**SUPPLEMENTAL INFORMATION**

**Cardiometabolic Profiles of Adolescents Exposed to the World Trade Center Disaster**

Appendix Table 1. Comparison of WTCHR participants in the present study to other eligible participants who did not take part in the WTCHR

Appendix Table 2. Pearson Correlation Coefficients of Exposure Variables

Appendix Table 3. Univariable Linear Regression Analysis of Cardiometabolic Outcomes Associated with Dust Cloud, Home Dust, and belonging to WTCHR group

Appendix Table 4. Univariable Linear Regression Analysis of Cardiometabolic Outcomes Associated with Traumatic & Psychosocial Exposures

Appendix Table 5. Univariable Logistic Regression Analysis of Dichotomous Outcomes (Columns) Associated with Exposures (Rows)

Appendix Table 6. Multivariable Linear Regression Analysis of Cardiometabolic Outcomes Associated with Dust Cloud, Home Dust, belonging to WTCHR group, and traumatic and psychosocial exposures (including only subjects with cotinine data; N=317)

Appendix Table 7. Logistic Regression Analysis of Dichotomous Outcomes (Columns) Associated with Exposures (Rows) (including only subjects with cotinine data; N=317)

Appendix Table 8. Multivariable Linear Regression Analysis of Cardiometabolic Outcomes Associated with Dust Cloud, Home Dust, belonging to WTCHR group, and traumatic and psychosocial exposures (including only subjects with cotinine data and adjusting for age as a

continuous variable; N=317)

Appendix Table 9. Logistic Regression Analysis of Dichotomous Outcomes (Columns) Associated with Exposures (Rows) (including only subjects with cotinine data and adjusting for age as a continuous variable; N=317)

Appendix Table 10. Linear Regression Analysis of Cardiometabolic Outcomes Associated with Dust Cloud, Home Dust, belonging to WTCHR group, and traumatic and psychosocial exposures (including only subjects with cotinine, adjusting for age as a continuous variable, excluding subjects with any exposure to the disaster in the comparison group; N= 257)

Appendix Table 11. Logistic Regression Analysis of Dichotomous Outcomes (Columns) Associated with Exposures (Rows) (including only subjects with cotinine data, adjusting for age as a continuous variable, excluding subjects with any exposure to the disaster in the comparison group; N=257)

**Appendix Table 1. Comparison of WTCHR participants in the present study to other eligible participants who did not take part in the WTCHR**

|  |  |  |  |
| --- | --- | --- | --- |
|   | **WTCHR participants (n=180)** | **Nonparticipants (n=759)** | **p value** |
| Male, % | 53.9% | 50.5% | 0.457 |
| Date of Birth |  |  |  |
| 9/11/93-9/10/95 | 26.1% | 35.6% | **0.004** |
| 9/11/95-9/10/98 | 42.8% | 43.9% |
| 9/11/98-9/10/01 | 31.1% | 20.6% |
| Income < $25,000 \* | 19.4% | 41.7% | **<0.001** |
| Race/Ethnicity\*\* |  |  |  |
| Non-Hispanic White | 36.7% | 46.9% | 0.092 |
| Non-Hispanic Black | 8.9% | 5.8% |
| Non- Hispanic Asian | 27.2% | 21.6% |
| Non-Hispanic Other | 8.9% | 7.5% |
| Hispanic or Latino | 17.8% | 18.3% |

\*n=1 missing for WTCHR study participants

\*\*n= 36 missing for WTCHR study participants, n=93 missing for WTCHR nonparticipants

