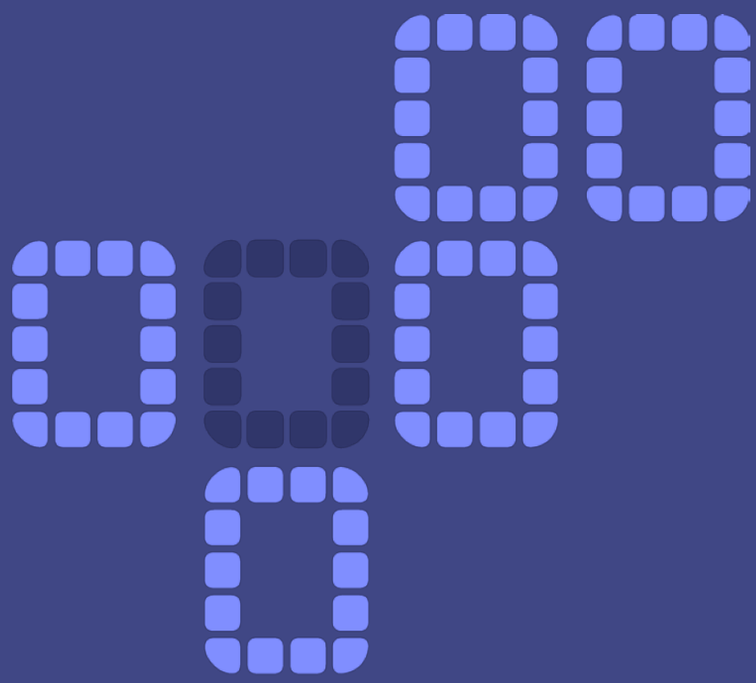
Government of **Western Australia**
Department of **Health**
Public Health

Evaluation of the Western Australian Sexual Health and Blood-borne Virus Action Plans and Aboriginal Sexual Health Strategy 2006 to 2008



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Evaluation of the Western Australian:

Sexually Transmitted Infection Action Plan
HIV/AIDS Action Plan
Hepatitis C Action Plan
Aboriginal Sexual Health Strategy

Submitted by

Centre for Population Health

Macfarlane Burnet Institute for Medical Research and Public Health

Burnet Institute
Working towards a healthy world

Contributors and Editors

Ms Jane Goller, Project Manager and Researcher, Centre for Population Health, Burnet Institute
Ms Rebecca Winter, Researcher, Centre for Population Health, Burnet Institute
Assoc Professor Margaret Hellard, Technical Advisor, Centre for Population Health, Burnet Institute
Dr Campbell Aitken, Technical Advisor, Centre for Population Health, Burnet Institute
Ms Sandra Downing, Researcher, Centre for Population Health, Burnet Institute
Ms Rachel Sacks-Davies, Research Assistant, Centre for Population Health, Burnet Institute

Edited by the Communicable Disease Control Directorate, Department of Health

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Contact Details

Communicable Disease Control Directorate

Department of Health

PO Box 8172

Perth Business Centre

Western Australia, 6849

Telephone (08) 9388 4999

Facsimile (08) 9388 4877

www.public.health.wa.gov.au

BURNET INSTITUTE EVALUATION TEAM

- **Ms Jane Goller**, Project Manager and Researcher, Centre for Population Health, Burnet Institute
- **Ms Rebecca Winter**, Researcher, Centre for Population Health, Burnet Institute
- **Assoc Professor Margaret Hellard**, Technical Advisor, Centre for Population Health, Burnet Institute
- **Dr Campbell Aitken**, Technical Advisor, Centre for Population Health, Burnet Institute
- **Ms Sandra Downing,** Researcher, Centre for Population Health, Burnet Institute
- **Ms Rachel Sacks-Davies**, Research Assistant, Centre for Population Health, Burnet Institute

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ABBREVIATIONS

ACCHS	Aboriginal Community Controlled Health Services
ABS	Australian Bureau of Statistics
AHCWA	Aboriginal Health Council of WA
AIDS	Acquired Immune Deficiency Syndrome
BBV	Blood Borne Virus
CDCD	Communicable Disease Control Directorate, WA
DoCS	Department of Corrective Services, WA
DoH	Department of Health (WA)
FPWA	Family Planning WA Sexual Health Services
GCPS	Gay Community Periodic Survey
HCV	Hepatitis C Virus
HCWA	Hepatitis Council of Western Australia
HIV	Human Immunodeficiency Virus
LGV	Lymphogranuloma venereum
MBS	Medical Benefits Scheme
MSM	Men who have sex with men
NIASHS	National Indigenous Australians' Sexual Health Strategy
NCHECR	National Centre in HIV Epidemiology and Clinical Research
NCHSR	National Centre for HIV Social Research
NRL	National Reference Laboratory
NSP	Needle and Syringe Program
OATSIH	Office for Aboriginal and Torres Strait Islander Health
PLWHA	People living with HIV/AIDS
PHOFA	Public Health Outcome Funding Agreement
RFQ	Request for quotation
SHBBVP	Sexual Health and Blood-borne Virus Program, WA
SLA	Statistical Local Area
SOPV	Sex on Premises Venue
STI	Sexually Transmitted Infection
SWOPWA	Street Worker Outreach Project WA
WA	Western Australia
WAAC	Western Australian AIDS Council
WACHAS	WA Committee for HIV/AIDS and STIs
WACHS	WA Country Health Services
WAISHAC	WA Indigenous Sexual Health Advisory Committee
WANADA	Western Australian Network of Alcohol and other Drug Agencies
WASUA	WA Substance Users' Association
WAVHC	WA Viral Hepatitis committee

EXECUTIVE SUMMARY

Background

The Western Australian (WA) Department of Health's (DoH) public health response to HIV/AIDS, sexually transmitted infections (STIs) and hepatitis C in WA includes the:

- WA Sexually Transmitted Infections (STI) Action Plan 2006-2008[1]
- WA HIV/AIDS Action Plan 2006-2008[2]
- WA Hepatitis C Action Plan 2006-2008[3] (Action Plans)
- WA Aboriginal Sexual Health Strategy 2005-2008[4] (Strategy)

The Action Plans were developed by the WA Sexual Health and Blood-borne Virus Program (SHBBVP) of the Communicable Disease Control Directorate (CDCD) through wide stakeholder consultation and to complement National Strategies. Primary objectives are to:

- Reduce transmission and improve clinical management of STIs and BBVs
- Minimise the personal and social impacts of STIs and BBVs, and
- Develop and strengthen links with other related National and WA strategies and action plans.

The WA Aboriginal Sexual Health Strategy 2005-2008 is the first of its kind in WA and was developed in response to recognition by the WA Indigenous Sexual Health Advisory Committee (WAISHAC) of the need for a better coordinated population health response to the high STI rates in Aboriginal people in WA. The Strategy complements the *National Aboriginal and Torres Strait Islander Sexual Health and Blood-borne Virus Strategy 2005-2008* and its development included state-wide consultation. This consultation included the opportunity to comment on successive drafts of the strategy. The strategy's main aims are to:

- Improve sexual health of Aboriginal people living in WA, including reducing STI and HIV transmission and the number of unwanted pregnancies
- Reduce the burden of disease of STIs and HIV on the WA Aboriginal population
- Reduce the social stigma and shame associated with HIV and STIs within the Aboriginal community
- Increase involvement of Aboriginal people in the design and implementation of sexual health services

The SHBBVP has overall responsibility for the implementation of the Plans and Strategy. It is advised by three committees which operate alongside but external to government structures. The WA Committee on HIV/AIDS and Sexually Transmitted Infections (WACHAS), the WA Indigenous Sexual Health Advisory Committee (WAISHAC), and the WA Viral Hepatitis Committee (WAVHC) are composed of a mix of key experts including government and non-government personnel.

Evaluation Objectives

The Burnet Institute was engaged to conduct the evaluation on behalf of the SHBBVP with the following objectives guiding the evaluation:

1. Assess the impact of the Strategy and Action Plans on STI, HIV and hepatitis C testing rates and examine aggregated surveillance data in the context of testing data
2. Assess the extent to which recommended actions and guiding principles have been implemented or adopted, specifically with relation to the priority populations and priority action areas within the Strategy and each of the Action Plans
3. Assess the appropriateness of the recommended actions and guiding principles to the current context
4. Identify barriers to implementation of STI and BBV prevention and control interventions.
5. Identify new and/or emerging priority areas or target populations.

Methodology

The evaluation was informed by an Advisory Group consisting of members of WACHAS, WAISHAC, and WAVHC and used the following methodology:

- Qualitative analysis of stakeholder interviews
- Quantitative and qualitative analysis of internet survey data
- Quantitative analysis of chlamydia, hepatitis C and HIV testing data for WA,

- Review of existing collated data and documents.

Results from each of the data were examined and interpreted together in order to assess progress against the evaluation objectives and to provide advice to the DoH regarding:

- Success or otherwise of the policy and planning processes guiding public health responses to the STI, HIV, and hepatitis C epidemics in WA, and
- Development of future policy directions.

Results

BBV and STI epidemiology and testing in WA

Since the Action Plans and Strategy were implemented, rates of hepatitis C notifications have remained stable with a slight decrease in the proportion of identified newly acquired cases. Notifications rates of HIV and STIs (chlamydia, gonorrhoea and syphilis) have increased and an increasing proportion of HIV infection acquired by heterosexual transmission has been observed. Chlamydia infection is most commonly notified in young people aged 15 to 24 years. The rate of HIV, STIs and hepatitis C notifications continue to be higher in Aboriginal people than in the non-Aboriginal population and gonorrhoea infection is largely confined to young Aboriginal people.

Testing for chlamydia has increased across WA with the greatest increases observed in the Kimberley, Pilbara, and Goldfields. This increase is likely to be a factor in the increase of observed infection. Where data was available, testing for HIV, hepatitis C and other STIs appears to have remained stable across WA, although increases in specific areas or settings have been recorded.

General findings and progress towards evaluation objectives

The Action Plans and Strategy have been well received by the BBV and STI sector and are thought of as a gold standard for policy and practice in WA.

Overall, stakeholders support the Action Plans' underpinning guiding principles and the priorities for action including the priority groups. Many stakeholders commented that the Plans lack clear measurable goals with a timeline and responsibility for implementation. There was also some confusion over who the Plans belonged to (government or the sector).

The Strategy's eight-way model for comprehensive sexual health care is thought to be an excellent framework for planning and delivering services and the guiding principles appropriate.

Development and implementation

For the Action Plans, stakeholders were satisfied with consultation processes for development of the Action Plans. The process of development was reported as having strengthened partnerships and allowed stakeholders to articulate a shared vision and ensure consistency in the WA response to BBVs and STIs.

For the Aboriginal Sexual Health Strategy, instead of a detailed list of recommended actions as in the Action Plan(s), a framework for provision of comprehensive sexual health care is provided. An extensive consultation process informed the Strategy's development and for stakeholders involved, the consultation process was reported to be appropriate. Although the 'eight way' model was generally viewed as an appropriate framework to address the sexual health needs of Aboriginal people and communities in WA some stakeholders suggested greater community level consultation could have occurred and questioned the extent to which enduring Aboriginal ownership had been achieved following development of the Strategy. Without an implementation plan, a few stakeholders considered there was inadequate articulation of how the Strategy should be implemented or success should be measured.

The guiding principles and priority areas of the Action Plans are generally well reflected in activities occurring across WA although some gaps do exist.

HIV Action Plan: The changing landscape of the epidemiology of HIV infection in WA has required a change of emphasis in the implementation of the Plan. Increases in diagnoses arising from heterosexual transmission have been promptly responded to with the development of prevention and education initiatives. Continuing attention to risk amongst men who have sex with men (MSM) and Aboriginal groups is required and has been prioritised. Treatment and care for PLWHA remains an ongoing challenge with limited specialist providers in the state. Expanding the workforce capacity for shared care has received increased attention and should remain a focus. Surveillance activities are continuing to operate well.

HCV Action Plan: Maintaining a stable rate of hepatitis C notifications has been a success story in the WA response to hepatitis C. As an epidemic driven primarily through injecting drug use, most attention and resources are directed in this area and particularly in relation to prevention and education. These initiatives are operating well however equitable access for priority groups could be improved. Workforce development also requires ongoing attention. Efforts towards improving regional access to treatment have resulted in gains such as the employment of nurse clinical specialists and opens doors for building localised shared care.

STI Action Plan: Prevention strategies have responded well to changes in STI epidemiology. Education programmes such as Mooditj is a valuable initiative which could be expanded further. Sex education targeting adolescents through the Growing and Developing Healthy Relationships resource could also be improved. Sexual health teams in the Kimberley, Pilbara, and Goldfields have gone some way to filling a gap in sexual health service provision however access to STI screening and treatment services in regional areas is an ongoing challenge in most areas.

Aboriginal Sexual Health Strategy: The eight-way model for comprehensive sexual health care is well utilised by the sexual health teams operating in the Kimberley, Pilbara, and Goldfields but does not appear to have been employed to a great extent outside of these areas. There are difficulties in giving each of the components adequate attention at a service delivery level which is primarily related to capacity.

Barriers to implementation

Barriers to the implementation of BBV and STI prevention and control interventions range from social, cultural, structural, political, economic, and environmental and are in some cases far-reaching. Frequently identified barriers included:

- Lack of funding associated with implementation of the Action Plans and Strategy outside of core funded community organisations.
- Difficulties in attracting and maintaining an appropriate and qualified workforce particularly in regional and remote areas, and particularly including male Aboriginal personnel.
- Keeping sexual health and BBVs on the agenda is difficult - both politically and at a service delivery level. Ministerial level leadership is lacking particularly with regard to directing cross government work and attention to sexual and blood borne virus concerns
- Current response lacks Aboriginal 'ownership' which influences effective implementation and the ability to form effective partnerships with the Aboriginal community controlled health sector.
- Stigma associated with risk behaviours for BBVs and STIs is a barrier to service access across the board but particularly for Aboriginal people.

Conclusions and recommendations

There are many challenges, some ongoing and some new, in providing a timely response to these epidemics in WA, with many of these challenges unique to the WA context. While these Plans and Strategy have provided a useful framework for action in WA, there are aspects of their development, implementation and monitoring that could be improved. Recommendations aimed at producing an improved and invigorated response to the HIV, hepatitis C and sexually transmitted infections epidemics in WA are provided below.

Recommendation: The process of developing an ongoing response to the HIV, hepatitis C and STI epidemics in WA should:

- Continue to include consultation with major stakeholders and be expanded to include stakeholders at all levels
- Continue to be viewed as a process of engagement that encourages ownership by all stakeholders, in particular Aboriginal people and other communities at heightened risk of or affected by these infections
- Continue to be aligned broadly with the National response but priorities unique to the WA context should be elevated according to their importance to WA
- Include a clear articulation of the roles and responsibilities for monitoring implementation and realistic indicators with measurable targets that are achievable in the lifespan of the Plans / Strategy.

Recommendation: Aboriginal people and communities should continue to be a priority population in the response to HIV, hepatitis C and STIs in WA:

- Access to mainstream services that are relevant to Aboriginal people should be encouraged by the continued inclusion of Aboriginal people as a priority population in the next iterations of each of the mainstream HIV, hepatitis C and STI policy documents
- A specific separate strategy toward reducing the burden of BBVs and STIs in Aboriginal people and communities transmitted via unsafe sexual and injecting behaviours should be developed and include an implementation plan
- Aboriginal organisations and communities should give direction and leadership to the SHBBVP regarding development of both the mainstream response and Aboriginal specific response to BBVs and STIs in the Aboriginal population

Recommendation: An evidence base around the factors driving heterosexual transmission of HIV in WA needs to be developed that will inform prevention interventions toward reducing this mode of transmission

Recommendation: Continue to progress workforce development strategies with an emphasis on:

- Expanding shared care approaches to managing BBV treatment and care for HIV and hepatitis C so that it is provided by GPs and nurses in all regions of WA (metropolitan, rural and remote) and supported by tertiary services. This should be supported by dedicated resources in the tertiary and rural sectors and appropriate remuneration toward shared care providers
- Training and education that supports GPs and nurses to participate in shared care approaches
- Training and education of GPs, nurses, Aboriginal health workers in management of STIs
- Expansion of the role of nurses in management of STIs
- Amendment of the *Poisons Act 1964* to enable the creation of advanced Sexual Health Nurses positions
- Updating and disseminating the Guidelines for Managing Sexually Transmitted Infections following their evaluation
- Expanding training positions for specialists in clinical immunology, sexual health and infectious diseases

Recommendation: The SHBBVP should enhance existing partnerships and develop new ones:

- Strengthen partnerships with the Department of Education towards it being compulsory for sexual health education to be on the school curriculum whilst acknowledging the right for individual families to 'opt out'
- Strengthen partnerships with Department of Corrections toward provision of NSPs in custodial settings
- Strengthen partnerships with Aboriginal Community Controlled Health Services toward addressing workforce issues and supporting services that meet the needs of the Aboriginal community
- Investigate and develop partnerships with industry and the private sector toward conducting research into the factors influencing heterosexual transmission of HIV and developing relevant prevention initiatives
- Continue to work collaboratively with the Infections and Immunology Network toward incorporating relevant aspects of the Models of Care into the public health response to BBVs and STIs ensuring an emphasis on education and prevention, the primary health setting and workforce development outside the tertiary sector

Recommendation: Investigate expansion of BBV and STI surveillance to incorporate denominator and core demographic data that would facilitate improved understanding of trends in notifications and access to services. Potential options are:

- Collection of testing data from laboratories for regions in addition to the STI endemic regions
- Sentinel surveillance at sexual health or other clinical services focusing on high priority groups to monitor testing rates, infection prevalence, and risk factors for infection.
- Collation and analysis of data arising from routine BBV and STI testing in the clinical setting to contribute to sentinel surveillance or monitor other indicators.
- It is also recommended that any system collecting data from the clinical setting is automated as far as practicable to minimise impact on service providers.

Recommendation: Develop a response toward prevention and timely diagnosis of BBVs and STIs in young people. This should involve:

- Peer education and new technologies to provide relevant and accessible prevention education.
- Promotion of chlamydia screening in young people in alignment with current federal initiatives.
- Development of innovative outreach testing and treatment programs that take into account geographic distances.

