

# Supporting mobility and motor skills in school after a brain injury

The brain controls movement, balance, co-ordination and muscle tone. Brain Injury can affect and impact a person's mobility in a number of different ways, depending on which part of the brain is injured.

## This may present as:

- Weakness ( hemiparesis) or paralysis on one side of the body (hemiplegia , this is often opposite to the side of injury)
- Arms, legs or both may be affected, making walking or using upper/lower limbs more challenging
- Spasticity (continuous muscle stiffness) or Dystonia (muscles intermittently contract involuntarily)
- Balance and coordination difficulties: ataxia, dizziness, vertigo and difficulty performing basic tasks
- Fatigue – please see our additional resources on fatigue

## Possible impact in school:

### Fine Motor

- Hand weakness which can affect handwriting, holding a pen, or functional tools, such as scissors
- Hand movements may be slower
- Difficulty coordinating both hands together functionally
- Difficulty judging force of grip (gripping too hard or too lightly)
- Clumsiness and dropping objects
- Difficulty manipulating small objects, e.g. buttons, zips

### Gross Motor

- Difficulties with spatial awareness when moving around, difficulties navigating obstacles
- Challenges with coordination (ataxia) and balance
- Difficulties with walking, running, jumping and catching, climbing stairs
- Altered gait when walking
- Reduced endurance (fatigue)
- Muscle stiffness that limits movement or causes discomfort
- May require extra support with posture and trunk control



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## Ways to Support:

### Physical Adaptations:

- Optimise positioning
- Ensure resources are placed at an accessible height
- Ensure clear, uncluttered pathways in all areas of the school environment
- Plan transitions between classrooms and areas to reduce the risk of falls / trips
- Utilise lifts and ramps – if possible allocate a peer 'buddy' to accompany the student
- Consider alternative ways for the student to carry/transport their resources around school (e.g. books/equipment/lunch tray)



Risk assessments are essential to ensure safety and appropriate adaptations are in place.

Plan ahead for curriculum adaptations – practical tasks, writing, and active lessons such as PE will need personalised adaptations to be considered.

### Equipment to consider:

- Adapted scissors (loop, spring, electric, switch activated)
- Pencil grips, thick / moulded pencils/pens, easygrip writing tools and rulers
- Adapted keyboard / mouse
- Speech to Text software
- Slanted writing boards
- Non slip mats to place under paper
- Stylus for use with touch screen equipment
- Seating support e.g. chair with arms, cushions, seat wedge
- Adapted PE equipment
- Height adjustable tables

Specialist OT/PT/SLT may recommend & provide training on:

- Wheelchair adaptations such as headrests, footrests, trunk support
- Switches or AAC devices
- Walking frames / Standing frames
- Orthotics equipment (e.g. AFOs, splints)

