**Supplementary Tables**

**Supplementary Table 1:** Adjusted odds of prevalent and incident diabetes in association with total green space and tree canopy (as continuous variables): multilevel logistic regressions adjusted for confounding and estimated using Markov Chain Monte Carlo method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  | Prevalence models | | Incidence models | |
|  | Model 1 (Total Green Space) | Model 2 (Tree Canopy) | Model 3 (Total Green Space) | Model 4 (Tree Canopy) |
|  | Odds Ratio (95% Credible Interval) | | | |
| Green space indicator | 0.993 (0.988, 0.998) | 0.984 (0.978, 0.989) | 0.998 (0.992, 1.003) | 0.988 (0.981, 0.994) |
|  |  |  |  |  |
| Age Group (ref: 45-54y) |  |  |  |  |
| 55-64y | 1.614 (1.446, 1.801) | 1.622 (1.452, 1.807) | 1.365 (1.191, 1.558) | 1.375 (1.198, 1.568) |
| 65-74y | 2.105 (1.831, 2.413) | 2.119 (1.839, 2.430) | 1.375 (1.144, 1.642) | 1.391 (1.154, 1.659) |
| >75y | 2.046 (1.745, 2.390) | 2.061 (1.755, 2.407) | 1.053 (0.844, 1.298) | 1.065 (0.849, 1.328) |
|  |  |  |  |  |
| Sex (ref: Male) |  |  |  |  |
| Female | 0.611 (0.564, 0.662) | 0.613 (0.565, 0.664) | 0.541 (0.484, 0.602) | 0.542 (0.486, 0.603) |
|  |  |  |  |  |
| Annual household income (ref: $0-$19,999) |  |  |  |  |
| $20,000-$29,999 | 0.884 (0.763, 1.018) | 0.884 (0.761, 1.020) | 0.899 (0.724, 1.096) | 0.903 (0.729, 1.104) |
| $30,000-$39,999 | 0.687 (0.580, 0.805) | 0.692 (0.583, 0.811) | 0.761 (0.601, 0.949) | 0.771 (0.606, 0.962) |
| $40,000-$49,999 | 0.716 (0.601, 0.844) | 0.720 (0.605, 0.849) | 0.814 (0.644, 1.014) | 0.828 (0.649, 1.034) |
| $50,000-$69,999 | 0.695 (0.591, 0.807) | 0.699 (0.597, 0.810) | 0.680 (0.546, 0.834) | 0.688 (0.551, 0.845) |
| >$70,000 | 0.630 (0.541, 0.726) | 0.634 (0.550, 0.727) | 0.621 (0.506, 0.749) | 0.630 (0.514, 0.764) |
| Not stated | 0.783 (0.690, 0.881) | 0.786 (0.694, 0.885) | 0.928 (0.781, 1.092) | 0.936 (0.784, 1.106) |
|  |  |  |  |  |
| Highest educational qualification (ref: None) |  |  |  |  |
| School | 0.833 (0.720, 0.959) | 0.836 (0.723, 0.967) | 0.716 (0.587, 0.864) | 0.721 (0.593, 0.871) |
| High school | 1.027 (0.869, 1.208) | 1.035 (0.875, 1.215) | 0.788 (0.625, 0.982) | 0.797 (0.634, 0.985) |
| Trade | 0.794 (0.673, 0.931) | 0.797 (0.677, 0.937) | 0.659 (0.526, 0.815) | 0.663 (0.531, 0.819) |
| Certificate/Diploma | 0.782 (0.673, 0.903) | 0.791 (0.681, 0.917) | 0.662 (0.542, 0.803) | 0.675 (0.554, 0.814) |
| University | 0.799 (0.685, 0.925) | 0.811 (0.698, 0.944) | 0.586 (0.475, 0.715) | 0.598 (0.486, 0.726) |
| Not stated | 1.038 (0.736, 1.405) | 1.046 (0.737, 1.420) | 0.791 (0.470, 1.212) | 0.798 (0.472, 1.217) |
|  |  |  |  |  |
| Economic status (ref: Employed) |  |  |  |  |
| Retired | 1.235 (1.101, 1.377) | 1.237 (1.108, 1.375) | 1.079 (0.929, 1.244) | 1.082 (0.930, 1.249) |