INTRODUCTION

The Western Australian (WA) Department of Health's (DoH) public health response to HIV/AIDS, sexually transmitted infections (STIs) and hepatitis C in WA over recent years includes development and implementation of the:

- WA Sexually Transmitted Infections (STI) Action Plan 2006-2008[1]
- WA HIV/AIDS Action Plan 2006-2008[2]
- WA Hepatitis C Action Plan 2006-2008[3] (Action Plans)
- WA Aboriginal Sexual Health Strategy 2005-2008[4] (Strategy)

These Action Plans and Strategy were developed by the WA Sexual Health and Blood Borne Virus Program (SHBBVP) of the Communicable Disease Control Directorate (CDCD) through stakeholder consultation and in respect of relevant National Strategies, in particular the:

- National HIV/AIDS Strategy – Revitalising Australia's Response 2005-2008[5]
- National Sexually Transmissable Infections Strategy 2005-2008[6]
- National Hepatitis C Strategy 2005-2008[7]
- National Aboriginal and Torres Strait Islander Sexual Health and Blood Borne Virus Strategy 2005-2008[8]

Responsibility for implementation and review of the Action Plans and Strategy rests with the SHBBVP. In 2007, a mid term review of the Action Plans conducted by the SHBBVP elicited several key priorities for the remaining 12 months of the Action Plans. In consideration that the Action Plans and Strategy are due for renewal in late 2008, the SHBBVP sought submissions early in 2008 for a consultant to conduct an evaluation of the implementation and success of the current Action Plans and Strategy and to provide recommendations about future directions. The Macfarlane Burnet Institute for Medical Research and Public Health (Burnet Institute) was engaged to conduct this evaluation on behalf of the SHBBVP.

Organisational framework

The Sexual Health and Blood-borne Virus Program (SHBBVP) sits within the Communicable Disease Control Directorate (CDCD), which in turn is situated within the Public Health Division of the Western Australian Department of Health. The SHBBVP directs and coordinates the prevention and control of sexually transmitted infections (STIs), human immunodeficiency virus (HIV) and blood-borne viruses (BBVs) for the population of WA with goals to:

- develop and implement state-wide policy
- improve quality of evaluation and information systems (data collection, analysis and dissemination)
- build capacity of the health/non-health workforce
- increase access to prevention and treatment services
- raise the profile of sexual health and blood-borne virus issues

The program uses a partnership approach to work with non-government organisations, affected communities, health operations branches of the Department of Health (e.g. WA Country Health Services, metropolitan area health services, health networks branch), and other government departments (e.g. Department of Aboriginal Affairs, Drug and Alcohol Office, Department of Corrective Services) to influence protective policy and practice. Priorities for action are informed by State and National epidemiological data.

The SHBBVP is composed of two main operational arms – policy and programs. State-wide policy is developed according to the processes described above; in partnership with stakeholders and informed by evidence. Core recurrent funding is administered by the SHBBVP to various community organisations with a mandate to provide specific prevention, education, clinical, surveillance, and workforce development activities. These include for example needle and syringe provision, general practitioner (GP) training and updates on BBVs and STI, and support services for affected communities. Treatment and care related to BBVs and STIs within WA is funded outside the SHBBVP through health operations services of the WA DoH (i.e. WA Country Health Services and Metropolitan Health Services).[9]

The SHBBVP is advised by three committees which operate alongside but external to government structures. The WA Committee on HIV/AIDS and Sexually Transmitted Infections (WACHAS), the WA Indigenous Sexual Health Advisory Committee (WAISHAC), and the WA Viral Hepatitis Committee (WAVHC) are composed of a mix of key experts including government and non-government personnel. Aside from advising government, the committees play an advocacy role and also monitor the implementation of the Action Plans and Strategy (although final responsibility for implementation lies with the SHBBVP). Due largely to the separate historical development of the different committees, their structure and operations are slightly different.

WA Indigenous Sexual Health Advisory Committee

WAISHAC emerged as a result of the development of the National Indigenous Sexual Health and Blood Borne Virus Strategy. The secretariat was originally provided by the Office for Aboriginal and Torres Strait Islander Health (OATSIH) but is now under the administration of the Aboriginal Health Council of WA (AHCWA). Membership is invited and determined by AHCWA in consultation with current committee members and key stakeholders.
The position of Chair is held by a non-government person.

WA Committee on HIV/AIDS and Sexually Transmitted Infections and WA Viral Hepatitis Committee

The secretariat for both WACHAS and WAVHC is the SHBBVP. The committees are a requirement under the Public Health Outcome Funding Agreement (PHOFA), and have been developed at a State level. Membership of the committees is decided by existing members; new members are invited to join where it is observed a gap exists in expertise or a position is vacated. The position of Chair is always held by an external (non-government) person.
The Chair of WACHAS meets with the Director General of Health and the Director of CDCD quarterly.

The Action Plans

Development of the HIV/AIDS, STI and Hepatitis C Action Plans was led by the SHBBVP and these plans provide WA with a framework for state-based action in prevention and control of STIs and BBVs. They were prepared as part of a nationwide move for all States and Territories to develop and implement strategic plans that reflected the guiding principles and priorities of the relevant National Strategies and include priority actions to be implemented at State level to complement National priorities with primary objectives to:

- Reduce transmission and improve clinical management of STIs and BBVs.
- Minimise the personal and social impacts of STIs and BBVs.
- Develop and strengthen links with other related National and WA strategies and action plans.

Wide consultation and collaboration with stakeholders was undertaken in line with the partnership approach taken by the unit in all its policy development. The partnership approach aims to engender shared responsibility in the development and implementation of Plans and Strategies. Accordingly these Action Plans target a broad range of organisations and disciplines in the government and non-government sectors across a wide geographical area in metropolitan and regional Western Australia.

WACHAS and WAVHC acted as reference groups for the development of the Action Plans in their respective disease areas. The consultation process included the convening of forums in Perth to which a general invitation to stakeholders was made. Contributions from attendees informed drafts of the Action Plans which were sent to major stakeholders for comment. After revisions, the Plans were approved by WACHAS (HIV Action Plan and STI Action Plan) and WAVHC (Hepatitis C Action Plan), the Director of the CDCD, and subsequently signed off by the Director General of Health. Following finalisation of the documents they were disseminated widely via mass mail out with a cover letter from the Director of the CDCD.

The Strategy

The WA Aboriginal Sexual Health Strategy 2005-2008 is the first of its kind in WA and was developed in response to recognition by the WA Indigenous Sexual Health Advisory Committee (WAISHAC) of the need for a better coordinated population health response to the high rates of STIs in Aboriginal people in WA. The Strategy complements the *National Aboriginal and Torres Strait Islander Sexual Health and Blood-borne Virus Strategy 2005 – 2008*, and was informed in part by the *Queensland Indigenous Sexual Health Strategy 2003-2006*. Its main aims are to:

- Improve sexual health of Aboriginal people living in WA, including reducing STI and HIV transmission and the number of unwanted pregnancies.
- Reduce the burden of disease of STIs and HIV on the WA Aboriginal population.
- Reduce the social stigma and shame associated with HIV and STIs within the Aboriginal community.
- Increase involvement of Aboriginal people in the design and implementation of sexual health services.

The Aboriginal Sexual Health Strategy is based on the 'Eight Way Model' of comprehensive sexual health care that was first promoted by Nganampa Health Council in the Anangu Pitjantjatjara Lands in South Australia.[10] The eight components of the 'Eight way model'; Planning and Management, Health Promotion and community Education, Data collection and monitoring, Health Hardware, Clinical services, Training, Research and Evaluation form a framework through which the Strategy can be both implemented and monitored.

WAISHAC guided the development of successive drafts of the Strategy and advised on consultation processes. Aboriginal SHBBVP staff conducted an extensive state-wide consultation in nine rural locations and two metropolitan locations, involving almost 200 people and 114 organisations, including representatives from 17 Aboriginal organisations and nine Aboriginal Community Controlled Health Services (ACCHS), and released successive drafts for

comment. After approval from WAISHAC and the Minister for Health, the Strategy was launched in December 2005.

Concurrent with implementation of the Strategy in WA was the execution of a Regional STI Program involving establishment of regional Aboriginal sexual health teams in the Kimberley, Goldfields and Pilbara regions with a view to reducing the very high STI rates in these regions. These teams work closely with regional population health units, ACCHSs and other stakeholders to coordinate and improve existing sexual health services for Aboriginal people. The principles of the Strategy, including partnerships and comprehensive programs, proactive community responses, and primary health care approaches are closely reflected in these roles.

Evaluation of the Action Plans and Strategy

The responsibility for implementation and review of the Action Plan(s) and Strategy rests with the SHBBVP. A mid term review of the Action Plan(s) conducted in mid 2007 led to a number of priorities for the remaining term.

A more comprehensive evaluation of the Actions Plan(s) and incorporating the Strategy was scheduled for late 2008 with the purpose to "*provide advice to the Department on the success or otherwise of the policy and planning processes guiding public health responses to the STI, HIV, and hepatitis C epidemics in Western Australia*" and "*advise on the development of future policy directions".* Toward this evaluation, the evaluation consultant was required to consult with key stakeholders from metropolitan and regional government and non-government organisations that represent high-risk groups or have key responsibility for implementing the Strategy and Action Plans and to use existing epidemiological information to assess the implementation and success of the Action Plans and Strategy.

The Burnet Institute was engaged to conduct the evaluation on behalf of the SHBBVP with the following objectives guiding the evaluation:

1. Assess the impact of the Strategy and Action Plans on STI, HIV and hepatitis C testing rates and examine aggregated surveillance data in the context of testing data.
2. Assess the extent to which recommended actions and guiding principles have been implemented or adopted, specifically with relation to the priority populations and priority action areas within the Strategy and each of the Action Plans.
3. Assess the appropriateness of the recommended actions and guiding principles to the current context.
4. Identify barriers to implementation of STI and BBV prevention and control interventions.
5. Identify new and/or emerging priority areas or target populations.

METHODOLOGY

The methodology for the evaluation consisted of the following components:

- qualitative analysis of stakeholder interviews
- quantitative and qualitative analysis of internet survey data
- quantitative analysis of chlamydia, hepatitis C and HIV testing data for WA, and
- review of existing collated data and documents.

An Advisory Group consisting of representatives from the WA Committee for HIV/AIDS and STIs (WACHAS), the WA Indigenous Sexual Health Advisory Committee (WAISHAC), the WA Viral Hepatitis Committee and the SHBBVP (Appendix 1) provided advice on key WA organisations and stakeholders to interview and survey, methods to promote the internet survey and the general content of the interview schedule and internet survey. An Advisory Group meeting was held in Perth in July 2008, and was attended by three representatives from the Burnet Institute evaluation team.

Interviews with key stakeholders

This component included group and key informant interviews with selected stakeholders. A list of key informants and the interview schedules were generated from the Evaluation objectives, discussions with the SHBBVP, a preliminary document review, and input from the Advisory Group. A list of the organisations and committees consulted with is presented in Appendix 2 and a list of the key questions asked in the interviews is provided in Appendix 3.

The interviews were semi-structured and designed to ascertain views of stakeholders regarding the process of developing the Action Plans and Strategy, the extent that guiding principles have been implemented and that new policies have resulted from the Action Plans and Strategy, barriers and enablers to implementation, strengths and weaknesses of the strategies and priorities for future planning. In recognition of the fact that many stakeholders were more familiar with one Action Plan or Strategy than the others, interviewees were given the option of having the interview focus on the Action Plan or Strategy they considered to best fit their area of expertise and position.
The interview schedule contained generic questions relevant to all the Action Plans and Strategies but allowed discussion of activities, priorities and progress specific to a given Action Plan or Strategy. A total of 48 key stakeholders were invited to participate in an interview via an email or letter that outlined the process of the evaluation, introduced the evaluation team and described the Evaluation methodology with a follow up phone call or email to confirm the interview appointment.

During July and August 2008, interviews were conducted with 40 key stakeholders located across Western Australia, in Perth, Kalgoorlie, Broome, Kununurra and Bunbury. Most interviews were conducted in person, but when this could not be arranged a telephone interview was conducted. In addition, a consultation was held with the Advisory Group members bringing the total number of stakeholders interviewed to 44.

All interviews were taped and transcribed with detailed notes also taken during the interview. Transcriptions were coded for broad themes derived from the interview schedules and evaluation criteria. Interview data were analysed together with data from the internet survey, document review and data collation to provide one of the key inputs against the evaluation criteria.

Internet survey

An internet survey formed the other component of the stakeholder consultation, running over a four week period in September and early October 2008. Through the internet survey, opinion was sought from a larger sample of stakeholders from a broader range of disciplines, but from similar organisations and settings represented in the stakeholder interviews.

The survey design was informed by initial in-depth interviews, a review of relevant documents and consultation with the Advisory Group. The questionnaire consisted of generic questions to elicit information about the organisational context and work roles of respondents and other sets of questions specific to each Action Plan or Strategy to allow for variation in the roles and expertise of respondents. The survey also provided opportunity for response to more than one area of expertise if respondents chose to do so. A mix of closed and short open ended questions were included in the survey to elicit information about awareness of the Action Plan(s) and Strategy, priorities for the future response, progress, barriers and enablers in the areas of HIV/AIDS, STIs, hepatitis C and Aboriginal sexual health and impact of the Action Plan(s) and Strategy. Survey completion took around fifteen minutes.

Participation in the survey was voluntary and response from a range of organisations and disciplines was sought via electronic advertisement in WA GP network news, email invitations and reminders circulated to Advisory Group members, SHBBVP staff, interviewees, WA Sexual Health Network members, and to WA stakeholders who were sent a copy of the Action Plans and Strategy when they were distributed in 2006. All email invitations included a link to the survey website, brief details of the evaluation and an invitation to forward the invitation to colleagues who they considered may have an interest in contributing to the evaluation. In addition, the survey was promoted to WA

delegates at the Australasian Society for HIV Medicine (ASHM) and Australasian Sexual Health Conferences (held in Perth, September 2008) via flyers, handing out paper versions of the questionnaire and locating a computer at the WA Department of Health booth at which delegates could complete the questionnaire. As an incentive to participate in the survey, respondents were offered the option to enter a prize draw following questionnaire completion. A total of 131 valid responses to the internet survey were received.

Document review and data collation

Documents for review were compiled throughout the evaluation and included current relevant National and WA strategies, National and WA epidemiological reports, program reports, minutes and reports from government advisory committees namely (WAVHC, WACHAS, WAISHAC), and relevant research and conference papers. Sourcing of documents was supported by the SHBBVP, Advisory Group and interviewees.

Epidemiological and surveillance reports containing aggregated HIV, hepatitis C and STI (chlamydia, gonorrhoea and syphilis) notifications data for WA and Australia were reviewed to provide a description of the current state of the HIV, hepatitis C and STI epidemics in WA. Aggregated BBV and STI testing data for the remote regions of the Kimberley, Goldfields and Pilbara was also reviewed in these reports. At the time of writing, the most recent completed annual STI and BBV surveillance report from the WA DoH contains data from 2006 and earlier. [11] This report and the 2005[12] and 2004[13] reports were the main information sources for description of the epidemics in WA. Data for 2007 and 2008 were drawn from quarterly surveillance reports,[14] the 2007 National Surveillance report[15] and the WA Communicable Diseases Bulletin, '*Disease-WAtch'*.[16]

BBV and STI testing data

Three aggregated data sets were sourced for the testing data analysis.

1. State-wide hepatitis C and HIV testing data by year was sourced from the National Reference Laboratory (NRL) for 2002 to 2007. Laboratories and the blood bank self report the number of specimens tested for HIV and hepatitis C each year to NRL. The number of specimens reported from the Red Cross Blood Bank were excluded from analysis as these represent screening of blood donations rather than testing in the community or health sector.
2. Medical Benefits Scheme (MBS) chlamydia testing data by age group, sex and month for WA was sourced directly from the Medicare Group Reports website.[17] Data was extracted for two time periods. For the period, January 2002 to October 2005, data was extracted for two item numbers used to identify chlamydia testing (69369 & 69370). For the period June 2007 to May 2008, data was extracted for three item numbers specific to chlamydia testing (69316, 69317 & 69319). There was a period from November 2005 to May 2007 when chlamydia testing was incorporated into more general item numbers with the result that testing specific to chlamydia could not be ascertained. The total number of tests conducted each month in WA was calculated by adding the item number tests together.
3. MBS chlamydia testing data by age group, sex, statistical local area (SLA), month, health region and remoteness area for WA for item numbers 69369 and 69370 between January 2005 and December 2005 and for item numbers 69316, 69317 and 69319 between May 2007 to December 2007. This data was provided by the WA DoH.

Estimated residential population data by age group and sex for each year of interest in WA was sourced directly from the Australian Bureau of Statistics (ABS) website[18] to provide denominator data for calculation of testing rates. Age groups were combined to match the age groups produced in the Medicare reports. SLAs were grouped into health regions and remoteness types. Testing rates per 100,000 population were calculated by sex, age group, quarter (MBS data) and year (NRL data). Linear regression was used to assess whether testing rates had changed over time. For the MBS data that included remoteness and region, the testing rate for a five month period (June to October) in 2005 and 2007 was determined. A two-sample Mann-Whitney test was used to compare whether chlamydia testing rates (MBS data) changed between 2005 and 2007. All analyses were conducted in STATA version 9 with a significance level of 0.05.

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RESULTS

The stakeholder consultation consisted of individual or group interviews with 40 key stakeholders located across WA in Perth, Kalgoorlie, Broome, Kununurra and Bunbury and 131 valid responses to the internet survey. Of the survey respondents, (Appendix 4) 37% worked for a government department, 30% for a non-government organisation, 27% for a health service provider and 6% for an academic organisation; and described their role as involving a range of responsibilities and positions including health education, health promotion, advocacy, policy, research, Aboriginal Health Worker, medical practitioner and nursing. Taken together, the survey respondents' roles and responsibilities covered all population groups of interest in the Action Plans and Strategy and all the health regions of WA.

Results from each of the data sources - the document review, data collation, testing data analysis and stakeholder consultation (interviews and survey) - are examined and interpreted together in order to assess progress against the evaluation objectives and to provide advice to the DoH regarding:

- Success or otherwise of the policy and planning processes guiding public health responses to the STI, HIV, and hepatitis C epidemics in WA, and
- Development of future policy directions.

BBV and STI epidemiology in WA

A summary of the current state of the HIV, hepatitis C and STIs epidemics in WA is provided below with a more detailed description provided in (Appendix 5).

HIV: Between 2000 and 2007, WA - like many other regions in Australia - experienced a steady increase in the annual number of notifications of HIV infection. For the first half of 2008 there were fewer HIV infections notified than for the same period in 2007, but it is too early to know whether this represents any alteration in the recent upward trend. The pattern of exposure and risk groups for HIV infection has altered over time in WA. Since 2006, the proportion of cases with a heterosexual exposure has increased, largely driven by an increase in the proportion of cases acquired overseas from a high prevalence country, in migrants or in others (often males) working or travelling overseas. Although the proportion of cases acquired through male to male sexual intercourse has decreased and the number of new diagnoses in Aboriginal people has remained stable over recent years, both MSM and Aboriginal people remain important population groups for targeted prevention. Advances in treatment for HIV/AIDS have led to an increasing number of people living with HIV/AIDS (PLWHA) in WA with an estimated 995 people living with HIV in WA as of March 2007.

