*\* | -1.184\*\*\* | -1.184\*\*\* | -1.184\*\*\* | -1.183\*\*\* | -1.183\*\*\* | -1.177\*\*\* | -1.183\*\*\* |
|  | (0.041) | (0.041) | (0.041) | (0.041) | (0.041) | (0.041) | (0.041) | (0.041) | (0.041) | (0.041) | (0.041) | (0.041) | (0.041) |
| Income | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* |
|  | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) |
| Poverty | 1.466\*\*\* | 1.466\*\*\* | 1.455\*\*\* | 1.460\*\*\* | 1.468\*\*\* | 1.460\*\*\* | 1.465\*\*\* | 1.461\*\*\* | 1.460\*\*\* | 1.461\*\*\* | 1.463\*\*\* | 1.454\*\*\* | 1.460\*\*\* |
|  | (0.142) | (0.142) | (0.141) | (0.143) | (0.143) | (0.143) | (0.143) | (0.143) | (0.143) | (0.143) | (0.142) | (0.142) | (0.143) |
| Unemployment | 0.540\*\*\* | 0.540\*\*\* | 0.560\*\*\* | 0.551\*\*\* | 0.545\*\*\* | 0.550\*\*\* | 0.551\*\*\* | 0.550\*\*\* | 0.545\*\*\* | 0.549\*\*\* | 0.542\*\*\* | 0.562\*\*\* | 0.550\*\*\* |
|  | (0.205) | (0.204) | (0.203) | (0.206) | (0.205) | (0.205) | (0.206) | (0.206) | (0.205) | (0.207) | (0.205) | (0.203) | (0.206) |
| Uninsured | 0.524\*\*\* | 0.523\*\*\* | 0.519\*\*\* | 0.532\*\*\* | 0.526\*\*\* | 0.521\*\*\* | 0.528\*\*\* | 0.527\*\*\* | 0.524\*\*\* | 0.530\*\*\* | 0.525\*\*\* | 0.522\*\*\* | 0.532\*\*\* |
|  | (0.080) | (0.080) | (0.079) | (0.080) | (0.080) | (0.080) | (0.080) | (0.080) | (0.080) | (0.080) | (0.080) | (0.079) | (0.080) |
| Gini | 1.164\*\*\* | 1.162\*\*\* | 1.139\*\*\* | 1.173\*\*\* | 1.170\*\*\* | 1.172\*\*\* | 1.173\*\*\* | 1.173\*\*\* | 1.173\*\*\* | 1.173\*\*\* | 1.163\*\*\* | 1.143\*\*\* | 1.173\*\*\* |
|  | (0.126) | (0.126) | (0.125) | (0.127) | (0.127) | (0.127) | (0.128) | (0.128) | (0.127) | (0.128) | (0.126) | (0.126) | (0.127) |
| Elderly | -0.595\*\*\* | -0.597\*\*\* | -0.605\*\*\* | -0.600\*\*\* | -0.594\*\*\* | -0.602\*\*\* | -0.600\*\*\* | -0.602\*\*\* | -0.604\*\*\* | -0.601\*\*\* | -0.599\*\*\* | -0.608\*\*\* | -0.601\*\*\* |
|  | (0.058) | (0.058) | (0.057) | (0.058) | (0.058) | (0.058) | (0.058) | (0.058) | (0.058) | (0.058) | (0.058) | (0.057) | (0.058) |
| Nonwhite | 0.210\*\*\* | 0.207\*\*\* | 0.208\*\*\* | 0.209\*\*\* | 0.209\*\*\* | 0.210\*\*\* | 0.209\*\*\* | 0.209\*\*\* | 0.209\*\*\* | 0.209\*\*\* | 0.207\*\*\* | 0.206\*\*\* | 0.209\*\*\* |
|  | (0.021) | (0.021) | (0.021) | (0.021) | (0.021) | (0.021) | (0.021) | (0.021) | (0.021) | (0.021) | (0.021) | (0.021) | (0.021) |
| Constant | -1.775\*\*\* | -1.772\*\*\* | -1.764\*\*\* | -1.775\*\*\* | -1.776\*\*\* | -1.774\*\*\* | -1.775\*\*\* | -1.774\*\*\* | -1.773\*\*\* | -1.774\*\*\* | -1.772\*\*\* | -1.764\*\*\* | -1.775\*\*\* |
|  | (0.038) | (0.038) | (0.038) | (0.038) | (0.038) | (0.038) | (0.038) | (0.038) | (0.038) | (0.038) | (0.038) | (0.038) | (0.038) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Observations | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 |
| Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 |  |  |  |  |  |  |  |  |  |  |