| Unemployed | 1.250 (0.914, 1.655) | 1.252 (0.912, 1.646) | 1.183 (0.778, 1.686) | 1.180 (0.775, 1.679) |
| Unpaid work | 1.149 (0.808, 1.563) | 1.152 (0.811, 1.566) | 1.294 (0.833, 1.875) | 1.293 (0.829, 1.875) |
| Disabled | 2.380 (1.852, 3.007) | 2.374 (1.851, 2.986) | 1.353 (0.899, 1.918) | 1.342 (0.900, 1.887) |
| Homemaker | 1.022 (0.789, 1.289) | 1.023 (0.791, 1.295) | 1.249 (0.914, 1.643) | 1.254 (0.926, 1.651) |
| Other (e.g. study) | 1.455 (1.061, 1.920) | 1.455 (1.066, 1.915) | 1.246 (0.784, 1.831) | 1.248 (0.790, 1.830) |
|  |  |  |  |  |
| Couple status (ref: Not in a couple) |  |  |  |  |
| In a couple | 0.892 (0.813, 0.978) | 0.897 (0.820, 0.980) | 0.890 (0.783, 1.006) | 0.899 (0.792, 1.015) |
|  |  |  |  |  |
|  |  |  |  |  |

**Supplementary Table 2:** Adjusted odds of prevalent and incident hypertension in association with total green space and tree canopy (as continuous variables): multilevel logistic regressions adjusted for confounding and estimated using Markov Chain Monte Carlo method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  | Prevalence models | | Incidence models | |
|  | Model 5 (Total Green Space) | Model 6 (Tree Canopy) | Model 7 (Total Green Space) | Model 8 (Tree Canopy) |
|  | Odds Ratio (95% Credible Interval) | | | |
| Green space indicator | 0.999 (0.996, 1.001) | 0.997 (0.993, 1.000) | 0.998 (0.994, 1.002) | 0.993 (0.989, 0.997) |
|  |  |  |  |  |
| Age Group (ref: 45-54y) |  |  |  |  |
| 55-64y | 1.772 (1.683, 1.866) | 1.775 (1.686, 1.866) | 1.511 (1.393, 1.641) | 1.516 (1.397, 1.644) |
| 65-74y | 2.697 (2.508, 2.894) | 2.703 (2.520, 2.897) | 1.946 (1.728, 2.178) | 1.957 (1.743, 2.187) |
| >75y | 4.010 (3.676, 4.361) | 4.015 (3.693, 4.361) | 2.171 (1.873, 2.502) | 2.183 (1.884, 2.510) |
|  |  |  |  |  |
| Sex (ref: Male) |  |  |  |  |
| Female | 0.944 (0.904, 0.984) | 0.944 (0.903, 0.985) | 0.713 (0.666, 0.763) | 0.714 (0.666, 0.765) |
|  |  |  |  |  |
| Annual household income (ref: $0-$19,999) |  |  |  |  |
| $20,000-$29,999 | 0.926 (0.846, 1.013) | 0.926 (0.846, 1.014) | 0.952 (0.810, 1.109) | 0.959 (0.820, 1.116) |
| $30,000-$39,999 | 0.956 (0.868, 1.047) | 0.957 (0.870, 1.049) | 0.984 (0.837, 1.151) | 0.995 (0.845, 1.158) |
| $40,000-$49,999 | 0.885 (0.803, 0.971) | 0.886 (0.805, 0.973) | 0.927 (0.785, 1.088) | 0.936 (0.794, 1.095) |
| $50,000-$69,999 | 0.843 (0.774, 0.917) | 0.845 (0.776, 0.918) | 0.960 (0.830, 1.110) | 0.972 (0.842, 1.114) |
| >$70,000 | 0.830 (0.766, 0.897) | 0.831 (0.769, 0.897) | 0.826 (0.720, 0.944) | 0.839 (0.733, 0.953) |
| Not stated | 0.831 (0.771, 0.892) | 0.831 (0.773, 0.893) | 0.990 (0.869, 1.124) | 1.001 (0.883, 1.129) |
|  |  |  |  |  |
| Highest educational qualification (ref: None) |  |  |  |  |
