|  |  |  |
| --- | --- | --- |
|  | **CPNS Death HR (95% CI)** | |
|  | Age-sex adj | Fully adj |
| **Age** |  |  |
| 18-<40 | 0.05 (0.04-0.08) | 0.07 (0.05-0.10) |
| 40-<50 | 0.27 (0.21-0.33) | 0.31 (0.24-0.39) |
| 50-<60 | 1.00 (ref) | 1.00 (ref) |
| 60-<70 | 2.62 (2.31-2.98) | 2.11 (1.85-2.40) |
| 70-<80 | 7.62 (6.79-8.55) | 4.79 (4.25-5.40) |
| 80+ | 26.02 (23.31-29.06) | 12.57 (11.13-14.20) |
|  |  |  |
| **Sex** |  |  |
| Female | 1.00 (ref) | 1.00 (ref) |
| Male | 2.23 (2.11-2.35) | 1.88 (1.78-1.99) |
|  |  |  |
| **BMI** |  |  |
| Not obese | 1.00 (ref) | 1.00 (ref) |
| Obese class I (30-34.9kg/m2) | 1.57 (1.47-1.68) | 1.27 (1.19-1.36) |
| Obese class II (35-39.9kg/m2) | 2.01 (1.82-2.21) | 1.56 (1.42-1.73) |
| Obese class III (≥40 kg/m2) | 2.97 (2.61-3.37) | 2.26 (1.99-2.58) |
|  |  |  |
| **Smoking** |  |  |
| Never | 1.00 (ref) | 1.00 (ref) |
| Ex-smoker | 1.80 (1.70-1.91) | 1.26 (1.18-1.34) |
| Current | 1.25 (1.12-1.40) | 0.88 (0.79-0.99) |
|  |  |  |
| **Ethnicity\*** |  |  |
| White | 1.00 (ref) | 1.00 (ref) |
| Mixed | 1.82 (1.32-2.50) | 1.64 (1.20-2.26) |
| Asian or Asian British | 1.93 (1.72-2.16) | 1.60 (1.42-1.80) |
| Black | 2.15 (1.82-2.54) | 1.70 (1.43-2.01) |
| Other | 1.39 (1.07-1.79) | 1.38 (1.07-1.78) |
|  |  |  |
| **IMD quintile** |  |  |
| 1 (least deprived) | 1.00 (ref) | 1.00 (ref) |
| 2 | 1.19 (1.09-1.30) | 1.14 (1.05-1.25) |
| 3 | 1.34 (1.22-1.46) | 1.22 (1.12-1.33) |
| 4 | 1.71 (1.57-1.86) | 1.49 (1.37-1.63) |
| 5 (most deprived) | 2.13 (1.95-2.32) | 1.74 (1.59-1.90) |
|  |  |  |
| **Blood pressure** |  |  |
| Normal | 1.00 (ref) | 1.00 (ref) |
| High, or diagnosed hypertension | 1.24 (1.16-1.32) | 0.96 (0.90-1.02) |
|  |  |  |
| ***Co-morbidities*** |  |  |
| **Respiratory disease ex asthma** | 2.34 (2.20-2.49) | 1.78 (1.66-1.90) |
|  |  |  |
| **Asthma (vs none)\*** |  |  |
| With no recent OCS use | 1.23 (1.14-1.34) | 1.11 (1.02-1.20) |
| With recent OCS use | 1.67 (1.45-1.92) | 1.23 (1.06-1.42) |
|  |  |  |
| **Chronic heart disease** | 2.00 (1.89-2.12) | 1.26 (1.19-1.34) |
|  |  |  |
| **Diabetes (vs none)**\*\* |  |  |
| Controlled (HbA1c<7.5%) | 2.03 (1.91-2.17) | 1.51 (1.41-1.61) |
| Uncontrolled (HbA1c>7.5%) | 3.61 (3.33-3.90) | 2.37 (2.18-2.57) |
| No recent HbA1c measure | 2.38 (2.09-2.71) | 1.86 (1.63-2.12) |
|  |  |  |
| **Cancer (non-haematological, vs none)** |  |  |
| Diagnosed < 1 year ago | 1.77 (1.46-2.15) | 1.51 (1.24-1.83) |
| Diagnosed 1-4.9 years ago | 1.38 (1.21-1.57) | 1.18 (1.04-1.34) |
| Diagnosed ≥5 years ago | 1.02 (0.94-1.12) | 0.96 (0.88-1.05) |
|  |  |  |
| **Haematological malignancy (vs none)** |  |  |
| Diagnosed < 1 year ago | 3.91 (2.68-5.71) | 3.42 (2.34-4.99) |
| Diagnosed 1-4.9 years ago | 3.56 (2.85-4.44) | 3.07 (2.46-3.84) |
| Diagnosed ≥5 years ago | 2.09 (1.72-2.55) | 1.86 (1.52-2.26) |
|  |  |  |
| **Liver disease** | 2.34 (1.94-2.82) | 1.61 (1.33-1.95) |
|  |  |  |
| **Stroke/dementia** | 2.34 (2.18-2.51) | 1.80 (1.67-1.93) |
|  |  |  |
| **Other neurological** | 2.91 (2.60-3.26) | 2.43 (2.17-2.73) |
|  |  |  |
| **Kidney disease** | 2.15 (2.03-2.29) | 1.70 (1.60-1.80) |
|  |  |  |
| **Organ transplant** | 7.71 (5.82-10.22) | 4.23 (3.17-5.64) |
|  |  |  |
| **Spleen diseases** | 1.80 (1.20-2.71) | 1.39 (0.92-2.10) |
|  |  |  |
| **Rheumatoid/Lupus/ Psoriasis** | 1.35 (1.23-1.47) | 1.22 (1.12-1.34) |
|  |  |  |
| **Other immunosuppressive condition** | 2.02 (1.45-2.81) | 1.68 (1.21-2.34) |

*FOOTNOTES: Ethnicity effect estimated from a model restricted to those with recorded ethnicity. Models adjusted for age using a 4-knot cubic spline age spline, except for estimation of age group effects. OCS = oral corticosteroids. \*Recent OCS use defined as in the year before baseline. \*\*HbA1c classification based on latest measure within 15 months before baseline.*