Hepatitis C: Since 2001, the annual number of hepatitis C notifications in WA has remained fairly constant, with unspecified infection representing the majority of notifications and the number of newly acquired cases identified decreasing from 2003 to 2007. Notification rates are higher in males than in females and in individuals aged over 20 years. However, adolescents represent a significant proportion of newly acquired cases. Over the last couple of years, the highest notification rates were in the Kimberley, Great Southern and Midwest regions and although most hepatitis C infection is diagnosed in non-Aboriginal people, notification rates (newly acquired and unspecified infection) in Aboriginal people are higher and appear to be increasing.

STIs: Over the last decade a continuing upward trend in notifications of genital chlamydia and gonorrhoea has been observed in WA. The increase in chlamydia notifications is consistent with increases observed elsewhere in Australia, whereas the continuing increase in gonorrhoea notifications is in contrast to decreases observed nationally in recent years. Chlamydia and gonorrhoea infection in WA are more common in younger people (aged 15 to 24 years) and chlamydia is more common in females and gonorrhoea more common in males. Where Aboriginality is known, chlamydia and gonorrhoea infection rates are higher in Aboriginal people than non-Aboriginal people; gonorrhoea infection rates were 100 times the rate in Aboriginal people to non-Aboriginal people in 2006. Nationally, rates of gonorrhoea are also higher in Aboriginal people than in the non-Aboriginal population. By region, the highest number of chlamydia cases occur in metropolitan areas whereas for gonorrhoea highest number of cases occur in the Kimberley. Notification rates for both infections are highest in the Kimberley, Goldfields and Pilbara regions. The majority of STI notifications in children aged 14 years or younger are in adolescents aged 13 to 14.

Notifications for infectious syphilis in WA show a different pattern over the past decade. From 1999 to 2002, increases in infectious syphilis notifications were driven by an outbreak in the Kimberley before fluctuating and dropping in 2005. From 2006, notifications of infectious syphilis in WA increased sharply, with most cases diagnosed amongst Perth MSM and a smaller increase observed remotely in the Kimberley, Goldfields and Pilbara regions. This year, the syphilis outbreak in WA has been complicated by co-infection of lymphogranuloma venereum (LGV) with eight cases diagnosed, mainly in Perth MSM also infected with HIV and infectious syphilis.

Key Points

Since the Action Plans and Strategy were implemented in 2005 and 2006:

- Notifications rates of HIV and STIs (chlamydia, gonorrhoea and syphilis) have increased
- Notification rates of hepatitis C infection have remained stable
- An increasing proportion of HIV notifications were acquired by heterosexual transmission
- MSM remain an important risk group for HIV and STIs with increasing notifications of HIV and syphilis
- Rates of HIV, STIs and hepatitis C continue to be higher in Aboriginal people living in WA than in the non-Aboriginal population
- Gonorrhoea infection is largely confined to young Aboriginal people
- Chlamydia infection is most commonly notified in young people aged 15 to 24 years

Progress toward evaluation objectives

Objective 1

Assess the impact of the Strategy and Action Plans on STI, HIV and hepatitis C testing rates and examine aggregated surveillance data in the context of testing data

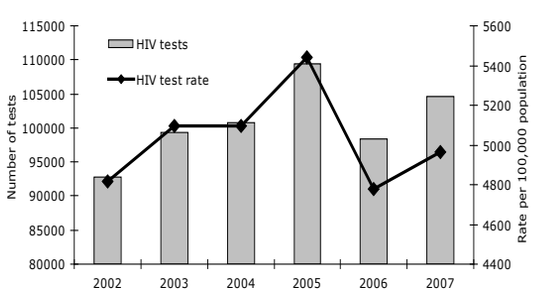
A key objective of the Action Plans and Strategy is to reduce transmission of BBVs and STIs. However, with a limited timeframe since their implementation in 2005 and 2006, changes in HIV, hepatitis C and STI transmission that are reflected in surveillance data are not anticipated to take place during the time-scale of this evaluation. In addition, the extent of diagnoses is dependent on testing for these infections and these trends are derived from passive and enhanced surveillance in which only positive tests or new diagnoses are notified to the DoH. It is therefore difficult to determine whether reported increases in notifications represent increased transmission or detection of previously undiagnosed cases through increased testing.

Testing for these infections forms an essential component of the response to BBVs and STIs in terms of diagnosis, facilitating early intervention, treatment and prevention of transmission and there are actions toward increasing the extent of BBV and STI testing in WA in each of the Action Plans and Strategy. Analysis of testing data enables a measure of the impact of the Plans and Strategy on access to testing and diagnosis and may also assist in understanding notification trends.

HIV testing: Between 2002 and 2007, analysis of HIV testing data from NRL found that the number and rate of HIV tests conducted across WA fluctuated (figure 1).

HIV testing increased by 12% from a crude rate of 4815 tests per 100,000 in 2002 to 5441 tests per 100,000 in 2005, followed by a 14% decrease in 2006 and then increased again by 4% in 2007 to 4963 per 100,000 people. Linear regression shows the testing rate did not change over the six-year period (p=0.9). However, this result should be interpreted with caution as the NRL data relies on laboratories self reporting the number of specimens screened for HIV annually and if some laboratories do not report results in some years, data will be incomplete.

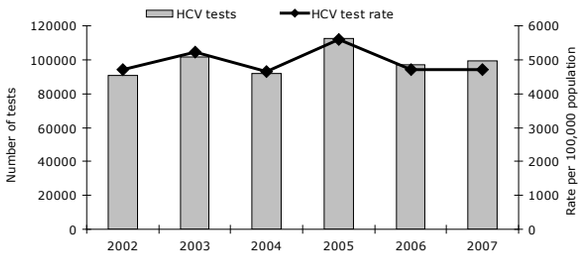
Figure 1: Number and crude rate of HIV tests, WA, 2002 to 2007



Hepatitis C testing: Analysis of hepatitis C testing data from NRL shows fluctuations in the number and rate of hepatitis C tests across WA between 2002 and 2007 (figure 2).

Hepatitis C testing increased by 16% from a crude rate of 4716 tests per 100,000 people in 2002 to 5605 tests per 100,000 people in 2005, followed by a 19% decrease in 2006 and then remained stable at a rate of 4710 per 100,000 people in 2007. Linear regression shows that the testing rate did not change over the six year period (p=0.9). This result should also be interpreted with caution as the NRL data relies on laboratories self-reporting the number of specimens screened for hepatitis C annually.

Figure 2: Number and crude rate of HCV tests, WA, 2002 to 2007



Regional BBV and STI testing: The highest STI notification rates for WA are recorded in the Kimberley, Goldfields and Pilbara remote regions of WA. Since 2004, STI and BBV testing data for these regions has been collected from laboratories that conduct the testing for health services in the region as a means of monitoring levels and trends in clinical activity.[11 19] Between 2004 and 2006, BBV testing (for HIV, hepatitis C and hepatitis B) in the Kimberley, Goldfields and Pilbara increased by around 2% per quarter from the first quarter of 2004 to the last quarter of 2006[11] with a corresponding increase in the number of BBV notifications from the same regions. While a higher proportion of BBV tests were consistently conducted in females, a higher proportion of notifications from these regions were in males. Over the same time period, STI testing[1] in the Kimberley, Goldfields and Pilbara increased by 9% between 2004 and 2006, corresponding to a 3% increase in BBV notifications.

Chlamydia testing: Analysis of MBS chlamydia testing data from 2002 to 2005 showed the quarterly rate of chlamydia testing across WA increased by 78%, from 446 per 100,000 people in the first quarter of 2002 to 1113 per 100,000 in the third quarter of 2005. Between 2005 and 2007 there was a period when MBS codes did not specifically identify chlamydia testing. Following MBS coding alterations in 2007 that facilitated identification of chlamydia tests, the rate of chlamydia testing (per three month period) in WA increased a further 19%, from 846 per 100,000 (June – August 2007) to 1495 per 100,000 (March-May 2008) (Figure 3). Using linear regression, these increases were found to be statistically significant (p=0.01). The highest rates of testing for males and females from 2002 to 2008 were consistently in 15 to 24 and 25 to 34 year olds.

Figure 3: Quarterly chlamydia testing rates by sex, WA, 2002-2005 & 2007-2008

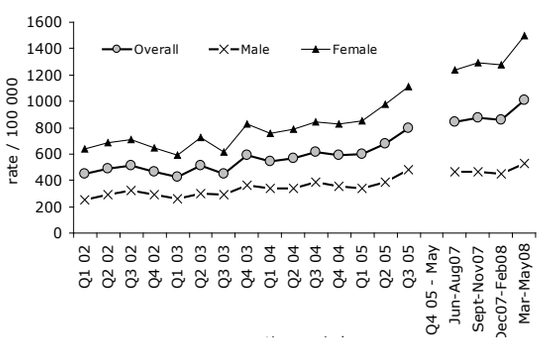
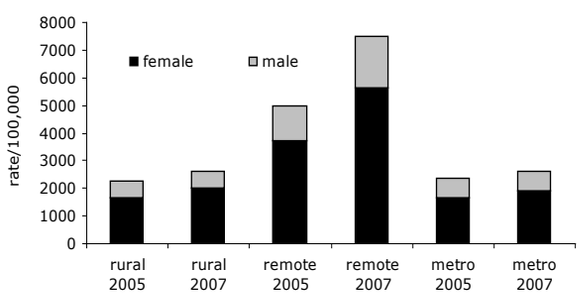


Figure 4: Chlamydia testing rate by remoteness area & sex, WA, Jun-Oct 2005 and Jun-Oct 2007



Key Points

Since the Action Plans and Strategy were implemented in 2005 and 2006:

- Chlamydia testing has increased across WA, with the greatest increases observed in the remote regions where the sexual health teams are located. Chlamydia testing did not increase in males in metropolitan or rural areas.
- It is likely that some of the increase in chlamydia notifications is influenced by increases in chlamydia testing
- Aside from specific clinic data or surveillance of BBV and STI testing in specific regions there were limited data sources to monitor trends in testing to support interpretation of trends in notifications. However, it is likely the increase in syphilis notifications represents a real increase in transmission in MSM.

1 STI testing data incorporates nucleic acid tests for gonorrhoea, genital chlamydia and syphilis serology

Analysis of a second MBS chlamydia testing data set compared chlamydia testing rates by region and time period. Chlamydia testing rates in the Kimberley, Goldfields and Pilbara remote regions for the period June to October 2005 and June to October 2007 almost doubled from 4985 per 100,000 people in 2005 to 7493 tests per 100,000 in 2007 ($p<0.01$) (figure 4). Although testing rates were consistently higher in females, this increase in the rate of testing was observed for males and females. Over the same time period, significant increases in chlamydia testing rates in females were observed in rural and metropolitan regions, 15% ($p<0.01$) in rural areas and 9% ($p=0.05$) in the metropolitan region. Chlamydia testing rates in rural and metropolitan based males did not alter between 2005 and 2007.

Other HIV and STI testing: For MSM, results from the Perth Gay Community Periodic Survey (GCPS)[20] suggest HIV testing did not increase between 2004 and 2006. However HIV testing in MSM attending a clinic in a Perth Sex on Premises Venue (SOPV) increased when data for 18 months during 2005-2006 was compared 18 months during 2007 – 2008 with a corresponding increase in the proportion of HIV tests that tested positive. At the same SOPV clinic, the proportion of MSM tested for syphilis increased over the same time period with a corresponding increase in the proportion of positive syphilis tests.[21]

Summary: Increases in chlamydia testing across WA from 2002 to 2007 indicate that progress toward improved diagnosis of chlamydia infection was occurring prior to the Plans and Strategy has continued since their implementation. It is encouraging the greatest increases were observed in the Kimberley, Goldfields and Pilbara where the highest STI notification rates are recorded in WA, suggesting the focus on sexual health through the Aboriginal Sexual Health Strategy and the sexual health teams have impacted positively on chlamydia testing and diagnosis in the highest risk regions. Changes in chlamydia testing elsewhere in WA were less pronounced, increased testing occurred in females but not males, suggesting there is further opportunity to promote testing in males in the general community. The increases in chlamydia notifications that paralleled increased testing suggest some of the increase in notifications may be influenced by increased testing, in particular in the remote regions. Similarly for gonorrhoea and syphilis in the remote regions, some of the increase in notifications may be influenced by improved case ascertainment through increased STI testing as measured through STI testing surveillance in these regions. This testing data surveillance has provided a mechanism to facilitate interpretation of trends in notifications and a means to monitor testing patterns. However other important information such as test result and age is lacking that would further enhance understanding of infection trends, access to clinical services and testing practices.

In Perth MSM, increases in syphilis and HIV testing at an SOPV clinic suggest improved access to testing that is consistent with targeted prevention in the Action Plans. This increase in testing occurred in the context of increasing syphilis notifications in WA and Perth MSM. The increased prevalence of infectious syphilis in those tested suggests that while some of the increase in notifications may be due to improved access to testing, there is also a real increase in syphilis transmission in Perth MSM.

For HIV, testing rates across WA did not appear to change (aside from increases in BBV testing in remote regions or specific SOPV clinics). This suggests increases in HIV notifications have occurred in a context of stable testing which may further suggest increased transmission in particular where there is heterosexual exposure. However, there are no specific data available to provide a measure of testing in non-MSM groups so it is difficult to fully interpret increases in notifications. Furthermore, there are limited testing data available to fully interpret notification trends in MSM.

For hepatitis C, the overall number of notifications remained constant but the number identified as newly acquired decreased. However, it is difficult to know if this represents a decrease in hepatitis C transmission or whether the number of newly acquired cases is underestimated due to methodological issues in identifying newly acquired hepatitis C.

Objective 2

Assess the extent to which recommended actions and guiding principles have been implemented or adopted, specifically with relation to the priority populations and priority action areas within the Strategy and each of the Action Plans

In assessing progress toward this objective a general assessment drawing largely from the stakeholder consultation provides an overview of awareness and perceptions of the Action Plans and Strategy and summarises how they have been put into practice.

Each Action Plan and Strategy is also examined separately using data drawn mainly from the stakeholder consultation and document review to assess progress toward implementation of recommended actions and guiding principles. In view of the detailed nature of the recommended actions listed for the Plans and Strategy the assessment toward this objective examines broadly what progress has been made in the priority action areas and priority populations rather than assessing progress as the presence or absence of each suggested activity.

General findings

Generally, there was good awareness of the Action Plans and Strategy with most of the in-depth interviewees and around two thirds of survey respondents reporting they were aware of the Plans and Strategy. Many interviewees could not recall specific details of the Plans and Strategy, but were aware of their existence through involvement in the consultation for their development and/or had participated in the mid-term review of the Action Plans. This is most likely a reflection of the fact that they were developed a number of years prior and subsequent documents such as the Models of Care[22 23] *(see page 16)* were foremost in people's minds. Despite this, interviewees were familiar with the general direction of the WA response as articulated in the Plans and Strategy and were able to comment on the priority groups and areas. Over half of survey respondents reported they became aware of the Plans and/or Strategy through communication from their workplace, organisation or a professional body and around one quarter reported they had contributed to their development and/or participated in the mid-term review. In general, agencies directly funded through the SHBBVP had much greater awareness of the detail of the Action Plans, particularly due to the fact that service contracts are required to be aligned with them.

Each of the Action Plans contains an extensive list of recommended actions that were formulated during development consultation, along with potential stakeholders to implement these actions. Feedback from stakeholders is that many of the recommended actions were in place in WA prior to development of the Plans with funding in place that supported these actions both prior to and following implementation of the Plans and their inclusion in the Plans reflects a continuance of these activities.

> *The Plans reflect what's happening at a State wide level and also map out what we should be doing.*

Other recommended actions were not in place previously and were formulated through the consultation process as relevant actions to the WA context. However, the Action Plans state that no additional funding was allocated for their implementation and that the various sectors and stakeholders would be required to prioritise such actions within current funding levels, the exception being where one-off grants could be sourced. Hence, although many stakeholders are mentioned in the Plan(s) their inclusion does not necessarily indicate a commitment to the proposed action. This was a source of annoyance for one interviewee:

> *We're listed as responsible but not really engaged…There's assumptions around whose role it is.*

The Aboriginal Sexual Health Strategy, as a *strategy* rather than an *action plan*, articulates an agreed ideal model for providing comprehensive sexual health interventions in WA. While some specific activities are articulated, it does not define them to the same level of detail as the Action Plans. The Strategy was rolled out approximately a year after the implementation of the sexual health teams in the Kimberley, Pilbara, and Goldfields and appears to be more closely aligned with their operations than other sexual health interventions. While the implementation of the sexual health teams was not an outcome of the strategy, they developed in close alignment and this is reflected in the teams' operations.

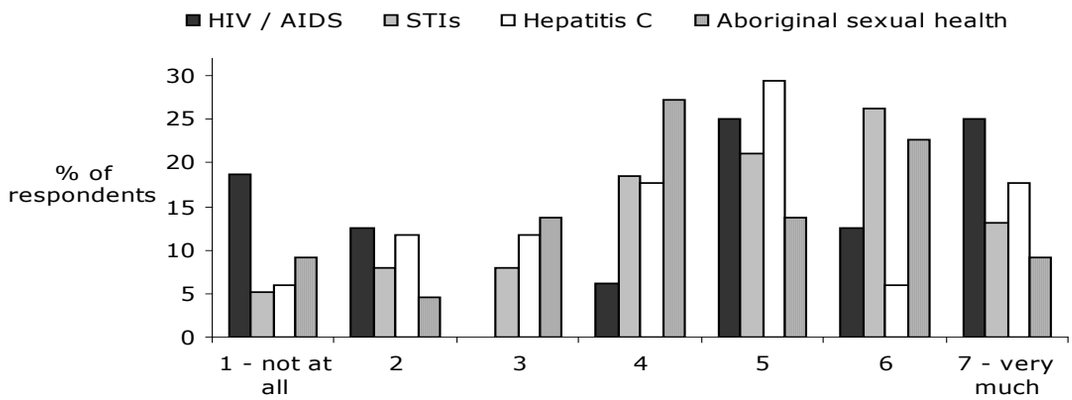
The Action Plans and Strategy were largely perceived to have been successful and useful tools by interviewees and survey respondents. Many interviewees described the Plans and Strategy as an articulation of 'best practice' or 'gold standard' and thus an account of what WA should be endeavouring to achieve in its response to BBVs and STIs.