| School | 0.987 (0.905, 1.073) | 0.989 (0.903, 1.080) | 0.873 (0.753, 1.009) | 0.875 (0.753, 1.012) |
| High school | 0.936 (0.845, 1.031) | 0.939 (0.848, 1.034) | 0.863 (0.729, 1.012) | 0.868 (0.734, 1.019) |
| Trade | 0.911 (0.823, 1.004) | 0.913 (0.823, 1.008) | 0.753 (0.634, 0.883) | 0.754 (0.637, 0.888) |
| Certificate/Diploma | 0.872 (0.798, 0.950) | 0.876 (0.801, 0.957) | 0.828 (0.715, 0.956) | 0.836 (0.720, 0.967) |
| University | 0.800 (0.732, 0.872) | 0.804 (0.734, 0.879) | 0.690 (0.594, 0.796) | 0.699 (0.602, 0.809) |
| Not stated | 0.783 (0.631, 0.957) | 0.785 (0.633, 0.960) | 0.663 (0.454, 0.926) | 0.667 (0.456, 0.926) |
|  |  |  |  |  |
| Economic status (ref: Employed) |  |  |  |  |
| Retired | 1.255 (1.185, 1.329) | 1.254 (1.184, 1.328) | 1.060 (0.963, 1.166) | 1.062 (0.965, 1.167) |
| Unemployed | 1.229 (1.034, 1.451) | 1.225 (1.033, 1.442) | 1.210 (0.914, 1.556) | 1.210 (0.912, 1.564) |
| Unpaid work | 1.152 (0.972, 1.350) | 1.149 (0.970, 1.351) | 1.119 (0.842, 1.450) | 1.125 (0.846, 1.453) |
| Disabled | 1.663 (1.391, 1.976) | 1.657 (1.380, 1.963) | 0.963 (0.688, 1.296) | 0.958 (0.685, 1.293) |
| Homemaker | 1.056 (0.940, 1.181) | 1.056 (0.941, 1.184) | 0.850 (0.688, 1.028) | 0.848 (0.689, 1.025) |
| Other (e.g. study) | 1.165 (0.973, 1.389) | 1.162 (0.970, 1.378) | 1.311 (0.978, 1.714) | 1.310 (0.975, 1.705) |
|  |  |  |  |  |
| Couple status (ref: Not in a couple) |  |  |  |  |
| In a couple | 0.991 (0.942, 1.041) | 0.992 (0.943, 1.043) | 0.994 (0.914, 1.079) | 0.997 (0.918, 1.082) |
|  |  |  |  |  |
|  |  |  |  |  |

**Supplementary Table 3:** Adjusted odds of prevalent and incident cardiovascular diseases in association with total green space and tree canopy (as continuous variables): multilevel logistic regressions adjusted for confounding and estimated using Markov Chain Monte Carlo method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  | Prevalence models | | Incidence models | |
|  | Model 9 (Total Green Space) | Model 10 (Tree Canopy) | Model 11 (Total Green Space) | Model 12 (Tree Canopy) |
|  | Odds Ratio (95% Credible Interval) | | Odds Ratio (95% Credible Interval) | |
| Green space indicator | 0.999 (0.996, 1.002) | 0.996 (0.993, 0.999) | 0.998 (0.994, 1.002) | 0.993 (0.988, 0.998) |
|  |  |  |  |  |
| Age Group (ref: 45-54y) |  |  |  |  |
| 55-64y | 2.343 (2.119, 2.589) | 2.346 (2.116, 2.584) | 1.644 (1.439, 1.878) | 1.651 (1.442, 1.880) |
| 65-74y | 4.565 (4.067, 5.118) | 4.590 (4.075, 5.122) | 2.754 (2.328, 3.232) | 2.774 (2.355, 3.251) |
| >75y | 8.100 (7.148, 9.171) | 8.174 (7.181, 9.198) | 4.685 (3.903, 5.588) | 4.734 (3.947, 5.645) |
|  |  |  |  |  |
| Sex (ref: Male) |  |  |  |  |
| Female | 0.473 (0.442, 0.504) | 0.473 (0.443, 0.505) | 0.519 (0.471, 0.571) | 0.521 (0.472, 0.574) |
|  |  |  |  |  |
| Annual household income (ref: $0-$19,999) |  |  |  |  |
