| **First Author, Year****Study Name****AHI Cutpoints** | **Cardiovascular Events, n Events, Adjusted HR/OR (95% CI)** | **Cardiovascular Events, n Events, Adjusted HR/OR (95% CI) Continued** | **Cognitive Impairment, n Events, Adjusted HR/OR (95% CI)** | **Covariates Included in the Final Adjusted Model (Other Covariates Considered in the Study That Were Not Included in The Final Model)** |
| --- | --- | --- | --- | --- |
| Blackwell, 2015290MrOS SleepNormal or mild: < 15Mod to severe: ≥ 15 | NR | NR | Trails B:Normal to mild: RefMod to severe: 1.14 (0.84 to 1.54)Modified Mini-Mental State Examination (3MS)Normal to mild: RefMod to severe: 0.99 (0.79 to 1.24) | Age, site, race, BMI, education, number of depressive symptoms, history of diabetes, history or stroke or transient ischemic attack, history of hypertension, history of CHD, history of Parkinson’s disease, impairment in instrumental activities of daily living, benzodiazepine use, antidepressant use, self-reported health status, physical activity, alcohol use, and smoking status.  |
| Gottlieb, 2010224SHHSNormal: <5Mild: 5 to <15Mod: 15 to <30 Severe: ≥30 | **Incident CHD events, n**Total: 473 (76 CHD deaths, 186 MIs, 212 coronary revascularization procedures)Men: 296Women: 177**Incident CHD, men, HR**Normal: Ref1. Mild: 0.94 (0.71 to 1.24)Mod: 1.07 (0.75 to 1.52)Severe: 1.45 (0.99 to 2.13)2. Mild: 0.93 (0.70 to 1.23)Mod: 1.04 (0.73 to 1.48)Severe: 1.41 (0.96 to 2.07)3. Mild: 0.91 (0.69 to 1.20)Mod: 1.07 (0.75 to 1.52)Severe: 1.33 (0.91 to 1.95)**Incident CHD, women, HR**1. Mild: 1.01 (0.73 to 1.45)Mod: 0.92 (0.54 to 1.55)Severe: 0.36 (0.11 to 1.16)2. Mild: 0.99 (0.71 to 1.40)Mod: 0.89 (0.52 to 1.51)Severe: 0.37 (0.12 to 1.19)3. Mild: 0.98 (0.69 to 1.38)Mod: 0.87 (0.51 to 1.49)Severe: 0.40 (0.12 to 1.27) | **Incident HF events, n**Total: 308Men: 141Women: 167**Incident HF, men, HR**Normal: Ref1. Mild: 0.96 (0.63 to 1.46)Mod: 1.17 (0.71 to 1.94)Severe: 1.61 (0.95 to 2.71)2. Mild: 0.90 (0.59 to 1.38)Mod: 1.08 (0.65 to 1.80)Severe: 1.59 (0.94 to 2.69)3. Mild: 0.88 (0.57 to 1.35)Mod: 1.13 (0.68 to 1.89)Severe: 1.58 (0.93 to 2.66)**Incident HF, women, HR**1. Mild: 1.12 (0.79 to 1.59)Mod: 1.10 (0.66 to 1.83)Severe: 1.05 (0.50 to 2.23)2. Mild: 1.15 (0.81 to 1.63)Mod: 1.06 (0.64 to 1.77)Severe: 1.19 (0.56 to 2.53)3. Mild: 1.13 (0.80 to 1.61)Mod: 1.01 (0.60 to 1.69)Severe: 1.19 (0.56 to 2.52) |  | Model 1. age, race, BMI, smokingModel 2. age, race, BMI, smoking, total and HDL cholesterol, lipid-lowering medications, diabetes mellitusModel 3. age, race, BMI, smoking, total and HDL cholesterol, lipid-lowering medications, diabetes mellitus, SBP, DBP, use of antihypertensive medications |
