

Other Retroviruses That May Cause Human Illness

Retroviruses are a family of viruses that are grouped together based on how they are structured and how they replicate within a host. Besides human immunodeficiency virus (HIV), the virus that causes AIDS, there are two other retroviruses that can cause human illness. One is called human T-lymphotropic virus type 1 (HTLV-1) and the other is called human T-lymphotropic virus type 2 (HTLV-II). Both of these viruses are transmitted between people through sexual contact, infected blood or tissue exposure, or during pregnancy or childbirth from an infected mother to her child.

Human T-lymphotropic Viruses Types 1 and 2 Facts

Human T-lymphotropic virus type 1 (HTLV-I) causes adult T-cell leukemia in about 2.5% of those persons infected with the virus. The time between acquiring the infection with HTLV-1 and developing disease is thought to be 30-50 years. HTLV-1 also can cause a neurological disease called HTLV-1-associated myelopathy/tropical spastic paraparesis in about 5% of those infected. This is an illness that affects the spinal cord and white matter of the central nervous system. Manifestations include difficulty walking and weakness and stiffness of the lower extremities more than the upper extremities. Bowel and bladder control may be lost. A number of other disorders have been associated with HTLV-1 including inflammation of the joints or eyes. HTLV-I is endemic in Japan, the Caribbean, New Guinea and parts of Central Africa. Prevalence is highest in southwest Japan. It is not common in the United States.

Human T-lymphotropic virus type 2 (HTLV-II) may cause neurodegenerative disease such as myelopathy, and it may be associated with hematological malignancies but the association between the virus and these diseases is weak. The virus is endemic in Native Americans in South, Central, and North America.

Enzyme immunoassay screening of serum, with confirmation by type specific western blot, immunofluorescent assay or polymerase chain reaction can be used to determine carrier status and help in confirmation of either HTLV-I or HTLV-II disease. Specific pathological conditions must be present for disease diagnosis.

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http://www.mnaidsproject.org/Services/map_aidline.html

CDC National STD and AIDS Hotlines
1-800-227-8922 or 1-800-342-2437
1-800-243-7889 TTY
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www.ashastd.org