HIV (human immunodeficiency virus) infects and destroys the white blood cells (called CD4+ T-lymphocytes or CD4 T-cells) of the body's immune system [1]. Thus, HIV reduces the ability of the body's immune system to respond to infection, increasing susceptibility to opportunistic infections and some types of cancer.

HIV is transmitted from person to person through the exchange of blood and bodily fluids [2]. Transmission of HIV in Australia occurs primarily through sexual contact between men. The virus can be transmitted also through sexual contacts between men and women, by sharing needles and/or syringes (primarily for drug injection) with someone who is infected, or, less commonly (and now very rarely in countries where blood is screened for HIV antibodies), through transfusions of infected blood or blood clotting factors. Babies born to HIV-infected women may become infected before or during birth or through breast-feeding after birth.

Once the virus enters the body it replicates rapidly in lymph tissue [3]. Not all people develop symptoms after infection, but those who do may develop signs from approximately 10 days to several weeks after infection. General practitioners are often the first point of call for patients with HIV symptoms (such as headache, malaise and rash which may mimic other flu-like illnesses). There are distinguishing features of HIV infection that can be determined by good history-taking (including assessment of risk-taking behaviour), and relevant clinical examination. HIV is primarily detected by testing a person's blood for the presence of antibodies to the virus, but tests may be negative for up to three weeks after the primary HIV infection. The virus can cause specific diseases of its own and, at later stages, when the body's resistance is weakened, AIDS (acquired immune deficiency syndrome) can occur. With early diagnosis and treatment with antiviral agents the long-term course
of the disease can be altered significantly.

Australia has so far prevented the uncontrolled spread of HIV among its population and the number of cases of HIV and AIDS cases in Australia are among the lowest in the world. Current data on HIV/AIDS in Australia comes mainly from the national surveillance of HIV/AIDS by the National Centre in HIV Epidemiology and Clinical Research (NCHECR). In Australia, the cumulative number of HIV diagnoses by the end of 2002 was estimated to be 19,674 with an estimated 13,120 people living with HIV/AIDS infection [4]. To 31 December 2002 (after adjusting for reporting delay), there have been 9,083 AIDS cases and 6,272 deaths following AIDS. In Australia, more than 85% of cases of newly acquired HIV infection diagnosed in 1998-2002 were the result of sexual contact between men [4].

The immune system is chronically damaged in AIDS and a person may develop opportunistic infections (such as tuberculosis, pneumocystis carinii pneumonia (PCP) and cryptococcal meningitis) or malignancies (such as the commonly found cancer, Kaposi’s sarcoma) [1].

References
The Australian Indigenous HealthInfoNet is an innovative Internet resource that contributes to ‘closing the gap’ in health between Indigenous and other Australians by informing practice and policy in Indigenous health.

Two concepts underpin the HealthInfoNet’s work. The first is evidence-informed decision-making, whereby practitioners and policy-makers have access to the best available research and other information. This concept is linked with that of translational research (TR), which involves making research and other information available in a form that has immediate, practical utility. Implementation of these two concepts involves synthesis, exchange and ethical application of knowledge through ongoing interaction with key stakeholders.

The HealthInfoNet’s work in TR at a population-health level, in which it is at the forefront internationally, addresses the knowledge needs of a wide range of potential users, including policy-makers, health service providers, program managers, clinicians, Indigenous health workers, and other health professionals. The HealthInfoNet also provides easy-to-read and summarised material for students and the general community.

The HealthInfoNet encourages and supports information-sharing among practitioners, policy-makers and others working to improve Indigenous health – its free on line yarning places enable people across the country to share information, knowledge and experience. The HealthInfoNet is funded mainly by the Australian Department of Health and Ageing. Its award-winning web resource (www.healthinfonet.ecu.edu.au) is free and available to everyone.