

Hand Control

What is hand control?



Hand control is the ability to accurately use and manipulate objects, utensils, tools and even fingers in isolation for functional task performance. Finger strength is one of the most significant underlying abilities that impacts a child's ability to demonstrate hand control. It influences the ability to maintain effective finger positioning for very precise movements required of many fine motor tasks (e.g. drawing, writing, cutting).

Why is hand control important?

Poor hand control can affect a child's ability to eat, write neatly, use a computer, turn pages in a book and perform personal care tasks, such as dressing and grooming. If hand control is compromised, it can influence attention to academic tasks, ease of transition into school and a child's ability to display their intellectual capacity on paper or in assessment.

With the advent of technology, many people think there is less of a need to develop hand control for pencil skills. What they fail to realise is that the *same* hand control skills are required for effective computing skills as for writing.

What are the building blocks necessary to develop hand control?

- **Attention and concentration:** Sustained effort, doing activities without distraction and being able to hold that effort long enough to complete the task or through repeated attention to develop task mastery.
- **Body awareness:** “Knowing” where the fingers are, and the pressure they are applying, without having look at them.
- **Sensory processing:** Accurate registration, interpretation and response to sensory stimulation in the environment and the child’s own body.
- **Postural control:** The ability to stabilize the trunk and neck to enable coordination of the hands and fingers.
- **Shoulder stability:** The ability to contract the muscles of the shoulder joint to hold the shoulder steady to allow the arm to be held in different positions while the forearm and hand to perform an activity.

How can I tell if my child has problems with hand control?

If a child has difficulties with hand control they might have:

- An awkward pencil grasp and poor pencil control.
- Difficulty holding and manipulating scissors.
- A tendency to use their whole hand to manipulate an object rather than just a few fingers.
- Poor endurance for pencil and scissor based activities.
- Difficulty with self-care tasks, such as tying shoelaces and doing up buttons.
- Difficulty grasping and releasing objects in a controlled manner.
- Messy and/or slow handwriting.
- Difficulty staying within the lines when colouring or cutting out shapes.
- Difficulty opening containers or unscrewing lids.

What other problems can occur when a child has hand control difficulties?

- **Fine motor skills:** Finger and hand skills such as writing, cutting, opening lunch boxes, tying shoelaces.
- **Gross motor skills:** Whole body physical skills using the core strength muscles of the trunk and arms such as bat and ball games.
- **Behaviour:** such as avoidance of challenging hand control based tasks in self-care, academic or even play.
- **Persistence to task:** Perseverance may be limited confronted by challenging tasks.
- **Hand dominance:** The consistent use of one (usually the same) hand for task performance which allows refined skills to develop.
- **Bilateral integration:** Using two hands together with one hand leading (e.g. using the dominant hand to hold and move the pencil but the non-dominant to hold the writing paper).
- **Self care:** The everyday tasks undertaken to be ready to participate in life activities (including dressing, eating, cleaning teeth, opening and closing lunch boxes or seal packets).

What can be done to improve hand control?

- **Hand dominance:** Determine and reinforce the child's dominant hand through frequent use in precision task performance.
- **Grasping and manipulating:** Encourage participation in activities that require grasping and manipulating small objects, such as drawing, puzzles, opening containers and threading.
- **Finger games:** Practice tasks that use just one or two fingers (e.g. poking games).
- **Fine motor activities:** Give praise and encouragement when the child engages in fine motor activities, especially if they persist when finding the activity difficult.
- **Hand and finger strength:** Practice activities that develop hand and finger strength (e.g. scrunching paper, using tweezers, play-doh, pegs).
- **Sensory play:** Encourage the child to engage in sensory play activities (e.g. rice play, finger painting) to assist the development of tactile awareness.

- **Hand-eye coordination:** Practice activities that involve hand-eye coordination (e.g. throwing and catching) and crossing the mid-line (e.g. reaching across the body to pick up items).
- **Upper limb strength:** Encourage play activities that develop upper limb strength (e.g. climbing ladders, wheelbarrow walking).

What activities can help improve hand control?

- **Scrunching** and tearing paper.
- **Using tweezers** to pick up small items (e.g. marbles).
- **Pick up objects** using thumb, index and middle finger while keeping other fingers tucked into the palm.
- **Play-doh activities** that involve rolling with hands or a rolling pin, hiding objects such as coins in the play-doh or just creative construction.
- **Kneading** dough.
- **Squeezing** sponges or water toys in the bath.
- **Threading** beads onto a string.
- **Every day activities** that require strength such as opening containers and jars.
- **Scissor** projects that involve cutting out geometric shapes to then paste them together to make pictures such as robots, trains or houses.

Why should I seek therapy if I notice difficulties with hand control in my child?

Therapeutic intervention to help a child with hand control difficulties is important to:

- Improve a child's ability in, and persistence with, fine motor tasks that are required for every day life as well as academic success.
- Help a child to complete age appropriate self care tasks, such as doing up buttons and zips.
- Avoid a child becoming disengaged in an academic environment due to difficulties completing writing, drawing and/or cutting activities.
- Avoid frustrations experienced by parents, teachers and children when a

child is struggling to remain engaged in academic activities.

- Help maintain and develop a positive sense of well being due to confidence in skills for preschool, school, play with peers and self care independence.
- Ensure that a child doesn't fall behind their peers in development of handwriting - a leading cause of academic under-performance.
- Ensure that mouse control for IT tasks are developed (as children with poor pencil skills are often pushed towards IT as an alternative written communication method).

If left untreated what can hand control difficulties lead to?

When children have difficulties with hand control, they are might also have difficulties with:

- Meeting academic criteria due to poor handwriting skills and rapid fatigue.
- Excessive pressure and anxiety in a school-aged child due to difficulties 'keeping up' in class.
- Completing exams due to difficulty answering all written questions within the allocated time.
- Poor self esteem when a child compares their finger skill abilities (e.g. writing and cutting) with their peers.
- Developing efficient typing skills and mouse control for PC or stylus for iPads.
- Manipulating items for construction (e.g. puzzles, Lego).

What type of therapy is recommended for hand control difficulties?

If your child has difficulties with hand control, it is recommended they consult an Occupational Therapist.

Contact us today to make an initial enquiry or book an assessment for your child
on 1800 KID SENSE (1800 543 736)

