

Children and Young People Physical Activity Guidelines

Introduction

The physical activity guidelines for children and young people are relevant to those aged from 5 to 18 years. Physical activity is associated with better physiological, psychological and psychosocial health among children and young people (23, 24). Global and UK-specific evidence has shown that boys are more active than girls at all ages and that physical activity levels decline through childhood into adolescence (17, 25, 26). There is also some evidence to suggest that physical activity levels track from childhood into adulthood (27). As such, ensuring that all children are as active as possible throughout childhood is important for current and future population health.

In recent years, there has been increasing awareness of the impact that inactivity and sedentary behaviour may have on health. As set out in the Introduction, sedentary behaviour is not simply the absence of moderate or vigorous physical activity. It includes behaviours such as watching television, reading, working with a computer, sitting while playing video games, or travelling in a motor vehicle. The most common measures of sedentary time used in the literature are self-reported time spent sitting, screen time, and the volume of device-based measures of sedentary time (accelerometer/inclinometer). For young people, evidence suggests that higher levels of sedentary behaviour are weakly associated with greater levels of obesity and lower physical fitness.

It is important to note that this chapter does not include specific recommendations for disabled children and disabled young people. Specific guidelines need to be developed for this group, but this speciality was beyond the remit and expertise of the group undertaking the review of the children and young people guidelines.

Physical activity guidelines for Children and Young People

- Children and young people should engage in MVPA for an average of at least 60 minutes per day across the week. This can include all forms of activity such as physical education, active travel, after-school activities, play and sports.
- Children and young people should engage in a variety of types and intensities of physical activity across the week to develop movement skills, muscular fitness, and bone strength.
- Children and young people should aim to minimise the amount of time spent being sedentary, and when physically possible should break up long periods of not moving with at least light physical activity.

Summary of scientific support for the new guidelines

The recommendations are based on the best available current evidence and are intended to provide guidance for children and young people, parents, and health professionals, but it is important to recognise that the benefits of physical activity operate on a continuum. Thus, for children and young people who are inactive, any increase in physical activity or any reduction in sedentary time is likely to provide health benefits and should be encouraged.

To develop these guidelines, the expert panel reviewed scientific evidence published from 2010 to 2018. The purpose of this review was to identify any new evidence justifying a change to the previous guidelines from 2011. Where insufficient additional evidence was available, the 2011 guideline was retained. The searches primarily focused on review-level evidence for longitudinal cohort studies examining the relationship between physical activity and health outcomes. Systematic reviews and meta-analyses were also examined, along with randomised controlled trials, to identify what types and volume of physical activity were used in effectiveness studies. Full details of methods are available in Annex B.

The three revised recommendations presented below are a refinement of the previous CMOs' guidelines from 2011 (12). The evidence leading to the updated recommendations is outlined below.

Children and young people should engage in MVPA for an average of at least 60 minutes per day across the week

The review of evidence indicated that it would be helpful to change this guideline to an average of at least 60 minutes of MVPA per day. This was because the current evidence base does not support a specific minimum daily threshold of 60 minutes of MVPA for health benefits. Current studies have broadly used an average of 60 minutes per day to assess the benefits of physical activity on health outcomes. The expert panel was unable to assess whether a 60-minute minimum daily threshold is required for health benefits. Recommending an average number of daily minutes more closely reflects the evidence and as such this is the new recommendation.

Children and young people should engage in a variety of types and intensities of physical activity across the week to develop movement skills, muscular fitness, and bone strength

The review of the evidence found broad support for health benefits of vigorous intensity physical activity and activities that would strengthen bone being undertaken by children and young people but found no strong evidence for specific numbers or durations of bouts of moderate-to-vigorous or vigorous intensity physical activity per day.

A recent analysis of nearly 30,000 children suggests that time spent in physical activity with increasing intensity was favourably associated with risk markers of future adult disease in youth, irrespective of bout duration (28). Furthermore, a recent paper has shown that children rarely accumulate physical activity in long bouts, and that the total time in MVPA, rather than time spent in specific bouts, was important for health outcomes (28, 29).

The evidence reviews identified moderate quality evidence that physical activity in children and young people is positively associated with increased proficiency in motor/movement skills (sometimes referred to as a component of physical literacy), and that this relationship is reciprocal (30). Moreover, exposure to different types of activities is implicated in higher perceptions of competence, which are also associated with higher physical activity levels (31). Physical education is likely to play a key role in the development of movement skills and supporting the promotion of high-quality physical education provision is therefore important for the development of children's skills and confidence to be physically active. Nevertheless, there is insufficient evidence to specify the intensity or amount of activity required to accrue such benefits, nor for specifying movements that contribute to fitness improvements.

The current evidence, does, however, suggest that developing a broader, more diverse range of movement skills, providing variety in the types of physical activity that children and young people engage in, is likely to be beneficial, although more high-quality evidence in this area is required (30, 32). The evidence therefore supports a guideline advocating a range of different types and intensities of physical activity across the week, in order to develop movement skills, muscular fitness, and bone strength.

Children and young people should aim to minimise the amount of time spent being sedentary, and when physically possible should break up long periods of not moving with at least light physical activity

In relation to sedentary time, the review of the evidence base highlighted that there is little evidence to suggest modification of the previous guidelines, other than adding a statement recommending that young people reduce periods of inactivity, and replace these with a variety of activities, including light as well as MVPA. This clarification has therefore been made to the wording of the previous guidelines.

Types of physical activity for children and young people

As described above, a key finding from the evidence review is the benefits for children and young people of engaging in different forms of physical activity across the week. Children and young people should engage in a range of activities to improve their skills such as jumping, running and catching, as well as building the confidence to be active. There is therefore no single way in which children and young people should be active; the focus

should be on identifying activities that they find enjoyable, and on creating opportunities to be active. Equally, children and young people should aim to limit sedentary time and replace this with light intensity physical activity wherever possible. The following infographic suggests activities that could be key components of helping children and young people to be physically active.

