|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  | **Air pollution status** |
|  |  |  | **Deprivation status** | Low | Moderate | High |
| **Nitrogen dioxide (NO2)** | **Mortality rate ratio**(95%CI) | ***All-cause*** | LeastMost | -1.41\* (1.36 to 1.45) | 1.01 (0.92 to 1.07)1.43\* (1.34 to 1.52) | 1.09 (0.28 to 2.09)1.62\*\* (1.37 to 1.89) |
| ***Cardiovascular disease*** | LeastMost | -1.40\* (1.32 to 1.48) | 0.94 (0.84 to 1.06)1.26\* (1.14 to 1.40) | 1.17 (0.03 to 3.95)1.32 (0.93 to 1.78) |
| ***Cerebrovascular disease*** | LeastMost | -1.15\* (1.03 to 1.29) | 1.04 (0.83 to 1.27)1.31\* (1.05 to 1.59) | 0.41 (0.01 to 2.84)1.39 (0.67 to 2.44) |
| ***Respiratory disease*** | LeastMost | -1.70\* (1.57 to 1.84) | 1.14 (0.97 to 1.32)1.80\* (1.58 to 2.06) | 1.17 (0.04 to 15.94)2.10\*\* (1.38 to 3.03) |
| ***Chronic liver disease*** | LeastMost | -2.33\* (1.81 to 3.17) | 1.00 (0.54 to 1.88)2.33\* (1.49 to 3.62) | 0.67 (0.22 to 4.58)3.56 (0.88 to 8.94) |
| **Morbidity rate ratio** (95%CI) | ***Cardiovascular disease*** | LeastMost | -1.51\* (1.47 to 1.56) | 0.92\* (0.86 to 0.98)1.39\* (1.31 to 1.47) | 1.05 (0.24 to 2.22)1.44\* (1.20 to 1.69) |
| ***Cerebrovascular disease*** | LeastMost | -1.42\* (1.32 to 1.53) | 0.80\* (0.68 to 0.94)1.22\* (1.05 to 1.39) | 0.95 (0.01 to 6.81)1.37 (0.87 to 2.05) |
| ***Respiratory disease*** | LeastMost | -1.80\* (1.75 to 1.85) | 0.92\* (0.87 to 0.97)1.73\* (1.66 to 1.80) | 1.02 (0.11 to 1.65)1.70\* (1.49 to 1.93) |
| ***Chronic liver disease*** | LeastMost | -3.25\* (2.66 to 4.11) | 0.75 (0.42 to 1.25)2.69\* (1.96 to 3.71) | 0.81 (0.13 to 6.44)4.13\* (1.79 to 8.24) |
|  |  |  |  |  |  |  |
| **Particulate matter (PM10)** | **Mortality rate ratio**(95%CI) | ***All-cause*** | LeastMost | -1.56\* (1.46 to 1.66) | 1.02 (0.96 to 1.08) 1.58\* (1.50 to 1.66) | 1.06 (0.91 to 1.24)1.65\*\* (1.50 to 1.80) |
| ***Cardiovascular disease*** | LeastMost | -1.54\* (1.37 to 1.73) | 0.95 (0.86 to 1.05)1.46\* (1.33 to 1.61) | 1.05 (0.78 to 1.38)1.38\* (1.16 to 1.64) |
| ***Cerebrovascular disease*** | LeastMost | -1.33\* (1.04 to 1.68) | 1.02 (0.82 to 1.24)1.36\* (1.11 to 1.64) | 1.21 (0.68 to 1.96)1.33 (0.91 to 1.87) |
| ***Respiratory disease*** | LeastMost | -2.05\* (1.73 to 2.41) | 1.19\* (1.02 to 1.39)2.21\* (1.92 to 2.53) | 1.35 (0.86 to 1.95)2.38\*\* (1.89 to 2.95) |
