|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **ECDS Event HR (95% CI)** | | **ITU admission HR (95% CI)** | | **CPNS Death HR (95% CI)** | | **ONS COVID-19 Death HR**  **(95% CI)** | |
|  | Age-sex adj | Fully adj | Age-sex adj | Fully adj | Age-sex adj | Fully adj | Age-sex adj | Fully adj |
| **Age** |  |  |  |  |  |  |  |  |
| 18-<40 |  |  | 0.16 (0.13-0.21) | 0.22 (0.17-0.28) | 0.05 (0.03-0.08) | 0.06 (0.04-0.09) | 0.05 (0.02-0.12) | 0.05 (0.02-0.13) |
| 40-<50 |  |  | 0.47 (0.38-0.59) | 0.56 (0.45-0.69) | 0.28 (0.21-0.36) | 0.31 (0.23-0.41) | 0.30 (0.17-0.54) | 0.33 (0.19-0.60) |
| 50-<60 |  |  | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| 60-<70 |  |  | 1.58 (1.34-1.87) | 1.37 (1.16-1.63) | 2.76 (2.36-3.23) | 2.32 (1.99-2.72) | 3.62 (2.61-5.03) | 3.04 (2.18-4.22) |
| 70-<80 |  |  | 1.43 (1.19-1.71) | 1.13 (0.94-1.37) | 8.36 (7.27-9.63) | 6.05 (5.25-6.99) | 12.87 (9.54-17.36) | 9.09 (6.71-12.32) |
| 80+ |  |  | 0.49 (0.35-0.68) | 0.37 (0.26-0.52) | 27.06 (23.63-30.98) | 17.01 (14.77-19.59) | 39.14 (29.23-52.41) | 24.00 (17.77-32.41) |
|  |  |  |  |  |  |  |  |  |
| **Sex** |  |  |  |  |  |  |  |  |
| Female |  |  | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| Male |  |  | 2.59 (2.26-2.98) | 2.69 (2.34-3.10) | 2.31 (2.16-2.47) | 1.98 (1.85-2.12) | 2.24 (1.99-2.53) | 1.92 (1.70-2.17) |
|  |  |  |  |  |  |  |  |  |
| **BMI (kg/m2)** |  |  |  |  |  |  |  |  |
| <40 |  |  | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| ≥40 |  |  | 3.50 (2.80-4.38) | 2.43 (1.93-3.06) | 3.33 (2.88-3.84) | 2.41 (2.08-2.79) | 2.76 (2.06-3.71) | 2.05 (1.52-2.76) |
|  |  |  |  |  |  |  |  |  |
| **Smoking** |  |  |  |  |  |  |  |  |
| Non-smoker |  |  | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| Current |  |  | 0.38 (0.30-0.47) | 0.36 (0.29-0.45) | 0.90 (0.82-0.99) | 0.80 (0.72-0.88) | 0.86 (0.71-1.03) | 0.76 (0.63-0.92) |
|  |  |  |  |  |  |  |  |  |
| **Ethnicity\*** |  |  |  |  |  |  |  |  |
| White |  |  | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| Black |  |  | 2.92 (1.79-4.75) | 2.75 (1.69-4.49) | 1.89 (1.30-2.75) | 1.68 (1.15-2.45) | 1.69 (0.84-3.42) | 1.60 (0.79-3.24) |
| Asian |  |  | 2.69 (2.16-3.35) | 2.10 (1.67-2.64) | 2.01 (1.76-2.30) | 1.52 (1.32-1.74) | 2.44 (1.95-3.05) | 1.96 (1.56-2.47) |
| Mixed |  |  | 4.22 (3.23-5.52) | 3.62 (2.75-4.77) | 2.18 (1.79-2.65) | 1.78 (1.45-2.17) | 1.79 (1.22-2.61) | 1.62 (1.10-2.39) |
| Other |  |  | 2.77 (1.92-4.00) | 2.78 (1.92-4.02) | 1.45 (1.07-1.95) | 1.35 (1.00-1.82) | 2.23 (1.46-3.42) | 2.16 (1.41-3.32) |
|  |  |  |  |  |  |  |  |  |
| **IMD quintile** |  |  |  |  |  |  |  |  |
| 1 (most deprived) |  |  | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| 2 |  |  | 1.05 (0.87-1.27) | 1.05 (0.87-1.27) | 0.78 (0.70-0.85) | 0.83 (0.75-0.91) | 0.83 (0.69-0.99) | 0.88 (0.73-1.06) |
