

## Cerebral Palsy

**Condition:** Cerebral palsy (CP) is caused by abnormal development or injury to a baby's brain before they are born or during infancy. CP affects posture and muscles, which can make it hard to control movement.

**Background:** CP occurs in up to 4 out of every 1,000 births and is more common in babies who are born early. It is the most common motor disability of childhood. It can be caused by stroke, lack of oxygen, traumatic injury, infection, genetic syndrome, or brain malformation. In some cases, the cause is not known.

**Risk Factors:** CP is more common in boys and African Americans and babies that are born prematurely, have low birth weight, or are part of a twin pregnancy. Sometimes, genetic syndromes or strokes can run in families.

**History and Symptoms:** Children with CP may have trouble meeting milestones on time. They may have muscle spasms, weakness, or abnormal movements. They may seem either "floppy" or very stiff. CP does not get worse over time but can lead to problems with thinking, speech, swallowing and mobility. Children with CP may also have seizures, orthopedic problems, pain, and difficulties with vision and hearing. There are many types of CP, with some children having few symptoms and others needing total care.

**Physical Exam:** The physical medicine and rehabilitation (PM&R) physician will check strength, posture, reflexes, joint flexibility, muscle tightness, and how the baby or child moves. Based on the exam, the PM&R physician will determine the type of movement pattern and parts of the body affected.

**Diagnostic Process:** Depending on the child's age, head/brain ultrasound, CT, or MRI will help diagnose CP. Genetic testing, other blood tests, and tests of hearing and vision may be considered as well to aid in diagnosis. These results, along with the history and exam, help the PM&R physician diagnose the type of CP.

**Rehab Management:** A PM&R physician has special training in diagnosing and treating children with CP. Babies and children with CP need help moving and meeting milestones. They may need help with eating, communicating, and going to the bathroom. PM&R physicians help coordinate a large team of specialists to treat CP. This team includes orthopedists, neurologists, therapists, social workers, nurses, parents, and teachers.

The PM&R physician may prescribe physical, occupational, or speech therapy to help the child's development. They may also prescribe medication to help with muscle tightness or abnormal movement. Equipment, such as braces, walkers, and wheelchairs, is used to help the child make progress and be independent. Regular check-ups are important to avoid complications, like joint contractures and hip or spine issues. Adaptions to school and social activities are also important to help the child with CP live a full life.

**Other Resources for Patients and Families:** The PM&R physician focuses on function and quality of life. They can help families find resources for their child. There are laws that require early intervention and other services for children with CP. A social worker or the local school system can help with these services as well. Additional resources may be found at [www.aacpdm.org](http://www.aacpdm.org), [www.cdc.gov/ncbddd/cp/](http://www.cdc.gov/ncbddd/cp/), and [www.ucp.org](http://www.ucp.org).

## Frequently Asked Questions

### **What is PM&R?**

Physical medicine and rehabilitation (PM&R), also known as physiatry, is a primary medical specialty that aims to enhance and restore functional ability and improve quality of life to those with injuries, physical impairments or disabilities affecting the brain, spinal cord, nerves, bones, joints, ligaments, muscles and tendons. PM&R physicians, known as physiatrists, evaluate and treat the whole body, maximize patients' independence in their daily life and are experts in designing comprehensive, patient-centered treatment plans to empower patients to achieve their goals. By taking the whole body into account, they can accurately pin-point problems, decrease pain, assist in recovery from devastating injuries and maximize overall outcomes and performance with non-surgical and peri-surgical options. To learn more, visit [www.aapmr.org/aboutpmr](http://www.aapmr.org/aboutpmr).

### **What makes PM&R physicians unique?**

PM&R physicians' training focuses not just on treating medical conditions, but on enhancing the patient's performance and quality of life in the context of those medical conditions. They focus not only on one part of the body, but instead on the development of a comprehensive program for putting the pieces of a person's life back together – medically, socially, emotionally and vocationally – after injury or disease. PM&R physicians make and manage medical diagnoses, design a treatment plan and prescribe the therapies that physical therapists or other allied therapists perform or that are carried out by the patients themselves. By providing an appropriate treatment plan, PM&R physicians help patients stay as active as possible at any age. Their broad medical expertise allows them to treat disabling conditions throughout a person's lifetime.

### **Why see a PM&R physician?**

A PM&R physician will thoroughly assess your condition, needs, and expectations and rule out any serious medical illnesses to develop a treatment plan. By understanding your condition and goals, you and your PM&R physician can develop a treatment plan suited to your unique needs.

### **How do I find a PM&R physician near me?**

Visit [www.aapmr.org/findapmrphysician](http://www.aapmr.org/findapmrphysician) or contact your primary care physician for a referral.