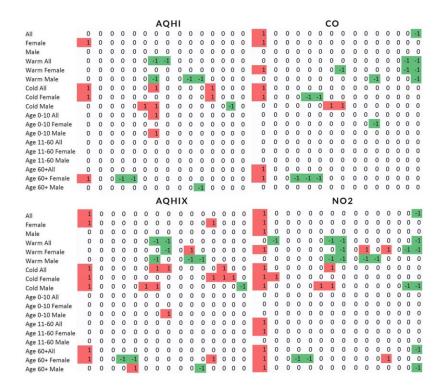
Table 1 M00M99. Statistics on ED visits for diseases of the musculoskeletal system and connective tissue (ICD-10 codes: M00 – M99). Toronto, Canada. 2004 – 2015.

| Variables        | ED visits | Min | Q1  | Median | Mean  | Q3  | Max |
|------------------|-----------|-----|-----|--------|-------|-----|-----|
| All              | 691,703   | 55  | 138 | 161    | 161.2 | 185 | 287 |
| Female           | 368,089   | 23  | 72  | 86     | 85.8  | 99  | 157 |
| Male             | 323,614   | 29  | 63  | 75     | 75.4  | 87  | 148 |
| Warm All         | 366,557   | 77  | 144 | 167    | 166.9 | 191 | 287 |
| Warm Female      | 195,811   | 38  | 76  | 89     | 89.2  | 103 | 157 |
| Warm Male        | 170,746   | 34  | 65  | 77     | 77.8  | 90  | 148 |
| Cold All         | 325,146   | 55  | 132 | 155    | 155.1 | 177 | 256 |
| Cold Female      | 172,278   | 23  | 69  | 82     | 82.2  | 95  | 137 |
| Cold Male        | 152,868   | 29  | 61  | 73     | 72.9  | 85  | 132 |
| Age 0-10 All     | 15,954    | 0   | 2   | 3      | 3.7   | 5   | 14  |
| Age 0-10 Female  | 7,023     | 0   | 1   | 1      | 1.6   | 2   | 9   |
| Age 0-10 Male    | 8,931     | 0   | 1   | 2      | 2.1   | 3   | 9   |
| Age 11-60 All    | 465,555   | 36  | 92  | 108    | 108.5 | 125 | 196 |
| Age 11-60 Female | 233,025   | 13  | 45  | 54     | 54.3  | 63  | 105 |
| Age 11-60 Male   | 232,530   | 17  | 45  | 54     | 54.2  | 63  | 107 |
| Age 60+All       | 210,194   | 8   | 40  | 49     | 49.0  | 57  | 96  |
| Age 60+ Female   | 128,041   | 3   | 24  | 30     | 29.8  | 35  | 64  |
| Age 60+ Male     | 82,153    | 1   | 15  | 19     | 19.1  | 23  | 44  |

Notes. Column labelled as "ED visits" shows the number of ED visits, Warm: April – September, Cold: October – March, Min – minimum, Max –maximum, Q1-25<sup>th</sup> percentile, Q3-75<sup>th</sup> percentile.



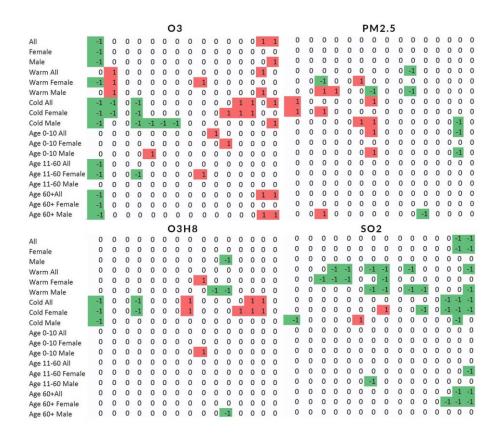


Figure 1 M00M991. The map of the results from 2,160 models. red - positive, green-negative, both are statistically significant, white – no relations. Toronto, 2004-2015.

| Lag               | 0  | 1 | 2 | 3 | 4 | 5 | 6  | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | Total |
|-------------------|----|---|---|---|---|---|----|---|---|---|----|----|----|----|----|-------|
| AQHI              | 4  | 0 | 0 | 0 | 0 | 1 | 4  | 0 | 0 | 0 | 0  | 2  | 0  | 0  | 0  | 11    |
| AQHIX             | 7  | 0 | 0 | 0 | 1 | 1 | 2  | 2 | 0 | 1 | 0  | 3  | 2  | 1  | 0  | 20    |
| CO                | 7  | 0 | 0 | 0 | 0 | 0 | 1  | 1 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 9     |
| NO <sub>2</sub>   | 12 | 1 | 0 | 0 | 0 | 1 | 2  | 0 | 0 | 1 | 0  | 2  | 0  | 0  | 0  | 19    |
| 03                | 0  | 3 | 0 | 0 | 1 | 0 | 0  | 0 | 2 | 1 | 2  | 2  | 2  | 5  | 6  | 24    |
| O3H8              | 0  | 0 | 0 | 0 | 0 | 0 | 0  | 2 | 2 | 0 | 0  | 1  | 2  | 2  | 0  | 9     |
| PM <sub>2.5</sub> | 2  | 0 | 3 | 1 | 0 | 2 | 4  | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 12    |
| SO <sub>2</sub>   | 0  | 0 | 0 | 0 | 0 | 1 | 0  | 1 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 2     |
| Total             | 32 | 4 | 3 | 1 | 2 | 6 | 13 | 6 | 4 | 3 | 2  | 10 | 6  | 8  | 6  | 106   |

