

Early movers

Helping under-5s live active & healthy lives



² Introduction to physical activity in the early years



BHF National Centre
physical activity+health

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*We've used the terms 'physically active play' and 'physical activity' interchangeably throughout this section. Both refer to play involving movements of all the major muscle groups.

Physical activity guidelines for under-5s



The three guidelines

Due to the growing awareness and evidence of the benefits of physical activity for the early years, UK public health physical activity guidelines for the under-5s were released for the first time in July 2011.

These were published by the four UK countries, as part of the 'Start Active, Stay Active' report.¹ The four UK early years curriculums now include physical development as an area of learning.

The guidelines are relevant to all children under the age of five, but should be interpreted to fit with each child's individual physical and mental capabilities. For example, if you're working with children who have special needs, it's essential to liaise with their parents or carers. For some children you may need to take ask healthcare professionals about the types and amounts of physical activity they should be doing.

Guideline 1

Infants who can't yet walk unaided

Physical activity should be encouraged from birth, particularly through floor-based play and water-based activities in safe environments.

Guideline 2

Pre-school children who can walk unaided

Children of pre-school age who are capable of walking unaided should be physically active daily for at least 180 minutes (3 hours), spread throughout the day.

Guideline 3

All those aged under 5

All under-5s should minimise the amount of time spent being sedentary (being restrained or sitting) for extended periods (except time spent sleeping).

Your setting is the ideal place to give under-5s the opportunities to be active every day, and to help them meet the physical activity guidelines. This is especially important for children who spend most of their weekdays with you.



For more information about the guidelines, see Section 1, page 16.



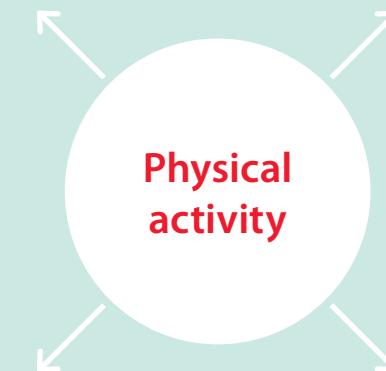
The relationship between physical activity and other aspects of learning and development

Cognitive 'thinking'

- Creativity – discovery, experimentation, developing imagination, thinking in different ways.
- Problem solving skills, thinking critically & making choices.

Health & wellbeing

- Strong bones, muscles, heart and lungs.
- Feeling well and energised.
- Maintaining a healthy weight.
- Intermediate and long-term health benefits by establishing good physical activity habits early on.



Physical development

- Stamina – through continuous bouts/more energetic activity.
- Strength.
- Mobility.
- Stimulating important brain connections.
- Motor skills – moving with confidence & control:
 - coordinated movement
 - control
 - stability (core, shoulder, hand)
 - agility
 - hand-eye-foot coordination (the body's ability to coordinate the visual system with the motor system)
 - rhythm and timing – musicality
 - balance and spatial awareness.

Personal, social and emotional outcomes

- Fair play – knowing how to behave and what is acceptable.
- Cooperation – taking turns, sharing, playing by rules.
- Language and communication – listening attentively, responding with comments, questions or actions, speaking in a familiar group.
- Confidence – trying new activities, working in a group, asking for help if needed.
- Optimism – enjoying achievements.
- Resilience – coping with stressful situations.
- Sense of self belief – 'Can do'.
- Valuing oneself.
- Behavioural flexibility – adapting emotionally to new situations without becoming stressed.

The importance of physical activity for under-5s



Young children love being active and moving around freely.

Unrestricted floor-based activities for babies are especially important and help them to:

- maintain a healthy weight
- build social and emotional bonds with parents/ carers, siblings and other children
- develop good posture, strength and balance
- develop all their senses
- teach them about their bodies and the world around them
- interact with others and develop language and communication skills
- keep their bodies and minds active.

Physically active play can help under-5s:

- develop essential movement skills
- maintain a healthy weight
- develop strong bones, muscles and heart
- develop social and emotional skills.

It's also widely believed that physically active play can help the development of:

- important brain structures
- self-confidence
- communication skills
- good habits for being active
- immediate and long term health outcomes.