> *I think it's absolutely important to have some continuity at a State level…there's got to be some consistency in the way service is being delivered I guess. And what services are being delivered. So it's absolutely better to have such Plans than not to have them.*

> *The fact that they got the Action Plans and Aboriginal Sexual Health Strategy was really exciting.*

In particular, stakeholders pointed to benefits in the process of developing the plans. The process enabled articulation of a shared direction and the ability to view how separate activities formed part of the whole picture. Interviewees also referred to them as a useful reference when programme and research planning, compiling grant applications, and to direct community members to. Over half of survey participants responded that the Plans or Strategy had had a moderate to substantial influence on program planning and/ or service delivery in their organisation (Figure 5). Additional uses included a basis for planning and prioritising research, guiding funding applications and as a 'yardstick' to ensure appropriate direction of programs and education.

Figure 5: Extent survey respondents considered Action Plans/Strategy had influenced program planning / service delivery in their organisation



Despite this general satisfaction with the overall direction of the Plans and Strategy, many interviewees and survey respondents said the Plans did not clearly articulate who had responsibility for implementation of actions. For some interviewees this opinion appeared to stem from a perception they were 'government plans', and that ownership of the responsibility for action had not been achieved outside of a core group of heavily involved organisations and individuals.

> *I am never sure who they are for, how you measure them and all that. Are they for the NGOs, the hospitals and health services working together with a shared vision or are they for the Department of Health?*

> *I think there is a view that Health Department Plans are government Plans…people see them as the main drivers. Those sort of Plans need the Health Department to implement them.*

While directly funded organisations drew a link between their service provision contracts being directly tied into performance indicators that related back to the Plans, for other interviewees this was not so clear. This reflects ongoing difficulties in attracting investment (non financial) from organisations and departments who do not have BBV and STI prevention and management as their core business. For others a lack of performance indicators attached to the Plans themselves and a clear expression of accountability for monitoring performance were seen to be a weakness. A similar opinion was held by some survey respondents with one commenting:

> *"The priorities in the action plan have supported the collaborative work across the sector, however much of the plan does not have clear funding linked to it and the capacity to report against the implied targets is assumed. Clear and relevant targets would support the collaboration and the evaluation, as well as support the reporting back to the communities with whom we work."*

The terminology used in some of the Plans was also a source of confusion for some interviewees. For example, the term 'stakeholders' as used in the Hepatitis C Action Plan was undefined and a couple of interviewees were unclear whether it referred to stakeholders overall or stakeholders with responsibility for implementation.

> *Stakeholders! That is confusing, because it should say what is to be done, over what time it is to be done, who is responsible, and what are the measures.*

The guiding principles (Appendix 6) are generally reflected in recommended actions in the Action Plans. For example suggested actions toward staff and peer training in sexual health would contribute to improving access to appropriate health care, early detection and intervention and involvement of affected people and communities; while actions toward research and surveillance support the principles of evidence based policy. The guiding principles of each of the Action Plans and Strategy were largely viewed by interviewees as relevant to the response to HIV, hepatitis C and STIs in WA.

In terms of implementation of actions it was perceived that not all of the activities listed under the Plans and Strategy were currently operational, nor could they be so under current funding levels. For regional areas in particular, differing priorities meant that implementation occurred flexibly, tailoring interventions according to the specific context and available resources. This flexibility was seen as a strength as it was perceived that no one Plan or Strategy could adequately cover the breadth of needs in varying contexts.

The structure of the Aboriginal Sexual Health Strategy is different to the Action Plan(s) in that it does not provide a detailed list of recommended actions, rather it provides a framework under which comprehensive sexual health care can be provided. Although the 'eight way' model was generally viewed as an appropriate framework to address the sexual health needs of Aboriginal people and communities in Western Australia there was also a perception by some interviewees and survey respondents that as a strategy the Aboriginal Sexual Health Strategy lacked a plan for

implementation and there was inadequate articulation of directions for implementation or indicators of success.

> *The eight way model is theoretically a very good model but without an implementation or work plan for the Strategy it is impossible to comment…*

Also of particular note were discussions around the decision to not include a focus on BBV transmission through parenteral and other non sexual means. Some interviewees indicated that this was a prudent decision based on a desire to focus on the critical situation regarding STIs amongst Aboriginal people in parts of WA in a context of difficulties in getting traction around these issues.

> *[So we] could get some runs on the board - make it safe, the sky wasn't going to fall in – and demonstrate that this could be done without making people feel ashamed or stigmatized.*

Many interviewees commented that for future iterations, the sector should review this exclusion.

> *If there is an existing Aboriginal Sexual Health Strategy, there needs perhaps to be a broadening out of that. A Sexual Health and BBV Strategy. You could argue for it being one or two separate Strategies.*

Since 2005, when the Action Plans and Strategy articulated the public health response to BBVs and STIs, WA has commenced a process of health reform that includes setting up the Health Networks Branch and development of Models of Care across many diseases that aim to focus on the best use of resources toward prevention and maintenance across all continuums of care.[24] Developed by the Infections and Immunology Health Network (published 2008) the HIV and STIs Models of Care comprehensively articulate:

- current services and initiatives across WA relevant to HIV/AIDS and STIs from primary to tertiary prevention
- recommendations pertaining to a future HIV and STIs Models of Care in WA across the care continuum

There is considerable overlap between the priorities and priority groups identified in the HIV and STIs Models of Care and the Action Plans and Strategy, indicating continuing relevance of many actions (particularly around primary prevention and building workforce capacity) prioritised during development of the Action Plans and Strategy and during the mid-term review. Development of the Hepatitis C Model of Care is still in progress. The Models of Care were perceived by a number of stakeholders to offer a strategic direction for WA, and important that they articulated prevention, treatment and care within the community, primary and tertiary sectors and a partnerships approach between these sectors and organisations outside the health sector. For example, although not finalised, one stakeholder felt a Hepatitis C Model of Care had potential to improve access to hepatitis C treatment via a shared care model.

> *There's clinical networks and there's models of care….Are they important? They're important for things like the hepatitis-C treatment process, the shared-care process*

However, with a number of recommendations outlined in the Models of Care pertaining to a clinical response some stakeholders were unsure how the Models of Care should marry with the future public health response elicited by the SHBBVP. Although the means to integrate the Models of Care and future public health responses by the SHBBVP is not entirely clear, it is significant they build on the partnerships outlined in the Action Plans and Strategy and provide another means of engagement between involved sectors and stakeholders upon which existing and new partnerships can be strengthened and built on.

Key Points

- The Action Plans and Strategy have generally been well received by stakeholders and are viewed as a 'gold standard' for practice.
- The Action Plans lack clear measurable goals with a timeline and responsibility for implementation.
- Development of the Action Plans strengthened partnerships and articulated a shared vision.
- Aboriginal Sexual Health Strategy lacks a plan for implementation.
- Exclusion of BBVs from Aboriginal Sexual Health Strategy should be reviewed for future iterations.
- The Models of Care articulate many priorities that build on the Action Plans and Strategy. There is potential to create a shared vision for BBVs and STIs between the community, primary and tertiary sector

HIV Action Plan

The guiding principles are listed in Appendix 6.

Adoption of the Guiding Principles

The principles underlying the HIV/AIDS Action Plan were viewed by interviewees as fundamental to the response to HIV/AIDS in WA and crucial to ensuring a national direction is reflected at a jurisdictional level. A partnership approach is clearly reflected throughout the WA response with strong collaboration evident between national bodies (eg. DoHA, Australasian Society for HIV Medicine (ASHM), National Centre for HIV Epidemiology and Clinical Research (NCHECR), and National Centre for HIV Social Research (NCHSR) and state bodies within and between government, community, medical, scientific academic sectors. A partnerships approach has facilitated continuance or implementation of activities such as surveillance and research relating to HIV notifications and risk behaviours, and other activities such as workforce training and development and implementation of travel safe messages targeting people at risk of HIV and travelling overseas.

Although participation of PLWHA was agreed by stakeholders as essential to ensuring the response reflects the needs of people with HIV infection, feedback from one stakeholder was that the WA response lacked strong peer based input. This was largely attributed to funding constraints in which the peak body for PLWA in WA, the HIV/AIDS Peer Advisory Network (HAPAN) largely relies on voluntary input for its activities. In contrast, the peak body for PLWHA in some other Australian jurisdictions such as PLWHA Victoria is registered as a charity.

Guiding principles, of 'health promotion and harm minimisation', 'a non-partisan approach' and 'an enabling environment' are clearly reflected in the WA response through ongoing initiatives between successive governments such as needle and syringe programs (NSPs), provision of condoms in high risk environments such as prisons, and promotion of non-occupational post exposure prophylaxis (NPEP) and more recent initiatives such as legislative reform for the Prostitution Amendment Bill 2007 and Public Health Act. However, in view of high rates of injecting drug use in custodial settings a lack of injecting equipment in custodial facilities is an area in which an enabling environment has not been provided.

Implementation of recommended actions

The HIV/AIDS Action Plan outlines actions and suggested activities in line with the priority areas of the National HIV/AIDS Strategy toward i) targeted prevention education and health promotion; ii) improving the health of PLWHA and iii) responding to changing care and support needs, iv) surveillance, v) HIV testing and vi) a clearer direction for HIV research. These actions target a broad range of population groups including gay and other homosexually active men, PLWHA, Aboriginal people, people who inject drugs, people in custodial settings, sex workers, people from priority CALD backgrounds, people at risk of acquiring HIV overseas and women.

In the context of a diversifying HIV epidemic in WA, 'targeted prevention and health promotion' that speaks to the expanding range of high risk groups is essential. People at risk of acquiring HIV overseas were identified as a priority group when the HIV/AIDS Action Plan was developed in 2005 and the importance of this risk to WA heterosexual males was strongly emphasised at the recent ASHM conference in Perth. In response to an increasing proportion of infections acquired through heterosexual exposure and in a high prevalence country a number of initiatives have continued or commenced since 2006. For example, a WAAC website[25] and a SHBBVP brochure[26] provide information to travellers, in particular heterosexual and gay men travelling or working overseas, about the risks of acquiring HIV overseas and prevention. In addition, a more general state wide media campaign titled 'Safe sex no regrets' targeting heterosexuals, gay males and females and encouraging condom use and safe sex is running in WA between October 2008 and January 2009.[27] Such activities were perceived by a number of interviewees and survey respondents as helping to highlight the changing risk groups in WA and as being influenced by the Plan. However, there was concern from some stakeholders that there is a danger with targeted campaigns of compartmentalising prevention messages and identifying those at risk.

> *A key issue is community education that targets the groups most at risk, and not simply those who the media feels is at risk (e.g. only young people) or the latest trend to the exclusion of ongoing epidemics. The focus needs to be on Aboriginal sexual health, gay men and men travelling to countries of high prevalence. While these groups need different strategies they are not necessarily three separate groups - but do have important overlap.*

On another note, an issue raised in the Mid Term review of the Action Plans was that 'HIV education fatigue' has developed among the gay population and makes them difficult to reach in terms of education and prevention. This also highlights the need for the response to HIV reframing the issue so that prevention education speaks to a diverse range of MSM.

With advances in HIV/AIDS treatment, there is an increasing complexity of HIV/AIDS clinical care and also an increasing number of PLWHA in WA who are also ageing with needs across a continuum of care. A major challenge toward 'improving the health of PLWHA' and 'responding to the changing care and support needs' in WA is access to treatment. Currently there is a shortage of S100 prescribers in WA and most clinical management of HIV is provided through the Perth tertiary sector. There are currently 120 or more HIV patients living in regional areas in WA[2] and the

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2 Lisa Bastian, SHBBVP. Email communication, October 2008.

Royal Perth Hospital (RPH) coordinates a rural and remote service for HIV patients, through which most regional HIV patients are currently managed including a cohort of Aboriginal people living in one region of WA.[28] In addition, a key activity toward improving access to treatment has been regional training of GPs, nurses and allied health workers on HIV diagnosis, referral, and management with the objective of sharing care of HIV patients between their GP and the immunology clinic.[29] The needs of PLWHA are broader than treatment and services such as HAPAN, WAAC, Silver Chain, Ruah Community Services have continued to provide support to PLWHA across the care continuum including advocacy, welfare, psycho-social support, respite, and case management for PLWHA with chaotic lifestyles such as homelessness or problematic substance use. The complexity of the clinical care and other needs of PLWHA is well recognised and prompted a review of current HIV/AIDS service provision through the HIV Model of Care[22] that describes best practice in the WA health system for a person or population group prior to and following diagnosis of HIV. The HIV Model of Care provides a comprehensive articulation of current needs in the various sectors and will be a useful basis for future planning. However, some of it is outside the scope of a public health response.

Surveillance and research are important aspects of the HIV response, providing a means of monitoring trends and increasing understanding of risk factors and risk behaviours, infection transmission, testing, treatment outcomes, the impact of HIV infection on PLWHA and a means of measuring the impact of interventions. Systems such as HIV/AIDS surveillance, GCPS, annual NSP survey and collection of BBV and STI testing data for the STI endemic regions were in place prior to implementation of the Plan and their continuance is an important aspect of ensuring comparable data over time and identifying trends in high risk groups. One of the challenges in the diversifying epidemic is to gain an understanding of factors influencing transmission or outcomes in population groups that are an emerging risk or that may have more difficulty in accessing prevention or other services. A priority identified in the mid-term review was the risk of HIV acquisition in men travelling or working overseas and research has been commissioned to improve understanding of the circumstances of such transmission. Other research such as an Aboriginal BBV Scoping project investigating how to provide harm reduction services to Aboriginal IDU and participation in the National Prison Entrants BBV study were also noted as achievements in the mid term review. However, there is also opportunity to continue to find a 'clearer direction for HIV research'. A number of research priorities were identified in the Mid Term review and whilst stakeholders agreed on the need to base practice on evidence there were some who considered this was not occurring to any great extent and that funding was essential to wards this objective.

> *Research has a great capacity to inform practice. However, 'lip service' is paid to social and clinical research currently despite all the hype about evidence based practice. Cohort data provides powerful information that can be used for current and future management of PLWHA and funds need to be made available to support an HIV/BBV clinical database.*

Key Points

- The HIV Action Plan guiding principles have supported a WA response to HIV that is generally consistent with the National direction, however an enabling environment is not provided to all population groups with NSP unavailable in custodial facilities.
- Partnerships are working well to develop and implement prevention initiatives toward a range of population groups. However, there are limited mechanisms to measure the impact of these initiatives other than in MSM.
- The proportion of HIV infections acquired through heterosexual transmission is increasing. However, there is limited available evidence to gain a detailed understanding of the risk factors and behaviours influencing these increases.
- Clinical treatment of HIV/AIDS is complex and PLWHA have many needs across the care continuum. There are limited s100 prescribers in WA and most treatment is provided through tertiary hospital and outreach services. Shared care offers an alternative to further support PLWHA to access treatment in their community.

STI Action Plan

The guiding principles are listed in Appendix 6.

Adoption of the Guiding Principles

The guiding principles were perceived by stakeholders to be appropriate principles to underpin the WA response to STIs and were apparent in many of the initiatives and the strategic direction of many organisations consulted with. For example, organisations such as the WA AIDS Council, Magenta or Street Worker Outreach Project WA (SWOPWA) provide both a service and advocacy role that supports health promotion, an enabling environment, access to appropriate health care, early detection and intervention that are accessible to priority groups such as MSM and sex workers. Furthermore, organisations such as SWOPWA provide an avenue through which street workers, a marginalised high risk group can have policies and programs become responsive to their needs.

However, there are many challenges to realising these principles, such as poor access to sexual health care in WA created by retention issues in some regions and a shortage of qualified sexual health clinicians across WA. Moves to continue to develop an enabling environment are apparent in the proposed reform of the Poisons Act being advocated for by many stakeholders. Such an amendment is anticipated to contribute to improved access to sexual health care through creation of Advanced Sexual Health Nurse positions in WA.

Other challenges are the involvement of at risk people and communities, such as young people, Aboriginal communities or people with a disability to ensure policies and programs are responsive to needs. The need for community ownership of an issue and its response is highlighted in the Aboriginal Sexual Health Strategy and although a consultation process informed the STI Action Plan the response to STIs was not always seen as one by Aboriginal people for Aboriginal people. There are clearly further opportunities for involvement of affected communities through organisations such as the Health Consumers' Council. A partnership approach, although not a guiding principle of the STI Action Plan, is inherent in the development and implementation of this plan and more recently the STIs Model of Care, and perhaps this could be developed further in future iterations to resonate more strongly with affected people and communities.

Implementation of recommended actions

The STI Action Plan recommends actions toward prevention and control of STIs through the three main priority areas covered in the National STI Strategy namely; i) STIs in Aboriginal Communities, ii) STIs in gay and other homosexually active men, iii) Chlamydia control and prevention, and also provides actions toward other National priorities including STIs in the general community, Surveillance, Research, and Workforce issues. These actions target a broad range of population groups at risk of STIs including gay and other homosexually active men, Aboriginal people and communities, young people, sex workers, PLWHA, people in custodial settings, from CALD backgrounds or with a disability and the general community and as stated earlier, there are actions outlined that were occurring previously and have continued following the Plan's implementation.

Progress in the priority areas of the Plan is evident in the actions and opinion of many stakeholders and organisations working in WA, with the STI Action Plan clearly articulating a direction for the response toward specific priority areas and population groups. A mass media campaign funded by SHBBVP in collaboration with a range of organisations (2007-2008) targeted young people with the objective of increasing knowledge about chlamydia and promoting safe sex and testing. Although the impact of this campaign is not known it clearly fits with the priority area 'chlamydia control and prevention' and was viewed positively by a number of survey respondents. With chlamydia being the most commonly notified infectious disease in Australia and young people most represented, young people and the general community are priority groups in the STI Action Plan. While actions such as a study of the sexual health education needs in young people[30] offer a firm foundation on which to base sexual health education for young people in and out of school, the importance of sexual health education that reaches young people including young Aboriginal people across WA was reiterated by many stakeholders as an ongoing priority.

