

# Post-Polio Syndrome

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## Fact Sheet

### What is Post-Polio Syndrome (PPS)?

Post-polio syndrome is a condition characterized by new neurologic symptoms in polio survivors. Common symptoms include progressive muscle weakness, joint pain, and fatigue and can greatly impact quality of life. These symptoms occur 15-30 years after initial polio infection. It is estimated between 20-85% of polio survivors are affected by PPS.

### What causes Post-Polio Syndrome?

The exact cause of PPS is not clear, although there are several theories. Polio can damage nerve cells or neurons that carry messages between your brain and your muscles. After the initial polio infection, healthy neurons sprout new branches to take over for the neurons that were damaged. It is thought that these large neurons can deteriorate or weaken over time, which leads to post-polio symptoms.

### How is Post-Polio Syndrome diagnosed?

Post-polio syndrome is a clinical diagnosis made by your physician based on medical history and physical exam.

- History of polio infection.
- Long period of recovery with no change in symptoms – typically 15 years or more.
- New, gradual onset muscle weakness and fatigue.
- Symptoms present for at least one year.
- Exclusion of other possible causes.

Diagnostic tests that may be performed include imaging of brain and spinal cord, electromyography (EMG) and nerve conduction studies, blood tests, and muscle biopsy.

### How is Post-Polio Syndrome treated?

There is currently no cure for PPS. However, there are treatment options to help manage symptoms. It is recommended to establish care with a physician who specializes in treating PPS or neuromuscular diseases. A team approach to treatment including neurology, physiatry (PM&R), pulmonology, physical/occupational/speech therapy, psychology, pain management, and social work is beneficial.

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## How can physical therapy help?

Physical therapy can help maintain independence and quality of life.

- Education on energy conservation and activity modifications to manage fatigue.
- Recommendations on equipment including assistive devices, powered mobility, braces, and adaptive equipment.
- Develop individualized strengthening and aerobic exercise programs.

For more information on exercise with PPS, please refer to the “Exercise and Post-Polio Syndrome” Fact Sheet.

## Resources:

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