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| **Supplemental Table 1. Select demographic characteristics and established stroke risk factors in the California Teachers Study cohort (1995-2015).** |
|  |  |  |  |  |  |  |  |  |  | **Univariate (adjusted for age and race)** |
|  | **Cohort** | **Strokes** | **Ischemic** | **Hemorrhagic** |  | **Strokes** | **Ischemic** | **Hemorrhagic** |
|  | n=118,294 | n=4,437 | n=3,162 | n=1,275 | Chisq  | Hazard  | Confidence | Hazard  | Confidence | Hazard  | Confidence |
|  | n | % | n | % | n | % | n | % | w stroke | Ratio | Interval | Ratio | Interval | Ratio | Interval |
| ***Baseline characteristics*** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Race |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  Non-Hispanic White | 102542 | 87% | 3962 | 89% | 2841 | 90% | 1121 | 88% | <0.001 | 1.00 | - | 1.00 | - | 1.00 | - |
|  Black | 3142 | 3% | 124 | 3% | 84 | 3% | 40 | 3% |  | 1.18 | (0.97-1.42) | 1.09 | (0.88-1.36) | *1.53* | *(1.05-2.23)* |
|  Hispanic | 4933 | 4% | 90 | 2% | 67 | 2% | 23 | 2% |  | 1.13 | (0.91-1.41) | 1.18 | (0.92-1.50) | 0.63 | (0.63-1.62) |
|  Asian/Pacific Islander | 4174 | 4% | 103 | 2% | 60 | 2% | 43 | 3% |  | 0.93 | (0.76-1.15) | 0.78 | (0.61-1.02) | *1.49* | *(1.03-2.16)* |
|  Other | 3503 | 3% | 158 | 4% | 110 | 3% | 48 | 4% |  | 1.15 | (0.97-1.37) | 1.16 | (0.96-1.41) | 1.09 | (0.72-1.65) |
| Socioeconomic status |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  Below median | 25280 | 21% | 1068 | 24% | 753 | 24% | 315 | 25% | <0.001 | 1.00 | - | 1.00 | - | 1.00 | - |
|  Above median | 93014 | 79% | 3369 | 76% | 2409 | 76% | 960 | 75% |  | *0.90* | *(0.83-0.97)* | *0.91* | *(0.83-0.98)* | 0.86 | (0.73-1.02) |
| Smoking status |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  Never | 78094 | 66% | 2685 | 61% | 1895 | 60% | 790 | 62% | <0.001 | 1.00 | - | 1.00 | - | 1.00 | - |
|  Former | 34206 | 29% | 1427 | 32% | 1043 | 33% | 384 | 30% |  | 1.05 | (0.98-1.13) | 1.05 | (0.97-1.13) | 1.00 | (0.85-1.17) |
|  Current | 5994 | 5% | 325 | 7% | 224 | 7% | 101 | 8% |  | *1.92* | *(1.70-2.17)* | *1.80* | *(1.56-2.07)* | *2.28* | *(1.76-2.93)* |
| Alcohol intake  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  Never | 24665 | 22% | 1130 | 29% | 816 | 29% | 314 | 28% | <0.001 | 1.00 | - | 1.00 | - | 1.00 | - |
|  Former | 11011 | 10% | 269 | 7% | 195 | 7% | 74 | 7% |  | 1.09 | (0.95-1.26) | 1.09 | (0.93-1.28) | 1.10 | (0.81-1.51) |
|  Current | 74719 | 68% | 2562 | 65% | 1828 | 64% | 734 | 65% |  | *0.88* | *(0.82-0.95)* | *0.87* | *(0.80-0.95)* | 0.94 | (0.79-1.40) |
| BMI (kg/m2) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  <20 | 12317 | 11% | 353 | 8% | 224 | 7% | 129 | 11% | <0.001 | 1.02 | (0.90-1.15) | 0.99 | (0.86-1.14) | 1.12 | (0.87-1.45) |
|  20-24.9 | 56774 | 49% | 1843 | 43% | 1277 | 42% | 566 | 46% |  | 1.00 | - | 1.00 | - | 1.00 | - |
|  25-29.9 | 28247 | 25% | 1224 | 29% | 912 | 30% | 312 | 25% |  | *1.13* | *(1.05-1.22)* | *1.19* | *(1.09-1.30)* | 0.92 | (0.76-1.10) |
|  30+ | 15943 | 14% | 622 | 15% | 477 | 16% | 145 | 12% |  | *1.32* | *(1.20-1.46)* | *1.43* | *(1.29-1.59)* | 0.94 | (0.74-1.19) |
| Diabetes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  No | 115044 | 97% | 4164 | 94% | 2949 | 93% | 1215 | 95% | <0.001 | 1.00 | - | 1.00 | - | 1.00 | - |
|  Yes | 3250 | 3% | 273 | 6% | 213 | 7% | 60 | 5% |  | *2.10* | *(1.84-2.39)* | *2.22* | *(1.93-2.56)* | *1.56* | *(1.10-2.21)* |