| $20,000-$29,999 | 0.921 (0.818, 1.030) | 0.922 (0.821, 1.031) | 0.895 (0.745, 1.062) | 0.903 (0.752, 1.072) |
| $30,000-$39,999 | 0.797 (0.702, 0.899) | 0.800 (0.703, 0.907) | 0.784 (0.640, 0.947) | 0.794 (0.649, 0.957) |
| $40,000-$49,999 | 0.877 (0.767, 0.996) | 0.881 (0.771, 0.999) | 0.794 (0.643, 0.969) | 0.808 (0.652, 0.985) |
| $50,000-$69,999 | 0.744 (0.658, 0.840) | 0.748 (0.661, 0.847) | 0.741 (0.611, 0.890) | 0.752 (0.623, 0.901) |
| >$70,000 | 0.692 (0.618, 0.774) | 0.697 (0.622, 0.782) | 0.664 (0.558, 0.789) | 0.680 (0.572, 0.803) |
| Not stated | 0.773 (0.699, 0.850) | 0.774 (0.701, 0.854) | 0.880 (0.757, 1.019) | 0.891 (0.766, 1.031) |
|  |  |  |  |  |
| Highest educational qualification (ref: None) |  |  |  |  |
| School | 0.939 (0.828, 1.055) | 0.937 (0.830, 1.057) | 0.950 (0.790, 1.139) | 0.963 (0.796, 1.150) |
| High school | 0.941 (0.816, 1.079) | 0.943 (0.819, 1.081) | 0.929 (0.750, 1.142) | 0.950 (0.765, 1.167) |
| Trade | 0.938 (0.817, 1.067) | 0.936 (0.819, 1.063) | 1.023 (0.837, 1.243) | 1.038 (0.846, 1.260) |
| Certificate/Diploma | 0.871 (0.768, 0.981) | 0.875 (0.774, 0.990) | 0.934 (0.772, 1.118) | 0.958 (0.794, 1.147) |
| University | 0.875 (0.771, 0.986) | 0.882 (0.781, 0.995) | 0.782 (0.647, 0.939) | 0.807 (0.663, 0.970) |
| Not stated | 0.969 (0.729, 1.258) | 0.966 (0.724, 1.263) | 1.022 (0.655, 1.482) | 1.032 (0.657, 1.495) |
|  |  |  |  |  |
| Economic status (ref: Employed) |  |  |  |  |
| Retired | 1.322 (1.212, 1.439) | 1.320 (1.212, 1.438) | 1.123 (0.982, 1.277) | 1.132 (0.993, 1.286) |
| Unemployed | 1.394 (1.062, 1.775) | 1.391 (1.059, 1.786) | 1.003 (0.646, 1.444) | 1.008 (0.641, 1.461) |
| Unpaid work | 0.949 (0.704, 1.241) | 0.953 (0.701, 1.253) | 1.059 (0.694, 1.519) | 1.067 (0.691, 1.535) |
| Disabled | 3.173 (2.539, 3.907) | 3.140 (2.509, 3.874) | 1.732 (1.165, 2.426) | 1.733 (1.168, 2.439) |
| Homemaker | 1.159 (0.935, 1.413) | 1.162 (0.940, 1.410) | 1.069 (0.782, 1.401) | 1.078 (0.786, 1.423) |
| Other (e.g. study) | 1.445 (1.121, 1.819) | 1.436 (1.115, 1.809) | 1.020 (0.658, 1.470) | 1.024 (0.661, 1.477) |
|  |  |  |  |  |
| Couple status (ref: Not in a couple) |  |  |  |  |
| In a couple | 0.935 (0.871, 1.003) | 0.938 (0.873, 1.005) | 0.908 (0.812, 1.011) | 0.910 (0.814, 1.010) |
|  |  |  |  |  |
|  |  |  |  |  |

**Supplementary Table 4:** Adjusted odds of prevalent and incident diabetes in association with total green space and tree canopy (as categories): multilevel logistic regressions adjusted for confounding and estimated using Markov Chain Monte Carlo method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  | Prevalence models | | Incidence models | |
|  | Model 13 | Model 14 | Model 15 | Model 16 |
|  | Odds Ratio (95% Credible Interval) | | | |
| Total green space (ref: 0-4%) |  |  |  |  |