**Appendix Table 2: Pearson Correlation Coefficients of Exposure Variables**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Home Dust** | **Dust Cloud** | **Traumatic****Exposure** | **WTCHR** | **PTSD** | **MDD** | **GAD** |
| **Home Dust** |  | 0.501 (<0.001)\* | 0.298 (<0.001)\* | 0.529 (<0.001)\* | 0.101 (0.045)\* | -0.11 (0.029)\* | 0.07 (0.165) |
| **Dust Cloud** |  |  | 0.324 (<0.001)\* | 0.507 (<0.001)\* | 0.134 (0.009)\* | -0.092 (0.076) | 0.091 (0.078) |
| **Traumatic Exposures** |  |  |  | 0.413 (<0.001)\* | 0.096 (0.054) | -0.002 (0.961) | 0.095 (0.056) |
| **WTCHR** |  |  |  |  |  | -0.106 (0.034)\* | 0.033 (0.508) |
| **PTSD** |  |  |  |  |  | 0.069 (0.166) | 0.22 (<0.001) |
| **MDD** |  |  |  |  |  |  | 0.418 (<0.001)\* |
| **GAD** |  |  |  |  |  |  |  |

\*p<0.05

PTSD: post-traumatic stress disorder; MDD: major depressive disorder; GAD: generalized anxiety disorder

**Appendix Table 3. Univariable Linear Regression Analysis of Cardiometabolic Outcomes Associated with Dust Cloud, Home Dust, and belonging to WTCHR group**

|  |
| --- |
| **Univariable analysis** |
|  | **Dust cloud** | **Home dust** | **WTCHR** |
| *Cardiometabolic Outcomes* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* |
| BMI | -1.112 (-2.546, 0.322) | 0.128 | -0.732 (-1.867, 0.403) | 0.206 | -1.182 (-2.2, -0.163) | **0.023** |
| BMIz | -0.193 (-0.518, 0.131) | 0.242 | -0.166 (-0.43, 0.099) | 0.218 | -0.302 (-0.544, -0.059) | **0.015** |
| logTrig | -0.061 (-0.198, 0.076) | 0.381 | 0 (-0.11, 0.109) | 0.994 | -0.006 (-0.106, 0.093) | 0.9 |
| logChol | 0.016 (-0.038, 0.069) | 0.563 | -0.005 (-0.047, 0.037) | 0.817 | 0.008 (-0.03, 0.047) | 0.668 |
| logLDL | 0.045 (-0.04, 0.13) | 0.297 | 0.003 (-0.063, 0.07) | 0.921 | 0.048 (-0.012, 0.109) | 0.119 |
| logHDL | 0.02 (-0.077, 0.117) | 0.683 | -0.03 (-0.106, 0.046) | 0.437 | -0.036 (-0.105, 0.033) | 0.301 |
| BrachD | 0.131 (-0.285, 0.547) | 0.537 | 0.29 (-0.047, 0.627) | 0.091 | 0.123 (-0.181, 0.427) | 0.426 |
| AIx | -0.826 (-3.908, 2.257) | 0.599 | -0.456 (-2.885, 1.973) | 0.712 | -1.397 (-3.618, 0.823) | 0.217 |
| PWV | -0.097 (-0.296, 0.102) | 0.339 | -0.119 (-0.277, 0.038) | 0.138 | -0.088 (-0.231, 0.055) | 0.229 |

BMI: Body Mass Index; BMIz: BMI z score; logTrig: log-transformed triglycerides; logChol: log-transformed total cholesterol; logLDL: log-transformed LDL cholesterol; logHDL: log-transformed LDL cholesterol; BrachD: brachial artery distensibility; AIx: Augmentation Index; PWV: pulse wave velocity

**Appendix Table 4. Univariable Linear Regression Analysis of Cardiometabolic Outcomes Associated with Traumatic & Psychosocial Exposures**