| Marin, 200550 Untreated mild to mod: AHI 5-30Untreated Severe: AHI >30Treated OSA with CPAP: Any AHI >5Snorers: AHI <5Healthy controls: AHI <5 | 144 Non-fatal cardiovascular events (non-fatal MI, non-fatal stroke, coronary bypass surgery, percutaneous transluminal coronary angiography): 86 in untreated OSA participants; 24 in treated OSA group; 22 in simple snorers; and 12 in healthy menPartial adjusted ORUntreated mild to mod: 1.62 (0.65 to 3.01)Untreated severe: 3.32 (1.24 to 7.41)CPAP treated: 1.42 (0.53 to 3.29)Snorers: 1.23 (0.71 to 2.86)Fully adjusted ORUntreated mild to mod: 1.57 (0.62 to 3.16)Untreated severe: 3.17 (1.12 to 7.52)CPAP treated: 1.42 (0.52 to 3.40)Snorers: 1.32 (0.64 to 3.01) | NR | NR | Partial: Age, diagnostic group, diabetes, lipid disorders, smoking status, alcohol use, systolic and diastolic blood pressure, blood glucose, total cholesterol. Triglycerides, and current use of antihypertensive, lipid-lowering and antidiabetic drugsFull: above plus hypertension and presence of cardiovascular disease—i.e., ischemic heart disease, congestive heart disease, or cerebrovascular disease.Used matching for age and BMI |
| Redline, 2010225SHHSMenQuartile I: <4.1Quartile II: 4.1-<9.5Quartile III: 9.5 to 19.1Quartile IV: 19.1 to 164.5 |  | Incident ischemic stroke193 total (15 fatal), 85 in men and 108 in women**Age Adjusted HR****Men**AHI <4.1: refAHI 4.1-<9.5: 1.86 (0.68 to 5.13)AHI 9.5 to 19.1: 1.97 (0.74 to 5.21) AHI 19.1 to 164.5: 3.05 (1.21 to 7.72)**Women** AHI <4.1: refAHI 4.1-<9.5: 1.34 (0.77 to 2.34)AHI 9.5 to 19.1: 1.26 (0.72 to 2.20) AHI 19.1 to 164.5: 1.24 (0.69 to 2.22)**Fully Adjusted HR****Men**AHI <4.1: refAHI 4.1-<9.5: 1.86 (0.67 to 5.12)AHI 9.5 to 19.1: 1.86 (0.70 to 4.95) AHI 19.1 to 164.5: 2.86 (1.10 to 7.39)**Women** AHI <4.1: refAHI 4.1-<9.5: 1.34 (0.76 to 2.36)AHI 9.5 to 19.1: 1.20 (0.67 to 2.16) AHI 19.1 to 164.5: 1.21 (0.65 to 2.24) |  | Fully adjusted model included age, BMI, smoking status, SBP, use of antihypertensive medications, diabetes status, and race (secondary analyses addressed atrial fibrillation also; including it did not materially change the findings) |
| Yaffe, 2011222SOFSDB+: ≥ 15SDB-: < 15 |  |  | Mild cognitive impairment or dementia\*Unadjusted OR 1.80 (1.10, 2.93)Adjusted OR 1.85 (1.11, 3.08)Additional adjustment OR 2.36 (1.34, 4.13) | Adjusted: age, race, body mass index, education level, smoking status, presence of diabetes, presence of hypertension, antidepressant use, benzodiazepine use, and use of nonbenzodiazepine anxiolytics.Additional adjustment models also adjusted for baseline cognitive test scores. |

\* Shortened mini-mental state exam and modified Trails B at baseline. Followup included: Trails B, modified mini-mental state examination, California Verbal Learning Test, Digit Span, and category and verbal fluency tests.

**Abbreviations:** AHI=apnea-hypopnea index; BMI=body mass index; CHD=cardiovascular heart disease; CI=confidence interval; CPAP=continuous positive airway pressure; DBP=diastolic blood pressure; HDL=high-density lipoprotein; HF=heart failure; HR=hazard ratio; mod=moderate; MI=myocardial infarction; NA=not applicable; NR=not reported; OR=odds ratio; OSA=obstructive sleep apnea; RDI=respiratory disturbance index; Ref=reference; SDB=Sleep Disordered Breathing; SBP=systolic blood pressure; SHHS=Sleep Heart Health Study; SOF=Study of Osteoporotic Fractures; WSCS=Wisconsin Sleep Cohort Study.