| 5-9% | 0.765 (0.579, 1.032) |  | 1.165 (0.694, 1.965) |  |
| 10-19% | 0.841 (0.636, 1.148) |  | 1.264 (0.744, 2.183) |  |
| 20-29% | 0.769 (0.575, 1.053) |  | 1.222 (0.710, 2.113) |  |
| >30% | 0.695 (0.512, 0.962) |  | 1.116 (0.645, 1.925) |  |
|  |  |  |  |  |
| Tree canopy (ref: 0-9%) |  |  |  |  |
| 10-19% |  | 0.839 (0.741, 0.952) |  | 0.890 (0.756, 1.045) |
| 20-29% |  | 0.744 (0.634, 0.872) |  | 0.762 (0.626, 0.926) |
| >30% |  | 0.622 (0.516, 0.746) |  | 0.687 (0.547, 0.855) |
|  |  |  |  |  |
| Age Group (ref: 45-54y) |  |  |  |  |
| 55-64y | 1.615 (1.448, 1.799) | 1.618 (1.449, 1.809) | 1.364 (1.193, 1.551) | 1.372 (1.195, 1.566) |
| 65-74y | 2.107 (1.829, 2.418) | 2.115 (1.834, 2.428) | 1.373 (1.148, 1.626) | 1.387 (1.154, 1.655) |
| >75y | 2.044 (1.740, 2.389) | 2.061 (1.751, 2.412) | 1.047 (0.837, 1.283) | 1.063 (0.848, 1.314) |
|  |  |  |  |  |
| Sex (ref: Male) |  |  |  |  |
| Female | 0.612 (0.564, 0.664) | 0.612 (0.564, 0.663) | 0.538 (0.483, 0.598) | 0.542 (0.485, 0.606) |
|  |  |  |  |  |
| Annual household income (ref: $0-$19,999) |  |  |  |  |
| $20,000-$29,999 | 0.881 (0.757, 1.014) | 0.885 (0.761, 1.020) | 0.895 (0.718, 1.096) | 0.902 (0.727, 1.102) |
| $30,000-$39,999 | 0.687 (0.580, 0.805) | 0.691 (0.583, 0.810) | 0.760 (0.598, 0.949) | 0.771 (0.607, 0.964) |
| $40,000-$49,999 | 0.715 (0.599, 0.845) | 0.720 (0.605, 0.849) | 0.809 (0.639, 1.005) | 0.825 (0.649, 1.029) |
| $50,000-$69,999 | 0.693 (0.593, 0.807) | 0.698 (0.596, 0.808) | 0.675 (0.541, 0.833) | 0.688 (0.553, 0.845) |
| >$70,000 | 0.628 (0.542, 0.722) | 0.632 (0.545, 0.727) | 0.617 (0.503, 0.747) | 0.630 (0.515, 0.759) |
| Not stated | 0.781 (0.691, 0.881) | 0.785 (0.692, 0.886) | 0.923 (0.770, 1.091) | 0.936 (0.784, 1.105) |
|  |  |  |  |  |
| Highest educational qualification (ref: None) |  |  |  |  |
| School | 0.835 (0.721, 0.963) | 0.840 (0.725, 0.976) | 0.716 (0.588, 0.866) | 0.722 (0.592, 0.873) |
| High school | 1.031 (0.869, 1.213) | 1.038 (0.877, 1.224) | 0.790 (0.627, 0.979) | 0.799 (0.637, 0.988) |
| Trade | 0.798 (0.676, 0.935) | 0.801 (0.679, 0.943) | 0.656 (0.525, 0.812) | 0.664 (0.531, 0.820) |
| Certificate/Diploma | 0.783 (0.674, 0.905) | 0.791 (0.681, 0.919) | 0.663 (0.546, 0.804) | 0.673 (0.551, 0.815) |
| University | 0.802 (0.689, 0.932) | 0.811 (0.694, 0.945) | 0.587 (0.482, 0.715) | 0.597 (0.486, 0.724) |
| Not stated | 1.043 (0.737, 1.418) | 1.051 (0.743, 1.430) | 0.793 (0.470, 1.219) | 0.799 (0.473, 1.229) |
|  |  |  |  |  |
| Economic status (ref: Employed) |  |  |  |  |
| Retired | 1.234 (1.106, 1.373) | 1.235 (1.102, 1.376) | 1.076 (0.931, 1.242) | 1.083 (0.931, 1.247) |
| Unemployed | 1.255 (0.916, 1.657) | 1.253 (0.917, 1.651) | 1.181 (0.780, 1.670) | 1.181 (0.777, 1.673) |
