

## Cerebral Palsy: The Basics

### WHAT IS CEREBRAL PALSY?

Cerebral palsy (CP) is a group of disorders caused by either injuries or abnormalities in the brain that can impair movement, learning, hearing, seeing, and thinking. Many of the effects occur while a baby is still in the mother's womb. However, they can continue to occur within the first 2 years of life while the brain is still developing. Cerebral palsy is usually diagnosed by 3 years of age. About 2 to 3 children in 1,000 are affected. About 800,000 children and adults of all ages in the United States have cerebral palsy.

### WHAT ARE THE SYMPTOMS OF CP?

Common symptoms of CP are:

- ▶ Very tight muscles that don't stretch (spasticity)
- ▶ Abnormal way of walking (gait)
- ▶ Tight joints that do not open up all the way
- ▶ Muscle weakness or loss of movement in a group of muscles, or paralysis
- ▶ Seizures (in about half of patients)
- ▶ Uncontrollable body movements or tremors

The symptoms may affect just one arm or leg, an arm and leg on the same side, only the legs, all four limbs, or any combination of arms and legs.

### WHAT ARE THE RISK FACTORS FOR CP?

Infants who are born prematurely have a heightened risk of CP. The condition may also occur during early infancy as a result of other conditions, including:

- ▶ Bleeding in the brain
- ▶ Brain infections (e.g., encephalitis, meningitis, herpes simplex infections)
- ▶ Head injury
- ▶ Infections in the mother during pregnancy (e.g., rubella)
- ▶ Severe jaundice

### WHAT TREATMENTS ARE AVAILABLE FOR CP?

Although there is currently no cure for CP, treatments are available that may improve symptoms. For example, physical and occupational therapy may improve walking and gait, stretch spastic muscles, and prevent deformities. Braces, other orthotic devices, wheelchairs, and rolling walkers may be used to increase mobility. Speech therapy may address swallowing disorders, speech impediments, and other obstacles to communication. Communication aids such as computers with attached voice synthesizers may also be helpful. Drugs may be prescribed to control seizures, relax muscle spasms, and alleviate pain. Surgery may also correct anatomical abnormalities or release tight muscles in some people.

### WHAT RESEARCH IS BEING DONE INTO CP?

The National Institute of Neurological Disorders and Stroke ([ninds.nih.gov](http://ninds.nih.gov)) conducts CP research and clinical trials. Some current CP research is looking at early brain development in newborns to find out how bleeding, epileptic seizures, and breathing and circulation problems may lead to CP.

For more *Neurology Now* articles on cerebral palsy, go to [bit.ly/yvbw14](http://bit.ly/yvbw14).

For more resources and support, contact:

- ▶ Cerebral Palsy International Research Foundation: [cpirf.org](http://cpirf.org); 609-452-1200
- ▶ Pedal With Pete Foundation: [www.pedal-with-pete.org](http://www.pedal-with-pete.org); 614-527-0202
- ▶ United Cerebral Palsy: [ucp.org](http://ucp.org); 1-800-872-5827

**PUBLICACIONES EN ESPAÑOL:** Parálisis Cerebral: Esperanza en la Investigación: [1.usa.gov/1lawzYu](http://1.usa.gov/1lawzYu)

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