| Hypertension |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  No | 94031 | 79% | 2567 | 58% | 1804 | 57% | 763 | 60% | <0.001 | 1.00 | - | 1.00 | - | 1.00 | - |
|  Yes | 24263 | 21% | 1870 | 42% | 1358 | 43% | 512 | 40% |  | *1.54* | *(1.45-1.65)* | *1.60* | *(1.49-1.72)* | *1.32* | *(1.13-1.54)* |
| Hyperlipidemia |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  No | 117217 | 99% | 4324 | 98% | 3074 | 98% | 1250 | 99% | <0.001 | 1.00 | - | 1.00 | - | 1.00 | - |
|  Yes | 808 | 1% | 84 | 2% | 65 | 2% | 19 | 1% |  | *1.38* | *(1.09-1.74)* | *1.47* | *(1.14-1.88)* | 0.92 | (0.46-1.85) |
| Associations significant at a p-value of 0.05 indicated in italics. |

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| **Supplemental Table 2**. Overall, ischemic, and hemorrhagic stroke risk (hazard ratios and 95% confidence intervals) associated with American Heart Association recommended physical activity levels, adjusted for demographic and other risk factors and comorbidities, at study baseline (1995-1996) and at ten years of follow-up (2005-06). |
|  |  |  |  |  |
| **Met AHA physical activity guidelines, at study baseline (1995-96)** |  |
|  | Did not meet guidelines | Met guidelines |
| Total strokes |  |  |  |  |
| Cases | 2421 | 2016 |
| Person-yrs | 974,153 | 979,305 |
| Age+race-adjusted | 1.00 | - | 0.90 | (0.83-0.97) |
| Multivariate | 1.00 | - | 0.92 | (0.85-0.99) |
| MV+BMI | 1.00 | - | 0.94 | (0.87-1.02) |
| MV+BMI+Comorbidities | 1.00 | - | 0.96 | (0.88-1.03) |
|  |  |  |  |  |
|  | Did not meet guidelines | Met guidelines |
| Ischemic strokes |  |  |  |  |
| Cases | 1727 | 1435 |
| Person-yrs | 974,153 | 979,305 |
| Age+race-adjusted | 1.00 | - | 0.87 | (0.80-0.94) |
| Multivariate | 1.00 | - | 0.89 | (0.81-0.96) |
| MV+BMI | 1.00 | - | 0.92 | (0.84-1.00) |
| MV+BMI+ Comorbidities | 1.00 | - | 0.93 | (0.85-1.02) |
|  |  |  |  |  |
|  | Did not meet guidelines | Met guidelines |
| Hemorrhagic strokes |  |  |  |  |
| Cases | 694 | 581 |
| Person-yrs | 974,153 | 979,305 |
| Age+race-adjusted | 1.00 | - | 1.05 | (0.88-1.25) |
| Multivariate | 1.00 | - | 1.07 | (0.90-1.28) |
| MV+BMI | 1.00 | - | 1.06 | (0.89-1.27) |
| MV+BMI+ Comorbidities | 1.00 | - | 1.07 | (0.89-1.28) |
|  |  |  |  |  |
|  |  |  |  |  |
| **Met AHA physical activitiy guidelines (2005-06)** |  |  |  |
|  | Did not meet guidelines | Met guidelines |
| Total strokes |  |  |  |  |
| Cases | 1098 | 844 |
| Person-yrs | 501,783 | 644,959 |
| Age+race-adjusted | 1.00 | - | 0.70 | (0.63-0.77) |
| Multivariate | 1.00 | - | 0.71 | (0.64-0.79) |
| MV+BMI | 1.00 | - | 0.73 | (0.66-0.81) |
| MV+BMI+ Comorbidities | 1.00 | - | 0.74 | (0.67-0.82) |
|  |  |  |  |  |
|  | Did not meet guidelines | Met guidelines |
| Ischemic strokes |  |  |  |  |
| Cases | 829 | 620 |
| Person-yrs | 501,783 | 644,959 |
| Age+race-adjusted | 1.00 | - | 0.68 | (0.61-0.76) |
| Multivariate | 1.00 | - | 0.69 | (0.62-0.78) |
| MV+BMI | 1.00 | - | 0.72 | (0.64-0.80) |
| MV+BMI+ Comorbidities | 1.00 | - | 0.74 | (0.66-0.83) |
|  |  |  |  |  |
|  | Did not meet guidelines | Met guidelines |
| Hemorrhagic strokes |  |  |  |  |
| Cases | 269 | 224 |
| Person-yrs | 501,783 | 644,959 |
| Age+race-adjusted | 1.00 | - | 0.78 | (0.62-0.97) |
| Multivariate | 1.00 | - | 0.79 | (0.63-0.99) |
| MV+BMI | 1.00 | - | 0.78 | (0.62-0.98) |
| MV+BMI+ Comorbidities | 1.00 | - | 0.78 | (0.62-0.98) |
|  |  |  |  |  |
|  |  |  |  |  |
| Multivariate (MV) = age, race, calories, smoking status, alcohol, SES |  |
| Comorbidities = hypertension, diabetes, hyperlipidemia |  |  |  |