



PHYSICAL ACTIVITY AND SEDENTARY BEHAVIOUR

A BRIEF TO SUPPORT **older people**



INTRODUCTION

Regular physical activity is important to promote well-being in older people. It is beneficial for physical and mental health, and facilitates social inclusion by reducing isolation. Being active supports healthy ageing and can also help manage conditions such as hypertension and type 2 diabetes, reduce symptoms of depression and anxiety, and enhance cognitive function. Conversely, too much sedentary behaviour can be unhealthy.

Everyone can benefit from increasing physical activity and reducing sedentary behaviour. Supporting older people to do more physical activity is a key strategy to foster healthy and active ageing. However, many people face barriers or may be concerned about becoming more active, particularly if they have a chronic condition. Additional guidance and support can help older people be more active for their physical and mental health and well-being.

What this brief will provide

This brief summarises the recommendations on physical activity and sedentary behaviour for older people. It will support and guide health and social care professionals and allied workers to promote physical activity among older people to prevent noncommunicable diseases and the decline of intrinsic capacity (i.e., the composite of physical and mental capacities) and also help manage common conditions such as hypertension and type 2 diabetes. Specific recommendations are provided to prevent falls, osteoporosis, and decline of functional ability. It is based on the WHO Guidelines on physical activity and sedentary behaviour (1), and supported by additional resources as part of the ACTIVE technical package (2) and WHO guidelines on community-level interventions to manage declines in intrinsic capacity (ICOPE guideline)(3).

This brief can be used to support actions that Governments and non-State actors are taking under the UN Decade of healthy ageing (2021–2030) (4) and the WHO Global action plan on physical activity 2018–2030: more active people for a healthier world (5).



PHYSICAL ACTIVITY AND SEDENTARY BEHAVIOUR RECOMMENDATIONS FOR older people

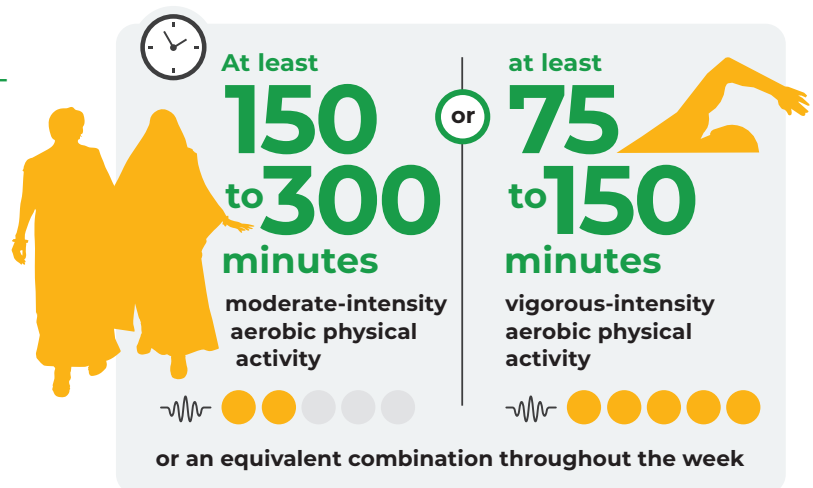
It is recommended that:

- › All older adults should undertake regular physical activity.

Strong recommendation, moderate certainty evidence

- › Older adults should do at least 150–300 minutes of moderate-intensity aerobic physical activity; or at least 75–150 minutes of vigorous-intensity aerobic physical activity; or an equivalent combination of moderate- and vigorous-intensity activity throughout the week, for substantial health benefits.

Strong recommendation, moderate certainty evidence



For additional health benefits:

On at least



2 days a week

muscle-strengthening activities at moderate or greater intensity that involve all major muscle groups.



- › Older adults should also do muscle-strengthening activities at moderate or greater intensity that involve all major muscle groups on 2 or more days a week, as these provide additional health benefits.

Strong recommendation, moderate certainty evidence

On at least



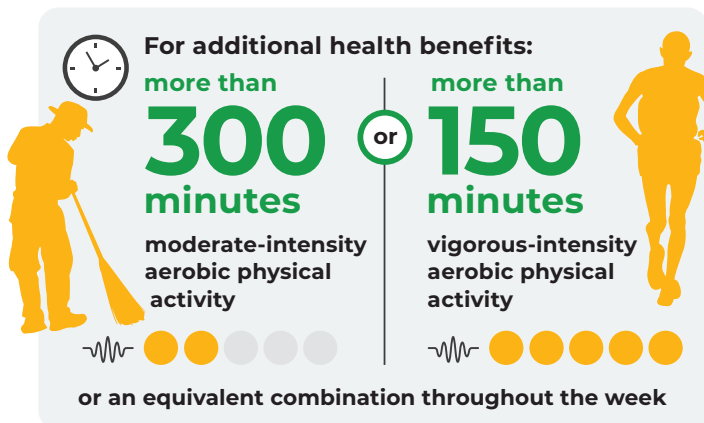
3 days a week

varied multicomponent physical activity that emphasizes functional balance and strength training at moderate or greater intensity.



- › As part of their weekly physical activity, older adults should do varied multicomponent physical activity that emphasizes functional balance and strength training at moderate or greater intensity, on 3 or more days a week, to enhance functional capacity and to prevent falls.

Strong recommendation, moderate certainty evidence



> Older adults may increase moderate-intensity aerobic physical activity to more than 300 minutes; or do more than 150 minutes of vigorous-intensity aerobic physical activity; or an equivalent combination of moderate- and vigorous-intensity activity throughout the week, for additional health benefits.

