

# HIV Testing

**Author:** Kirsty Smith (Coordinator Tri-state Sexual Health Project)

**Topic Reviewers:** Dr Steven Skov (AIDS-STD unit RDH); Ivor Alexander (RAN, Nhulunbuy CDC)

## Overview

Overall, rates of HIV and AIDS diagnoses in Indigenous Australians are similar to non-Indigenous rates. Epidemiological data demonstrates that HIV exposure categories differ between Indigenous and non-Indigenous HIV infections. There is a higher proportion of heterosexually acquired cases of HIV infection among Indigenous cases compared with national rates. There is also a higher proportion of HIV infection of Indigenous women compared with non-Indigenous women (25% compared with 7% for non-Indigenous cases.<sup>1,2</sup> Only 50% of Indigenous HIV infections are attributed to male homosexual contact.

It is well documented that STIs facilitate the transmission and acquisition of HIV infection.<sup>3</sup>

In view of the hyperendemic STI rates in Indigenous populations of Central Australia and the Top End,<sup>1</sup> the potential for an HIV epidemic in the region remains high. Common reproductive tract infections in this region include gonorrhoea, chlamydia, trichomonas, bacterial vaginosis, syphilis and donovanosis. Research performed in a comparable high STI setting in Africa found that 29.5% of all HIV transmitted was attributable to reproductive tract infections.<sup>4</sup>

Testing for HIV has been available in Australia since October 1984. At that time, AIDS was associated with high morbidity and mortality and an HIV diagnosis was highly stigmatised due to associations with marginalised groups and death. National guidelines for pre-test counselling were produced by a Commonwealth working party in 1992<sup>5</sup> with the aim of optimising the information given, obtaining informed consent and preparing the client to deal with the result, whether positive or negative.

In the last 10 years, advances in HIV treatments have significantly reduced rates of AIDS notifications and AIDS-related deaths,<sup>1</sup> due to improved health and survival for people living with HIV. Despite these advances, HIV remains a stigmatised condition that warrants clear testing guidelines.

## Barriers to testing

The promotion of pre-test counselling for HIV helped ensure a standard of education and training for health care professionals working in the field. Unfortunately, it also created a mystique around HIV testing which left many practitioners feeling inadequate to offer testing as they felt they lacked the 'counselling skills' required. A study of the uptake of HIV testing in six clinics in remote Aboriginal communities of Central Australia<sup>6</sup> attributed the low level of HIV testing to the following:

- lack of policies and procedures to guide staff on the task of offering HIV tests
- lack of clear policy, which contributed to staff misconceptions, which discouraged them from offering testing and providing pre-test information
- lack of organisational guidelines if an individual did test positive
- difficulties in maintaining confidentiality in small communities

Audits of health services in Central Australia and the Top End of the NT conducted by the Tristate Project and the THS AIDS/STD Unit respectively in 2000, also demonstrated that a low level of HIV testing was occurring. Of particular concern was the low number of tests being offered to people with an STI and pregnant women. Reasons given by non-Aboriginal practitioners for not offering tests included lack of counselling skills, language barriers, lack of time, cultural sensitivities, and lack of confidence for dealing with a positive result.

The Australian National Council on AIDS and Related Diseases (ANCARD) HIV Testing Policy<sup>7</sup> recommends that the terms 'HIV test discussion' and 'post-test counselling' should replace pre- and post-test counselling to describe the counselling process. According to the policy:

. . . this change in term is not in any way to diminish the role of this discussion, but rather to acknowledge the increasing complexity that this discussion may take on. Further the complexity of discussion will vary from person to person depending on their risk factors. In definitional terms, this allows for 'counselling' to be provided after the test and will include the management and continuing needs of the infected person.

In the NT we have adopted the term 'pre-test information' in an attempt to reduce clinician anxiety about pre-test counselling and to normalise HIV testing.

### **Confidentiality**

Systems to ensure confidentiality are crucial in the provision of HIV testing, particularly in small communities.<sup>8</sup> Currently most health services in the region have developed coding systems and systems for filing HIV results, to ensure greater confidentiality around testing. Some health services have developed policies for dealing with HIV positive results.<sup>9,10</sup> All health services need to consider and document this process and ensure staff are aware of the policy and protocol for testing and for dealing with results either positive or negative.

