# Appendix

Table A. Odds ratios (OR) and 95% confidence intervals (CI) for the daily emergency hospital visits for ischemic heart diseases (ICD-10 codes: I20-I25) in Reykjavik capital area associated with 10 µg/m³ increase in NO2, PM10, PM2.5, SO2 and H2S, adjusted for each pollutant, temperature and relative humidity, at lag 0 to lag 4.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **NO2** | **PM10** | **PM2,5** | **SO2** | **H2S** |
| **ICD-10 codes** | **Lag** | **OR** | **95% CI** | **OR** | **95% CI** | **OR** | **95% CI** | **OR** | **95% CI** | **OR** | **95% CI** |
| **I20 – I25** | 0 | 1.009 | 0.989-1.030 | 0.984 | 0.970-0.998 | 0.998 | 0.986-1.010 | 1.002 | 0.983-1.022 | 1.039 | 0.993-1.087 |
|  | 1 | 0.991 | 0.971-1.012 | 0.997 | 0.984-1.010 | 0.999 | 0.987-1.011 | 1.004 | 0.986-1.024 | 1.013 | 0.966-1.061 |
|  | 2 | 0.995 | 0.975-1.015 | 1.001 | 0.989-1.014 | 0.999 | 0.988-1.011 | 1.009 | 0.992-1.026 | 1.007 | 0.961-1.055 |
|  | 3 | 0.994 | 0.974-1.015 | 0.999 | 0.986-1.012 | 0.998 | 0.986-1.011 | 0.994 | 0.975-1.013 | 1.024 | 0.977-1.074 |
|  | 4 | 1.008 | 0.987-1.029 | 0.999 | 0.986-1.013 | 0.997 | 0.985-1.010 | 0.990 | 0.969-1.011 | 0.996 | 0.948-1.046 |

Table B. Odds ratios (OR) and 95% confidence intervals (CI) for the daily emergency hospital visits for cardiac arrhythmias or heart failure (ICD-10 codes: I44-I50) in Reykjavik capital area associated with 10 µg/m³ increase in NO2, PM10, PM2.5, SO2 and H2S, adjusted for each pollutant, temperature and relative humidity, at lag 0 to lag 4.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **NO2** | **PM10** | **PM2,5** | **SO2** | **H2S** |
| **ICD-10 codes** | **Lag** | **OR** | **95% CI** | **OR** | **95% CI** | **OR** | **95% CI** | **OR** | **95% CI** | **OR** | **95% CI** |
| **I44 – I50** | 0 | 1.029 | 1.016-1.042 | 1.001 | 0.992-1.010 | 0.994 | 0.986-1.003 | 1.006 | 0.995-1.019 | 0.969 | 0.936-1.003 |
|  | 1 | 1.014 | 1.000-1.027 | 1.006 | 0.998-1.015 | 0.999 | 0.991-1.007 | 1.002 | 0.991-1.014 | 0.987 | 0.954-1.021 |
|  | 2 | 0.990 | 0.976-1.003 | 1.000 | 0.991-1.010 | 1.007 | 0.999-1.015 | 1.005 | 0.992-1.017 | 0.982 | 0.949-1.016 |
|  | 3 | 0.999 | 0.986-1.013 | 1.013 | 1.004-1.022 | 1.010 | 1.001-1.018 | 1.002 | 0.989-1.015 | 1.006 | 0.972-1.040 |
|  | 4 | 0.981 | 0.967-0.994 | 1.000 | 0.991-1.009 | 1.006 | 0.998-1.015 | 0.998 | 0.985-1.011 | 1.037 | 1.003-1.072 |

Table C. Odds ratios (OR) and 95% confidence intervals (CI) for the daily emergency hospital visits for heart diseases (ICD-10 codes: I20-I25, I44-I50; I20-I25; I44-I50; and I48) in Reykjavik capital area associated with 10 µg/m³ increase in NO2, PM10, PM2.5, SO2 and H2S, adjusted for each pollutant, temperature and relative humidity, at lag 0-1 (moving average of lags 0, and 1) and at lag 0-2 (moving average of lags 0, 1, and 2).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **NO2** | **PM10** | **PM2,5** | **SO2** | **H2S** |
| **ICD-10 codes** | **Lag** | **OR** | **95% CI** | **OR** | **95% CI** | **OR** | **95% CI** | **OR** | **95% CI** | **OR** | **95% CI** |
| **I20 – I25, I44 – I50** | 0-1 | 1.022 | 1.008-1.036 | 0.999 | 0.990-1.009 | 0.997 | 0.989-1.005 | 1.006 | 0.993-1.019 | 0.986 | 0.953-1.020 |
|  | 0-2 | 1.013 | 0.998-1.029 | 1.000 | 0.989-1.011 | 1.000 | 0.991-1.009 | 1.010 | 0.995-1.026 | 0.980 | 0.943-1.020 |
| **I20 – I25** | 0-1 | 0.998 | 0.973-1.023 | 0.986 | 0.969-1.003 | 0.998 | 0.985-1.012 | 1.005 | 0.980-1.030 | 1.037 | 0.981-1.097 |
|  | 0-2 | 0.991 | 0.963-1.020 | 0.988 | 0.969-1.008 | 0.999 | 0.984-1.014 | 1.013 | 0.984-1.042 | 1.040 | 0.974-1.110 |
| **I44 – I50** | 0-1 | 1.033 | 1.016-1.050 | 1.006 | 0.994-1.017 | 0.996 | 0.986-1.005 | 1.007 | 0.991-1.022 | 0.960 | 0.920-1.001 |
|  | 0-2 | 1.023 | 1.004-1.043 | 1.005 | 0.992-1.018 | 1.001 | 0.990-1.011 | 1.009 | 0.991-1.028 | 0.951 | 0.905-0.998 |
| **I48** | 0-1 | 1.037 | 1.013-1.061 | 0.992 | 0.976-1.009 | 0.986 | 0.972-1.000 | 1.010 | 0.989-1.032 | 0.966 | 0.909-1.026 |
|  | 0-2 | 1.024 | 0.996-1.052 | 0.995 | 0.976-1.015 | 0.989 | 0.973-1.005 | 1.011 | 0.986-1.037 | 0.974 | 0.909-1.045 |

