

# Cerebral Palsy



## What is cerebral palsy?

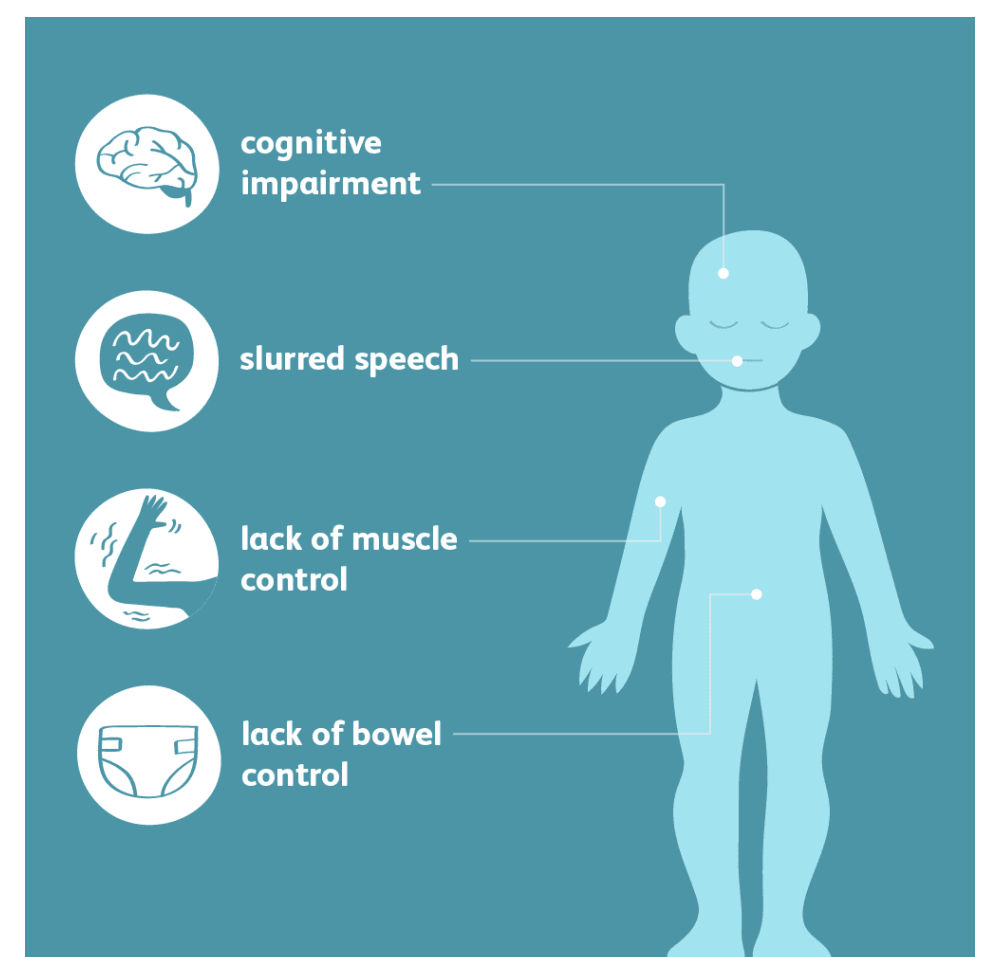
Cerebral palsy (CP) refers to a group of neurological disorders that appear in infancy or early childhood and permanently affect body movement and muscle coordination. It is caused by damage to or abnormalities inside the developing brain that disrupts the brain's ability to control movement and maintain posture and balance. The term cerebral refers to the brain; palsy refers to the loss or impairment of motor function.

Cerebral palsy affects the motor area of the brain's outer layer (called the cerebral cortex), the part of the brain that directs muscle movement. In some cases, the cerebral motor cortex hasn't developed normally during foetal growth. In others, the damage is a result of injury to the brain either before, during, or after birth. In either case, the damage is irreparable and the impairments that result are permanent.

## Symptoms

Children with cerebral palsy exhibit a wide variety of symptoms, including –

- lack of muscle coordination when performing voluntary movements (ataxia);
- stiff or tight muscles and exaggerated reflexes (spasticity)
- weakness in one or more arm or leg;
- walking on the toes, a crouched gait, or a "scissored" gait;
- variations in muscle tone, either too stiff or too floppy;
- excessive drooling or difficulties swallowing or speaking;
- shaking (tremor) or random involuntary movements;
- delays in reaching motor skill milestones; and
- difficulty with precise movements such as writing or buttoning a shirt.



## Types of Cerebral Palsy

Doctors classify cerebral palsy according to the type of movement disorder involved — **spastic** (stiff muscles), **athetoid** (writhing movements), or **ataxic** (poor balance and coordination) as well as additional symptoms, such as weakness (paresis) or paralysis (plegia). Reference is also made to the parts of the body that are affected. Hemiplegia or hemiparesis indicates that only one side of the body is weakened whereas quadriplegia or quadriparesis means that all four limbs are affected. Spastic cerebral palsy is the most common type of the disorder.

## How can CP be managed?

Cerebral palsy cannot be cured, but treatment will often improve a child's capabilities. Many children go on to enjoy near-normal adult lives if their disabilities are properly managed. In general, the earlier treatment begins, the better chance children have of overcoming developmental disabilities or learning new ways to accomplish the tasks that challenge them.

There is no standard therapy that works for every individual with cerebral palsy. Once the diagnosis is made, a team of health care professionals will work with a child and his or her parents to identify specific impairments and needs, and then develop an appropriate plan to tackle the core impairments that affect the child's quality of life.