|  |
| --- |
| **Univariable analysis** |
|  | **Other Traumatic Exposure** | **PTSD** | **Major Depressive Disorder** | **General Anxiety Disorder** |
| *Cardiometabolic Outcomes* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *P value* |
| BMI | -0.068 (-1.113, 0.976) | 0.898 | 2.31 (0.562, 4.059) | **0.010** | -0.34 (-1.593, 0.914) | 0.594 | 0.922 (-1.609, 3.453) | 0.474 |
| BMIz | -0.162 (-0.407, 0.083) | 0.195 | 0.179 (-0.219, 0.576) | 0.377 | -0.134 (-0.433, 0.164) | 0.377 | -0.081 (-0.651, 0.49) | 0.781 |
| logTrig | -0.066 (-0.165, 0.034) | 0.196 | 0.2 (0.039, 0.362) | **0.015** | -0.061 (-0.174, 0.053) | 0.294 | -0.018 (-0.239, 0.203) | 0.874 |
| logChol | 0.004 (-0.034, 0.042) | 0.840 | 0.067 (0.004, 0.129) | **0.036** | 0.015 (-0.029, 0.059) | 0.511 | -0.023 (-0.108, 0.062) | 0.597 |
| logLDL | 0.055 (-0.006, 0.115) | 0.078 | 0.077 (-0.023, 0.176) | 0.129 | -0.007 (-0.076, 0.063) | 0.849 | -0.017 (-0.152, 0.119) | 0.808 |
| logHDL | -0.05 (-0.119, 0.02) | 0.159 | 0.033 (-0.08, 0.147) | 0.563 | 0.073 (-0.006, 0.152) | 0.069 | -0.009 (-0.163, 0.145) | 0.911 |
| BrachD | 0.021 (-0.289, 0.331) | 0.894 | -0.351 (-0.875, 0.173) | 0.189 | 0.507 (0.138, 0.877) | **0.007** | 0.477 (-0.266, 1.221) | 0.207 |
| AIx | 0.981 (-1.289, 3.251) | 0.396 | -0.246 (-3.984, 3.493) | 0.897 | 0.636 (-2.162, 3.434) | 0.655 | -2.183 (-7.626, 3.259) | 0.431 |
| PWV | 0.066 (-0.08, 0.212) | 0.375 | -0.179 (-0.431, 0.073) | 0.164 | -0.102 (-0.276, 0.073) | 0.253 | -0.295 (-0.643, 0.053) | 0.097 |

BMI: Body Mass Index; BMIz: BMI z score; logTrig: log-transformed triglycerides; logChol: log-transformed total cholesterol; logLDL: log-transformed LDL cholesterol; logHDL: log-transformed LDL cholesterol; BrachD: brachial artery distensibility; AIx: Augmentation Index; PWV: pulse wave velocity

**Appendix Table 5. Univariable Logistic Regression Analysis of Dichotomous Outcomes (Columns) Associated with Exposures (Rows)**

|  |
| --- |
| **Univariable analysis** |
|  | **Overweight** | **PTSD** | **Major Depressive Disorder** | **General Anxiety Disorder** |
| *Exposures* | *OR increase* *(95% CI)* | *p* | *n*  | *OR increase (95% CI)* | *p* | *n* | *OR increase* *(95% CI)* | *p* | *n* | *unit increase**(95% CI)* | *p* | *n* |
| Home Dust | 0.94 (0.858, 1.029) | 0.181 | 397 | 1.067 (1.002, 1.136) | **0.045** | 397 | 0.906 (0.83, 0.989) | **0.029** | 397 | 1.026 (0.982, 1.072) | 0.258 | 397 |
| Dust Cloud | 0.94 (0.838, 1.054) | 0.288 | 375 | 1.110 (1.027, 1.199) | **0.009** | 375 | 0.904 (0.809, 1.01) | 0.076 | 375 | 1.007 (0.953, 1.064) | 0.808 | 375 |
| Traumatic exposure | 0.981 (0.902, 1.066) | 0.651 | 402 | 1.059 (0.999, 1.122) | 0.054 | 402 | 0.998 (0.92, 1.083) | 0.961 | 402 | 1.017 (0.977, 1.059) | 0.406 | 402 |
| WTCHR | 0.902 (0.831, 0.978) | **0.013** | 402 | 1.067 (1.008, 1.129) | **0.026** | 402 | 0.917 (0.847, 0.993) | **0.034** | 402 | 0.984 (0.946, 1.024) | 0.423 | 402 |
| PTSD | 1.052 (0.914, 1.212) | 0.479 | 402 |  |  |  |  |  |  |
| MDD | 0.988 (0.894, 1.092) | 0.813 | 402 |  |  |  |  |  |  |
| GAD | 1.012 (0.826, 1.24) | 0.908 | 402 |  |  |  |  |  |  |