| Unpaid work | 1.144 (0.795, 1.570) | 1.151 (0.807, 1.565) | 1.291 (0.822, 1.872) | 1.296 (0.826, 1.888) |
| Disabled | 2.380 (1.848, 3.006) | 2.380 (1.847, 2.988) | 1.345 (0.891, 1.905) | 1.347 (0.905, 1.891) |
| Homemaker | 1.018 (0.786, 1.282) | 1.023 (0.789, 1.294) | 1.249 (0.917, 1.646) | 1.255 (0.918, 1.646) |
| Other (e.g. study) | 1.458 (1.061, 1.911) | 1.456 (1.066, 1.925) | 1.242 (0.785, 1.812) | 1.245 (0.789, 1.830) |
|  |  |  |  |  |
| Couple status (ref: Not in a couple) |  |  |  |  |
| In a couple | 0.889 (0.812, 0.973) | 0.894 (0.815, 0.977) | 0.884 (0.780, 0.998) | 0.898 (0.791, 1.017) |
|  |  |  |  |  |
|  |  |  |  |  |

**Supplementary Table 5:** Adjusted odds of prevalent and incident hypertension in association with total green space and tree canopy (as categories): multilevel logistic regressions adjusted for confounding and estimated using Markov Chain Monte Carlo method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  | Prevalence models | | Incidence models | |
|  | Model 17 | Model 18 | Model 19 | Model 20 |
|  | Odds Ratio (95% Credible Interval) | | | |
| Total green space (ref: 0-4%) |  |  |  |  |
| 5-9% | 0.892 (0.756, 1.041) |  | 0.877 (0.662, 1.122) |  |
| 10-19% | 0.882 (0.739, 1.039) |  | 0.943 (0.702, 1.209) |  |
| 20-29% | 0.882 (0.740, 1.038) |  | 0.892 (0.665, 1.159) |  |
| >30% | 0.875 (0.728, 1.039) |  | 0.859 (0.638, 1.118) |  |
|  |  |  |  |  |
| Tree canopy (ref: 0-9%) |  |  |  |  |
| 10-19% |  | 0.934 (0.866, 1.008) |  | 0.996 (0.888, 1.114) |
| 20-29% |  | 0.897 (0.819, 0.985) |  | 0.927 (0.815, 1.054) |
| >30% |  | 0.860 (0.776, 0.958) |  | 0.828 (0.719, 0.952) |
|  |  |  |  |  |
| Age Group (ref: 45-54y) |  |  |  |  |
| 55-64y | 1.773 (1.686, 1.864) | 1.774 (1.685, 1.868) | 1.512 (1.397, 1.636) | 1.517 (1.400, 1.644) |
| 65-74y | 2.699 (2.519, 2.889) | 2.706 (2.518, 2.903) | 1.947 (1.737, 2.178) | 1.964 (1.750, 2.199) |
| >75y | 4.014 (3.692, 4.364) | 4.024 (3.692, 4.373) | 2.170 (1.875, 2.500) | 2.188 (1.887, 2.518) |
|  |  |  |  |  |
| Sex (ref: Male) |  |  |  |  |
| Female | 0.944 (0.904, 0.984) | 0.944 (0.904, 0.985) | 0.712 (0.664, 0.763) | 0.714 (0.667, 0.765) |
|  |  |  |  |  |
| Annual household income (ref: $0-$19,999) |  |  |  |  |
| $20,000-$29,999 | 0.923 (0.842, 1.011) | 0.926 (0.846, 1.013) | 0.954 (0.810, 1.111) | 0.958 (0.816, 1.113) |
| $30,000-$39,999 | 0.952 (0.866, 1.044) | 0.956 (0.869, 1.050) | 0.986 (0.837, 1.151) | 0.991 (0.843, 1.154) |
| $40,000-$49,999 | 0.880 (0.799, 0.967) | 0.885 (0.803, 0.973) | 0.928 (0.788, 1.083) | 0.935 (0.798, 1.093) |
| $50,000-$69,999 | 0.840 (0.771, 0.913) | 0.845 (0.773, 0.918) | 0.962 (0.828, 1.111) | 0.971 (0.841, 1.115) |
| >$70,000 | 0.826 (0.763, 0.893) | 0.831 (0.767, 0.899) | 0.828 (0.721, 0.948) | 0.838 (0.732, 0.953) |
| Not stated | 0.827 (0.768, 0.889) | 0.831 (0.770, 0.894) | 0.991 (0.871, 1.123) | 0.999 (0.880, 1.130) |
