**Aims** To review existing research on the association between physical activity and the transition to retirement and to identify barriers to and facilitators of physical activity after retirement.

Method Systematic review of qualitative and quantitative studies, published between January 1980 and August 2010 in any language. We searched 19 electronic databases as well as citation and reference lists, and hand-searched seven journals. We included all observational study designs that examined naturally occurring physical activity. Studies of retired professional athletes were excluded. Quality appraisal, data extraction and synthesis were done separately for qualitative and quantitative evidence and verified by a second reviewer. Findings were synthesised using a textual narrative approach and an adaptation of the harvest plot method.

Results Of 3,239 references identified, 24 studies (19 quantitative and 5 qualitative) met the inclusion criteria: The majority of studies were published after 2000 and set in the USA (41.7%) and other industrialised countries. Methodological quality was mixed. The impact of retirement on physical activity varied depending on domains of activity studied. Recreational physical activity increased with retirement, but overall physical activity (including occupational, transport, home and recreational) decreased. In retirees from lower socioeconomic groups, physical activity declined, whereas it increased in people from higher socioeconomic groups. In the qualitative studies, participants emphasised the importance of physical activity after retirement. Health benefits and opportunities to build new social support networks were common reasons to be physically active. Regular physical activity also helped to establish new daily structures and provided 'a new purpose in life' for many after leaving the labour force. Barriers to physical activity were lack of motivation, health problems, costs, caregiving responsibilities and perceived inappropriateness of physical activity in older age. Retirees from manual occupations were concerned about the unproductiveness of recreational physical activities.

**Conclusion** Despite a general awareness of the benefits of physical activity and an increase in recreational activities, overall physical activity appears to decline with the transition to retirement. This systematic review can inform the development of interventions aimed at maintaining and increasing physical activity at retirement.

## PHYSICAL ACTIVITY AND THE TRANSITION TO RETIREMENT: A MIXED-METHOD SYSTEMATIC REVIEW

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**Background** Physical activity is seen as important for preventing disease and maintaining mobility and independence in later life. The transition to retirement often results in changes in lifestyle including physical activity behaviour. Interventions aimed at promoting physical activity need to be based on an understanding of the impacts of retirement as well as on people's attitudes towards physical activity in retirement.