Table 2. OLS regression results – Dependent variable: Poor physical

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Violation event | 0.025\*\* |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (0.012) |  |  |  |  |  |  |  |  |  |  |  |  |
| Violations |  | 0.002\*\*\* |  |  |  |  |  |  |  |  |  |  |  |
|  |  | (0.001) |  |  |  |  |  |  |  |  |  |  |  |
| Pop affected by violations |  |  | 0.002\*\*\* |  |  |  |  |  |  |  |  |  |  |
|  |  |  | (0.000) |  |  |  |  |  |  |  |  |  |  |
| Violations duration |  |  |  | 0.000 |  |  |  |  |  |  |  |  |  |
|  |  |  |  | (0.000) |  |  |  |  |  |  |  |  |  |
| T1 violations |  |  |  |  | -0.001 |  |  |  |  |  |  |  |  |
|  |  |  |  |  | (0.003) |  |  |  |  |  |  |  |  |
| Pop affected by T1 violations |  |  |  |  |  | 0.000 |  |  |  |  |  |  |  |
|  |  |  |  |  |  | (0.000) |  |  |  |  |  |  |  |
| T1 violations duration |  |  |  |  |  |  | -0.000 |  |  |  |  |  |  |
|  |  |  |  |  |  |  | (0.000) |  |  |  |  |  |  |
| T1 violations (pathogens) |  |  |  |  |  |  |  | 0.007 |  |  |  |  |  |
|  |  |  |  |  |  |  |  | (0.006) |  |  |  |  |  |
| Pop affected by T1 violations (pathogens) |  |  |  |  |  |  |  |  | 0.000 |  |  |  |  |
|  |  |  |  |  |  |  |  |  | (0.001) |  |  |  |  |
| Pathogens violations duration |  |  |  |  |  |  |  |  |  | 0.000 |  |  |  |
|  |  |  |  |  |  |  |  |  |  | (0.000) |  |  |  |
| T2 violations |  |  |  |  |  |  |  |  |  |  | 0.002\*\*\* |  |  |
|  |  |  |  |  |  |  |  |  |  |  | (0.001) |  |  |
| Pop affected by T2 violations |  |  |  |  |  |  |  |  |  |  |  | 0.002\*\*\* |  |
|  |  |  |  |  |  |  |  |  |  |  |  | (0.000) |  |
| T2 violations duration |  |  |  |  |  |  |  |  |  |  |  |  | 0.000 |
|  |  |  |  |  |  |  |  |  |  |  |  |  | (0.000) |
| Education | -0.022\*\*\* | -0.022\*\*\* | -0.022\*\*\* | -0.022\*\*\* | -0.022\*\*\* | -0.022\*\*\* | -0.022\*\*\* | -0.022\*\*\* | -0.022\*\*\* | -0.022\*\*\* | -0.022\*\*\* | -0.022\*\*\* | -0.022\*\*\* |
|  | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) |
| Income | -0.011\*\*\* | -0.011\*\*\* | -0.011\*\*\* | -0.011\*\*\* | -0.011\*\*\* | -0.011\*\*\* | -0.011\*\*\* | -0.011\*\*\* | -0.011\*\*\* | -0.011\*\*\* | -0.011\*\*\* | -0.011\*\*\* | -0.011\*\*\* |
|  | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) |