|  |  |  |  |  |
| Highest educational qualification (ref: None) |  |  |  |  |
| School | 0.984 (0.898, 1.072) | 0.987 (0.904, 1.077) | 0.876 (0.750, 1.013) | 0.881 (0.761, 1.019) |
| High school | 0.933 (0.841, 1.030) | 0.936 (0.848, 1.031) | 0.866 (0.733, 1.015) | 0.875 (0.742, 1.028) |
| Trade | 0.908 (0.820, 1.002) | 0.910 (0.824, 1.007) | 0.755 (0.636, 0.888) | 0.760 (0.643, 0.897) |
| Certificate/Diploma | 0.869 (0.793, 0.950) | 0.873 (0.800, 0.954) | 0.832 (0.715, 0.960) | 0.842 (0.727, 0.971) |
| University | 0.797 (0.727, 0.871) | 0.801 (0.734, 0.875) | 0.694 (0.596, 0.802) | 0.702 (0.607, 0.813) |
| Not stated | 0.780 (0.627, 0.954) | 0.781 (0.631, 0.956) | 0.667 (0.457, 0.934) | 0.672 (0.464, 0.932) |
|  |  |  |  |  |
| Economic status (ref: Employed) |  |  |  |  |
| Retired | 1.252 (1.183, 1.322) | 1.252 (1.183, 1.323) | 1.059 (0.962, 1.164) | 1.061 (0.966, 1.163) |
| Unemployed | 1.222 (1.030, 1.441) | 1.227 (1.037, 1.447) | 1.214 (0.921, 1.566) | 1.209 (0.915, 1.554) |
| Unpaid work | 1.147 (0.967, 1.348) | 1.149 (0.972, 1.348) | 1.118 (0.837, 1.449) | 1.122 (0.843, 1.450) |
| Disabled | 1.653 (1.384, 1.962) | 1.654 (1.380, 1.963) | 0.963 (0.686, 1.303) | 0.964 (0.686, 1.294) |
| Homemaker | 1.053 (0.935, 1.178) | 1.056 (0.940, 1.181) | 0.847 (0.688, 1.026) | 0.853 (0.694, 1.032) |
| Other (e.g. study) | 1.160 (0.964, 1.382) | 1.161 (0.966, 1.379) | 1.304 (0.968, 1.697) | 1.313 (0.983, 1.706) |
|  |  |  |  |  |
| Couple status (ref: Not in a couple) |  |  |  |  |
| In a couple | 0.990 (0.942, 1.042) | 0.992 (0.944, 1.042) | 0.992 (0.914, 1.078) | 1.001 (0.919, 1.088) |
|  |  |  |  |  |
|  |  |  |  |  |

**Supplementary Table 6:** Adjusted odds of prevalent and incident cardiovascular diseases in association with total green space and tree canopy (as categories): multilevel logistic regressions adjusted for confounding and estimated using Markov Chain Monte Carlo method

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  | Prevalence models | | Incidence models | |
|  | Model 21 | Model 22 | Model 23 | Model 24 |
|  | Odds Ratio (95% Credible Interval) | | | |
| Total green space (ref: 0-4%) |  |  |  |  |
| 5-9% | 1.049 (0.800, 1.362) |  | 0.919 (0.621, 1.323) |  |
| 10-19% | 1.117 (0.849, 1.457) |  | 1.025 (0.690, 1.481) |  |
| 20-29% | 1.075 (0.813, 1.402) |  | 0.958 (0.642, 1.386) |  |
| >30% | 1.028 (0.776, 1.346) |  | 0.890 (0.588, 1.297) |  |
|  |  |  |  |  |
| Tree canopy (ref: 0-9%) |  |  |  |  |
| 10-19% |  | 0.915 (0.826, 1.012) |  | 0.927 (0.797, 1.078) |
| 20-29% |  | 0.889 (0.793, 0.997) |  | 0.913 (0.769, 1.077) |
| >30% |  | 0.855 (0.756, 0.967) |  | 0.782 (0.652, 0.935) |
|  |  |  |  |  |
| Age Group (ref: 45-54y) |  |  |  |  |
