

2.0. Cardio-vascular disease

2.1. Stroke

Population: Adults (aged 18-64 years)
Exposure: Duration, frequency and/or intensity of OPA, or a compositional score reflecting total volume of OPA.
Comparison: No OPA, or a lesser duration, frequency and/or intensity, no or a smaller compositional score of total volume of OPA.
Outcome: Cardio-vascular disease.

Certainty assessment							Summary of findings	Certainty	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations			

Physical activity and stroke. A meta-analysis of observational data. (Wendel-Vos 2004) (104)

11 ^a	Cohort studies	Serious ^c	Serious ^d	Not serious	Not serious	None	<p>This review compared three groups (active, moderately active and inactive)</p> <p>OPA: People who were physically active at work were at lower risk of ischaemic stroke compared with both physically inactive (RR = 0.57, 95% CI: 0.43, 0.77) and moderately physically active (RR = 0.77, 95% CI: 0.60, 0.98) people at the workplace.</p> <p>For total stroke these numbers were not significant (RR=0.74, 95% 0.49-1.12) and (RR= 0.92, 95% 0.92-1.24)</p> <p>LTPA: People who were active in their leisure time were at lower risk of ischaemic stroke compared with inactive (RR= 0.79, 95% 0.69-0.91) and moderately active (RR=0.84, 95% 0.63-1.11).</p> <p>For total stroke these numbers were (RR=0.78, 95% 0.71-0.85) and (RR=0.95, 95% 0.68- 1.32)</p>	Low ^f	Critically
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Physical activity and risk of cardiovascular disease: What does the new epidemiological evidence show? (Li J. 2013) (105) Overall CVD risks/ Coronary heart disease/stroke/unclassified CVD

This article was excluded from further analyses as it was judged to not provide an accurate summary of the available evidence. (AMSTAR2 rating)

2.2. Coronary Heart Disease

Dose Response Between Physical Activity and Risk of Coronary Heart Disease (Sattelmair 2011) (106) Coronary Heart Disease.

4 ^b	Cohort studies	Serious ^e	Not Serious	Not serious	Not serious	None	<p>This review compared the highest to the categories of PA for each type of PA using random effects pooled RRs.</p> <p>OPA : OPA was associated with a reduction (RR=0.84, 95% CI; 0.79-0.90) risk of CHD. 3 out of 4 studies were based on men (RR=0.87, CI 95% 0.81-0.99). Heterogeneity (I²) was 0%</p> <p>LTPA: The pooled risk among all studies that assessed LTPA indicated a risk reduction (RR, 0.74; 95% CI, 0.69-0.78) in Coronary Heart Disease.</p>	Moderate ^g	Critically
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a: Okada 1976; Paffenbarger 1978; Salonen 1982; Menotti 1990; Haheim 1996; Gillum 1996; Nakayama 1997; Evenson 1999

b: Eaton 1995; Rosengren 1997; Hu 2007; Virkkunen 2007.

c: Serious; The definitions of high, moderate, and low levels of physical activity varied substantially among studies. In the meta-analysis the degree of adjustment variables varied from study to study

d: Serious; High heterogeneity

e: Serious; primary source of potential residual confounding is likely to stem from confounding variables that were either unmeasured or insufficiently measured in the individual studies themselves. For instance, dietary intake was rarely assessed in the studies reviewed.

f: certainty downgraded from high to low because of serious risk of bias and serious inconsistency

g: certainty downgraded from high to moderate because of serious risk of bias