

Post Polio Syndrome (PPS)

Post-polio syndrome (PPS, or post-poliomyelitis syndrome or post-polio sequelae) is a condition that affects approximately 25–50% of people who have previously survived an acute attack of poliomyelitis – a viral infection of the nervous system – after the initial infection. Typically the symptoms appear 15–30 years after recovery from the original paralytic attack, at an age of 35 to 60. Symptoms include acute or increased muscular weakness, pain in the muscles, and fatigue. The same symptoms may also occur years after a nonparalytic polio (NPP) infection.

The precise mechanism that causes PPS is unknown. It shares many features with chronic fatigue syndrome, but unlike that disorder, it tends to be progressive, and can cause loss of muscle strength. Treatment is primarily limited to adequate rest, conservation of available energy, and supportive measures, such as leg braces and energy-saving devices such as powered wheelchairs, analgesia (pain relief) and sleep aids.

	Active	Passive	Assisted active
New muscle weakness	★	★	★
Overwhelming fatigue		★	★
Muscle and joint pain		★	★
Sleep disorders	★		
Breathing difficulties	★	★	★

Exercise is safe and effective when carefully prescribed and monitored by experienced health professionals. Exercise is more likely to benefit those muscle groups that were least affected by polio. Cardiopulmonary endurance training is usually more effective than strengthening exercises, especially when activities are paced to allow for frequent breaks and strategies are used to conserve energy. Heavy or intense resistive exercise and weight-lifting using polio-affected muscles may be counterproductive, as this can further weaken rather than strengthen these muscles.

Exercise with APT can help to reduce the damage caused by PPS.