> *Making Education Departments realise that sexual health is vital for general health and should be taught in schools as a mandatory subject in high school. Growing and developing healthy relationships is a great resource that is under utilized.*

Recent changes in surveillance data trends have influenced expansion or implementation of actions in response. For example, in response to increased syphilis notifications in Perth MSM, WAAC initiated an integrated community response with the aim of increasing testing, detection, and treatment that included peer support, targeted awareness and education regarding STIs, safe sex and other issues relevant to MSM via a website (Project X), pamphlets, gay forums and groups (Mensline, PLWHA) and outreach clinics at Sex on Premises Venues (SOPVs). Increases have been reported in the number of MSM attending the SOPV clinic, the proportion of MSM tested for HIV and/or syphilis and in the proportion of HIV and syphilis tests that tested positive at this clinic.[21] Whilst it is encouraging these actions toward STI prevention in MSM are evolving in a timely manner in response to changes in surveillance data, the reported increases in notifications of syphilis and LGV (some coinfected with HIV or syphilis) also highlight that current levels of sexual risk behaviours create an environment in which transmission of STIs (and HIV) is possible. The 2006 Perth GPCS found the proportion of MSM reporting unprotected anal intercourse with casual and/or regular sexual

partners has increased gradually but significantly since 2000,[20] and reiterates the need for continued invigoration of prevention education toward a diverse range of MSM.

While the Aboriginal Sexual Health Strategy provides a framework for comprehensive sexual health care, the STI Action Plan articulates actions toward addressing STIs in Aboriginal communities in particular by attempting to make mainstream services more accessible to Aboriginal people and to overcome some of the barriers to good sexual health care for Aboriginal people. Many of the recommended actions are around training and education in sexual health for Aboriginal workers and other practitioners working with Aboriginal communities, improved access to STI diagnosis and care in the primary care setting, provision of culturally appropriate prevention services and health care and improved use of surveillance data. Initiatives such as sexual health training for Aboriginal educators provided by Family Planning WA Sexual Health Services (FPWA); training in the use of flip-charts for Aboriginal community STI education; and the 'Mooditj' program (developed by FPWA) to provide culturally appropriate life skills education to Aboriginal youth by Aboriginal workers and peer community members were viewed by interviewees and survey participants as contributing to improved service delivery and/or benefits to the target group. Other progress includes improvements in surveillance data via a data linkage study[12] that improved identification of Aboriginal and non-Aboriginal people in STI and BBV notifications, resulting in a decrease in the Aboriginal to non-Aboriginal rate ratio. In addition, increases in STI testing in the Kimberley, Goldfields and Pilbara regions compared to rural and metropolitan areas suggests that where specific programs are funded such as the sexual health teams there is greater opportunity for improvements. These positive examples must however be viewed in the context of the continuing high STI rates and challenges in improving sexual health in Aboriginal communities. Key issues identified in the Mid-Term review included workforce issues, provision of BBV/STI education to young Aboriginal people not attending school and developing an evidence-base around effective ways of promoting behaviour change in young Aboriginal people with the importance of community involvement in developing a relevant response for Aboriginal people reiterated in the stakeholder consultation for this evaluation.

> *Community ATSI people need to be more involved in all aspects of planning, development, implementation and evaluation of services, programs*
>
> *Young Aboriginal people need services that cater to their needs and specific cultural issues. While progress has been made in this area, our service still sees a lot of reinfection from untested young people*

Key Points

- The STI Action Plan guiding principles have been generally well adopted, but access to appropriate health care, particularly in remote and rural regions is an ongoing challenge
- Prevention strategies have responded well to changes in trends in STIs
- Involvement of Aboriginal people and communities in development of all aspects of STI prevention and sexual health care is essential
- Sexual health education that reaches young people in school and out of school is a priority.
- Sexual health education should be available on the school curriculum

Hepatitis C Action Plan

The guiding principles are listed in Appendix 6. They are perceived by stakeholders to be appropriate principles to underpin the WA response to hepatitis C.

Adoption of the Guiding Principles

The adoption of the guiding principles (Appendix 5) can be seen in the growing hepatitis C response in WA. Harm reduction, as a National and State policy is implemented primarily through the provision of sterile injecting equipment and education on safer injecting, performed by NSPs and the drug user peer organisation WASUA (Western Australian Substance Users' Association). The partnership approach is built through the collaboration of stakeholders at both a policy and service level as evidenced in committees such as WAVHC and the collaborative delivery of services.

As the group most at risk of, and most affected by, hepatitis C, injecting drug user representation in the development, implementation and evaluation of interventions is sought through WASUA. As members of the WAVHC, providers of services, and active collaborators in the WA response, WASUA can be seen to be heavily involved. This reflects a commitment on the part of the sector to include and consult with at risk communities at all levels of the process.

The extent to which access to prevention, diagnosis, and treatment services for all people at risk of hepatitis C is equitable is difficult to assess. However, the commitment to improving the lives of people at risk of or living with hepatitis C is apparent in WA which reflects a commitment to the principles. One obvious inconsistency is the lack of injecting equipment availability in custodial settings. Education in prisons is well delivered through the Health In

Prison, Health Outta Prison (HIP HOP) programme, although access to education overall cannot perhaps be thought of as equitable. Similarly, access to treatment and support in prison is limited, particularly with the recent withdrawal of some services. However, in community settings, continued effort is clearly being made to ensure services are delivered consistently and without judgement or discrimination. Workforce development has improved in recent years according to some stakeholders, and was identified in the 2007 NSP Review as a continuing priority.

The inclusion in the Action Plan of the nine principles of the *National Strategic Framework for Aboriginal and Torres Strait Islander Health - Framework for Action by Governments* reflects an ongoing commitment to meeting the needs of Aboriginal people and in particular those at risk of or affected by hepatitis C. The need to focus attention on making services culturally appropriate and the need to target Aboriginal people at risk of hepatitis C has been repeatedly raised by stakeholders as a priority in consultations over recent years (e.g. consultation for development of Action Plan 2005, Mid Term Review 2007). While there is still a long way to go in achieving these aims, the commitment across the sector was apparent in the stakeholder consultation for this evaluation.

A commitment to developing initiatives in line with the best available evidence is apparent through efforts made to ensure quality improvement through evaluation of programmes, projects, and policy.

Implementation of recommended actions

The Hepatitis C Action Plan is built across four Priority Areas: prevention and education, diagnosis and treatment, health maintenance, care and support for people living with hepatitis C, and surveillance. These are implemented with particular attention to three priority groups (people who inject drugs, people in custodial settings, and Aboriginal people who engage in risk behaviours or who are at risk). This section is structured by assessing the extent to which each of the Priority Areas have been addressed in relation to the Priority Groups.

Prevention and education initiatives form the bulk of activity relating to hepatitis C. This emphasis is also seen in other Australian states.

People who inject drugs

Prevention and Education - People who inject drugs are fairly well serviced in prevention and education services in WA. NSP are provided through WASUA and WAAC in Perth, WASUA in Bunbury via a mobile service, and via hospitals, community health centres, Population Health Units, and pharmacies across the whole state. WASUA also provides a limited mail out service to people living outside Perth. In some regions, NSPs are supported by a coordinator based at the regional Population Health Unit of the WA Country Health Services and pharmacies are supported by the Hepatitis Council of WA. WASUA also provides peer education services although to a limited extent outside Perth

An independent review of NSP Services across the State conducted in 2007 found that on the whole access to NSPs across the state is good[31]. The Review made a number of recommendations which are also reflected in the Action Plan. One of these recommendations was the roll out of needle and syringe vending machines across the State which has since been achieved. However, stakeholders view this as a bittersweet victory – in some cases cost-retrieval vending machines have replaced a free service through hospital emergency departments, thus potentially winding back access for some people.

Diagnosis and treatment and care and support for people living with hepatitis C - Our analyses of testing data in relation to hepatitis C show slight fluctuations over time. This may be interpreted as a change in testing access but many other factors may come into play including limitations in the data itself. Testing rates in the Kimberley, Goldfields and Pilbara have increased over the life of the Plan which is encouraging.

Treatment for hepatitis C, and access to support services for people living with the virus have been identified as areas that need improvement by a number of stakeholders. Only a small number of the affected population embark on treatment annually. Access to treatment services outside of Perth is limited but small gains have been made. Hepatitis clinical nurse specialist positions have been established in three regions which has improved access to local support and care in those regions. There is also a resulting increased capacity for shared care.

Support for people living with hepatitis C is provided in Perth by HCWA and WASUA; limited access to these services is available for people living in regional areas.

Surveillance – General surveillance is operating fairly well and provides insight into overall notification rates however there are limitations in identifying newly acquired cases. Wider NSP site participation in the National NSP survey (National Centre for HIV Epidemiology and Clinical Research) would provide a further measure of the epidemic amongst injecting drug users attending NSPs.

People in custodial settings

Prevention and education - People in custodial settings are the least well serviced in terms of prevention services. This has been discussed in the above section. However, a proposed feasibility study for the provision of injecting equipment in prisons shows promising commitment to addressing the increased hepatitis C risk faced by prisoners. Proposals for the provision of bleach for cleaning injecting equipment are also being considered by the Department of Corrective Services[32]

Diagnosis and treatment and care and support for people living with hepatitis C - All prisoners are offered testing on entry to prison and encouraged to undergo a course of hepatitis B vaccination.

Hepatitis C treatment access in WA prisons has historically been quite good when compared with other Australian states (e.g. Victoria). However, some services have been recently discontinued; an event which has caused disappointment across the sector. The prohibitive costs of providing health care to prisoners has been identified as a significant barrier.

The regional hepatitis nurse roles described above also provide opportunity to improve continuity of care from custody to the community in the regions in which they have been established. BBV support and referral services for people leaving custody are also provided by Outcare, an organisation which provides social support for people leaving prison and their families.

Surveillance - While official surveillance of hepatitis C notifications from prison is not conducted, monitoring of prevalence is at least partially addressed by participation in the annual National Prison Entrant's Blood Borne Virus and Risk Behaviour Survey (National Drug Research Institute).

Aboriginal people who engage in risk behaviours or are at risk

Prevention and Education - As outlined in the above section, Aboriginal people as a priority group is well recognised. The Southern regions are the greatest affected by hepatitis C outside of Perth and notifications amongst Aboriginal people are disproportionately higher. Initiatives targeting this group are somewhat thin on the ground but have improved in the life of the Plan. The recent appointment of a project worker based at WANADA with responsibility for development of an Aboriginal hepatitis C and injecting drug use project in the Southern regions will assist in developing culturally appropriate resources and build capacity amongst ACCHS. A small amount of COAG funding was also directed to the South West Population Health Unit (SWPHU) to work with the South West Aboriginal Medical Service (SWAMS) with a brief to build capacity to deliver harm reduction programs, and to enhance and extend access by Aboriginal people to NSP services in the region. These projects mark a good start at creating initiatives directed at Aboriginal people but there is clearly a need for a continuing effort in this area. A needs assessment of Aboriginal people who inject drugs conducted in 2001 reported that 43% of the 77 people they interviewed 'usually' shared injecting equipment[33]. Continuing attention should be given to implementing the recommendations from this report.

Diagnosis and treatment and care and support for people living with hepatitis C - Diagnosis and treatment services for Aboriginal people need to be culturally appropriate and accessible. Projects such as the one described above in partnership with SWAMS and SWPHU will help to improve referral processes and accessibility. By all accounts, very few Aboriginal people are accessing treatment across the state. Whether this is due to cultural factors, accessibility, or appropriateness of services is unclear but is likely to be a combination of factors.

Surveillance - Surveillance in regards to Aboriginal people has improved in recent years with better reporting of Aboriginality on notifications. This has enabled more accurate reporting of the burden of disease for this population which has in turn improved understanding of the nature of the epidemic.

Additional initiatives

Aside from the priority groups, education for health professionals and the wider community were frequently cited by stakeholders as requiring attention. Lack of knowledge around hepatitis C often leads to discrimination both in and out of clinical settings. One example of activity in this area was a hepatitis C general community awareness campaign which was coordinated by the Hepatitis Council WA and utilised mass media as its vehicle. Another initiative funded by the SHBBVP is aimed at educating GPs around hepatitis C and is provided by Edith Cowan University.

Key Points

- The Hepatitis C Action Plan guiding principles have been well adopted in most cases, but structural barriers exist in some cases (e.g. equitable access to prevention services in custodial settings).
- Prevention and education initiatives in the community are operating well but continued attention should be directed at workforce development.
- Testing for hepatitis C overall has fluctuated over the past five years but increased in the Kimberley, Goldfields, and Pilbara.
- Small numbers of people living with hepatitis C commence treatment. Access to treatment services remain limited outside of Perth and the capacity for shared care needs strengthening.
- Care and support services are limited in regional areas but there have been recent gains in the appointment of regional clinical nurse specialists.
- Improved identification of Aboriginal cases in notifications.

Aboriginal Sexual Health Strategy

The structure of the Aboriginal Sexual Health Strategy is different to the Action Plans in that it does not provide a detailed list of recommended actions, rather it outlines a framework under which comprehensive sexual health care can be provided. Accordingly, the assessment of the implementation of the Strategy will focus on the extent to which the guiding principles have been implemented and the extent to which the framework for comprehensive sexual health care has been adopted.

Adoption of the Guiding Principles

Three main guiding principles underpin the Strategy: 1) partnerships and comprehensive programs, 2) proactive community responses, 3) primary health care approaches. Broadly, these are well supported by the stakeholders consulted, although it was felt that broad and enduring Aboriginal community ownership of the solutions has not yet been achieved.

One of the underlying principles of effective partnerships identified in the Strategy – taken from the NIASHS Implementation Plan – is *Indigenous ownership of Indigenous health*. This is defined as "Indigenous people being able to participate and have control over processes involving the decision-making and planning at all levels and a shared understanding of the value of the Aboriginal community-controlled health sector".

The Strategy points to the need for community ownership of problems and solutions. This was also indicated by a number of interviewees and survey respondents. In addition, the need for Aboriginal community empowerment was described.

Across the regions there appear to be inconsistencies in the level of engagement between the Aboriginal community controlled health sector and the Government and other sectors. This is not necessarily a reflection of the efforts of the sexual health teams but could rather possibly be an indicator of the extent to which the ACCHS feel able to prioritise sexual health. A number of stakeholders indicated that there are not enough Aboriginal people involved at all stages of the process of the development and implementation of interventions. One interviewee commented:

> *But that's not to say that all the white fellas have to bugger off and leave it all to Aboriginal people…but the decisions themselves on how something is going to happen have been made and it is like, "would you like those dots to be pink or blue?". [Aboriginal people] are not asked whether they want dots in the first place.*

The Strategy also identifies the critical role of intersectoral partnerships in achieving effective primary health care. A major difficulty with any targeted health Strategy is generating support and interest outside of the health sector and with organisations that do not have the topic of interest as part of their core business. Some good progress has been made in developing partnerships overall and particularly between government departments and government and non-government agencies. Some particularly effective partnerships are operating at both policy and service levels in both metropolitan and regional areas.

Adoption of the eight way model of comprehensive sexual health care

As a framework for action, the Strategy is well supported in principle and practice by a majority of stakeholders. As one interviewee stated:

> *I [have] found the 8 Way Model to be an excellent framework to work in. I use it all the time really, not only for planning but also for any 'spot fires' that we need to look at. I will address the issues using the 8 Way Model, which identifies strengths and weaknesses. So, I guess, in each area, looking at utilising the 8 Way Model as an assessment tool to identify what areas you can build on.*

Most interviewees and survey respondents overwhelmingly expressed support for comprehensive sexual health care as defined in the eight way model. However, the extent to which the framework has actually been implemented is somewhat inconsistent across the regions.

As outlined earlier, the Strategy appears to be most closely aligned with the operations of the regional sexual health teams which specifically target young Aboriginal people. In the Kimberley, Goldfields, and Pilbara the eight way model is being actively implemented as a framework for service planning and delivery and priority setting. Although the effort is being made to incorporate all eight aspects of the model, in reality it is very difficult to give adequate attention and resources to each of the components on the ground. In such settings, which are particularly impacted by more immediate acute and chronic health issues, other service delivery becomes a key priority; the need for which can overshadow other components of the model.

> *It's something we were talking about – being spread thinly across. Some areas* (components of the model) *you are not able to do a huge amount in. But it's important to include them still. Because we know that with sexual health it doesn't work with just a clinical point of view.*

In the Kimberley, Pilbara, and Goldfields it appears the framework has been fairly well implemented although the ability to perform research and evaluation on the ground is limited. These components are more commonly executed at the Department level, rather than occurring from the 'ground up'. Table 1 below shows internet survey respondents' views on the extent to which the eight components are given adequate attention. (NB: Two thirds (66%) of internet survey respondents commenting on the area of Aboriginal Sexual Health stated their work focussed on the Kimberley, Pilbara or Goldfields areas. The responses therefore give a good indication of implementation mainly in those areas.)

Table 1: Extent the components of the eight way model are given attention in current Aboriginal sexual health initiatives in WA

	1 not at all	**2**	**3**	**4**	**5**	**6**	**7 very much**
Planning and management	1	2	5	11	7	3	1
Health promotion and community education	1	4	3	6	13	0	3
Data collection and monitoring	1	1	7	7	9	3	2
Health hardware	1	5	4	6	8	3	2
Clinical services	2	3	2	7	9	3	4
Training	2	6	6	6	7	2	1
Research	1	4	2	8	9	4	2
Evaluation	1	3	6	8	7	3	2

Adoption of the eight-way model outside of the Kimberley, Pilbara, and Goldfields is more difficult to assess. Funding for Aboriginal sexual health and BBV initiatives in WA ACCHS is largely via national funding streams (National Aboriginal and Torres Strait Islander Sexual Health and BBV Strategy) than through State funding streams. While ACCHS, GPs, and community health services provide clinical sexual health services and varyingly implement other components of the model (e.g. health hardware, health promotion, data collection and monitoring), the extent to which the eight-way model has specifically and consciously been adopted is unclear and assumed to be limited based on discussions with some stakeholders.

Despite this, a majority of internet survey respondents indicated that the Strategy had influenced program planning or service delivery and over half of respondents perceived the priorities of the Strategy have enabled progress in the field of Aboriginal sexual health since 2005 (Figure 6). In addition, around half of the survey respondents considered the priorities of State and Commonwealth government to be an enabler.

Some stakeholders also felt there are gaps in the eight-way model and additional components should be considered. Suggestions included: cultural safety, outreach services, community consultation and partnerships, community ownership and building healthy public policy. Such suggestions fit strongly with the Ottawa Charter for Health Promotion.

Key Points

Aboriginal Sexual Health Strategy Guiding principles and the eight-way model for delivery of comprehensive sexual health care was largely supported by stakeholders.

- Implementation of the framework is occurring most noticeably in Kimberley, Goldfields, and Pilbara; however there are structural barriers in ability to implement eight components comprehensively. Implementation in other regions is less discernible.
- Aboriginal community participation and ownership at all stages of the development and implementation process is considered of prime importance by stakeholders.
- Engagement and partnerships with ACCHS could be improved in most areas across WA. Some regions have come to a point of 'readiness' to do this more effectively.