'The foundations for virtually every aspect of human development – physical, intellectual and emotional – are laid in childhood. What happens during these early years has lifelong effects on many aspects of health and wellbeing.'

Marmot, M. (2010)²



Health and wellbeing

We know that physical activity is essential for optimal growth and healthy development in under-5s. But evidence suggests that it's especially important in helping them maintain a healthy weight. This is vital, as nearly a quarter of children in reception classes in England were found to be either overweight or obese in 2010–2011³.

So, encouraging babies and young children to move regularly, and limiting sedentary behaviour (sitting still), is an important factor in helping under-5s maintain a healthy weight.

Higher levels of physical activity in childhood can lead to continued participation in later life. So, it's important to establish high levels of physical activity as early as possible to encourage children to stay active enough to benefit their health.

Healthy eating and sleep in the early years are also important to young children's growth, development, health and wellbeing. There are links between inadequate sleep in childhood and obesity in adulthood⁴. And, poor sleep patterns don't only affect the child, they can also lead to stress and exhaustion for the parent or carer.



For more information on adopting healthy eating in early years settings, see Section 1, page 18.



Personal, social and emotional development

Providing early sensory (sight, taste, touch and hearing) and movement experiences are critical for building connections in the brain that help develop vision, language and communication, social, cognitive (thinking) and movement skills. They also help to lay the foundations for developing resilience, behavioural flexibility and how to cooperate with others.

Early movement experiences also provide valuable opportunities to build social and emotional bonds with parents and prime carers, (including key workers in the setting), siblings and other children.

'Different parts of the brain develop in different sensitive windows of time. The estimated prime window for emotional development is up to 18 months, by which time the foundation of this has been shaped by the way in which the prime carer interacts with the child.'

Allen, G. (2010)⁵

The importance of physical development for under-5s



Developing movement skills

Physical development is an important aspect of physical activity. Encouraging children to take part regularly will help them build confidence and increase their motivation to continue participating in physical activity. You can help by:

- understanding the sequence of motor development from infancy through to age five, so that you can plan developmentally appropriate activities for the children that both challenge and reinforce earlier movement learning experiences
- offering varied physical activities that help the gradual development of movement patterns
- allowing lots of time and opportunities for children to practise and refine these movement patterns
- praising and encouraging their efforts for trying new movements and achieving success, however small.

We learn more physical skills in our first five years than at any other time in our lives. Therefore, it's important that young children have lots of time to practise and develop these skills.



The more children succeed in gaining movement (motor) skills, the more they'll want to continue with sport and physical activity. This on-going participation helps them develop more complex motor skills as they get older, eg, striking a ball. As well as continuing to improve their movement skills, cognitive, social and emotional development, this will also have a positive effect on their health.

Developing movement skills is age related, but not age determined; these skills tend to develop in the same order, although there are differences in how and when they develop.



For further reading on this subject see the physical development resources in Section 1, page 19.



Encouraging physical literacy



Early movement skills are the foundation for developing physical literacy

Developing physical literacy is the foundation for learning to love being active, and continuing to be active throughout our lives.

As well as acquiring physical skills, physical literacy also includes the development of a child's knowledge and understanding of why physical activity is important, together with the positive attitudes, enthusiasm, motivation and confidence to enjoy regular physical activity throughout their life.

Creating positive, enabling environments can give young children rewarding physical activity experiences that stimulate them to learn key skills and enjoy being active.



For ideas on developing enabling environments for physical activity see Section 4.

'...Physical Literacy can be described as the motivation, confidence, physical competence, knowledge and understanding to maintain physical activity throughout the lifecourse.'

Margaret Whitehead, 2010, (p11-12)⁶



Positive outcomes of physical literacy outcomes

Physical literacy can have many important learning outcomes.

Personal, social and emotional outcomes

Confidence and competence – in a range of gross (eg, jumping, climbing, running, swinging etc) and fine motor movements (eg, manipulating a variety of objects such as a knife and fork or a pencil). The confidence to try new activities and ask for help if needed.