| Lag              | 0  | 1 | 2 | 3 | 4 | 5 | 6  | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | Total |
|------------------|----|---|---|---|---|---|----|---|---|---|----|----|----|----|----|-------|
| All              | 3  | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 1  | 5     |
| Female           | 4  | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0  | 1  | 0  | 0  | 0  | 5     |
| Male             | 1  | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 1  | 2     |
| Warm All         | 0  | 1 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 0  | 2     |
| Warm Female      | 2  | 1 | 0 | 0 | 0 | 1 | 0  | 0 | 2 | 2 | 0  | 1  | 0  | 0  | 0  | 9     |
| Warm Male        | 0  | 1 | 1 | 1 | 0 | 0 | 0  | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 0  | 4     |
| Cold All         | 5  | 0 | 0 | 0 | 0 | 0 | 4  | 2 | 0 | 0 | 0  | 2  | 3  | 1  | 1  | 18    |
| Cold Female      | 5  | 1 | 1 | 0 | 0 | 0 | 0  | 2 | 0 | 0 | 1  | 4  | 3  | 2  | 0  | 19    |
| Cold Male        | 2  | 0 | 0 | 0 | 0 | 5 | 5  | 1 | 0 | 0 | 0  | 0  | 0  | 0  | 1  | 14    |
| Age 0-10 All     | 0  | 0 | 0 | 0 | 0 | 0 | 2  | 0 | 0 | 1 | 0  | 0  | 0  | 0  | 0  | 3     |
| Age 0-10 Female  | 0  | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 1  | 0  | 0  | 0  | 0  | 1     |
| Age 0-10 Male    | 0  | 0 | 0 | 0 | 1 | 0 | 2  | 1 | 1 | 0 | 0  | 0  | 0  | 0  | 0  | 5     |
| Age 11-60 All    | 1  | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 1     |
| Age 11-60 Female | 1  | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 1 | 0 | 0  | 0  | 0  | 0  | 0  | 2     |
| Age 11-60 Male   | 0  | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0  | 0  | 0  | 0  | 0  | 0     |
| Age 60+All       | 3  | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 1  | 5     |
| Age 60+ Female   | 4  | 0 | 0 | 0 | 0 | 0 | 0  | 0 | 0 | 0 | 0  | 2  | 0  | 0  | 0  | 6     |
| Age 60+ Male     | 1  | 0 | 1 | 0 | 1 | 0 | 0  | 0 | 0 | 0 | 0  | 0  | 0  | 1  | 1  | 5     |
| Total            | 32 | 4 | 3 | 1 | 2 | 6 | 13 | 6 | 4 | 3 | 2  | 10 | 6  | 8  | 6  | 106   |

| Air Pollution: A | AC<br>QH | XIH) | CO | 102 | 03 | 3H8<br>P |    | O2<br>.5 To | tal |
|------------------|----------|------|----|-----|----|----------|----|-------------|-----|
| All              | 0        | 1    | 1  | 1   | 2  | 0        | 0  | 0           | 5   |
| Female           | 1        | 2    | 1  | 1   | 0  | 0        | 0  | 0           | 5   |
| Male             | 0        | 0    | 0  | 1   | 1  | 0        | 0  | 0           | 2   |
| Warm All         | 0        | 0    | 0  | 0   | 2  | 0        | 0  | 0           | 2   |
| Warm Female      | 0        | 1    | 1  | 3   | 2  | 1        | 1  | 0           | 9   |
| Warm Male        | 0        | 0    | 0  | 0   | 2  | 0        | 2  | 0           | 4   |
| Cold All         | 3        | 4    | 1  | 2   | 3  | 3        | 2  | 0           | 18  |
| Cold Female      | 2        | 4    | 1  | 2   | 3  | 4        | 2  | 1           | 19  |
| Cold Male        | 2        | 3    | 2  | 3   | 1  | 0        | 2  | 1           | 14  |
| Age 0-10 All     | 1        | 0    | 0  | 0   | 1  | 0        | 1  | 0           | 3   |
| Age 0-10 Female  | 0        | 0    | 0  | 0   | 1  | 0        | 0  | 0           | 1   |
| Age 0-10 Male    | 1        | 1    | 0  | 0   | 1  | 1        | 1  | 0           | 5   |
| Age 11-60 All    | 0        | 0    | 0  | 1   | 0  | 0        | 0  | 0           | 1   |
| Age 11-60 Female | 0        | 0    | 0  | 1   | 1  | 0        | 0  | 0           | 2   |
| Age 11-60 Male   | 0        | 0    | 0  | 0   | 0  | 0        | 0  | 0           | 0   |
| Age 60+All       | 0        | 1    | 1  | 1   | 2  | 0        | 0  | 0           | 5   |
| Age 60+ Female   | 1        | 2    | 1  | 2   | 0  | 0        | 0  | 0           | 6   |
| Age 60+ Male     | 0        | 1    | 0  | 1   | 2  | 0        | 1  | 0           | 5   |
| Total            | 11       | 20   | 9  | 19  | 24 | 9        | 12 | 2           | 106 |

Figure 2 M00M99. The scores of the positive statistical significant associations by strata, air pollutants, and lags. Toronto, Canada. 2004 - 2015.