

# Tropical Spastic Paraparesis

National Institute of Neurological Disorders and Stroke (NINDS)

## Source

*National Institute of Neurological Disorders and Stroke (NINDS). [Tropical Spastic Paraparesis Information Page](#).*

For several decades the term “tropical spastic paraparesis” (TSP) has been used to describe a chronic and progressive disease of the nervous system that affects adults living in equatorial areas of the world and causes progressive weakness, stiff muscles, muscle spasms, sensory disturbance, and sphincter dysfunction. The cause of TSP was obscure until the mid-1980s, when an important association was established between the human retrovirus — human T-cell lymphotropic virus type 1 (also known as HTLV-1) — and TSP. TSP is now called HTLV-1 associated myelopathy/ tropical spastic paraparesis or HAM/TSP. The HTLV-1 retrovirus is thought to cause at least 80 percent of the cases of HAM/TSP by impairing the immune system. In addition to neurological symptoms of weakness and muscle stiffness or spasms, in rare cases individuals with HAM/TSP also exhibit uveitis (inflammation of the uveal tract of the eye), arthritis (inflammation of one or more joints), pulmonary lymphocytic alveolitis (inflammation of the lung), polymyositis (an inflammatory muscle disease), keratoconjunctivitis sicca (persistent dryness of the cornea and conjunctiva), and infectious dermatitis (inflammation of the skin). The other serious complication of HTLV-1 infection is the development of adult T-cell leukemia or lymphoma. Nervous system and blood-related complications occur only in a very small proportion of infected individuals, while most remain largely without symptoms throughout their lives. The HTLV-1 virus is transmitted person-to-person via infected cells: breast-feeding by mothers who are seropositive (in other words, have high levels of virus antibodies in their blood), sharing infected needles during intravenous drug use, or having sexual relations with a seropositive partner. Less than 2 percent of HTLV-1 seropositive carriers will become HAM/TSP patients.