- High levels of self-esteem – feeling good about themselves and believing in their capabilities.
- Understanding what's acceptable behaviour – the importance of sharing, taking turns, rules and cooperation, tolerating others, learning with and from others.
- Emotional wellbeing – valuing themselves, adapting to new situations without becoming stressed, and resilience (coping with stressful situations).

- Independence – managing themselves (behaviour), their environments (awareness), making their own risk assessments in safe environments, problem solving and decision-making.
- Tolerance and consideration for others – knowing how to behave, having trust and respect for others, developing empathy (sensitivity to others' needs and feelings).
- Playing cooperatively and fairly – taking turns, the ability to keep to the rules.



Physical outcomes

- Capacity for increased levels of physical activity leading to better health and wellbeing.
- Ability to perform gross and fine motor skills with confidence and control.
- Knowledge and understanding of the importance of physical activity for their health and wellbeing as well as the importance of healthy eating and plenty of sleep.
- Enjoyment of being physically active and appreciating how much fun it is.

Cognitive outcomes

- Good listening skills – the ability to listen in a range of situations, listening to others and responding appropriately.
- Good concentration.
- Ability to express creativity.
- Ability to use their imagination and think in different ways.
- Enhanced memory skills.
- Broader vocabulary.
- Ability to set challenges and desire to seek solutions to problems and challenges.

You have an important role to play in giving babies and young children positive early movement experiences through physically active play and games, which will lay the foundations for a future of health-enhancing physical activity and wellbeing.

The importance of reducing sedentary behaviour



Low physical activity levels and high sedentary behaviour in early years settings

Sedentary behaviour is any activity that uses very little energy, usually while a person is sitting or lying down. Sitting still for long periods can be harmful as it can contribute to overweight and obesity as well as lower cognitive development¹. And, sedentary behaviour in early childhood is likely lead to even higher levels later in life⁷.

Children who spend long periods of time sitting still during allocated play times are missing out on opportunities to learn through play and to develop both physically and socially.

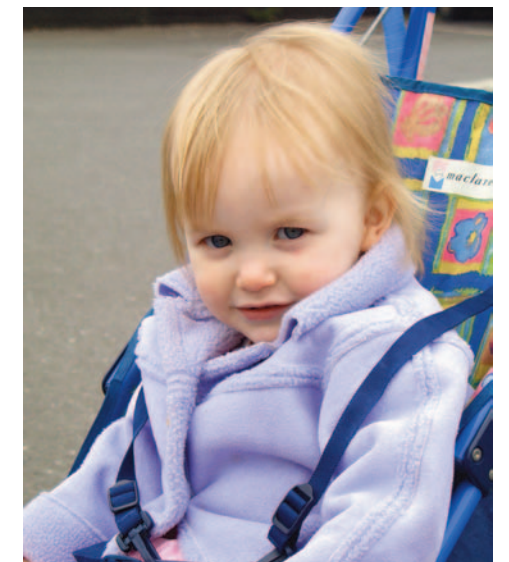
This applies to babies too. Even before they can walk, babies need plenty of time to practise movements such as reaching for and grasping objects, kicking and touching. Spending too much time in car seats, high chairs and buggies reduces these opportunities. As babies start to crawl, and eventually to walk, they continue to need plenty of time and space to move freely and practise new movements.

Studies have shown that physical activity levels in childcare appear to be very low; the majority suggesting that children accumulate less than 60 minutes of moderate or vigorous physical activity over an eight-hour day and levels of sedentary behaviour are high⁸.

You're ideally placed to give babies and young children plenty of opportunities to move and be active, and to ensure that their sedentary behaviour is limited and replaced with more active opportunities.



For tips on reducing sedentary behaviour in your setting, see Section 4, pages 24–28.



Early movers – How it supports UK early years curriculum areas of development



England⁹

Three prime areas of learning

Physical development

Early learning goals (by age five)

Moving and handling

- Good control and coordination in large and small movements.
- Move confidently.
- Handling equipment and tools effectively.

Health and self care

- Knowing the importance of exercise for good health.

Communication and language

Early learning goals

Listening and attention

- Listening attentively in a range of situations and responding with relevant comments, questions or actions.