### **HIV pre-test information**

Objectives of pre-test information<sup>11</sup>:

- To provide the individual with sufficient information about the implications of a positive or negative result
- To enable informed decision-making about testing
- To communicate the health benefits of testing
- To educate patients about maintaining and reducing subsequent infection risk
- To prepare for a possible positive diagnosis

There are a number of references<sup>7,12,13</sup> which outline HIV pre-test information. According to the ANCARD HIV Testing policy,<sup>5</sup> pre-test information 'should provide accurate information about safe practices that is appropriate to the person's gender, culture, behaviour and language.' Nganampa Health Council has developed audio cassettes in Pitjantjatjara to provide HIV pre-test information for use in clinical consultations where an HIV test is offered. Other health services (NT Department of Health and Community Services, Congress Alukura, Ngaanyatjarra Health Service) have produced videos in language and pictorial storybooks for use in clinical consultations or with groups.

Clearly there are cultural sensitivities and language issues involved in STI and HIV testing. For the purposes of the protocol, and with the aim of increasing the offering and uptake of HIV testing, a checklist has been avoided in this edition as it is felt that this may deter practitioners from offering a test due to time constraints or seeming too hard. Instead, the broad and relevant issues to be discussed when offering an HIV test are provided, and practitioners are encouraged to develop their own style for discussing HIV and tailoring the information discussed, language and terminology used, to the needs of the client.<sup>14</sup>

Pre-test discussion should include information about:

- HIV and how it is transmitted
- risk assessment
- what a negative and positive test result mean
- the window period (see below)
- ways of maintaining confidentiality around testing
- how and when to get results
- health benefits of knowing a person is positive
- how to prevent transmission of HIV

### **The window period**

The ELISA test will usually begin to detect antibodies from two weeks to two months after infection. For practical purposes, if the result remains negative after three months after the exposure, infection is extremely unlikely to have occurred.

An attempt should be made to ascertain when the most recent behaviour occurred. Re-testing can then be done if it is possible that the first test was performed before a sufficient quantity of antibody was generated to produce a positive result. This is the 'window period' – the interval between infection and the moment when the ELISA result becomes positive.<sup>15</sup>

## **Indications for HIV testing**

### **1. Presence of an STI**

All persons with an STI should be offered an HIV test. There is a significantly increased risk of acquiring and transmitting HIV in the presence of another STI. There is also a medico-legal precedent that a practitioner may be found negligent if they fail to offer an HIV test to a person with an STI.<sup>15</sup> If the person refuses a test, this should be documented in their case notes.

## **2. Exposure to the blood or body fluids of a person whose infection status is positive or unknown**

This may include reuse of injecting equipment, biohazard injuries, ceremonial practises that involve blood, unprotected sex.

## **3. Signs or symptoms of HIV or immunosuppression**

Seroconversion illness

Clinical manifestations of seroconversion illness of HIV infection which should prompt HIV testing include the following:

### **General**

Fever  
Pharyngitis  
Lymphadenopathy  
Arthralgia  
Myalgia  
Lethargy/ malaise  
Anorexia/ weight loss

### **Neurological**

Headache/retro-orbital pain  
Meningoencephalitis  
Peripheral neuropathy  
Radiculopathy  
Brachial neuritis  
Guillain-Barre syndrome  
Cognitive/affective impairment

### **Dermatological**

Erythematous  
maculopapular rash  
Roseola-like rash  
Diffuse urticaria  
Mucocutaneous ulceration  
Desquamation  
Alopecia

### **Gastrointestinal**

Oral/ oropharyngeal  
candidiasis  
Nausea/vomiting  
Diarrhoea

### **Respiratory**

Cough

Not all patients develop all features: about 80% of patients will have an illness usually lasting about 10-14 days.<sup>16</sup>

### **Intermediate immune deficiency**

Intermediate immune deficiency lasts, on average, about five years. Most people maintain full activity and good health, punctuated by minor medical problems until late in the period. The immune system gradually loses its ability to function normally at the skin and mucosal surfaces, while usually maintaining the ability to prevent significant systemic infection.<sup>15</sup>

HIV testing should be initiated for any infection which looks unusual, is worse than usual, lasts longer than usual, doesn't get better with usual treatment or keeps coming back, for example:

- thrush in the mouth of children or adults
- herpes (oral or genital) if very severe or occurring often
- shingles
- unusual or chronic skin rashes
- chronic diarrhoea in an adult for more than one month
- unexplained weight loss in an adult (more than 10% of baseline weight)
- night sweats or recurrent fevers (lasting more than one month)
- generalised raised lymph nodes lasting three months or more
- TB
- low white blood cells or platelets

- any neurological symptoms

#### **4. Risk factors**

Risk factors in the patient history such as unprotected sex, men who have sex with men, sharing of injecting equipment, sexual partner of someone from a high-risk group.