| 55-64y | 2.335 (2.100, 2.583) | 2.344 (2.120, 2.588) | 1.649 (1.437, 1.887) | 1.653 (1.438, 1.894) |
| 65-74y | 4.544 (4.018, 5.092) | 4.582 (4.070, 5.123) | 2.756 (2.329, 3.255) | 2.776 (2.333, 3.264) |
| >75y | 8.052 (7.062, 9.099) | 8.163 (7.195, 9.187) | 4.682 (3.874, 5.597) | 4.737 (3.907, 5.667) |
|  |  |  |  |  |
| Sex (ref: Male) |  |  |  |  |
| Female | 0.472 (0.442, 0.503) | 0.474 (0.444, 0.505) | 0.520 (0.472, 0.573) | 0.521 (0.472, 0.573) |
|  |  |  |  |  |
| Annual household income (ref: $0-$19,999) |  |  |  |  |
| $20,000-$29,999 | 0.920 (0.821, 1.029) | 0.922 (0.820, 1.027) | 0.900 (0.750, 1.070) | 0.902 (0.753, 1.069) |
| $30,000-$39,999 | 0.797 (0.702, 0.902) | 0.801 (0.705, 0.906) | 0.788 (0.644, 0.954) | 0.791 (0.649, 0.954) |
| $40,000-$49,999 | 0.876 (0.768, 0.992) | 0.881 (0.771, 1.002) | 0.799 (0.650, 0.972) | 0.804 (0.654, 0.976) |
| $50,000-$69,999 | 0.743 (0.656, 0.836) | 0.748 (0.660, 0.843) | 0.744 (0.617, 0.889) | 0.752 (0.620, 0.897) |
| >$70,000 | 0.692 (0.618, 0.772) | 0.698 (0.624, 0.778) | 0.669 (0.563, 0.789) | 0.678 (0.571, 0.799) |
| Not stated | 0.772 (0.700, 0.849) | 0.775 (0.701, 0.852) | 0.884 (0.766, 1.020) | 0.891 (0.767, 1.026) |
|  |  |  |  |  |
| Highest educational qualification (ref: None) |  |  |  |  |
| School | 0.938 (0.828, 1.060) | 0.942 (0.836, 1.059) | 0.954 (0.795, 1.148) | 0.959 (0.800, 1.143) |
| High school | 0.942 (0.816, 1.081) | 0.948 (0.824, 1.086) | 0.933 (0.752, 1.144) | 0.943 (0.761, 1.157) |
| Trade | 0.937 (0.818, 1.070) | 0.940 (0.821, 1.068) | 1.029 (0.841, 1.256) | 1.032 (0.842, 1.250) |
| Certificate/Diploma | 0.871 (0.769, 0.985) | 0.878 (0.776, 0.988) | 0.940 (0.783, 1.133) | 0.952 (0.791, 1.141) |
| University | 0.876 (0.772, 0.992) | 0.885 (0.782, 0.999) | 0.789 (0.653, 0.952) | 0.800 (0.664, 0.963) |
| Not stated | 0.969 (0.725, 1.263) | 0.972 (0.725, 1.261) | 1.026 (0.656, 1.504) | 1.027 (0.655, 1.511) |
|  |  |  |  |  |
| Economic status (ref: Employed) |  |  |  |  |
| Retired | 1.325 (1.215, 1.447) | 1.324 (1.215, 1.440) | 1.128 (0.984, 1.281) | 1.130 (0.986, 1.287) |
| Unemployed | 1.400 (1.073, 1.791) | 1.394 (1.063, 1.782) | 1.007 (0.648, 1.452) | 1.008 (0.647, 1.462) |
| Unpaid work | 0.948 (0.702, 1.242) | 0.950 (0.698, 1.242) | 1.057 (0.681, 1.522) | 1.065 (0.694, 1.523) |
| Disabled | 3.177 (2.533, 3.908) | 3.156 (2.523, 3.889) | 1.734 (1.168, 2.421) | 1.733 (1.169, 2.413) |
| Homemaker | 1.160 (0.941, 1.411) | 1.160 (0.940, 1.409) | 1.071 (0.788, 1.402) | 1.072 (0.789, 1.402) |
| Other (e.g. study) | 1.443 (1.116, 1.820) | 1.440 (1.119, 1.811) | 1.024 (0.665, 1.465) | 1.023 (0.664, 1.472) |
|  |  |  |  |  |
| Couple status (ref: Not in a couple) |  |  |  |  |
| In a couple | 0.933 (0.868, 1.001) | 0.936 (0.870, 1.005) | 0.905 (0.814, 1.007) | 0.912 (0.817, 1.014) |
|  |  |  |  |  |
|  |  |  |  |  |