**Supplementary material giving respiratory symptom data for male smokers (86) and non- smokers (143) separately**

**Smokers:** Results from multivariate logistic regression analysis of respiratory symptoms and arsenic exposure at birth (10–400 μg/l and >400 μg/l) compared to <10 μg/l in male (smokers only)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Respiratory symptoms** | **<10 μg/l** |  | **10–400 μg/l** |  | **>400 μg/l** |
| N |  | N | OR | 95% CI | *p*-valueb |  | N | OR | 95% CI | *p*-valueb |
| Coughing |  |  |  |  |  |  |  |  |  |  |  |
|  When having a cold (last 12 months) | 27 |  | 16 | 0.91 | 0.23, 3.57 | 0.55 |  | 24 | 0.98 | 0.28, 3.43 | 0.51 |
|  When not having a cold (last 12 months) | 7 |  | 2 | 0.38 | 0.07, 2.10 | 0.87 |  | 5 | 0.77 | 0.21, 2.79 | 0.66 |
|  Dry cough (last 12 months) | 9 |  | 7 | 1.29 | 0.38, 4.36 | 0.34 |  | 13 | 2.06 | 0.69, 6.12 |  0.10 |
| Wheezing |  |  |  |  |  |  |  |  |  |  |  |
|  Ever | 12 |  | 10 | 1.78 | 0.58, 5.48 | 0.16 |  | 14 | 1.64 | 0.59, 4.53 | 0.17 |
|  Last 12 months | 5 |  | 2 | 0.24 | 0.03, 2.09 | 0.90 |  | 8 | 2.09 | 0.40, 11.0 | 0.19 |
|  Number of wheezing attacks (1-3 times) | 4 |  | 2 | 0.78 | 0.13, 4.73 | 0.61 |  | 4 | 1.32 | 0.29, 5.96 | 0.36 |
|  Number of wheezing attacks (4+ times)  | 1 |  | 0 |  |  |  |  | 3 | 3.74 | 0.32, 43.5 | 0.15 |
|  Number of nights sleep disturbed (<1/week) | 0 |  | 1 |  |  |  |  | 3 |  |  |  |
|  Number of nights sleep disturbed (1 or more/week) | 2 |  | 0 |  |  |  |  | 2 | 1.07 | 0.13, 9.04 | 0.47 |
|  Severe enough to affect speech | 2 |  | 0 |  |  |  |  | 2 | 0.92 | 0.11, 7.54 | 0.42 |
|  After exercise | 3 |  | 1 | 0.50 | 0.05, 5.30 | 0.72 |  | 6 | 2.79 | 0.61, 12.8 | 0.09 |
|  Without exercise | 0 |  | 0 |  |  |  |  | 2 |  |  |  |
|  When having a cold | 4 |  | 1 | 0.35 | 0.04, 3.49 | 0.81 |  | 5 | 1.49 | 0.35, 6.40 | 0.30 |
|  When not having a cold | 2 |  | 1 | 0.81 | 0.07, 9.61 | 0.57 |  | 3 | 1.86 | 0.28, 12.2 | 0.26 |
| Shortness of breath |  |  |  |  |  |  |  |  |  |  |  |
|  Woken up with shortness of breath | 12 |  | 9 | 1.40 | 0.45, 4.34 | 0.28 |  | 14 | 1.56 | 0.56, 4.33 | 0.20 |
|  Woken up with tightness of chest | 5 |  | 6 | 2.68 | 0.65, 11.0 | 0.09 |  | 8 | 2.27 | 0.61, 8.37 | 0.11 |
|  When walking fast or climbing | 12 |  | 4 | 0.43 | 0.11, 1.62 | 0.11 |  | 14 | 1.54 | 0.54, 4.39 | 0.21 |
|  When walking on level ground | 4 |  | 1 | 0.28 | 0.03, 2.95 | 0.85 |  | 5 | 1.39 | 0.30, 6.48 | 0.34 |
| Asthma | 7 |  | 7 | 2.14 | 0.59, 7.74 | 0.12 |  | 9 | 1.57 | 0.48, 5.15 |  0.23 |