#### **5. Pregnant women**

With the appropriate intervention, perinatal transmission of HIV is now almost entirely preventable. Antiretroviral prophylaxis before, during and after birth, caesarean delivery and bottle feeding can together reduce the rate of transmission from around 30% to 2% or even lower.<sup>17</sup> These life saving interventions can only be applied, however, if the woman's HIV status is known. HIV risk assessment (without testing) for women in Australia is an insensitive process as a significant proportion of women diagnosed with HIV report no risk factors for HIV infection other than sexual contact with a man of unknown status.<sup>16</sup> Of those children born with HIV in Australia, most of the women were unaware of their HIV positive status. Consequently, in March 1998, the Royal Australian and New Zealand College of Obstetricians and Gynaecologists issued its formal policy, which recommends screening of all pregnant women for HIV as a standard of care.<sup>18</sup> It has been the official policy of the DHCS since 1994 to recommend HIV testing to all pregnant women, regardless of risk assessment.

#### **6. On patient request**

HIV screening is not routinely indicated as part of an adult health check, however, it should be done if requested.

#### **Summary**

There are hyperendemic rates of sexually transmitted infections in the CARPA region, thus the potential for an HIV epidemic is very real. In view of the considerable advances in HIV treatments available, and to normalise the process of HIV testing, emphasis on extensive pre-test counselling using checklists has now shifted to pre-test information which can be tailored to the needs of individual clients. Appropriate and widespread testing is encouraged to enable a rapid and effective response to an emerging HIV epidemic.

#### **Key references for further reading**

- Stewart, G. (ed) 1994. Could it be HIV? North Sydney: Australasian Medical Publishing Company Limited.
- Stewart, G. (ed) 1997. Managing HIV. North Sydney: Australasian Medical Publishing Company Limited.

#### **References**

1. National Centre in HIV Epidemiology and Clinical Research, 2000, Annual Surveillance Report 2000, HIV/AIDS, Hepatitis C and Sexually Transmitted Infections in Australia.
2. Guthrie JA, Dore GJ, McDonald AM, Kaldor JM. HIV and AIDS in Aboriginal Torres Strait Islander Australians: 1992 -1998. The National HIV Surveillance Committee. Med J Aust 2000; 172(6):266-9.

3. Cohen MS. Sexually Transmitted diseases enhance HIV transmission: no longer a hypothesis. *Lancet* 1998; 351(Suppl III):5-7.
4. Erbeliding, E.J. Preventing the Sexual Transmission of HIV. [http://www.hopkins-aids.edu/geneva/hilites\\_erb\\_hivstd.html#proj](http://www.hopkins-aids.edu/geneva/hilites_erb_hivstd.html#proj)
5. Department of Health, Housing and Community Services. National Counselling Guidelines. Canberra: Australian Government Publishing Service, 1992.
6. Miller, P & Torzillo P. Private business: the uptake of confidential HIV testing in remote Aboriginal communities on the Anangu Pitjantjatjara Lands. *AustNZJPublic Health* 1998 Oct; 22(6):700-3.
7. Australian National Council on AIDS and related Diseases, Intergovernmental Committee on AIDS and Related Diseases, 1998. HIV testing policy. Canberra: Commonwealth Department of Health and Aged Care, 1998; 18.
8. Skov S, Bowden F, McCaul P, Thompson J & Scrimgeour D. HIV and isolated Aboriginal communities. *Med J Aust* 1996; 165:41-2.
9. Miller PJ. Testing for HIV: an information manual for clinic doctors and nurses on the Anangu Pitjantjatjara Lands. Alice Springs: Nganampa Health Council, 1994.
10. Smith KS 1996. HIV Testing Manual for Remote Health Services. Alice Springs: Territory Health Services.
11. Australasian Society for HIV Medicine. Could it be HIV? 2nd ed. North Sydney: Australasian Medical Publishing Company Limited, 2001.
12. Stewart G (Ed). Could it be HIV? North Sydney: Australasian Medical Publishing Company Limited, 1994.
13. Australian National Council on AIDS, Hepatitis C and Related Diseases, Commonwealth Department of Health and Aged Care. The Management of HIV/AIDS. A resource guide for Indigenous primary health care organisations. Canberra: Commonwealth of Australia, 2000.
14. Territory Health Services. Draft Position paper on HIV testing in the NT, Darwin: THS, 2000.
15. McMurchie M, Puls D, Nisselle P, Kanwar A. Legal responsibilities in: HIV/Viral hepatitis: a guide for primary care. Dore G et al. (eds). Canberra: Australasian Society for HIV Medicine, 2001.
16. Stewart G (Ed). Managing HIV. North Sydney: Australasian Medical Publishing Company Limited, 1997.
17. Ziegler JB. Antenatal screening for HIV in Australia: time to revise policies? *Med J Aust* 1999; 171:201-3.
18. Royal Australian and New Zealand College of Obstetricians and Gynaecologists. Screening in pregnancy. Statement No. 2.2. Melbourne: RANZCOG, 1998.