Objective 3

Assess the appropriateness of the recommended actions and guiding principles to the current context

The Plans' and Strategy's guiding principles and recommended actions on the whole remain suitable to the current WA context. Both internet survey and in-depth interviewees overwhelmingly agreed that the guiding principles of the Action Plans and Strategy remain relevant to the current context. Furthermore the adoption of the guiding principles has provided a strong foundation to base a future response. With the Plans and Strategy viewed by stakeholders as a gold standard, the recommended actions were clearly perceived to be appropriate. In addition, many priorities of the mid term review and this consultation are in line with the current Plans and Strategy highlighting there is further work to be done in a similar direction to that outlined in the current Plans and Strategy.

For each of the priority areas listed in the Action Plans the majority of internet survey respondents agreed they are a continuing high priority for the WA response. In-depth interviewees also supported the continuation of these priority areas. Although evidence of implementation of the eight way model outside the remote setting was limited, a majority of stakeholders commenting on the Aboriginal Sexual Health Strategy, believed it to be a good framework under which to continue the response. One interviewee expressed this succinctly:

> *You can't really argue with those!*

In terms of emerging priorities, the Action Plans and Strategy in their current form allow a shift of focus when the context requires it. This has been seen with local responses to overseas acquired HIV, a syphilis spike both in MSM and in the Kimberley, and LGV among MSM in Perth. These are easily linked back to priority populations and/or risk behaviours in the current Plans. While not emphasised in the current iterations, the comprehensiveness of the action areas and priority groups allowed a shift in focus with the changing environment. This comprehensiveness, while seen as a strength, is also potentially a 'wish list', rather than an accurate documentation of the current response.

> *When I sit and look at the actions…it's like, well we haven't achieved that and we haven't achieved that etc.*

The trick is to maintain the flexibility by continuing the comprehensive coverage of risk populations, risk behaviours, and priority actions, while not creating a document that is unrealistic to implement. This also links to a need for performance indicators and targets.

The proportional disparity of hepatitis C notifications between Aboriginal people and the wider population, along with the potential for increases in hepatitis C and HIV transmission amongst Aboriginal people (especially in prisons) requires an ongoing focus. How this is given due attention in policy frameworks in WA should be decided in consultation with the sector.

Key Points

- The Action Plans' Guiding Principles, Priority Areas, and actions remain relevant to current context.
- Eight-way model of comprehensive Aboriginal sexual health care remains an appropriate framework but has not been 'tested' outside of the Kimberley, Pilbara and Goldfields.
- Action Plans and Strategy in their current form are flexible enough to enable priority changing according to emerging issues. This flexibility needs to be maintained but realistic priorities for implementation need to be set.
- The proportional disparity of hepatitis C notifications between Aboriginal people and the wider population needs ongoing attention.

Objective 4

Identify barriers to implementation of STI and BBV prevention and control interventions.

Assessment of the barriers to implementation of STI and BBV prevention and control interventions is largely drawn from the stakeholder consultations. All interviewees were asked about the barriers faced by their organisation or sector in implementing a response to STIs and BBVs as outlined in the Plans and Strategy. Survey respondents were asked to gauge the extent to which a variety of factors (derived from interviewee's insights) had helped or hindered progress since 2006 (Figure 6).

Barriers to implementation of prevention and control interventions are in some instances far reaching and beyond the scope of the SHBBVP and the WA DoH. Barriers identified through in-depth interviews and surveys broadly included cultural, political, environmental, structural, and economic factors. The need for increased funding in all areas of BBV and STI prevention, diagnosis and treatment is an overarching theme, identified by almost all interviewees, and implicit in many of the barriers described.

Staff availability and continuity was assessed by survey respondents as the greatest barrier in the response to HIV, STIs and hepatitis C across WA (figure 6), with a number of respondents also commenting that staff shortages contributed to STIs and BBVs being a low priority in some settings. A lack of appropriately skilled staff in the primary care and Aboriginal Community Controlled Health sectors around sexual health and BBVs resulting in a need for staff education were also significant barriers commented on by survey respondents. Opinion on training needs also included a need for cultural training around sexual health and BBVs for staff working with Aboriginal communities as identified by a couple of survey respondent.

Maintaining a workforce in particular in regional and remote areas was the most frequently identified challenge.

> *The registered nurses turn over rate this financial year was 250%!*

The current mining boom in WA has produced difficulties in attracting and retaining appropriately qualified staff in the health sector. Both government and non-government organisations cannot compete with the higher remuneration offered in the private mining sector. Nursing and Aboriginal Health Worker positions are difficult to fill with high turn over.

> *A nurse can get paid more washing dishes at the mines!*

Remoteness and extreme weather conditions also serve to make long term employment unlikely for out of town workers. Survey respondents also noted that the Aboriginal Sexual Health Strategy was dependent on skilled persons to implement.

Furthermore, the prohibitive cost of housing in 'mining towns' and remote areas cuts significantly into project and program budgets and was an important barrier identified by interviewees and survey respondents. The turnover affects continuity in care for the consumers of health services and - particularly in relation to Aboriginal communities - impacts on the development of a trusting relationship. Recruiting and training Aboriginal Health Workers from the local community is again met with the challenge of providing an attractive salary package, another issue identified was the lack of accreditation for workers. Male workers are particularly short on the ground and are seen as important in making services more accessible to Aboriginal men and adolescents.

> *There is a lack of males in health in general, but particularly Aboriginal male health workers. And in remote places you might have a white, middle aged female and it's not going to be appropriate for males to come in there.*

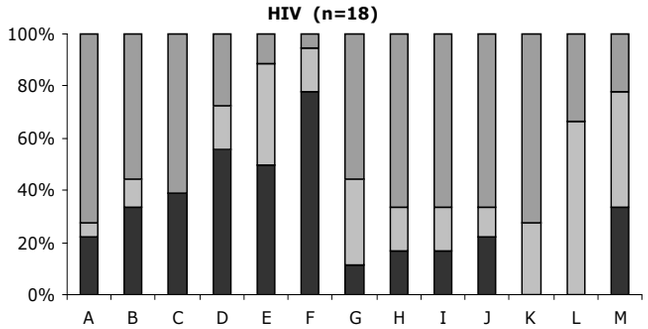
Geographic factors such as distance present challenges in terms of delivery of services including BBV and STI screening and treatment.

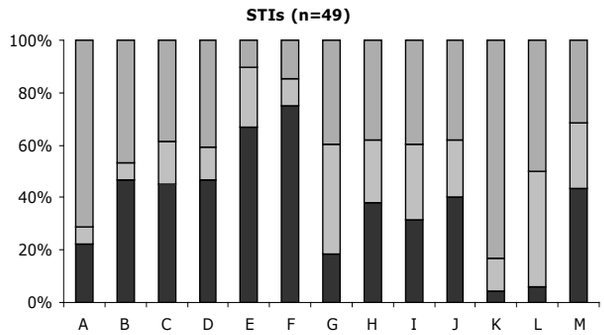
> *That's one of the big things in order to see change – people have to have access to primary health care… **appropriate** primary health care. Which is limited in remote areas.*

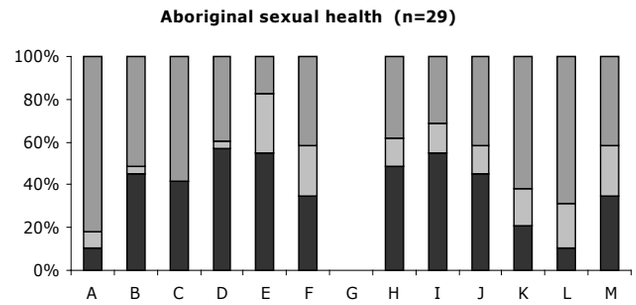
Many interviewees and a number of survey respondents identified the need for a total rethink in the way health services are developed and delivered. The 'medical model' was seen by many as anachronistic and more holistic ways of viewing and managing health were described. The way in which health provision is compartmentalised (e.g. sexual health workers, chronic disease etc) was mentioned by a number of interviewees as an inefficient way to utilise resources. Pooling funding between departments by finding a common interest is one way that this can be overcome, although attempts to do this are rarely coordinated. At a service level however, others cautioned against the tendency for health workers particularly in remote and regional areas to be 'jack of all trades and master of none'.

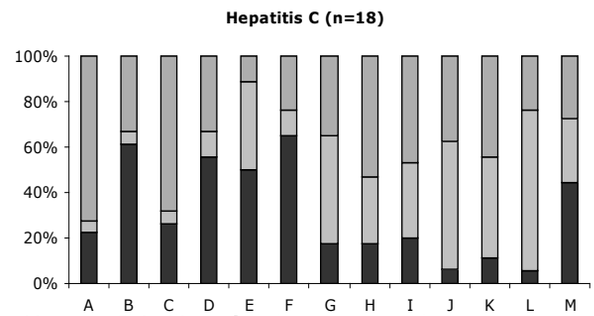
Figure 6: Barriers and enablers to progress since 2006

Helped No impact Hindered









A	Staff availability / continuity	H	Priorities of state government
B	Education and training of health staff	I	Priorities of federal government
C	Availability of funding	J	Media attention
D	Priorities of workplace	K	Geographical factors
E	Priorities of Action Plan	L	Housing for staff
F	Partnerships with relevant organisations	M	Community / consumer demand
G	Priorities of local government		

Outside of prevention and health service provision, a number of challenges were identified in relation to social, environmental, and economic factors. A number of interviewees discussed the need to focus on upstream determinants of health more broadly, while recognising this was outside the ability of the SHBBVP and its funded organisations alone.

> *We need the capacity to address the social determinants of sexual health. Without attention to the overall well-being of young people, their education, housing, hopes and aspirations, freedom from community violence and despair, any initiatives are going to be limited.*

In relation to this, the short funding cycles of public health interventions were seen to be limited in their ability to effect change on the ground (although contract terms have increased in some areas which was identified as an enabler). Attention to socio-economic factors linked in with an identified need to engage other sectors more broadly in developing 'healthy public policy', an area which itself presents a challenge as different departments have differing agendas. Difficulties in garnering the interest and support of non-health sectors was commonly identified.
One frequently cited example also highlighted in the STIs Model of Care was trying to achieve a minimum delivery of sex education hours in schools, a political hot potato which has received mixed reactions from the Department of Education.

> *But the schools are still doing very little sexual health education. And it really needs to be part of the curriculum. We can go in there and say these are the recommendations. But unless it's made a compulsory part of the curriculum it's hard to get it enforced. Everything is pointing to those early education is the best.*

STIs and BBVs are also seen to be struggling for attention and resources, competing with the tertiary care sector and more 'palatable' issues such as chronic disease. A general lack of high level political leadership was identified by interviewees and survey respondents as being a major barrier to profile raising and thus effective implementation of prevention interventions. It should be noted here that the support and commitment of SHBBVP staff and the CDCD were frequently cited as enablers in the field. Political leadership was rather seen to be a gap at the Ministerial level.

> *I don't think there is much support at the Ministerial level until it gets out of control.*

> *I use it in funding applications and arguments for extra staff but nothing ever happens as apparently everything remains historical and there really isn't enough outrage about STIs in the system… not like immunization rates – somehow it has not embarrassed the ministers enough to matter*

For HIV, the risk of complacency or '*policy implementation fatigue'* was identified as a major challenge for government and also the health and community sectors to ensure continued focussed efforts in the response. The WA DoH

Executive Director of Public Health in an address at the ASHM conference highlighted the need for reframing issues so that they are relevant to the changing nature of the epidemic in WA such as increasing heterosexual transmission and managing HIV along the care continuum as with other chronic illnesses. Reframing the issue is essential to strengthen or develop new partnerships that are important to the response to the changing epidemic.

In relation to service provision on the ground, keeping sexual health on the agenda is also seen to be difficult particularly in non-metropolitan areas where chronic disease management and responding to acute care needs compete for attention on a daily basis. For ACCHSs this was particularly the case.

> *As the organisation who are looking after the sickest group in the community, our priorities are primarily towards diabetes, renal and heart disease and so on. Sexual health, STIs, tend to slip down the list.*

Perceived barriers to implementation of the Aboriginal Sexual Health Strategy specifically include a lack of Aboriginal community ownership in formulating and implementing a response. In some areas partnerships with ACCHSs are strong and in others are not. Strong partnerships were viewed as an important aspect of ownership. It was expressed by many interview and survey participants that Aboriginal ownership at all steps of the process is crucial for adoption of the Strategy and long term change in STI rates.

> *You need Aboriginal involvement, Aboriginal ownership...and Aboriginal empowerment along the process of it.*

Further, for Aboriginal communities, talking about sex and drugs is said to be difficult as there is a strong sense of shame attached. This is seen as a major barrier to implementation of services. Programmes such as 'Mooditj', which does not focus on sex per se but rather life skills, were frequently identified as a good way of approaching sexual health education. In relation to clinical services, most interviewees thought that sexual health should be "mainstreamed" rather than being provided separately – particularly due to the stigma attached to seeing a Sexual Health Worker.

> *We used to have an actual Sexual Health Worker…but because of the confidentiality and the cultural thing as well, it just wasn't working. Because if she was going to someone's house people would know what she was going there for, because she was associated with the division. That was a real problem, so in the end, we don't actually have any workers in that area.*

In small communities, the likelihood of knowing the health workers also acts as a deterrent to seeking screening and care for STIs and BBVs. The need for mainstream services to provide culturally appropriate services and resources was therefore identified, thus also enhancing choice for consumers. The Adult Health Checks were seen to be a good way of integrating sexual health into general health care however the population with the highest burden of STIs (15 – 24 year olds) are not currently presenting for the checks. Difficulties in reaching this mobile population were cited as a particular challenge for services.

Social/cultural barriers for non-Aboriginal populations also exist and primarily revolve around stigma and discrimination associated with for example injecting and sexual risk behaviour. This was seen to be due to a lack of knowledge and understanding in the wider community and also amongst health professionals, which discourages service access particularly in small communities, but also in Perth.

> *Attitude of general nursing staff to IDU and indigenous clients* (is a barrier).
>
> *Lack of knowledge by health professionals and general public* (is a barrier).

Key Points

- Barriers range from social, cultural, structural, political, economic, and environmental.
- Lack of funding associated with implementation of the Action Plans and Strategy outside of core funded community organisations.
- Attracting and maintaining an appropriate and qualified workforce particularly in regional and remote areas, and particularly including male Aboriginal personnel.
- Keeping sexual health and BBVs on the agenda is difficult - both politically and at a service delivery level. Ministerial level leadership is lacking particularly with regard to directing cross government work and attention to sexual and blood borne virus concerns
- Sexual health education should be compulsory on the school curriculum
- Current response lacks Aboriginal 'ownership' which influences effective implementation and the ability to form effective partnerships with the Aboriginal community controlled health sector.
- Stigma associated with risk behaviours for BBVs and STIs is a barrier to service access across the board but particularly for Aboriginal people.

Objective 5

Identify new and/or emerging priority areas or target populations.

There are many challenges for the ongoing response to BBVs and STIs in Western Australia. These challenges arise from a mix of ongoing and emerging issues, the majority which have been well identified through existing surveillance mechanisms or via reports and feedback from the range of health and other professionals working in the sectors relevant to individuals and communities at risk of or affected by these infections.

For HIV: the increasing overall number of notifications with an increasing proportion of cases in males and females that were acquired overseas in high prevalence countries through heterosexual exposure requires attention. Many of these infections were acquired in the individual's region of birth (i.e., high prevalence region) and others in males travelling or working overseas. These overseas acquired infections have occurred in a context of a shortage of skilled workers in WA with a subsequent migration of skilled workers from countries with a high prevalence and high levels of international travel (work and leisure) by WA residents arising from the WA resource industry boom and are factors for consideration in the response to HIV and also to STIs. Despite the increasing proportion of heterosexual acquired cases, the actual number of HIV diagnoses acquired through male to male sexual intercourse has increased and MSM remain an important population group for targeted prevention. It is also essential that a strong focus on prevention and diagnosis in Aboriginal people is maintained. Although the number of new HIV diagnoses in Aboriginal people in WA appears to have remained stable over recent years, the notification rate is higher in the Aboriginal population than the rest of the population and the continuing high rates of STIs and hepatitis C notifications in Aboriginal people indicate a high prevalence of risk factors which influence the transmission of HIV. Other groups of concern mentioned via the stakeholder consultation included young people, people with mental health, intellectual or other disabilities and MSM with alcohol and other drug issues.

Advances in treatment for HIV/AIDS have led to longer and improved quality of life for many PLWHA and also to an increasing number of PLWHA in WA and increasing complexity of HIV/AIDS clinical care. Most clinical services for PLWHA are in the Perth metropolitan tertiary sector with a few GPs also qualified to prescribe HIV s100 drugs. Around 120 people infected with HIV live in non-metropolitan regions and although there are actions to increase GP involvement in HIV management, the need to improve access to treatment in rural areas was reiterated by many stakeholders.

For STIs the pattern of increasing notification rates for chlamydia, gonorrhoea and infectious syphilis differ between infection, in particular in terms of population group and geographical area. Some of the trends include:

- Increasing rates of chlamydia in young heterosexual people, in particular females and higher rates of chlamydia infection in Aboriginal people and in the Kimberley, Goldfields and Pilbara
- Increasing rates and the highest rates of gonorrhoea notification in the Kimberley, followed by the Pilbara and the Goldfields; and the majority of gonorrhoea notifications in Aboriginal people
- Increasing rates of infectious syphilis in Perth MSM and fluctuating but higher rates of infectious syphilis in Aboriginal people and in the Kimberley and Goldfields

Such increases in these different population groups suggest continuing high prevalence of risk behaviours amongst a context of high and increasing disease prevalence in a range of population groups, highlighting the need for a response that speaks to the broader community and more specifically to particular at risk groups. Other groups of concern mentioned via the stakeholder consultation included older heterosexual people starting a new relationship, young people including homeless, people who inject drugs, people have been sexually assaulted, lesbians, migrants and overseas students, and people with a transient lifestyle such as those '*flying in and out of mining sites'*. However, aside from the GCPS (conducted second yearly in Perth MSM) there is no system of sexual risk behaviour surveillance in at risk groups and without these it is difficult to monitor the impact of health promotion and prevention campaigns on knowledge and risk behaviours. Surveillance of testing data or sentinel surveillance offers a mechanism to understand in more detail the trends in these infections and also an indicator of access to services.