PTSD: posttraumatic stress disorder; MDD: major depressive disorder; GAD: generalized anxiety disorder

**Appendix Table 6. Multivariable Linear Regression Analysis of Cardiometabolic Outcomes Associated with Dust Cloud, Home Dust, belonging to WTCHR group, and Traumatic and Psychosocial Exposures (including only subjects with cotinine data; N=317)**

|  |
| --- |
| **Multivariable analysis** |
|  | **Dust cloud** | **Home dust** | **WTCHR** |  |  |
| *Cardiometabolic Outcomes* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* |  |  |
| BMI (kg/m2) | -0.29 (-1.58, 1.01) | 0.66 | -0.10 (-2.05, 0.06) | 0.06 | -0.26 (-1.26, 0.73) | 0.61 |  |  |
| BMIz | -0.05 (-0.37, 0.28) | 0.79 | -0.16 (-0.43, 0.12) | 0.26 | -0.10 (-0.36, 0.17) | 0.47 |  |  |
| logTrig | -0.04 (-0.18, 0.09) | 0.53 | -0.02 (-0.13, 0.10) | 0.78 | 0.02 (-0.08, 0.13) | 0.66 |  |  |
| logChol | 0.03 (-0.02, 0.09) | 0.23 | -0.002 (-0.05, 0.04) | 0.95 | 0.03 (-0.01, 0.08) | 0.11 |  |  |
| logLDL | 0.06 (-0.03, 0.14) | 0.22 | 0.01 (-0.06, 0.08) | 0.79 | **0.08 (0.01, 0.14)** | **0.03\*** |  |  |
| logHDL | 0.04 (-0.05, 0.13) | 0.40 | -0.03 (-0.10, 0.05) | 0.45 | -0.02 (-0.09, 0.05) | 0.52 |  |  |
| BrachD | 0.20 (-0.20, 0.60) | 0.33 | 0.24 (0.10, 0.57) | 0.16 | 0.14 (-0.17, 0.45) | 0.39 |  |  |
| AIx | 0.66 (-2.58, 3.89) | 0.69 | 0.85 (-1.80, 3.48) | 0.53 | -0.13 (-2.64, 2.37) | 0.92 |  |  |
| PWV | -0.04 (-0.25, 0.16) | 0.68 | -0.07 (-0.24, 0.10) | 0.41 | -0.03 (-0.19, 0.13) | 0.72 |  |  |
|  | **Other Traumatic Exposure** |  | **PTSD** |  | **Major Depressive Disorder** |  | **General Anxiety Disorder** |  |
| *Cardiometabolic Outcomes* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* |
| BMI (kg/m2) | 0.33 (-0.67, 1.33) | 0.52 | **2.10 (0.38, 3.82)** | **0.02\*** | 0.36 (-0.84, 1.56) | 0.56 | 1.69 (-0.55, 3.93) | 0.14 |
| BMIz | -0.11 (-0.37, 0.15) | 0.41 | 0.21 (-0.22, 0.64) | 0.33 | -0.12 (-0.43, 0.20) | 0.48 | 0.11 (-0.45, 0.66) | 0.71 |
| logTrig | -0.04 (-0.14, 0.07) | 0.49 | 0.08 (-0.10, 0.26) | 0.40 | -0.05 (-0.17, 0.07) | 0.39 | 0.00 (-0.21, 0.22) | 0.97 |
| logChol | 0.03 (-0.01, 0.07) | 0.17 | 0.04 (-0.04, 0.11) | 0.32 | -0.01 (-0.10, 0.04) | 0.81 | -0.05 (-0.13, 0.04) | 0.32 |
| logLDL | **0.08 (0.02, 0.15)** | **0.02\*** | 0.04 (-0.07, 0.16) | 0.46 | 0.00 (-0.07, 0.08) | 0.94 | -0.03 (-0.17, 0.12) | 0.73 |
| logHDL | -0.03(-0.10, 0.04) | 0.43 | 0.04 (-0.08, 0.16) | 0.52 | -0.01 (-0.09, 0.07) | 0.87 | -0.08 (-0.22, 0.07) | 0.29 |
| BrachD | 0.08 (-0.23, 0.40) | 0.60 | **-0.68 (-1.21, 0.15)** | **0.01\*** | 0.10 (-0.28, 0.48) | 0.61 | 0.23 (-0.47, 0.93) | 0.51 |
| AIx | 0.32 (-2.22, 2.86) | 0.81 | 0.95 (-4.15, 3.07) | 0.66 | -1.43 (-4.49, 1.63) | 0.36 | -3.67 (-9.35, 2.00) | 0.20 |
| PWV | 0.03 (-0.13, 0.19) | 0.74 | -0.10 (-0.38, 0.19) | 0.51 | -0.03 (-0.22, 0.16) | 0.73 | -0.14 (-0.49, 0.22) | 0.45 |

