*Supplementary Table 1: Primary and Sensitivity Analysis: Changes between Baseline and Week Twelve for 16-to-24-hour Log Transformed Average PM2.5 (average PM2.5 in levels in squared brackets)*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Intervention | Usual Care | Mean Difference |
|  | Baseline(SD) | Week 12(SD) | Baseline(SD) | Week 12(SD) | Basic\*(95% CI) | P Value | Adjusted†(95% CI) | P Value |
| **Primary Outcome Analysis** |
| Multiple Imputation‡ | 3.4 (1.1)[54.2] | 2.9 (1.0)[30.7] | 3.4 (1.1)[48.7] | 3.3 (1.2)[47.6] | -0.45(-0.75 to -0.16) | 0.003 | -0.45(-0.75 to -0.16) | 0.003 |
| No. households | 102 | 102 | 102 | 102 | 204 |  | 204 |  |
| **Sensitivity Analysis** |
| Complete Case | 3.4 (1.1)[54.6] | 2.8 (1.0)[28.9] | 3.3 (1.0)[46.5] | 3.3 (1.1)[49.8] | -0.39(-0.66 to -0.13) | 0.004 | -0.39(-0.66 to -0.13) | 0.004 |
| No. households | 101 | 91 | 95 | 87 | 172 |  | 172 |  |
|  |  |  |  |  |  |  |  |  |
| Last Observation Carried Forward | 3.4 (1.1)[54.6] | 2.9 (1.0)[33.1] | 3.3 (1.0)[46.5] | 3.3 (1.1)[49.0] | -0.32(-0.56 to -0.08) | 0.01 | -0.32(-0.56 to -0.08) | 0.01 |
| No. households | 101 | 102 | 95 | 100 | 196 |  | 196 |  |
|  |  |  |  |  |  |  |  |  |
| Mixed Model§ | 3.4 (1.1)[54.6] | 2.8 (1.0)[28.9] | 3.3 (1.0)[46.5] | 3.3 (1.1)[49.8] | -0.43(-0.73 to -0.14) | 0.004 | -0.30(-0.60 to 0.00) | 0.05 |
| No. households | 101 | 91 | 95 | 87 | 202 |  | 202 |  |
|  |  |  |  |  |  |  |  |  |
| Excluding households with affected data due to calibration error‖ | 3.4 (0.9)[55.9] | 3.0 (0.9)[33.4] | 3.4 (1.0)[51.5] | 3.3 (1.0)[47.9] | -0.40(-0.72 to -0.09) | 0.01 | -0.40(-0.71 to -0.09) | 0.01 |
| No. households | 86 | 86 | 91 | 91 | 177 |  | 177 |  |
|  |  |  |  |  |  |  |  |  |
| Average PM2.5 paired for each participating household‖ | 3.4 (1.0)[53.6] | 2.8 (1.0)[30.7] | 3.3 (1.0)[48.7] | 3.2 (1.0)[42.9] | -0.40(-0.72 to -0.09) | 0.01 | -0.41(-0.72 to -0.09) | 0.01 |
| Average PM2.5 paired for all participating households‖ | 3.5 (1.0)[67.9] | 3.0 (1.0)[37.2] | 3.5 (1.0)[60.7] | 3.4 (2.0)[57.8] | -0.38(-0.80 to 0.05) | 0.08 | -0.37(-0.81 to 0.06) | 0.09 |
| No. households | 102 | 102 | 102 | 102 | 204 |  | 204 |  |

\* Basic refers to adjusted only for baseline log transformed average PM2.5.

† Adjusted for baseline log transformed average PM2.5, as well as for season at week twelve, deprivation index and having a partner who smokes.

‡ Imputing five datasets

§ In the mixed method model the effectiveness measure is the coefficient associated to the interaction between Intervention Group and Week Twelve Visit.

‖ Using multiple imputation model (imputing five datasets).