| ***Chronic liver disease*** | LeastMost | -3.71\* (2.07 to 7.16) | 1.14 (0.60 to 2.17)2.71\* (1.62 to 5.04) | 1.57 (0.28 to 5.50)4.71\* (2.32 to 9.79) |
| **Morbidity rate ratio** (95%CI) | ***Cardiovascular disease*** | LeastMost | -1.65\* (1.55 to 1.76) | 1.04 (0.98 to 1.10)1.68\* (1.60 to 1.77) | 1.03 (0.8 to 1.20)1.57\* (1.43 to 1.72) |
| ***Cerebrovascular disease*** | LeastMost | -1.58\* (1.35 to 1.84) | 0.97 (0.85 to 1.11)1.48\* (1.30 to 1.68) | 0.93 (0.61 to 1.35)1.31\* (1.03 to 1.66) |
| ***Respiratory disease*** | LeastMost | -2.03\* (1.92 to 2.15) | 1.04 (0.98 to 1.09)2.11\* (2.01 to 2.21) | 0.96 (0.84 to 1.09)2.02\* (1.88 to 2.18) |
| ***Chronic liver disease*** | LeastMost | -5.17\* (3.39 to 8.16) | 1.08 (0.70 to 1.82)4.58\* (3.12 to 7.01) | 0.83 (0.16 to 2.82)3.92 (0.22 to 6.84) |
|  |  |  |  |  |  |  |
| **Particulate matter (PM2.5)** | **Mortality rate ratio**(95%CI) | ***All-cause*** | LeastMost | -1.57\* (1.49 to 1.70) | 1.04 (0.98 to 1.10) 1.58\* (1.50 to 1.67) | 1.08 (0.91 to 1.18) 1.61\*\* (1.48 to 1.74) |
| ***Cardiovascular disease*** | LeastMost | -1.57\* (1.38 to 1.78) | 0.96 (0.87 to 1.07)1.48\* (1.34 to 1.63) | 0.97 (0.79 to 1.18)1.40\* (1.20 to 1.62) |
| ***Cerebrovascular disease*** | LeastMost | -1.41\* (1.07 to 1.84) | 1.05 (0.86 to 1.29)1.33\* (1.09 to 1.63) | 1.11 (0.74 to 1.59)1.50\* (1.09 to 2.01) |
| ***Respiratory disease*** | LeastMost | -2.15\* (1.79 to 2.59) | 1.21\* (1.04 to 1.42)2.19\* (1.90 to 2.53) | 1.26 (0.89 to 1.60)2.34\*\* (1.91 to 2.85) |
| ***Chronic liver disease*** | LeastMost | -4.29\* (2.33 to 8.30) | 1.14 (0.60 to 2.08)2.86\* (1.67 to 5.20) | 1.43 (0.40 to 4.09)3.71\* (1.92 to 7.50) |
| **Morbidity rate ratio** (95%CI) | ***Cardiovascular disease*** | LeastMost | -1.60\* (1.48 to 1.72) | 1.05 (0.99 to 1.11)1.71\* (1.62 to 1.80) | 0.95 (0.77 to 1.06)1.56\* (1.44 to 1.69) |
| ***Cerebrovascular disease*** | LeastMost | -1.54\* (1.29 to 1.83) | 0.99 (0.86 to 1.13)1.50\* (1.32 to 1.71) | 0.79 (0.59 to 1.06)1.76\* (1.46 to 2.12) |
| ***Respiratory disease*** | LeastMost | -2.03\* (1.91 to 2.15) | 1.06\* (1.01 to 1.12)2.14 \* (2.04 to 2.24) | 0.94 (0.85 to 1.04)2.04\* (1.91 to 2.18) |
| ***Chronic liver disease*** | LeastMost | -4.75\* (2.99 to 7.67) | 1.17 (0.72 to 1.88)4.58\* (3.15 to 7.05) | 0.83 (0.63 to 1.88)4.58\* (2.86 to 7.56) |

\* statistically significant result

\*\* statistically significant result; RR increased as area-level air pollution status worsened