Each column represents an examination of a single exposure variable or study arm controlled for sex, race/ethnicity, caloric intake, physical activity, cotinine concentration and BMI category (except when the outcome examined was BMI); \*p<0.05; \*\*p<0.01

BMI: Body Mass Index; BMIz: BMI z score; logTrig: log-transformed triglycerides; logChol: log-transformed total cholesterol; logLDL: log-transformed LDL cholesterol; logHDL: log-transformed LDL cholesterol; BrachD: brachial artery distensibility; AIx: Augmentation Index; PWV: pulse wave velocity; PTSD: posttraumatic stress disorder; MDD: major depressive disorder; GAD: generalized anxiety disorder.

**Appendix Table 7. Logistic Regression Analysis of Dichotomous Outcomes (Columns) Associated with Exposures (Rows) (including only subjects with cotinine data; N=317)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Overweight** |  | **PTSD** |  | **Major Depressive Disorder** |  | **Generalized anxiety disorder** |  |
| *Exposure* | *OR (95% CI)* | *p* | *OR (95% CI)* | *p* | *OR (95% CI)* | *p* | *OR**(95% CI)* | *p* |
| Home Dust | 0.93 (0.84, 1.02) | 0.13 | 1.06 (0.99, 1.13) | 0.11 | 0.91 (0.82, 1.00) | 0.06 | 1.03 (0.97, 1.08) | 0.35 |
| Dust Cloud | 0.98 (0.87, 1.11) | 0.77 | **1.11 (1.02, 1.20)** | **0.02\*** | 0.91 (0.81, 1.03) | 0.12 | 1.02 (0.95, 1.09) | 0.59 |
| Traumatic exposure | 0.10 (0.91, 1.09) | 0.93 | **1.11 (1.04, 1.18)** | **0.002\*** | 1.01 (0.91, 1.11) | 0.92 | 1.03 (0.98, 1.08) | 0.25 |
| WTCHR | 0.94 (0.86, 1.03) | 0.21 | **1.11 (1.04, 1.19)** | **0.001\*\*** | 0.93 (0.84, 1.02) | 0.11 | 0.99 (0.94, 1.03) | 0.73 |
| PTSD | 1.08 (0.92, 1.26) | 0.35 |  |  |  |  |
| MDD | 1.04 (0.93, 1.16) | 0.52 |  |  |  |  |
| GAD | 1.07 (0.87, 1.31) | 0.52 |  |  |  |  |

PTSD: posttraumatic stress disorder; MDD: major depressive disorder; GAD: generalized anxiety disorder.