For hepatitis C: Notifications have remained stable and while the number of newly acquired cases identified has decreased, the difficulties in ascertaining newly acquired hepatitis C infection mean it is difficult to determine whether transmission has altered. Notification rates in Aboriginal people remain high and they are also higher in some rural and remote areas (Kimberley, Great Southern and Midwest) than the rest of WA. Stakeholders agreed that people who inject drugs, people in custodial settings and Aboriginal people who engage in risk behaviours remained the highest priority groups and they also identified those with a mental illness and people from CALD backgrounds as potential concerns. People who inject drugs are fairly well serviced in prevention and education services in WA, however preventions strategies such as NSPs are not available in custodial settings, a high risk area. There have been significant advances in hepatitis C treatment over recent years, but currently only small numbers of people living with hepatitis C commence treatment and access to treatment services remain limited outside of Perth; highlighting the need for initiatives promoting improved access to hepatitis C treatment.

Summary

The target groups identified in the Action Plans and Strategy generally remain important to maintain a focus on for the response to BBVs and STIs, in particular men who have sex with men, Aboriginal people (in urban and remote communities), young people, injecting drug users and people in custodial settings. An increased emphasis is justified for heterosexual people at risk of acquiring HIV overseas, including people with a transient lifestyle, in both the HIV and STI response. Another priority group justifying increased emphasis is Aboriginal people who inject drugs. Some of the key challenges and priorities to address in the future response in WA are around access to services that is compounded by workforce recruitment, training and retention particularly in remote and rural areas. Another area is around developing a response that speaks to both the broader community and to specific at risk groups in the context of a diversifying HIV epidemic and altering trends in STI transmission.

Key Points

- Continued focus on priority populations in the Action Plans and Strategy
- Increased emphasis on HIV / STI prevention in heterosexuals at risk of acquiring HIV overseas
- Increased emphasis on harm reduction in Aboriginal people who inject drugs
- Increased emphasis on harm reduction and safe sex in custodial settings
- Continuing focus on addressing workforce issues

KEY ACHIEVEMENTS

It became apparent during the course of the evaluation that numerous successes and gains have been achieved in BBV and STI control in WA. Some of these achievements are difficult to measure, but were frequently identified by stakeholders as enablers to progress. These achievements are:

Overall

- The Action Plans and Strategy filled a gap in the WA public health literature; in that they articulate context and a direction for the whole-of-community response to increasing rates of BBVs and STIs.
- The *process* of development of the Action Plans enabled reflection and priority setting. It also enabled strengthening of collaborative partnerships and generated momentum.
- Maturing of the BBV and STI sectors, which now have improved capacity for critical analysis and innovation in future responses. The Aboriginal sexual health sector has reached a point of readiness for building sustainable partnerships and improving dialogue both within the sector and the community they serve.
- Achievement of several priorities in the final year of the strategies, facilitated greatly by the mid-term review of Action Plans which resulted in priority setting.
- The building of partnerships across government and non-government agencies with a shared commitment to improved service delivery to target groups.
- The Models of Care articulate a vision for BBVs and STIs between the community, primary and tertiary sector. There is potential for a more coordinated approach between and within sectors should the relevant aspects of the Models of Care be incorporated into the strategic direction of the different sectors. (It is important the emphasis of the Model of Care is equally that of education and prevention as well as service delivery and that work force development outside the tertiary setting is viewed as a major priority and is not secondary to the development of capacity in these centres).

Disease prevention, surveillance, control, and treatment

- Public health efforts have contained the HIV outbreak amongst Aboriginal community which occurred over a decade ago.
- Responsiveness to emerging disease priority areas through prevention efforts targeting groups at high risk of syphilis, LGV, and overseas acquired HIV.
- Surveillance of BBVs and STIs through the CDCD has provided consistent high quality analysis of notifications data to provide a thorough understanding of trends in infections and the burden of BBVs and STIs in WA.
- An independent review of NSP services.
- Continued condom provision in custodial settings.
- The establishment of regional hepatitis clinical specialist nurse positions in three regions has resulted in better local access to care and support and the opportunity for expansion of shared care in those regions.
- Community awareness campaigns including chlamydia, hepatitis C, and overseas acquired HIV specifically identified in the mid-term review.
- The implementation of Aboriginal sexual health teams has increased BBV and STI testing in Kimberley, Pilbara and Goldfields.
- Development of the HIV and STI Models of Care.

CONCLUSION AND RECOMMENDATIONS

The HIV, STI, and Hepatitis C Action Plans and the Aboriginal Sexual Health Strategy have made a valuable contribution over the past four years to the public health response to the HIV, hepatitis C and STI epidemics in WA. A key achievement is development of a framework under which HIV/AIDS, hepatitis C, STI education, prevention, treatment, care and control strategies could be developed and implemented and also an articulation of what was considered by many stakeholders to be 'best practice' or what WA should be endeavouring to achieve in its response to BBVs and STIs. Partnerships within and between many government and non-government programs and clinical services in the tertiary and primary sector underpin many prevention, education and workforce initiatives, creating an environment in which communication and formulating a response to emerging trends is possible.

Since implementation of the Plans and Strategy in 2005 and 2006, WA has experienced increasing rates of diagnoses of HIV and other STIs (chlamydia, gonorrhoea and syphilis) while overall rates of diagnosis of hepatitis C infection have remained stable. For each of these infections, the epidemiology differs in terms of the population groups affected, exposure patterns, geographic regions where rates are highest, and emerging trends in infection. In this context of increasing notifications and changing epidemics, there is a clear need for a continued and invigorated response to the HIV, hepatitis C and STIs epidemics in WA that continues to be aligned with the National response. With BBV and STI rates in WA generally higher among Aboriginal people than non-Aboriginal people, there is also an ongoing need for a specific response that meets the health needs of Aboriginal people and communities.

There are many challenges, some ongoing and some new, in providing a timely response to these epidemics in WA, with many of these challenges unique to the WA context. While these Plans and Strategy have provided a useful framework for action in WA, there are aspects of their development, implementation and monitoring that could be improved. Recommendations aimed at producing an improved and invigorated response to the HIV, hepatitis C and sexually transmitted infections epidemics in WA are provided below.

Recommendations

Development and implementation

Key finding: Although the consultation process for development of the Action Plans and Strategy was both comprehensive and inclusive of major stakeholders (from government, community, education, medical, health research and scientific sectors) across WA, a sense of ownership and responsibility for action was lacking in many stakeholders.

Key finding: Although the response in WA reflects national priorities and is largely relevant to the current context in WA, the Plans and Strategy lacked clear setting of priorities and indicators to work towards over the life of the Plans/Strategy. The recommended actions are in essence a long 'wish list' of what could be achieved if funds and resources were unlimited, and contain considerable ambiguity regarding roles and responsibilities for implementation and measures of achievement.

Recommendation: The process of developing an ongoing response to the HIV, hepatitis C and STI epidemics in WA should:

- Continue to include consultation with major stakeholders and be expanded to include stakeholders at all levels
- Be viewed as a process of engagement that ownership all stakeholders, in particular Aboriginal people and other communities at heightened risk of or affected by these infections
- Continue to be aligned broadly with the National response but priorities unique to the WA context should be elevated according to their importance to WA
- Include a clear articulation of the roles and responsibilities for monitoring implementation and realistic indicators with measurable targets that are achievable in the lifespan of the Plans / Strategy

BBVs and STIs in Aboriginal people

Key finding: BBV and STI rates continue to be higher among Aboriginal people in WA than in non-Aboriginal people, and there is an ongoing need for a specific response that meets the health needs of Aboriginal people and communities. There are also increasing rates of injecting drug use in Aboriginal people and Aboriginal people are over-represented in custodial facilities in WA. These factors have raised debate as to whether the response for Aboriginal people and communities around non-sexual transmission of BBVs should be addressed purely in mainstream policy documents or be a stand alone strategy.

Recommendation: Aboriginal people and communities should continue to be a priority population in the response to HIV, hepatitis C and STIs in WA:

- Access to mainstream services that are relevant to Aboriginal people should be encouraged by the continued inclusion of Aboriginal people as a priority population in the next iterations of each of the mainstream HIV, hepatitis C and STI policy documents
- A specific separate strategy toward reducing the burden of BBVs and STIs in Aboriginal people and communities transmitted via unsafe sexual and injecting behaviours should be developed and include an implementation plan
- Aboriginal organisations and communities should give direction and leadership to the SHBBVP regarding development of both the mainstream response and Aboriginal specific response to BBVs and STIs in the Aboriginal population

Heterosexual HIV transmission

Key finding: The proportion of HIV notifications acquired through heterosexual transmission has increased. However, there is limited available evidence to gain a detailed understanding of the risk factors and behaviours influencing this increase

Recommendation: An evidence base around the factors driving heterosexual transmission of HIV in WA needs to be developed that will inform prevention interventions toward reducing this mode of transmission

Workforce issues

Key finding: Large geographic distances, a lack of appropriately qualified staff and opportunities for higher remuneration outside the health sector workforce issues are major challenges to the response to BBVs and STIs in WA that were well recognised by all stakeholders and are articulated in the current iterations of the Plans and Strategy.

Recommendation: Continue to progress workforce development strategies with an emphasis on:

- Expanding shared care approaches to managing BBV treatment and care for HIV and hepatitis C so that it is provided by GPs and nurses in all regions of WA (metropolitan, rural and remote) and supported by tertiary services. This should be supported by dedicated resources in the tertiary and rural sectors and appropriate remuneration toward shared care providers
- Training and education that supports GPs and nurses to participate in shared care approaches
- Training and education of GPs, nurses, Aboriginal health workers in management of STIs
- Expansion of the role of nurses in management of STIs
- Amendment of the *Poisons Act 1964* to enable the creation of advanced Sexual Health Nurses positions
- Updating and disseminating the Guidelines for Managing Sexually Transmitted Infections following their evaluation
- Expanding training positions for specialists in clinical immunology, sexual health and infectious diseases

Partnerships and collaborations

Key finding: There are many successful partnerships and collaborations operating between government, community, clinical, academic and scientific sectors with respect to the HIV, STI and hepatitis C response in WA, however barriers to intersectoral partnerships and with the Aboriginal Community Controlled Health Sector were evident.

Recommendation: The SHBBVP should enhance existing partnerships and develop new ones:

- Strengthen partnerships with the Department of Education towards it being compulsory for sexual health education to be on the school curriculum, whilst acknowledging the right for individual families to 'opt out'
- Strengthen partnerships with Department of Corrections toward provision of NSPs in custodial settings
- Strengthen partnerships with Aboriginal Community Controlled Health Services toward addressing workforce issues and supporting services that meet the needs of the Aboriginal community
- Investigate and develop partnerships with industry and the private sector toward conducting research into the factors influencing heterosexual transmission of HIV and developing relevant prevention initiatives
- Continue to work collaboratively with the Infections and Immunology Network toward incorporating relevant aspects of the Models of Care into the public health response to BBVs and STIs ensuring an emphasis on education and prevention, the primary health setting and workforce development outside the tertiary sector

Surveillance and data collection

Key finding: The SHBBVP has provided consistent high quality analysis and reporting of notifications data through which trends in diagnoses of BBVs and STIs have been monitored. The recent addition of surveillance of BBV and STI laboratory testing data for the STI endemic regions has provided an added measure of trends in infection and clinical activity. However such information for other regions in WA is lacking and the surveillance of laboratory testing data lacks other important information such as test result and age. These data would further enhance understanding of infection trends, access to clinical services and testing practices.

Recommendation: Investigate expansion of BBV and STI surveillance to incorporate denominator and core demographic data that would facilitate improved understanding of trends in notifications and access to services. Potential options are:

- Collection of testing data from laboratories for regions in addition to the STI endemic regions.
- Sentinel surveillance[3] at sexual health or other clinical services focusing on high priority groups to monitor testing rates, infection prevalence, and risk factors for infection.
- Collation and analysis of data arising from routine BBV and STI testing in the clinical setting to contribute to sentinel surveillance or monitor other indicators.
- It is also recommended that any system collecting data from the clinical setting is automated as far as practicable to minimise impact on service providers.

Young people

Key finding: Although there are many examples of prevention education and health promotion interventions targeting a broad range of risk groups, inadequacies in reaching young people (in and out of school and Aboriginal people) to promote safe sex and safe injecting and to promote testing were emphasised frequently.

Recommendation: Develop a response toward prevention and timely diagnosis of BBVs and STIs in young people. This should involve:

- Peer education and new technologies to provide relevant and accessible prevention education.
- Promotion of chlamydia screening in young people in alignment with current federal initiatives.
- Development of innovative outreach testing and treatment programs that take into account geographic distances.

3 One example, is the Victorian Primary Care Network for Sentinel Surveillance on BBVs and STIs that uses a linked surveillance methodology to collect and link test results from the laboratory for all individuals routinely tested at the sentinel clinic to demographic and behavioural information arising from a survey completed voluntarily while the patient is in the doctor's room.[34]

APPENDICES

APPENDIX 1: Advisory Group members

- Crystal Connelly, Department of Corrective Services
- Susan Carruthers, Curtin University
- Sandra Fox, WA Substance Users' Association
- Lisa Bastian, SHBBVP
- Judith Bevan, SHBBVP
- Francine Eades, Aboriginal Health Council of WA
- Sue Laing, SHBBVP
- Donna Mak, SHBBVP
- Lynda Blum, SHBBVP
- Trish Langdon, WA AIDS Council
- Heath Greville SHBBVP

APPENDIX 2: Organisations and committees forming the stakeholder interviews

- WA Department of Health
  - SHBBVP
  - CDCD
  - WA Country Health Services
  - Public Health Units: Kimberley, Pilbara, Goldfields, Bunbury
  - Aboriginal sexual health teams: Kimberley, Goldfields, Pilbara
- WA Department of Corrective Services
- WA Committee for HIV / AIDS and STIs
- WA Indigenous Sexual Health Advisory Committee
- WA Viral Hepatitis Committee
- Western Australian AIDS Council
- Hepatitis Council of WA
- Curtin University
- Telethon Inst Child Health at University of WA
- Tertiary hospitals (Royal Perth and Fremantle)
- Australasian Society for HIV Medicine
- WA GP Network
- Kimberley Aboriginal Medical Services Council
- South West Aboriginal Medical Service
- WA Substance Users' Association
- Aboriginal Health Council of WA
- Health Consumers' Council
- WA Network of Alcohol and Drug Agencies
- Family Planning WA, Magenta, Street Worker Outreach Project WA

APPENDIX 3: Potential questions for key stakeholder interviews

Evaluation of the Western Australian:

HIV/AIDS, STI, hepatitis C Action Plans; and the Aboriginal Sexual Health Strategy

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Your role

- Brief description of current position and role
- Are you a representative on any Advisory Committee to the WA SHBBV? (ie. WAVHC / WACHAS / WAISHAC)
- Are you aware of the HIV/AIDS, STI, Hepatitis C Action Plan/s or Aboriginal Sexual Health Strategy and which do you see as relevant to your organisation and position? Which do you feel you can comment on?

Development of the Action Plans and Strategy and relevance

- What was the impetus and process for development of the Action Plans / Strategy for WA?
- Were you (or your organisation) involved in developing the action plan/s or strategy? In what capacity?
- The Action Plans and Strategy (AP/S) were developed with guiding principles and priority groups and suggested actions at state level to complement relevant National Strategies. With this in mind – comment on:
    - The relevance / usefulness of the AP/S to the WA context? To your organisation?
    - the extent that guiding principles have been adopted? Examples?
    - The priority areas and groups most relevant to your organisations work?

Dissemination and implementation

- For the AP/S you are aware – comment on how it was disseminated to your organisation?
- What do you see as your organisations role (if any) in achieving the AP/S goals?
- Has the content of the AP/S informed:
    - planning and priorities for your organisation?
    - service delivery or employee roles?
    - Specific activities
    - Gaining new funding toward work prioritised in the plans?
    - Development of specific partnerships that aid achieving objectives of the plan?
    - other?
- What are the barriers to implementation for your organisation? What has helped facilitate implementation?

Impact

- What strategies / actions have been implemented successfully or what improvements have occurred in the fields of HIV/AIDS, STIs, hepatitis C and aboriginal sexual health in your organisation / through General practice? Over the last three years? Since 2007?

Future

- What are the priorities for future plans and strategies?
- Are there any new or emerging challenges that need to be focussed on?
- What are the strengths and weaknesses of the existing plans? What elements would you like to see carried over to future plans?

APPENDIX 4: Details of survey respondents

	n	%
Total respondents	**131**	**100**
Type of organisation worked for:		
Non government organisation	39	30
Government	48	37
Health service provider	36	27
University / research institute	8	6
Description of role **(multiple responses possible)**		
Health advocate	24	12
Health educator / health promotion	56	28
Policy officer / advisor	18	9
Researcher	10	5
Medical practitioner - physician	3	1
Medical practitioner - general practice	3	1
Government advisory group member	5	2
Community or clinic nurse	38	19
Public health professional	18	9
Aboriginal health worker	9	4
Other	19	9
Total responses	*203*	
Population groups focused on **(multiple responses possible)**		
Aboriginal people	91	14
Injecting drug users	54	9
People in custodial settings	39	6
Young people	73	12
Men who have sex with men	37	6
People living with HIV/AIDS	37	6
People living with hepatitis C	38	6
Sex workers	32	5
People from culturally and linguistically diverse backgrounds	38	6
Women	66	10
Men	56	9
General population	73	12
Total responses	*634*	
Region in Western Australia of focus **(multiple responses possible)**		
Metropolitan area(s)	35	25
Great Southern	6	4
Midwest/Gascoyne	8	6
South West	6	4
Wheatbelt	2	1
Goldfields	12	9
Kimberley	15	11
Pilbara	11	8
All of Western Australia	45	32
Total responses	*140*	
Length of time working in sector		
Less than one year	14	11
One to five years	61	47
Between five to ten years	24	18
More than ten years	31	24
Not answered	1	1
Selected area of expertise to comment		
HIV / AIDS	20	
Hepatitis C	22	
Sexually Transmitted Infections	49	
Aboriginal Sexual Health	30	
Did not proceed to next stage	10	

APPENDIX 5: Trends in BBVs and STIs in WA

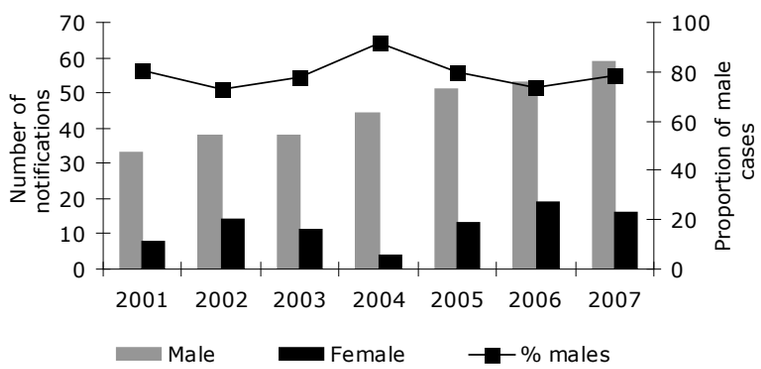
This appendix provides a description of recent trends and the current state of the HIV, hepatitis C and STIs epidemics in WA and is drawn largely from aggregated notifications data reported in existing epidemiological reports.

