

### Cerebral Palsy

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Cerebral palsy is caused by damage to the brain occurring before birth, during birth, or within the first few years after birth. The damage affects the brain's ability to control the muscles. There may be other disabling conditions caused by extensive damage to the brain including sensory disabilities, communication impairments, learning problems, seizures, ADHD, vision impairments, hearing impairments and intellectual impairments. Children who have cerebral palsy may experience difficulties moving and controlling the posture of their bodies.

Cerebral palsy is known as a developmental disability as it influences the way children develop. Children can be affected in varying degrees, from mild to severe. The degree of tension or resistance to movement (muscle tone) is often used to classify cerebral palsy along with the parts of the body involved.

Cerebral palsy is a non-progressive condition, but changes may occur due to variations during the child's growth and development and the effect of intercurrent illnesses. However with emerging research and understanding in brain plasticity, neonatal care and stem cell therapy, the future of possible cures and treatments is looking optimistic.

Physiotherapy and support may be required for children with cerebral palsy to ensure they are placed in positions that are most beneficial for their physical condition. Specialised and adaptive equipment is available and may be required to support the inclusion of children with cerebral palsy. Some of this equipment includes: prone leaners which enable a child with cerebral palsy to be placed in a supported standing position for doing activities such as puzzles or water play; corner chairs which enable children to sit at the correct height for joining in story times, playing with blocks etc. and posture chairs which provide appropriate support for a child to be included at a table (with a cut out) for painting, drawing and writing experiences. The child's therapist will be able to recommend the most appropriate equipment for each child.

The environment may require modification for children with cerebral palsy to ensure it is accessible by promoting greater control of their surroundings, independence and expanding the scope of learning experiences available.

### **Developmental Areas**

**Children may display some of the following characteristics**

#### **Social and Emotional Development**

- May become easily frustrated when unable to complete tasks
- May have limited peer initiated social experiences
- Access to visiting friends and other people's places for social occasions may be difficult if friend's houses are not accessible

#### **Physical Development**

- May have jerky or uncontrollable movements
- Muscles and limbs may be rigid or stiff
- Movement may lack coordination or balance
- May be unable to sit independently and maintain posture
- May be unable to walk independently or stand unaided
- Hand-eye coordination may be poor resulting in difficulties in manipulating objects and throwing/catching activities
- Vision or hearing may be impaired
- May become quickly or easily tired
- Saliva control may be poor – difficulty keeping lips closed
- Limited control over facial muscles may cause a risk of choking when eating or drinking
- Some may have epilepsy as a co-existing condition

#### **Language and Communication Development**

- May experience difficulties in producing some speech sounds
- Difficulties in keeping up with a two way conversation
- May use augmentive or alternative communication devices

#### **Cognitive Development**

- May have had limited concrete experience with the environment
- May have learning disabilities or intellectual impairments due to damage to the brain

#### **Health and Safety Issues**

- Be aware of health implications that may affect participation in aspects of the program

### **Cerebral Palsy** **Inclusion Strategies**

Each child diagnosed with **Cerebral Palsy** will be different and individual. It is important to gain information from the parents as to what characteristics of **Cerebral Palsy** their child displays. It is important to work closely with the parents as well as any additional support specialists e.g. therapists who may be involved with the child. It is also important to gain an understanding from the parent as to what is the most important aspect of their child attending your service. What is it that parents hope to gain from using your service? The following inclusion strategies are just some examples which may be applied to support the inclusion process. This list is only the start and it is dependant on a variety of factors such as environment, length of time child is in care, child's interest, likes, dislikes and skills already achieved. The strategies are divided into developmental areas however some strategies overlap and assist in a variety of developmental areas.

#### **Social and Emotional Development**

- Encourage and plan for positive social experiences (small group experiences etc.).
- Allow the child ample time to complete tasks independently.
- Encourage children to ask questions and allow time for responses.
- Promote the opportunity for children to explore play materials.
- Provide musical experiences that allow for emotional expression.
- Internet chat rooms that are appropriate for children may be a social alternative.

#### **Physical Development**

- Provide an area with clear, uncluttered spaces.
- Be aware of the child's *medical* physical needs.
- Ensure the environment is safe and secure promoting easy access.
- Provide appropriate materials and equipment to support the child e.g. support chairs at the appropriate height and adjustable tables.
- Provide toys that are easy to grasp and manipulate including puzzles with large knobs or floor puzzles with large pieces - manipulation aids can be added for children who are unable to isolate finger movements or control wrist movements.
- Provide tactile or sensory experiences that the child can cope with and present these at a level appropriate to the child's development e.g. tactile balls such as urchin or koosh balls.
- Use musical instruments to stimulate sensory development.
- Plan smaller, manageable experiences for the child that may be an activity or game divided into smaller achievable tasks.
- Be aware of the child's abilities when providing obstacle courses etc. for the whole group and provide opportunities for children to explore movement in different ways.
- Watch for signs of fatigue and avoid children becoming over tired.
- Plan quiet and busy activities indoors and outdoors to include children's varying capacities for attending to different experiences.

- Meal time assistance may be required (with the advice of an occupation therapist)
- **Stabilising** toys for children can enhance function as children with cerebral palsy may experience difficulties with two handed tasks. Toys can be stabilised by clamping their bases to tables, using masking tape to secure them to the surface, using a non slip mat such as Dycem or securing with suction caps or velcro.
- **Grasping aids** can be used to make objects more manageable. Velcro can be placed around the child's hand and the object to create a bond between the hand and the object. Wrap foam or tape around items to make them easier to hold.
- **Boundaries** can be created by restricting the movement of toys e.g. using a track with edges for push and pull toys etc.
- **Switches** can be adapted to battery operated toys for children who have extremely limited hand function.

### Language and Communication Development

- Encourage staff and children to become familiar with and utilise the child's communication system.
- Provide alternative forms of communication such as picture boards and use photos of resources available in the program.
- **Single message devices** can be used to allow the child to communicate during specific routines or play experiences. Single message devices store a verbal message and can be played by pushing the button.

### Reference

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