\*p<0.05; \*\*p<0.01

**Appendix Table 8. Multivariable Linear Regression Analysis of Cardiometabolic Outcomes Associated with Dust Cloud, Home Dust, belonging to WTCHR group, and traumatic and psychosocial exposures (including only subjects with cotinine data and adjusting for age as a continuous variable; N=317)**

|  |
| --- |
| **Multivariable analysis** |
|  | **Dust cloud** | **Home dust** | **WTCHR** |  |  |
| *Cardiometabolic Outcomes* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* |  |  |
| BMI (kg/m2) | -0.04 (-1.28, 1.21) | 0.96 | -0.73 (-1.75, 0.29) | 0.16 | -0.33 (-1.29, 0.63) | 0.50 |  |  |
| BMIz | -0.04 (-0.37, 0.28) | 0.79 | -0.16 (-0.43, 0.12) | 0.26 | -0.09 (-0.36, 0.17) | 0.48 |  |  |
| logTrig | -0.04 (-0.18, 0.09) | 0.53 | -0.01 (-0.13, 0.10) | 0.81 | 0.02 (-0.08, 0.13) | 0.68 |  |  |
| logChol | 0.04 (-0.01, 0.10) | 0.13 | 0.01 (-0.04, 0.05) | 0.76 | 0.03 (-0.01, 0.07) | 0.31 |  |  |
| logLDL | 0.06 (-0.02, 0.15) | 0.16 | 0.02 (-0.05, 0.09) | 0.62 | **0.07 (0.003, 0.14)** | **0.04\*** |  |  |
| logHDL | 0.05 (-0.04, 0.15) | 0.30 | -0.02 (-0.09, 0.05) | 0.60 | -0.03 (-0.10, 0.04) | 0.41 |  |  |
| BrachD | 0.19 (-0.21, 0.59) | 0.35 | 0.23 (0.11, 0.60) | 0.18 | 0.14 (-0.17, 0.45) | 0.37 |  |  |
| AIx | 0.69 (-2.55, 3.94) | 0.68 | 0.92 (-1.74, 3.57) | 0.50 | -0.17 (-2.69, 2.35) | 0.90 |  |  |
| PWV | -0.01 (-0.20, 0.19) | 0.95 | -0.02 (-0.19, 0.14) | 0.77 | -0.05 (-0.20, 0.10) | 0.54 |  |  |
|  | **Other Traumatic Exposure** |  | **PTSD** |  | **Major Depressive Disorder** |  | **General Anxiety Disorder** |  |
| *Cardiometabolic Outcomes* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* |
| BMI (kg/m2) | -0.40 (-1.41, 0.62) | 0.44 | **2.04 (0.38, 3.70)** | **0.02\*** | 0.24 (-0.92, 1.40) | 0.68 | 2.13 (-0.04, 4.29) | 0.05 |
| BMIz | -0.11 (-0.38, 0.16) | 0.43 | 0.22 (-0.22, 0.65) | 0.33 | -0.11 (-0.43, 0.21) | 0.48 | 0.10 (-0.45, 0.66) | 0.71 |
| logTrig | -0.05 (-0.16, 0.06) | 0.41 | 0.08 (-0.10, 0.26) | 0.40 | -0.05 (-0.17, 0.07) | 0.39 | 0.01 (-0.21, 0.23) | 0.95 |
| logChol | 0.01 (-0.03, 0.05) | 0.67 | 0.04 (-0.03, 0.11) | 0.30 | -0.01 (-0.10, 0.04) | 0.76 | -0.03 (-0.12, 0.06) | 0.49 |
| logLDL | 0.07 (-0.00, 0.14) | 0.06 | 0.05 (-0.07, 0.16) | 0.45 | 0.00 (-0.07, 0.08) | 0.97 | -0.01 (-0.15, 0.13) | 0.89 |
| logHDL | -0.06 (-0.13, 0.02) | 0.13 | 0.04 (-0.08, 0.16) | 0.51 | -0.01 (-0.09, 0.07) | 0.84 | -0.06 (-0.21, 0.08) | 0.39 |
| BrachD | 0.13 (-0.20, 0.45) | 0.45 | **-0.68 (-1.21, 0.15)** | **0.01\*** | 0.10 (-0.28, 0.48) | 0.59 | 0.22 (-0.49, 0.92) | 0.55 |
| AIx | 0.20 (-2.45, 2.85) | 0.88 | 0.95 (-3.31, 5.20) | 0.66 | -1.47 (-4.54, 1.60) | 0.35 | -3.61 (-9.31, 2.09) | 0.21 |
| PWV | -0.09 (-0.25, 0.07) | 0.26 | -0.11 (-0.38, 0.16) | 0.44 | -0.05 (-0.23, 0.13) | 0.59 | -0.07 (-0.41, 0.27) | 0.70 |