Understanding

- Following instructions.
- Answering questions about their experiences.

Personal, social and emotional development

Early learning goals

Self-confidence and self-awareness

- Having the confidence to try new activities.
- Having the confidence to speak in a familiar group.
- Choosing resources needed for activity.
- Saying when they need help.

Managing feelings and behaviour

- Talk about feelings, behaviour and consequences.
- Working in groups and following rules.
- Adjusting behaviour in different situations.

Making relationships

- Play cooperatively, taking turns.
- Considering others' ideas when organising activities.
- Showing sensitivity to others' needs and feelings.
- Forming positive relationships with adults and children.



Wales¹⁰

Foundation Phase Areas of Learning

Physical development

Skills

Develop:

- coordination
- gross motor skills
- fine manipulative skills
- confidence
- control of body movements
- sensory awareness.
- Using a range of equipment and stimuli; using and handling a range of tools.
- Understanding how their bodies move.
- Moving with increasing control and coordination.
- Becoming proficient at basic actions, eg, jumping, balancing, rolling, climbing etc.

Range

Develop skills, knowledge and understanding by:

- Exploring indoors and outdoors, using wide range of stimuli and equipment.
- Getting involved in different types of play.
- Developing gross and fine motor skills.
- Getting involved in individual, partner and small group physical activities.

Personal and social development, wellbeing and cultural diversity

Skills

- Taking risks and becoming confident explorers outdoors.
- Respecting the needs of others.
- Forming relationships and feeling confident to play cooperatively.
- Asking for help when needed.
- Developing an understanding of dangers outside.

Range

Develop skills, knowledge and understanding by:

- adopting different roles, including leadership within small group or pairs
- becoming independent learners
- using senses to be creative and imaginative.

Language, literacy and communication skills

Oracy

- Making themselves understood.
- Listening to and carrying out instructions.
- Using appropriate language in their play.

Range

- Experiencing activities in indoor and outdoor environments.
- Participating in role play/imaginative play.
- Extending vocabulary through activities that encourage their interest in words.

Creative development

Creative movement

- Exploring and expressing a range of moods and feelings through movement.
- Developing responses to stimuli such as music, pictures, words and ideas.
- Pretending, improvising and thinking imaginatively.



Scotland¹¹

Curriculum for Excellence (3-18 years)

Health and wellbeing: experiences and outcomes early level

Planning for choices and changes

'In everyday activity and play, I explore and make choices to develop my learning and interests. I am encouraged to use and share my experiences.' HWB0-19a.

Health and wellbeing: experiences and outcomes early level

Movement skills, competencies and concepts

'I am learning to move my body well, exploring how to manage and control it and finding out how to use and share space.' HWb 0-21a

'I am developing my movement skills through practice and energetic play.' HWB 0-22a

'I am aware of my own and others' needs and feelings especially when taking turns and sharing resources.' HWB-23a

'I am enjoying daily opportunities to participate in different kinds of energetic play, both outdoors and indoors.' HWB 0-25a



Northern Ireland¹²

The Foundation Phase (aged 4-6 years)

Areas of Learning

Physical development and movement

Athletics, games, dance and gymnastics

- Developing the core skills of: running, jumping and throwing in a cooperative context.
- Developing games skills.
- Exploring, creating, practising and improving body management skills.
- Responding to variety of stimuli and using body movements to communicate ideas and express feelings.

Progression

- Moving with control and coordination.
- Moving with confidence, imagination and safety.
- Awareness of personal and general space.
- Responding appropriately to instructions and stimuli.
- Using a range of small and large equipment appropriately.
- Handling small tools, objects, construction and malleable materials safely and with increasing control.
- Using appropriate language to talk about ideas, feelings and movements.

Language and literacy

Talking and listening

- Attention and listening skills.
- Social use of language.
- Language and thinking.
- Extending vocabulary.

Personal development and mutual understanding

Self-awareness

- Recognising what they can do.

Rules, rights and responsibilities

- Understanding importance of rules.
- Developing a sense of fair play.

Relationships

- Knowing how to treat others.





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