



# I NEED TO KNOW ABOUT HTLV

## What is HTLV?

HTLV is an abbreviation for Human T-lymphotropicvirus. It is called this because the virus infects a type of white blood cell called a T-cell or T-lymphocyte, which are important in fighting infections. HTLV is a retrovirus. This means that after infecting a cell, it inserts its own genetic blueprint, turning the cell into a 'factory' to produce copies of itself.

There are two types; HTLV-I and HTLV-II. HTLV-I infected humans for thousands of years. However, less is known about HTLV-II. HTLV-III was the original name for HIV, the virus that causes AIDS, but is no longer used.

## Where in the world is it found?

HTLV-I is found in Southern Japan, the Caribbean, South America, Central and Southern Africa, the Middle East, Papua New Guinea, Solomon Islands, Vanuatu and Central Australia. It is estimated that up to 20 million people worldwide are infected with this virus.

## What happens when someone is infected with HTLV?

The majority of people have no symptoms and remain well. However, approximately 5% of individuals infected with HTLV-I can develop adult T-cell leukaemia/lymphoma (ATL) or HTLV-I associated myelopathy/tropical spastic paraparesis (HAM/TSP). ATL is an aggressive blood cancer which usually presents in later life, generally when people are in their sixties. HAM/TSP is a condition that affects the spinal cord, resulting in leg weakness and difficulty walking.

## How is it spread?

The virus can be spread by breast feeding, sharing needles, sexual intercourse and transfusion of contaminated cellular blood products.

## How does the Blood Service prevent the transmission of HTLV-I/II?

All blood donations used for the production of fresh blood components are screened for HTLV-I/II antibodies. Leucodepletion and specialised storage techniques further decrease the possibility of the virus being present in transfused blood.

## What happens if the test is positive?

If the test is found to be positive, the donor is contacted and an appointment is made with a Blood Service medical officer for counselling and collection of a repeat blood sample, including a test for HTLV-I/II DNA. The donor is notified regarding the repeat result and the donor's GP is also notified. If repeat testing confirms the positive result, referral to an infectious diseases physician is recommended. The donor is also counselled regarding prevention of spread of the virus, which includes condom use and advising women to bottle feed rather than breastfeed. The donor is also advised that he/she will be unable to donate blood, bone marrow, semen and organs in the future.

## What is the treatment for HTLV?

There are only limited studies for the specific use of antiviral agents for HTLV infection. Treatment is not indicated for individuals without symptoms or associated disease. Management is limited to the early diagnosis of associated conditions and to the prevention of transmission of the virus to others.

## BLOOD FACT

HTLV-I is prevalent among the Australian Aboriginal population particularly in Central Australia.