| Poverty | 0.043\*\*\* | 0.043\*\*\* | 0.042\*\*\* | 0.042\*\*\* | 0.042\*\*\* | 0.042\*\*\* | 0.042\*\*\* | 0.042\*\*\* | 0.042\*\*\* | 0.042\*\*\* | 0.042\*\*\* | 0.042\*\*\* | 0.042\*\*\* |
|  | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) |
| Unemployment | 0.036\*\*\* | 0.036\*\*\* | 0.037\*\*\* | 0.036\*\*\* | 0.037\*\*\* | 0.037\*\*\* | 0.037\*\*\* | 0.036\*\*\* | 0.036\*\*\* | 0.036\*\*\* | 0.036\*\*\* | 0.037\*\*\* | 0.036\*\*\* |
|  | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) |
| Uninsured | 0.006\*\*\* | 0.006\*\*\* | 0.006\*\*\* | 0.006\*\*\* | 0.006\*\*\* | 0.006\*\*\* | 0.006\*\*\* | 0.006\*\*\* | 0.006\*\*\* | 0.006\*\*\* | 0.006\*\*\* | 0.006\*\*\* | 0.006\*\*\* |
|  | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) |
| Gini | 1.735\*\*\* | 1.736\*\*\* | 1.703\*\*\* | 1.752\*\*\* | 1.753\*\*\* | 1.752\*\*\* | 1.753\*\*\* | 1.752\*\*\* | 1.751\*\*\* | 1.751\*\*\* | 1.735\*\*\* | 1.707\*\*\* | 1.751\*\*\* |
|  | (0.279) | (0.279) | (0.278) | (0.280) | (0.280) | (0.280) | (0.280) | (0.280) | (0.280) | (0.280) | (0.279) | (0.278) | (0.280) |
| Elderly | -0.013\*\*\* | -0.013\*\*\* | -0.014\*\*\* | -0.014\*\*\* | -0.014\*\*\* | -0.014\*\*\* | -0.014\*\*\* | -0.014\*\*\* | -0.014\*\*\* | -0.014\*\*\* | -0.014\*\*\* | -0.014\*\*\* | -0.014\*\*\* |
|  | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) |
| Nonwhite | -0.005\*\*\* | -0.005\*\*\* | -0.005\*\*\* | -0.005\*\*\* | -0.005\*\*\* | -0.005\*\*\* | -0.005\*\*\* | -0.005\*\*\* | -0.005\*\*\* | -0.005\*\*\* | -0.005\*\*\* | -0.005\*\*\* | -0.005\*\*\* |
|  | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) |
| Constant | 3.465\*\*\* | 3.470\*\*\* | 3.481\*\*\* | 3.464\*\*\* | 3.465\*\*\* | 3.465\*\*\* | 3.467\*\*\* | 3.466\*\*\* | 3.466\*\*\* | 3.466\*\*\* | 3.471\*\*\* | 3.482\*\*\* | 3.464\*\*\* |
|  | (0.088) | (0.088) | (0.088) | (0.088) | (0.088) | (0.088) | (0.088) | (0.088) | (0.088) | (0.088) | (0.088) | (0.088) | (0.088) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Observations | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 |
| Adjusted R-squared | 0.729 | 0.729 | 0.730 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 | 0.729 | 0.730 | 0.729 |
| Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 |  |  |  |  |  |  |  |  |  |  |

