

Cerebral Palsy

Cerebral palsy is a condition, sometimes thought of as a group of disorders that can involve brain and nervous system functions such as movement, learning, hearing, seeing, and thinking. There are several different types of cerebral palsy, including spastic, dyskinetic, ataxic, hypotonic, and mixed.

Alternative Names

Spastic paralysis; Paralysis - spastic; Spastic hemiplegia; Spastic diplegia; Spastic quadriplegia

Causes

Cerebral palsy is caused by injuries or abnormalities of the brain. Most of these problems occur as the baby grows in the womb, but they can happen at any time during the first 2 years of life, while the baby's brain is still developing.

In some people with cerebral palsy, parts of the brain are injured due to low levels of oxygen ([hypoxia](#)) in the area. It is not known why this occurs.

Premature infants have a slightly higher risk of developing cerebral palsy. Cerebral palsy may also occur during early infancy as a result of several conditions, including:

- Bleeding in the brain
- Brain infections ([encephalitis](#), [meningitis](#), [herpes simplex](#) infections)
- Head injury
- Infections in the mother during pregnancy ([rubella](#))
- Severe [jaundice](#)

In some cases the cause of cerebral palsy is never determined.

Symptoms

Symptoms of cerebral palsy can be very different between people with this group of disorders. Symptoms may:

- Be very mild or very severe
- Only involve one side of the body or both sides
- Be more pronounced in either the arms or legs, or involve both the arms and legs



Symptoms are usually seen before a child is 2 years old, and sometimes begin as early as 3 months. Parents may notice that their child is delayed in reaching, and in developmental stages such as sitting, rolling, crawling, or walking.

There are several different types of cerebral palsy. Some people have a mixture of symptoms.

Symptoms of spastic cerebral palsy, the most common type, include:

- Muscles that are very tight and do not stretch. They may tighten up even more over time.
- Abnormal walk (gait): arms tucked in toward the sides, knees crossed or touching, legs make "scissors" movements, walk on the toes
- Joints are tight and do not open up all the way (called joint contracture)
- Muscle weakness or loss of movement in a group of muscles (paralysis)
- The symptoms may affect one arm or leg, one side of the body, both legs, or both arms and legs

The following symptoms may occur in other types of cerebral palsy:

- Abnormal movements (twisting, jerking, or writhing) of the hands, feet, arms, or legs while awake, which gets worse during periods of stress
- Tremors
- Unsteady gait
- Loss of coordination
- Floppy muscles, especially at rest, and joints that move around too much

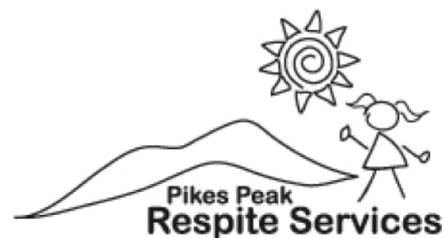
Other brain and nervous system symptoms:

- Decreased intelligence or learning disabilities are common, but intelligence can be normal
- Speech problems (dysarthria)
- Hearing or vision problems
- Seizures
- Pain, especially in adults (can be difficult to manage)

Eating and digestive symptoms

- Difficulty sucking or feeding in infants, or chewing and swallowing in older children and adults
- Problems swallowing (at all ages)
- Vomiting or constipation

Other symptoms:



- Increased drooling
- Slower than normal growth
- Irregular breathing
- Urinary incontinence

Treatment

There is no cure for cerebral palsy. The goal of treatment is to help the person be as independent as possible.

Treatment requires a team approach, including:

- Primary care doctor
- Dentist (dental check-ups are recommended around every 6 months)
- Social worker
- Nurses
- Occupational, physical, and speech therapists
- Other specialists, including a neurologist, rehabilitation physician, pulmonologist, and gastroenterologist

Treatment is based on the person's symptoms and the need to prevent complications.

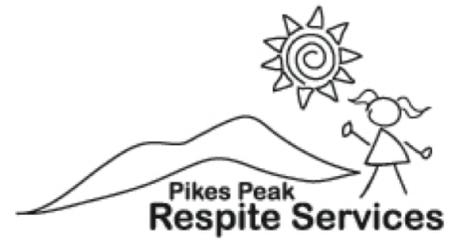
Self and home care include:

- Getting enough food and nutrition
- Keeping the home safe
- Performing exercises recommended by the health care providers
- Practicing proper bowel care (stool softeners, fluids, fiber, laxatives, regular bowel habits)
- Protecting the joints from injury

Putting the child in regular schools is recommended, unless physical disabilities or mental development makes this impossible. Special education or schooling may help.

The following may help with communication and learning:

- Glasses
- Hearing aids
- Muscle and bone braces
- Walking aids



- Wheelchairs

Physical therapy, occupational therapy, orthopedic help, or other treatments may also be needed to help with daily activities and care.

Respite

Stress and burnout among parents and other caregivers of cerebral palsy patients is common, and should be monitored.

Information was adapted from this website to assist PPRS Employees with understanding Cerebral Palsy. <https://health.google.com/health/ref/Cerebral+palsy>