

# Gross motor skill information for children with developmental delay

## Introduction

### Information for parents and carers

#### What are motor skills?

- **Gross motor skills** describe the way your child moves around, e.g. by rolling, sitting, crawling, standing and walking, and their abilities within these positions.



- **Fine motor skills** describe how your child uses their hands, both separately and together and how this affects their self-care skills and independence, e.g. playing, feeding, dressing and writing.



## What is developmental delay?

- Developmental delay can affect children differently.
- Some children are very delayed, others are only mildly delayed.
- In some children, it will affect all areas of their development, e.g. gross and fine motor skills, communication and understanding, where in others it only affects one area.
- If learning and understanding are very delayed, this affects how a child learns to move from one position to another and causes a delay in physical skills as well.
- Being included in every day play and family activities can help



children meet their motor milestones at their own pace.

- Although the activities in each section are written in a sequence, it is not essential that your child achieves one skill before you move on to the next.
- This is especially true in the early stages of development where it is important to spend time in a variety of positions to develop different skills as each position has an effect on the other.
- For example, at around six months old, you can spend a lot of time playing with your child on the floor and can practice rolling alongside playing in a supported sitting position.
- For the next booklet in the series, please contact the Physiotherapy Administrator on **0113 305 5208**.

## Babywalkers

Physiotherapists **DO NOT** recommend babywalkers or bouncers for any children, particularly those with developmental delay and altered muscle tone.

### Why not?

Babywalkers place your child in a position which is not quite sitting or standing. They enable movement without your child having the proper awareness or control of their body. Development is a progressive sequence and at each stage, children learn different aspects of controlling their body which gradually come together to enable independent walking.

**Please see our separate leaflet about babywalkers for further information.**

## What other factors affect motor skill development?

There are several factors which contribute to gross motor delay in children with developmental delay. The most important of these are explained here.

### Low muscle tone

Some children have quite floppy muscles (hypotonia or low muscle tone). This makes it harder for them to move against gravity and can affect all aspects of their physical development.

For example, in lying, their arms and legs will often rest flat on the floor or it may be difficult for them to learn to pull into a standing position.

Although the hypotonia may never disappear completely, with the right stimulation and good positioning, your child will acquire movement skills following a typical, but delayed pattern of development.

## Hypermobility

Children who have low muscle tone can be very flexible. They are often described as having *lax ligaments*, *hypermobility* or being *double-jointed*. This is because the muscles do not hold the joints together as tightly as in people with normal muscle tone. In most cases, although hypermobility is a factor in gross motor delay, it does not have any serious effects.

This extra flexibility is usually most noticeable in the fingers, ankles and knees. It can make it hard to control the position of the joints. People with hypermobility can find it difficult to know where their body is in relation to their environment, e.g. slopes, different surfaces, where obstacles / furniture are.

## Muscle strength

If children have low muscle tone and hypermobility, muscle strength can often be lower than in other children of a similar age. Again, this can contribute to gross motor delay as children lack sufficient strength to pull themselves along or up to standing, or walk for longer periods.

Muscle strength and endurance will improve as your child becomes more active, but some children may continue to be less co-ordinated than their peers.

## Footwear / orthotics

If your child has mild hypermobility or hypotonia, **boot-style shoes** from a good shoe shop will provide adequate support for their feet. Have your child's **feet measured properly** for length and width.

**Avoid shoes which have very squashy soles and heel areas.**

If your child is extremely flexible, a physiotherapist may decide that supportive boots or insoles would help control their foot posture while they are learning to stand and balance. These boots are not needed indefinitely and are not prescribed routinely.



We hope these leaflets provide information, advice and practical activities to help babies and young children with developmental delay develop their motor skills.

They have been produced by therapists from LCH Children's Physiotherapy and Occupational Therapy.

If you have any questions that are not answered in this booklet, a physiotherapist would be happy to discuss them with you, so please do not hesitate to contact the physiotherapy department on **0113 305 5208**.

Alternatively, talk to your Paediatrician or Portage worker.

## References

Diamant RB (1992) *Positioning for Play: Home Activities for Parents of Young Children*, Therapy Skill Builders

Crombie S (1997) *Physiotherapy Home Programmes for Children with Motor Delay*, Winslow

## Parent support - local groups

### Hawthorn Family Support Centre (Mencap)

The Vinery Centre, 20 Vinery Terrace,  
Leeds LS9 9LU  
[www.leedsmencap.org.uk/support-for-young-people/hawthorn-family-support-centre](http://www.leedsmencap.org.uk/support-for-young-people/hawthorn-family-support-centre)  
Tel: 0113 235 1331  
Email: [kath.surtees@leedsmencap.org.uk](mailto:kath.surtees@leedsmencap.org.uk)

### SNAPS (Special Needs and Parent Support)

[www.snapsyorkshire.org](http://www.snapsyorkshire.org)  
Email: [dean@snaps-vol.org.uk](mailto:dean@snaps-vol.org.uk)  
Mobile: 0796 484 7775

### Little Hiccups

Tel 07831 230 741  
Email: [info@littlehiccups.co.uk](mailto:info@littlehiccups.co.uk)

## Parent support - national organisations

**Babywalkers leaflet** produced by Bliss – the premature baby society [www.bliss.org.uk](http://www.bliss.org.uk)  
Search for “babywalkers”

### Contact a Family

[www.cafamily.org.uk](http://www.cafamily.org.uk)

## Family information

### The Family Hub

[www.familyinformation.leeds.gov.uk/Pages/default.aspx](http://www.familyinformation.leeds.gov.uk/Pages/default.aspx)

### Leeds SENDIASS

[www.leedssendiass.co.uk](http://www.leedssendiass.co.uk)  
[sendiass@leeds.gov.uk](mailto:sendiass@leeds.gov.uk)  
0113 3951 200

### Leeds Local Offer

[www.leeds.gov.uk/residents/Pages/Leeds-local-offer.aspx](http://www.leeds.gov.uk/residents/Pages/Leeds-local-offer.aspx)

### Leeds City Council Sport and Active Recreation Programme for Disabled People

[www.yorkshiresport.org/cc](http://www.yorkshiresport.org/cc)  
Search “Leeds Inclusive Sports Programme”.  
Tel 0113 395 0159  
Email: [glenn.holdsworth@yorkshiresport.org](mailto:glenn.holdsworth@yorkshiresport.org)

## Contact us

### ICAN Admin

3rd Floor Stockdale House  
Headingley Office Park  
Victoria Road  
Leeds LS6 1PF  
Tel: 0113 843 3620

## Help us get it right

If you have a complaint, concern, comment or compliment please let us know by speaking to a member of our staff. We learn from your feedback and use the information to improve and develop our services.

If you would like to talk to someone outside the service contact the **Patient Experience Team** on **0113 220 8585**, Monday to Friday 9.30am to 4.30pm or email [lch.pet@nhs.net](mailto:lch.pet@nhs.net)

**We can make this information available in Braille, large print, audio or other languages on request.**