Table D. Odds ratios (OR) and 95% confidence intervals (CI) for the daily emergency hospital visits for heart diseases (ICD-10 codes: I20-I25, I44-I50; I20-I25; I44-I50; and I48) in Reykjavik capital area associated with 10 µg/m³ increase in NO2, PM10, PM2.5, SO2 and H2S, in single pollutant models, at lag 0 to lag 4.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **NO2** | **PM10** | **PM2,5** | **SO2** | **H2S** |
| **ICD-10 codes** | **Lag** | **OR** | **95% CI** | **OR** | **95% CI** | **OR** | **95% CI** | **OR** | **95% CI** | **OR** | **95% CI** |
| **I20 – I25, I44 – I50** | 0 | 1.013 | 1.003-1.023 | 0.996 | 0.989-1.004 | 0.994 | 0.987-1.001 | 1.007 | 0.997-1.017 | 0.999 | 0.973-1.025 |
|  | 1 | 1.001 | 0.991-1.011 | 1.004 | 0.997-1.011 | 0.998 | 0.992-1.005 | 1.003 | 0.993-1.013 | 0.994 | 0.968-1.020 |
|  | 2 | 0.988 | 0.978-0.998 | 1.001 | 0.994-1.008 | 1.004 | 0.997-1.010 | 1.005 | 0.995-1.015 | 0.983 | 0.958-1.010 |
|  | 3 | 0.996 | 0.986-1.007 | 1.009 | 1.002-1.016 | 1.006 | 0.999-1.013 | 1.000 | 0.989-1.011 | 1.006 | 0.980-1.033 |
|  | 4 | 0.990 | 0.980-1.001 | 1.001 | 0.994-1.008 | 1.003 | 0.996-1.010 | 0.996 | 0.985-1.007 | 1.017 | 0.990-1.044 |
| **I20 – I25** | 0 | 0.998 | 0.980-1.016 | 0.987 | 0.973-1.000 | 0.995 | 0.983-1.007 | 1.005 | 0.986-1.024 | 1.033 | 0.989-1.078 |
|  | 1 | 0.985 | 0.967-1.003 | 0.999 | 0.987-1.012 | 0.998 | 0.986-1.009 | 1.006 | 0.987-1.025 | 1.003 | 0.959-1.049 |
|  | 2 | 0.989 | 0.971-1.008 | 1.003 | 0.991-1.015 | 0.999 | 0.988-1.010 | 1.009 | 0.992-1.026 | 1.000 | 0.957-1.046 |
|  | 3 | 0.991 | 0.973-1.009 | 1.000 | 0.988-1.013 | 0.998 | 0.986-1.010 | 0.995 | 0.976-1.014 | 1.016 | 0.972-1.063 |
|  | 4 | 1.002 | 0.983-1.021 | 1.001 | 0.989-1.014 | 0.997 | 0.985-1.009 | 0.991 | 0.970-1.012 | 0.997 | 0.952-1.045 |
| **I44 – I50** | 0 | 1.020 | 1.008-1.032 | 1.000 | 0.992-1.009 | 0.994 | 0.985-1.002 | 1.007 | 0.996-1.019 | 0.981 | 0.949-1.013 |
|  | 1 | 1.008 | 0.996-1.020 | 1.006 | 0.997-1.014 | 0.999 | 0.991-1.007 | 1.002 | 0.991-1.014 | 0.989 | 0.958-1.022 |
|  | 2 | 0.987 | 0.975-1.000 | 1.000 | 0.991-1.009 | 1.007 | 0.998-1.015 | 1.003 | 0.990-1.015 | 0.975 | 0.943-1.007 |
|  | 3 | 0.999 | 0.987-1.011 | 1.013 | 1.004-1.021 | 1.010 | 1.002-1.018 | 1.002 | 0.989-1.015 | 1.001 | 0.969-1.034 |
|  | 4 | 0.985 | 0.973-0.998 | 1.000 | 0.992-1.009 | 1.006 | 0.998-1.015 | 0.997 | 0.985-1.010 | 1.026 | 0.994-1.059 |
| **I48** | 0 | 1.023 | 1.005-1.040 | 0.991 | 0.978-1.004 | 0.986 | 0.974-0.998 | 1.007 | 0.991-1.024 | 0.988 | 0.943-1.036 |
|  | 1 | 1.016 | 0.999-1.034 | 0.999 | 0.986-1.012 | 0.992 | 0.980-1.004 | 1.006 | 0.991-1.022 | 1.001 | 0.956-1.049 |
|  | 2 | 0.990 | 0.973-1.008 | 1.003 | 0.990-1.016 | 1.003 | 0.991-1.016 | 1.002 | 0.985-1.019 | 1.003 | 0.958-1.052 |
|  | 3 | 0.998 | 0.980-1.016 | 1.009 | 0.996-1.023 | 1.002 | 0.989-1.015 | 1.007 | 0.990-1.025 | 1.022 | 0.976-1.071 |
|  | 4 | 0.995 | 0.977-1.013 | 0.999 | 0.986-1.012 | 1.003 | 0.989-1.016 | 1.001 | 0.984-1.018 | 1.035 | 0.988-1.085 |