

Supplementary table 2. Stratified Cox regression (by age, sex, education, and smoking) between vigorous intensity (using alternative cut-points) and all-cause, cardiovascular (CVD) and cancer mortality in the Health Survey for England and the Scottish Health Survey.

Variable	Total No. of Participants/Events	Proportion of moderate to vigorous activity classified as vigorous					
		0%	Ref.	>0% to <60%	HR (95% CI)	≥60%	HR (95% CI)
All-cause mortality							
All sample	64913/5064	44521/4477	1	10239/292	0.80 (0.70-0.90) p<0.0001	10153/295	0.89 (0.79-1.01) p=0.07
CVD mortality							
All sample	57702/1393	39913/1252	1	8978/70	0.80 (0.62-1.04) p=0.09	8811/71	0.91 (0.72-1.16) p=0.46
Cancer mortality							
All sample	63677/1602	43039/1384	1	10239/104	0.82 (0.67-0.99) p=0.04	10399/114	0.95 (0.79-1.15) p=0.62

N total population, *Ref* referent group, *HR* hazard ratio, *CI* confidence interval

For all-cause mortality values were adjusted for alcohol, total weighted volume of moderate to vigorous physical activity (MVPA), longstanding illness, body mass index (BMI) and psychological distress. For CVD mortality values were adjusted for alcohol, total weighted volume of MVPA, longstanding illness, CVD diagnosis at baseline, BMI and psychological distress. For cancer mortality values were adjusted for alcohol, total weighted volume of MVPA, longstanding illness, cancer diagnosis at baseline, BMI and psychological distress