Conditional recommendation, moderate certainty evidence

GOOD PRACTICE STATEMENTS



- Doing some physical activity is better than doing none.
- If older adults are not meeting the recommendations, doing some physical activity will bring benefits to health.
- Older adults should start by doing small amounts of physical activity, and gradually increase the frequency, intensity and duration over time.
- Older adults should be as physically active as their functional ability allows, and adjust their level of effort for physical activity relative to their level of fitness.

In older adults, higher amounts of sedentary behaviour are associated with the following poor health outcomes: all-cause mortality, cardiovascular disease mortality and cancer mortality, and incidence of cardiovascular disease, cancer and incidence of type 2 diabetes.

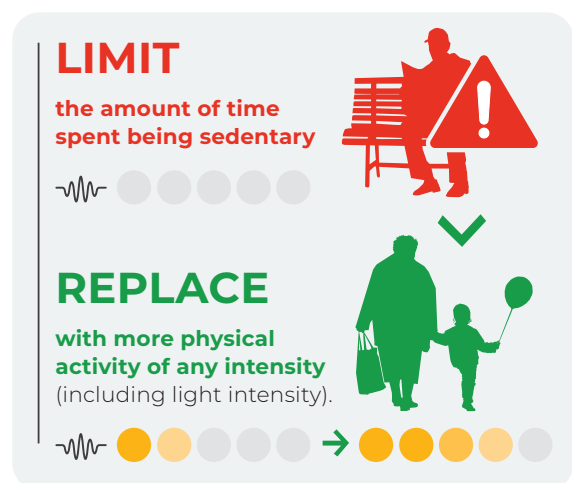
It is recommended that:

> Older adults should limit the amount of time spent being sedentary. Replacing sedentary time with physical activity of any intensity (including light intensity) provides health benefits.

Strong recommendation, moderate certainty evidence

> To help reduce the detrimental effects of high levels of sedentary behaviour on health, older adults should aim to do more than the recommended levels of moderate- to vigorous-intensity physical activity.

Strong recommendation, moderate certainty evidence



Physical activity can confer many health benefits for older people, including prevention of noncommunicable diseases and helping to manage conditions such as hypertension and type 2 diabetes. Being active helps to improve mental health (reduced symptoms of anxiety and depression), cognitive function and sleep, and maintain physical and mental capacities.

In older people, physical activity – in particular multicomponent physical activity programmes that include combinations of balance, strength, endurance, gait, and physical function training – is associated with a reduced rate of **falls** by as much as 23% and risk of **injury from falls** (6-8).

Muscle and bone mass tend to decline with increasing age (i.e. sarcopenia and osteopenia/osteoporosis), and this can be associated with declining strength and physical function. Regular physical activity improves **physical function** and reduces the risk of age-related loss of physical capacity in older people (9). Evidence also shows that higher levels of physical activity may improve bone health and thus prevent **osteoporosis** (10).

Engaging in a variety of different physical activity, such as balance and functional exercises plus resistance exercises can reduce rate of falls even further (6) and multiple exercise types have greater positive effects on bone health (11).



SUPPORTING OLDER PEOPLE TO BE MORE ACTIVE

Health and social care workers have a central role and responsibility in supporting older people and are ideally positioned to promote comprehensive lifestyle interventions for the prevention of falls and management of chronic diseases. They can also support informal carers (e.g. family members) or those who provide social programmes, care and support for older people in the community, to enable them to promote physical activity.

Integrating counselling on physical activity into health care as part of routine practice is a cost-effective intervention for tackling NCDs (12). Brief interventions for physical activity assessment and counselling delivered in primary health care can increase physical activity in healthy, inactive adults at a reasonable cost: varying from INT\$66 to INT\$683 to convert one inactive adult to being “active” (13).¹ A brief intervention by a health care professional to provide physical activity assessment and counselling can generate a cost-effectiveness ratio of INT\$ 1000–5000 per disability-adjusted life year (DALY) averted in low- and lower-income countries, and INT\$ 500–1000 per DALY averted in upper-middle and high-income countries (8).

The WHO toolkit on promoting physical activity through primary health care (14) supports the use of the Physical Activity Brief Intervention Protocol, which is based on the “5As” model for supporting behaviour change, and provides an easy means by which health care providers can communicate with older people about healthy behaviours. Further information on physical activity programmes tailored to older people is also available through www.vivifrail.com.

Walking may be a good way for those who are not active to start and gradually build up their physical activity. mActive is a mobile phone-based 4-week walking programme designed to improve health and enhance quality of life, through messages to prompt a regular walking routine, with step-by-step goals. mActive provides support and motivation for older adults of all abilities, and can be adapted for all countries and communities (15).

Communications campaigns can also help to promote the protective benefits of physical activity for mental and physical health and well-being and shift perceptions about the risk or safety of physical activity for older people (16).

There should be strong links between health and social care, communications campaigns and physical activity opportunities in the community. Referral by health care providers, or awareness-raising need to be supported by accessible opportunities, including indoor or outdoor community programmes for the delivery of individual or group-based exercise programmes, and safe places and spaces where people can be physically active. Community-based programmes can include organized walking groups, fitness, yoga and dance classes, as well as more structured forms of physical activity such as community sports clubs. Walking can also be supported by ensuring the local environment provides safe and enjoyable opportunities to walk, such as accessible and well-maintained sidewalks, parks and open spaces. Step Safely (17) outlines recommended interventions and strategies to prevent falls among older people in the home, residential care settings and in hospital, through environmental changes, medical interventions and exercise programmes.

¹ Costs depend on type of intervention: varying from a brief exercise advice to an “active script programme”. Costs were converted from British pounds to INT\$ at an exchange rate of INT\$ = 0.692551 British pounds, in 2015 (year of the study publication). Exchange rate as reported by the OECD (see: https://stats.oecd.org/viewhtml.aspx?datasetcode=SNA_TABLE4&lang=en).

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