a Adjusted for age, BMI, smoking (self and father), and number of rooms in house

b One-tailed *p*-value

**Non-smokers:** Results from multivariate logistic regression analysis of respiratory symptoms and arsenic exposure at birth (10–400 μg/l and >400 μg/l) compared to <10 μg/l in male (non-smokers only)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Respiratory symptoms** | **<10 μg/l** |  | **10–400 μg/l** |  | **>400 μg/l** |
| N |  | N | OR | 95% CI | *p*-valueb |  | N | OR | 95% CI | *p*-valueb |
| Coughing |  |  |  |  |  |  |  |  |  |  |  |
|  When having a cold (last 12 months) | 49 |  | 13 | 0.48 | 0.19, 1.22 | 0.94 |  | 24 | 0.57 | 0.26, 1.26 | 0.92 |
|  When not having a cold (last 12 months) | 10 |  | 2 | 0.52 | 0.10, 2.64 | 0.78 |  | 6 | 1.01 | 0.33, 3.07 | 0.50 |
|  Dry cough (last 12 months) | 15 |  | 7 | 1.57 | 0.53, 4.63 | 0.21 |  | 16 | 2.45 | 1.03, 5.83 |  0.02 |
| Wheezing |  |  |  |  |  |  |  |  |  |  |  |
|  Ever | 25 |  | 10 | 1.15 | 0.44, 3.01 | 0.39 |  | 20 | 1.69 | 0.77, 3.70 | 0.10 |
|  Last 12 months | 4 |  | 2 | 1.87 | 0.23, 15.0 | 0.28 |  | 6 | 2.56 | 0.56, 11.7 | 0.11 |
|  Number of wheezing attacks (1-3 times) | 2 |  | 2 | 3.16 | 0.40, 24.9 | 0.14 |  | 4 | 4.05 | 0.67, 24.4 | 0.06 |
|  Number of wheezing attacks (4+ times)  | 2 |  | 0 |  |  |  |  | 1 | 0.53 | 0.04, 8.05 | 0.68 |
|  Number of nights sleep disturbed (<1/week) | 1 |  | 0 |  |  |  |  | 3 | 17.0 |  0.80, 362.8 | 0.03 |
|  Number of nights sleep disturbed (1 or more/week) | 1 |  | 1 | 0.71 | 0.02, 30.4 | 0.57 |  | 0 |  |  |  |
|  Severe enough to affect speech | 1 |  | 1 | 3.39 | 0.18, 62.5 | 0.21 |  | 2 | 3.64 | 0.30, 44.2 | 0.16 |
|  After exercise | 3 |  | 2 | 2.15 | 0.31, 14.8 | 0.22 |  | 2 | 1.08 | 0.17, 6.87 | 0.47 |
|  Without exercise | 1 |  | 1 | 3.89 | 0.22, 68.7 | 0.18 |  | 1 | 1.97 | 0.11, 35.1 | 0.32 |
|  When having a cold | 3 |  | 1 | 1.08 | 0.10, 11.4 | 0.47 |  | 4 | 2.32 | 0.47, 11.4 | 0.15 |
|  When not having a cold | 1 |  | 1 | 1.55 | 0.07, 37.2 | 0.39 |  | 2 | 2.90 | 0.25, 34.1 | 0.20 |
| Shortness of breath |  |  |  |  |  |  |  |  |  |  |  |
|  Woken up with shortness of breath | 19 |  | 8 | 1.14 | 0.41, 3.17 | 0.40 |  | 17 | 1.85 | 0.81, 4.22 | 0.07 |
|  Woken up with tightness of chest | 7 |  | 2 | 0.66 | 0.12, 3.65 | 0.68 |  | 4 | 0.89 | 0.24, 3.27 | 0.57 |
|  When walking fast or climbing | 14 |  | 5 | 0.84 | 0.25, 2.76 | 0.62 |  | 12 | 1.48 | 0.60, 3.64 | 0.18 |
|  When walking on level ground | 5 |  | 5 | 2.86 | 0.70, 11.6 | 0.07 |  | 7 | 2.52 | 0.73, 8.69 | 0.07 |
| Asthma | 9 |  | 5 | 1.68 | 0.48, 5.81 | 0.21 |  | 14 | 3.81 | 1.42, 10.2 |  0.004 |

a Adjusted for age, BMI, smoking (self and father), and number of rooms in house

b One-tailed *p*-value