Table 3. OLS regression results – Dependent variable: Poor mental

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|   | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Violation event | 0.060\*\*\* |  |  |  |  |  |  |  |  |  |  |  |  |
|  | (0.017) |  |  |  |  |  |  |  |  |  |  |  |  |
| Violations |  | 0.004\*\*\* |  |  |  |  |  |  |  |  |  |  |  |
|  |  | (0.001) |  |  |  |  |  |  |  |  |  |  |  |
| Pop affected by violations |  |  | 0.003\*\*\* |  |  |  |  |  |  |  |  |  |  |
|  |  |  | (0.000) |  |  |  |  |  |  |  |  |  |  |
| Violations duration |  |  |  | 0.000\* |  |  |  |  |  |  |  |  |  |
|  |  |  |  | (0.000) |  |  |  |  |  |  |  |  |  |
| T1 violations |  |  |  |  | -0.002 |  |  |  |  |  |  |  |  |
|  |  |  |  |  | (0.005) |  |  |  |  |  |  |  |  |
| Pop affected by T1 violations |  |  |  |  |  | 0.001 |  |  |  |  |  |  |  |
|  |  |  |  |  |  | (0.001) |  |  |  |  |  |  |  |
| T1 violations duration |  |  |  |  |  |  | -0.000 |  |  |  |  |  |  |
|  |  |  |  |  |  |  | (0.000) |  |  |  |  |  |  |
| T1 violations (pathogens) |  |  |  |  |  |  |  | 0.027\*\* |  |  |  |  |  |
|  |  |  |  |  |  |  |  | (0.011) |  |  |  |  |  |
| Pop affected by T1 violations (pathogens) |  |  |  |  |  |  |  |  | 0.001 |  |  |  |  |
|  |  |  |  |  |  |  |  |  | (0.001) |  |  |  |  |
| Pathogens violations duration |  |  |  |  |  |  |  |  |  | 0.000 |  |  |  |
|  |  |  |  |  |  |  |  |  |  | (0.000) |  |  |  |
| T2 violations |  |  |  |  |  |  |  |  |  |  | 0.005\*\*\* |  |  |
|  |  |  |  |  |  |  |  |  |  |  | (0.001) |  |  |
| Pop affected by T2 violations |  |  |  |  |  |  |  |  |  |  |  | 0.003\*\*\* |  |
|  |  |  |  |  |  |  |  |  |  |  |  | (0.001) |  |
| T2 violations duration |  |  |  |  |  |  |  |  |  |  |  |  | 0.000\*\* |
|  |  |  |  |  |  |  |  |  |  |  |  |  | (0.000) |
| Education | -0.010\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* |
|  | (0.001) | (0.001) | (0.001) | (0.001) | (0.002) | (0.002) | (0.002) | (0.001) | (0.002) | (0.002) | (0.001) | (0.001) | (0.001) |
| Income | -0.012\*\*\* | -0.012\*\*\* | -0.012\*\*\* | -0.012\*\*\* | -0.012\*\*\* | -0.012\*\*\* | -0.012\*\*\* | -0.012\*\*\* | -0.012\*\*\* | -0.012\*\*\* | -0.012\*\*\* | -0.012\*\*\* | -0.012\*\*\* |
|  | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) |
| Poverty | 0.029\*\*\* | 0.029\*\*\* | 0.028\*\*\* | 0.029\*\*\* | 0.029\*\*\* | 0.029\*\*\* | 0.029\*\*\* | 0.029\*\*\* | 0.029\*\*\* | 0.029\*\*\* | 0.029\*\*\* | 0.028\*\*\* | 0.029\*\*\* |
|  | (0.004) | (0.004) | (0.003) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.003) | (0.004) |
| Unemployment | 0.056\*\*\* | 0.056\*\*\* | 0.057\*\*\* | 0.057\*\*\* | 0.057\*\*\* | 0.057\*\*\* | 0.057\*\*\* | 0.057\*\*\* | 0.057\*\*\* | 0.057\*\*\* | 0.056\*\*\* | 0.057\*\*\* | 0.057\*\*\* |
|  | (0.006) | (0.006) | (0.006) | (0.006) | (0.006) | (0.006) | (0.006) | (0.006) | (0.006) | (0.006) | (0.006) | (0.006) | (0.006) |
| Uninsured | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 | -0.001 |
|  | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) |
| Gini | 2.200\*\*\* | 2.206\*\*\* | 2.162\*\*\* | 2.239\*\*\* | 2.242\*\*\* | 2.239\*\*\* | 2.241\*\*\* | 2.241\*\*\* | 2.239\*\*\* | 2.236\*\*\* | 2.203\*\*\* | 2.168\*\*\* | 2.239\*\*\* |
|  | (0.363) | (0.363) | (0.363) | (0.364) | (0.365) | (0.365) | (0.365) | (0.365) | (0.365) | (0.365) | (0.363) | (0.363) | (0.364) |
| Elderly | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* | -0.009\*\*\* |
|  | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) | (0.002) |
| Nonwhite | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* | -0.008\*\*\* |
|  | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) |
| Constant | 4.426\*\*\* | 4.435\*\*\* | 4.451\*\*\* | 4.419\*\*\* | 4.426\*\*\* | 4.426\*\*\* | 4.427\*\*\* | 4.430\*\*\* | 4.428\*\*\* | 4.428\*\*\* | 4.439\*\*\* | 4.452\*\*\* | 4.422\*\*\* |
|  | (0.117) | (0.117) | (0.117) | (0.117) | (0.117) | (0.117) | (0.117) | (0.117) | (0.117) | (0.117) | (0.117) | (0.117) | (0.117) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Observations | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 | 3,100 |
| Adjusted R-squared | 0.429 | 0.430 | 0.431 | 0.428 | 0.427 | 0.427 | 0.427 | 0.428 | 0.427 | 0.427 | 0.430 | 0.431 | 0.428 |
| Robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 |  |  |  |  |  |  |  |  |  |  |