Each column represents an examination of a single exposure variable or study arm controlled for sex, race/ethnicity, caloric intake, physical activity, cotinine concentration and BMI category (except when the outcome examined was BMI); \*p<0.05; \*\*p<0.01

BMI: Body Mass Index; BMIz: BMI z score; logTrig: log-transformed triglycerides; logChol: log-transformed total cholesterol; logLDL: log-transformed LDL cholesterol; logHDL: log-transformed LDL cholesterol; BrachD: brachial artery distensibility; AIx: Augmentation Index; PWV: pulse wave velocity; PTSD: posttraumatic stress disorder; MDD: major depressive disorder; GAD: generalized anxiety disorder.

**Appendix Table 9. Logistic Regression Analysis of Dichotomous Outcomes (Columns) Associated with Exposures (Rows) (including only subjects with cotinine data and adjusting for age as a continuous variable; N=317)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Overweight** |  | **PTSD** |  |  | **Major Depressive Disorder** |  | **Generalized anxiety disorder** |  |
| *Exposure* | *OR (95% CI)* | *p* | *OR (95% CI)* | *p* | *n* | *OR (95% CI)* | *p* | *OR**(95% CI)* | *p* |
| Home Dust | 0.93 (0.85, 1.03) | 0.20 | 1.06 (0.99, 1.14) | 0.10 | 312 | 0.91 (0.83, 1.01) | 0.07 | 1.02 (0.97, 1.08) | 0.42 |
| Dust Cloud | 0.99 (0.88, 1.11) | 0.84 | **1.11 (1.02, 1.20)** | **0.02\*** | 374 | 0.91 (0.81, 1.03) | 0.13 | 1.01 (0.95, 1.08) | 0.68 |
| Traumatic exposure | 0.98 (0.89, 1.08) | 0.67 | **1.12 (1.04, 1.19)** | **0.001\*** | 316 | 0.99 (0.90, 1.10) | 0.91 | 1.04 (0.99, 1.10) | 0.11 |
| WTCHR | 0.94 (0.86, 1.03) | 0.20 | **1.11 (1.04, 1.19)** | **0.001\*\*** | 401 | 0.93 (0.84, 1.02) | 0.11 | 0.99 (0.94, 1.04) | 0.76 |
| PTSD | 1.08 (0.92, 1.26) | 0.36 |  |  |  |  |  |
| MDD | 1.03 (0.93, 1.15) | 0.55 |  |  |  |  |  |
| GAD | 1.08 (0.88, 1.32) | 0.46 |  |  |  |  |  |

PTSD: posttraumatic stress disorder; MDD: major depressive disorder; GAD: generalized anxiety disorder.

\*p<0.05; \*\*p<0.01

**Appendix Table 10. Linear Regression Analysis of Cardiometabolic Outcomes Associated with Dust Cloud, Home Dust, belonging to WTCHR group, and traumatic and psychosocial exposures (including only subjects with cotinine data, adjusting for age as a continuous variable, excluding subjects with any exposure to the disaster in the comparison group; N= 257)**