| 3 |  |  | 0.92 (0.75-1.12) | 0.93 (0.76-1.14) | 0.64 (0.58-0.71) | 0.72 (0.65-0.79) | 0.69 (0.57-0.84) | 0.77 (0.64-0.93) |
| 4 |  |  | 0.71 (0.58-0.88) | 0.74 (0.60-0.91) | 0.55 (0.50-0.61) | 0.64 (0.58-0.71) | 0.60 (0.49-0.73) | 0.70 (0.58-0.85) |
| 5 (least deprived) |  |  | 0.80 (0.65-0.98) | 0.83 (0.67-1.02) | 0.48 (0.44-0.54) | 0.58 (0.53-0.65) | 0.58 (0.48-0.71) | 0.70 (0.58-0.85) |
|  |  |  |  |  |  |  |  |  |
| **Blood pressure** |  |  |  |  |  |  |  |  |
| Normal |  |  | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) | 1.00 (ref) |
| High |  |  | 1.28 (1.11-1.48) | 1.23 (1.07-1.42) | 0.73 (0.68-0.77) | 0.79 (0.74-0.84) | 0.71 (0.63-0.80) | 0.77 (0.68-0.87) |
|  |  |  |  |  |  |  |  |  |
| ***Co-morbidities*** |  |  |  |  |  |  |  |  |
| Respiratory disease ex asthma |  |  | 1.44 (1.15-1.80) | 1.14 (0.89-1.46) | 2.35 (2.18-2.53) | 1.87 (1.72-2.02) | 2.47 (2.16-2.83) | 1.97 (1.70-2.29) |
| Asthma |  |  | 2.04 (1.72-2.42) | 1.76 (1.48-2.09) | 1.63 (1.49-1.79) | 1.25 (1.14-1.38) | 1.85 (1.57-2.18) | 1.41 (1.19-1.67) |
| Chronic heart disease |  |  | 1.40 (1.16-1.69) | 1.11 (0.92-1.35) | 1.86 (1.74-2.00) | 1.40 (1.30-1.50) | 1.96 (1.73-2.22) | 1.52 (1.34-1.73) |
| Diabetes |  |  | 2.60 (2.26-2.99) | 2.22 (1.92-2.56) | 2.39 (2.24-2.55) | 1.98 (1.86-2.12) | 2.18 (1.93-2.46) | 1.82 (1.60-2.06) |
| Cancer ex haem (in last year) |  |  | 0.85 (0.38-1.90) | 0.82 (0.37-1.84) | 1.64 (1.31-2.05) | 1.54 (1.23-1.93) | 2.27 (1.59-3.25) | 2.06 (1.43-2.96) |
| Canc haem/ apl anaem /bone mrrw transpl  (last yr) |  |  | 2.88 (1.78-4.66) | 2.51 (1.50-4.21) | 2.64 (2.16-3.23) | 1.48 (1.20-1.82) | 2.32 (1.56-3.44) | 1.24 (0.82-1.87) |
| Liver disease |  |  | 0.39 (0.15-1.03) | 0.30 (0.11-0.79) | 2.33 (1.87-2.91) | 1.68 (1.34-2.10) | 2.52 (1.71-3.72) | 1.96 (1.32-2.91) |
| Stroke/  dementia |  |  | 1.34 (0.97-1.85) | 1.18 (0.85-1.63) | 2.24 (2.06-2.43) | 1.80 (1.65-1.96) | 1.80 (1.52-2.12) | 1.45 (1.22-1.71) |
| Other neurological |  |  | 0.89 (0.49-1.62) | 0.83 (0.46-1.52) | 2.65 (2.31-3.05) | 2.22 (1.93-2.56) | 2.45 (1.88-3.20) | 2.15 (1.64-2.81) |
| Kidney disease |  |  |  |  |  |  |  |  |
| Organ transplant |  |  | 5.60 (3.00-10.45) | 4.87 (2.60-9.13) | 7.09 (5.05-9.94) | 5.19 (3.68-7.32) | 2.75 (1.03-7.34) | 1.95 (0.72-5.24) |
| Spleen diseases |  |  | 1.84 (0.69-4.90) | 1.70 (0.64-4.55) | 2.04 (1.30-3.21) | 1.73 (1.10-2.71) | 2.97 (1.48-5.95) | 2.54 (1.27-5.10) |
| Rheumatoid/Lupus/ Psoriasis |  |  | 1.39 (1.11-1.74) | 1.32 (1.05-1.66) | 1.40 (1.26-1.56) | 1.26 (1.13-1.40) | 1.62 (1.34-1.95) | 1.42 (1.18-1.72) |
| Endocrine disease | (later) |  |  |  |  |  |  |  |
| **Immunosuppression not classified elsewhere** | (later) |  |  |  |  |  |  |  |

**GREY HIGHLIGHT = DUMMY DATA - NOT REAL; YELLOW HIGHLIGHT = YET TO BE IMPLEMENTED**

FOOTNOTES: Ethnicity/BMI from a CC model? Adjustment for age slpine?