**Table 4. Updated OLS results used in calculating the marginal diminishing effects of costs associated with health-based violations**

|  |  |  |
| --- | --- | --- |
|   | (1) | (2) |
| Dependent variable | Poor physical | Poor mental |
|   |   |   |
| Number of violations | 0.00390\*\*\* | 0.00959\*\*\* |
|  | (0.00132) | (0.00198) |
| Number of violations 2 | -0.00003\* | -0.00008\*\*\* |
|  | (0.00002) | (0.00002) |
| Education | -0.02239\*\*\* | -0.00932\*\*\* |
|  | (0.00110) | (0.00150) |
| Income | -0.01131\*\*\* | -0.01245\*\*\* |
|  | (0.00231) | (0.00286) |
| Poverty | 0.04251\*\*\* | 0.02880\*\*\* |
|  | (0.00290) | (0.00350) |
| Unemployment | 0.03612\*\*\* | 0.05608\*\*\* |
|  | (0.00434) | (0.00608) |
| Uninsured | 0.00614\*\*\* | -0.00159 |
|  | (0.00158) | (0.00208) |
| Gini | 1.72957\*\*\* | 2.18802\*\*\* |
|  | (0.27845) | (0.36187) |
| Old | -0.01348\*\*\* | -0.00864\*\*\* |
|  | (0.00141) | (0.00193) |
| Nonwhite | -0.00497\*\*\* | -0.00772\*\*\* |
|  | (0.00054) | (0.00071) |
| Constant | 3.47342\*\*\* | 4.44590\*\*\* |
|  | (0.08768) | (0.11678) |
|  |  |  |
| Observations | 3,100 | 3,100 |
| Adjusted R-squared | 0.72917 | 0.43074 |
| Robust standard errors in parentheses |
| \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 |

**Table 5. Diminishing marginal costs of health-based violations (physically unhealthy days)**

|  |  |  |  |
| --- | --- | --- | --- |
| Violations | Total Cost $ | Marginal Cost $(Δ per violation) | Marginal Cost Decline (%) |
| 0 | 0  | – | – |
| 1 | 3,480,403  | 3,480,403  | – |
| 2 | 6,906,846  | 3,426,443  | -1.60% |
| 3 | 10,279,330  | 3,372,484  | -3.10% |
| 4 | 13,597,854  | 3,318,524  | -4.70% |
| 5 | 16,862,418  | 3,264,564  | -6.20% |
| 6 | 20,073,022  | 3,210,604  | -7.80% |
| 7 | 23,229,667  | 3,156,645  | -9.30% |
| 8 | 26,332,352  | 3,102,685  | -10.90% |
| 9 | 29,381,077  | 3,048,725  | -12.40% |
| 10 | 32,375,843  | 2,994,766  | -14.00% |

**Table 6. Diminishing marginal costs of health-based violations (mentally unhealthy days)**

|  |  |  |  |
| --- | --- | --- | --- |
| Violations | Total Cost $ | Marginal Cost $(Δ per violation) | Marginal Cost Decline (%) |
| 0 | 0 | – | – |
| 1 | 4,846,484 | 4,846,484  | – |
| 2 | 9,611,428 | 4,764,944  | -1.70% |
| 3 | 14,294,834 | 4,683,406  | -3.40% |
| 4 | 18,896,700 | 4,601,866  | -5.00% |
| 5 | 23,417,027 | 4,520,327  | -6.70% |
| 6 | 27,855,815 | 4,438,788  | -8.40% |
| 7 | 32,213,064 | 4,357,249  | -10.10% |
| 8 | 36,488,774 | 4,275,710  | -11.80% |
| 9 | 40,682,944 | 4,194,170  | -13.50% |
| 10 | 44,795,575 | 4,112,631  | -15.10% |

**Note that:**

1. **Marginal Cost** (Δ per violation) is calculated as:

$$(β\_{1}+2β\_{2}×Number of violations)×AC×Population$$

Where:

$β\_{1}$ is the coefficient for Number of violations

$β\_{2}$ is the coefficient for Number of violations 2

$AC$ is the annual cost per unhealthy day obtained from McNamara et al. (2024). For physically unhealthy days, $AC=720 (60×12)$ and for mentally unhealthy days, $AC=408 \left(34×12\right)$

$Population$ is the county’s average population in the US, which is 104,089

1. **Total Costs** are the sum of marginal costs up to that violation.