|  |
| --- |
| **Multivariable analysis** |
|  | **WTCHR** | **PTSD** |
| *Cardiometabolic Outcomes* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* |
| BMI (kg/m2) | -0.67 (-1.79, 0.44) | 0.20 | **2.10 (0.30, 3.90)** | **0.02\*** |
| BMIz | -0.16 (-0.46, 0.15) | 0.31 | 0.27 (-0.21, 0.75) | 0.28 |
| logTrig | 0 (-0.12, 0.12) | 0.10 | 0.06 (-0.13, 0.26) | 0.52 |
| logChol | 0.023(-0.03, 0.07) | 0.37 | 0.02 (-0.06, 0.11) | 0.56 |
| logLDL | **0.08 (0.001, 0.17)** | **0.04\*** | 0.02 (-0.12, 0.15) | 0.79 |
| logHDL | -0.06 (-0.14, 0.03) | 0.18 | 0.04 (-0.09, 0.18) | 0.54 |
| BrachD | 0.24 (-0.11, 0.60) | 0.18 | -0.53 (-1.11, 0.04) | 0.07 |
| AIx | 1.17 (-1.70, 4.03) | 0.42 | 0.78 (-3.74, 5.30) | 0.73 |
| PWV | -0.03 (-0.20, 0.15) | 0.75 | -0.01 (-0.30, 0.29) | 0.97 |
|  | **Major Depressive Disorder** |  | **General Anxiety Disorder** |  |
| *Cardiometabolic Outcomes* | *unit change**(95% CI)* | *p value* | *unit change**(95% CI)* | *p value* |
| BMI (kg/m2) | -0.50 (-1.82, 0.82) | 0.46 | -0.04 (-2.62, 2.55) | 0.98 |
| BMIz | -0.34 (-0.71, 0.04) | 0.08 | -0.39 (-1.07, 0.29) | 0.26 |
| logTrig | -0.03 (-0.17, 0.11) | 0.65 | 0.11 (-0.15, 0.36) | 0.42 |
| logChol | 0.00 (-0.06, 0.06) | 0.99 | -0.01 (-0.11, 0.01) | 0.88 |
| logLDL | 0.02 (-0.07, 0.12) | 0.64 | -0.01 (-0.18, 0.17) | 0.94 |
| logHDL | -0.02 (-0.12, 0.08) | 0.70 | -0.04 (-0.22, 0.13) | 0.63 |
| BrachD | 0.09 (-0.34, 0.52) | 0.68 | 0.47 (-0.35, 1.29) | 0.26 |
| AIx | -1.13 (-4.59, 2.33) | 0.52 | -0.38 (-7.06, 6.30) | 0.91 |
| PWV | 0.02 (-0.19, 0.22) | 0.86 | -0.05 (-0.44, 0.35) | 0.82 |

Each column represents an examination of a single exposure variable or study arm controlled for sex, race/ethnicity, caloric intake, physical activity, cotinine concentration and BMI category (except when the outcome examined was BMI); \*p<0.05; \*\*p<0.01

BMI: Body Mass Index; BMIz: BMI z score; logTrig: log-transformed triglycerides; logChol: log-transformed total cholesterol; logLDL: log-transformed LDL cholesterol; logHDL: log-transformed LDL cholesterol; BrachD: brachial artery distensibility; AIx: Augmentation Index; PWV: pulse wave velocity; PTSD: posttraumatic stress disorder; MDD: major depressive disorder; GAD: generalized anxiety disorder.

**Appendix Table 11. Logistic Regression Analysis of Dichotomous Outcomes (Columns) Associated with Exposures (Rows) (including only subjects with cotinine data, adjusting for age as a continuous variable, excluding subjects with any exposure to the disaster in the comparison group; N=257)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Overweight** |  | **PTSD** |  | **Major Depressive Disorder** |  | **Generalized anxiety disorder** |  |
| *Exposure* | *OR (95% CI)* | *p* | *OR (95% CI)* | *p* | *OR (95% CI)* | *p* | *OR**(95% CI)* | *p* |
| WTCHR | 0.94 (0.85, 1.04) | 0.21 | **1.11 (1.03, 1.20)** | **0.008\*\*** | 0.91 (0.82, 1.01) | 0.08 | 0.10 (0.94, 1.05) | 0.89 |
| PTSD | 1.12 (0.95, 1.33) | 0.18 |  |  |  |  |
| MDD | 0.98 (0.87, 1.10) | 0.71 |  |  |  |  |
| GAD | 0.94 (0.74, 1.19) | 0.62 |  |  |  |  |

PTSD: posttraumatic stress disorder; MDD: major depressive disorder; GAD: generalized anxiety disorder.

\*p<0.05; \*\*p<0.01