HIV /AIDS

The HIV epidemic in WA peaked in the 1980s followed by a decline in new diagnoses until the late 1990's.[13] With advances in treatment for HIV/AIDS there is an increasing number of PLWHA in WA, estimated at 995 people as of March 2007.[22] More recently, WA has experienced an increasing trend in the annual number of HIV infections diagnosed, with 75 cases in 2007 representing a 45% increase since 41 cases were notified in 2001.[11 12 14] This trend of increasing notifications has been observed elsewhere in Australia.[15] In the first six months of 2008, thirty cases of HIV infection were notified; three less than in the same period in 2007.[16]

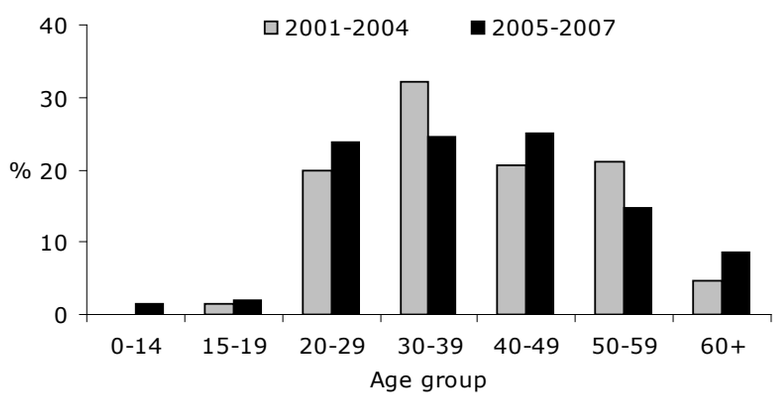
Between 2001 and 2007, although the majority of notifications in WA (79%) were in males (Figure 7), this proportion is lower than reported nationally where males represented 88% of notifications over the same period.[15] Females also represent an increasing proportion of HIV diagnoses in WA, 20% (2001 to 2007) compared to 5% in 1986.[2]

Figure 7: Number of HIV notifications by sex in WA, 2001 to 2007 (n=401)



Most WA notifications from 2001 to 2007 occurred in the 30 to 39 year age group (28%) (figure 8), males representing a higher proportion of cases aged over 40 years (53% compared to 26% of females in 2006).[11] In 2006, the median age for HIV diagnosis in WA was 41 for males (range: 24 to 71 years) and 29 in females (range 19 to 47 years) compared to 38 in males and 31 in females nationally.[15]

Figure 8: Proportion of HIV notifications by age group WA, 2001 to 2004 and 2005-2007 (n=401)

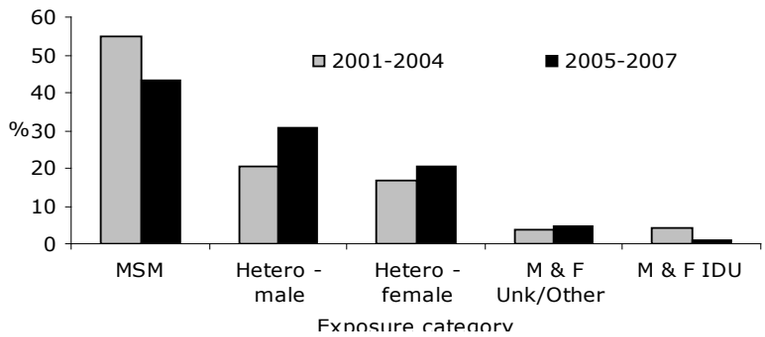


Most notified HIV cases in WA reside in the metropolitan region with five or less non metropolitan cases annually from 2001 to 2005. In 2006, 19% (n=13) of notifications were from non-metropolitan regions. Since 2001, 36 (9%) of notifications have been in Aboriginal people with the age standardised rate (ASR) of HIV notifications among Aboriginal people in WA fluctuating from 4 to 18 per 100,000 between 2001 and 2006; more than double the rate in non-Aboriginal people.

The pattern of exposure has altered over time in WA, with a decrease in the proportion of cases acquired through male to male sexual intercourse and an increase in the proportion of cases with a heterosexual exposure (males representing most of this increase). Heterosexual exposure increased from 38% between 2001 – 2004 to 51% between 2005 – 2007 (males = 31%, females = 20%) (Figure 9).

Elsewhere in Australia an increase in heterosexual exposure has not been observed.[15] Most male cases with heterosexual exposure reported acquiring their infections overseas with Thailand the main country of acquisition.[22] The proportion of cases reporting injecting drug use as the sole exposure from 2001 to 2004 was 4.2% compared to 0.9% between 2005 and 2007. A small proportion of cases where male to male sexual intercourse was the exposure also reported injecting drug use as an exposure.

Figure 9: Proportion of HIV notifications by exposure category, 2001-2004 and 2005-2007[10-13]



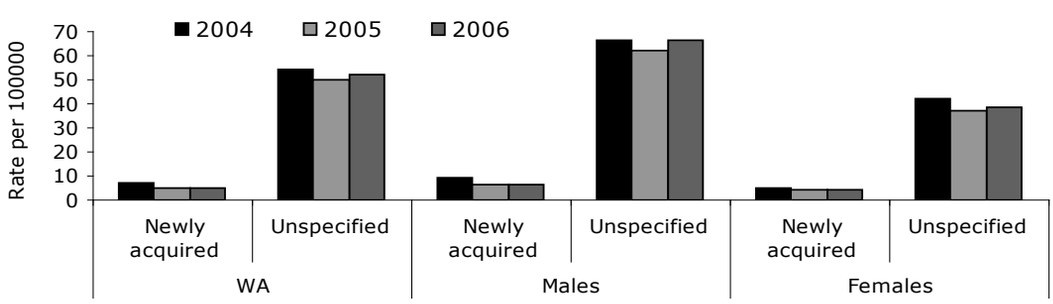
Hepatitis C

The annual number of notifications for newly acquired and unspecified hepatitis C infection[1] in WA from 1993 to 2006 is shown in figure 10,[11] the total number remaining fairly constant at 1100 to 1300 per year, with a peak in 2000 when laboratory notifications were first included. Most hepatitis C notifications in WA are unspecified infection, and in 2007 there were 76 newly acquired and 1207 unspecified cases. The number of notifications that are newly acquired has decreased over the last five years from 182 in 2003 to 76 in 2007.[14] However, ascertainment of newly acquired cases is difficult and this figure could be underestimated.

Figure 10: Number of hepatitis C notifications by disease status, WA, 1997 to 2006 [10]

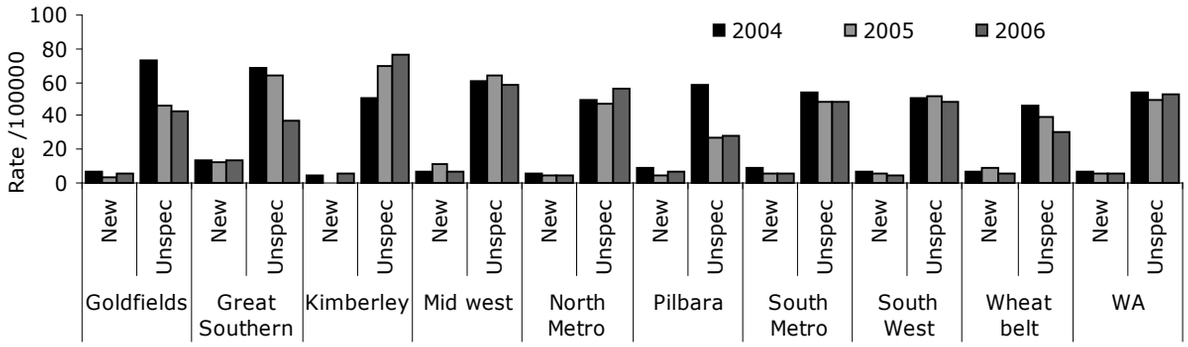
The hepatitis C notification rate is higher in males than in females (figure 11), although between 2004 and 2006 the newly acquired infection rate decreased for males (7.2 in 2004 to 5.3 in 2006) and females (5.1 in 2004 to 4.5 in 2006).[11-13] Most hepatitis C notifications in WA are in individuals aged 20 to 49 years (82% from 2005 to 2007).[3 14] However, adolescents represent a significant proportion of newly acquired infection (10% in 2006) compared to 3% of unspecified infection.[11]

Figure 11: Notification rate by sex, WA, 2004-2006



Although most hepatitis C notifications (75% between 2004 and 2007) are reported in the Perth metropolitan region the highest notification rate occurred in the Kimberley, crude rate 88 per 100000 in 2006 and 93 per 100,000 in 2007.[14] Comparison of rates by region 2004 to 2006 shows the age standardised notification rate (ASR) of 69 per 100000 in the Great Southern, Kimberley and Midwest regions was 1.2 times the rate of 58 per 100000 for all of WA (Figure 12). Over the same time period, the highest rate of newly diagnosed infection was recorded in the Great Southern region (12.9 per 100,000) and the highest rate of unspecified infection in the Kimberley (35.8 per 100,000). Notification rates in most other regions were similar to the overall WA rate, although in the Pilbara and Wheatbelt they were lower than the WA rate.

Figure 12: ASR of hepatitis C notifications by region, WA, 2004 to 2006



Hepatitis C notification rates in Aboriginal people in WA appear to be increasing (Figure 13 and 14). Although a greater number of infections are diagnosed in non-Aboriginal people (688 in 2006 and 699 in 2007) compared to Aboriginal people (115 in 2006 and 99 in 2007)[4], notification rates of newly acquired and unspecified infection are higher in Aboriginal people. However, the proportion of notifications not identified by Aboriginality varies between newly acquired and unspecified infection with 94% of newly acquired infections in 2006 identified compared with 67% of unspecified.[11] Where Aboriginal status is not known, ASRs are overestimated and need to be interpreted with caution.

Figure 13: ASR of newly acquired hepatitis C notifications by Aboriginality, WA, 1997-2006 [11]

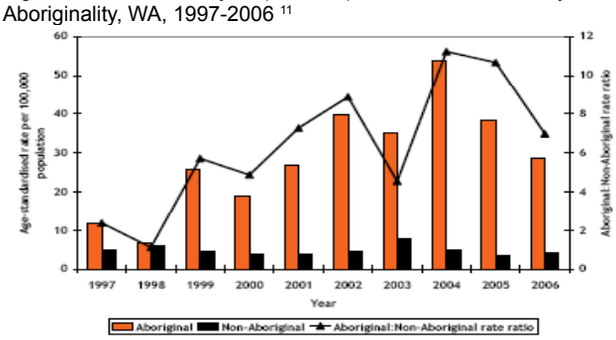
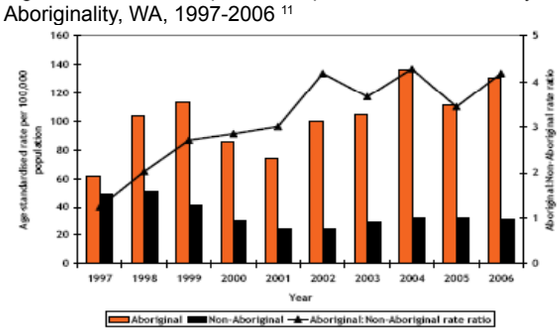


Figure 14: ASR of unspecified hepatitis C notifications by Aboriginality, WA, 1997-2006 [11]



Sexually Transmitted Infections

STIs that are notifiable under the *Health Act 1911* in WA include chlamydia, gonorrhoea, syphilis, donovanosis (Granuloma inguinale), chancroid and HIV (which is also a blood borne virus). STI surveillance in WA is limited to these notifiable infections. Description of STI epidemiology in this section will concentrate mostly on the most common notifiable STIs chlamydia, gonorrhoea and syphilis. Non-notifiable STIs such as human papilloma virus (HPV), the virus that causes genital warts and herpes simplex virus (HSV), the virus that causes genital herpes are not mentioned discussed.

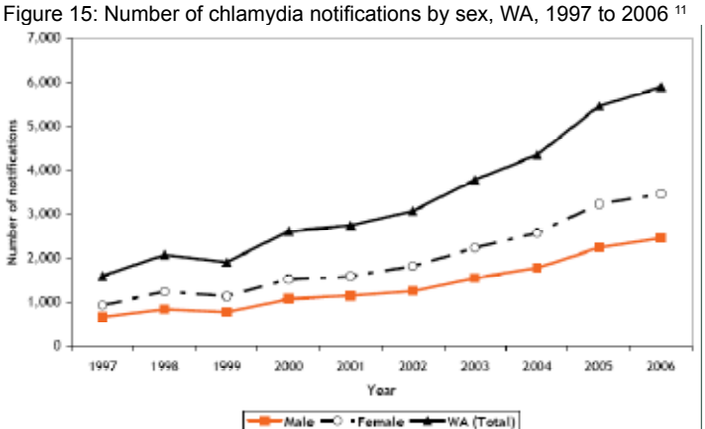
Chlamydia

Genital chlamydia is the most commonly notified infectious disease in Australia[15] and WA with the 7242 newly diagnosed cases in WA in 2007 (41%, 2969 in males; 59%, 4273 in females) reflecting a 23% increase on 2006[14] and a continuing upward trend since 1997 in which more cases are notified in females than males (figure 15).[11]

This trend appears to be continuing with the 4339 notifications in the first six months of 2008 representing a 12% increase compared to the same period in 2007. [16]

Most chlamydia diagnoses occur in younger age-groups and for 2006 and 2007, 36% of notifications were in 20 to 24 year olds and 29% in 15 to 19 year olds.[14]

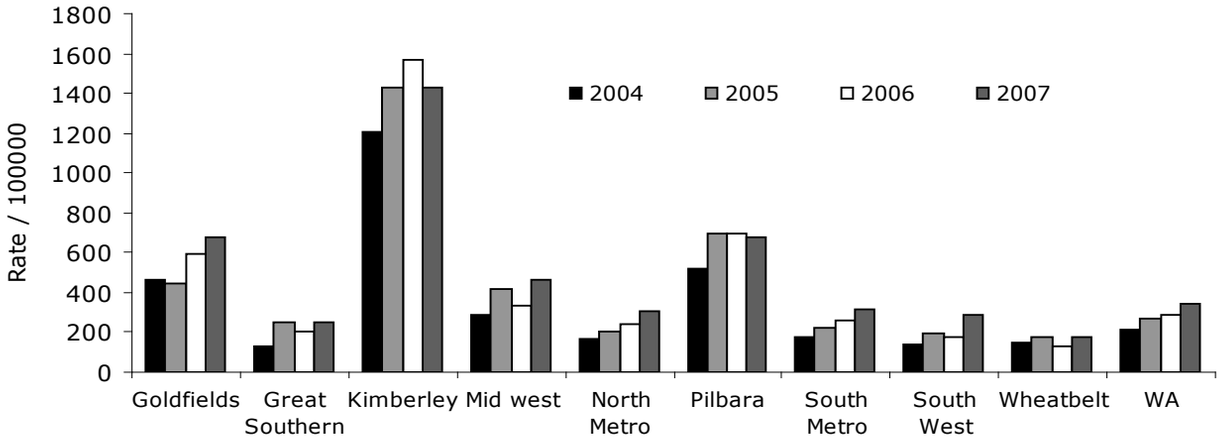
Figure 15: Number of chlamydia notifications by sex, WA, 1997 to 2006 [11]



Most chlamydia notifications in WA occur in the metropolitan region (67% 2004 to 2007), but when expressed as a population rate, the highest notification rates occurred in the Kimberley region (figure 16).

4 Does not account for Aboriginal status unknown

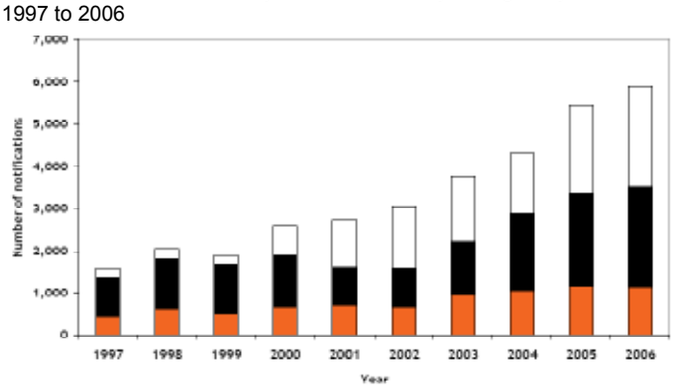
Figure 16: ASR* of chlamydia notifications by region, WA, 2004 to 2007



*Notification rate for 2007 is a crude rate as age standardised rates were not available

There is a substantial proportion of chlamydia notifications in WA where Aboriginality is not known (39% from 2004 to 2007) (figure 17), with implications for comparison of infection rates between Aboriginal and non-Aboriginal people. ASRs will be under-estimates and there may be differences in the proportions of people where Aboriginality is known relative to the total population. Consequently it is difficult to interpret ASRs by Aboriginality. However, where Aboriginality is known, chlamydia infection rates are higher in Aboriginal people than non-Aboriginal people (crude rate ratio in 2006 was 13.7:1 and in 2007 was 9.9:1).[14]

Figure 17: Number of chlamydia notifications by Aboriginality, WA, 1997 to 2006

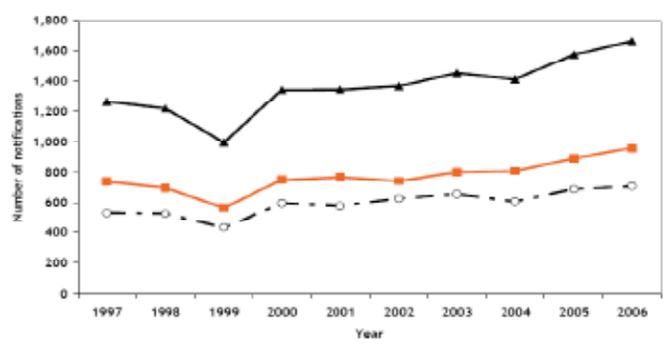


Gonorrhoea

Gonorrhoea is the second most commonly notified STI in Australia and WA.[14 15] From 1998 to 2006 there was an upward trend in the number and rate of notifications nationally that was also seen in WA. Some of the increase in WA was attributed to the introduction of laboratory notifications in 2000.

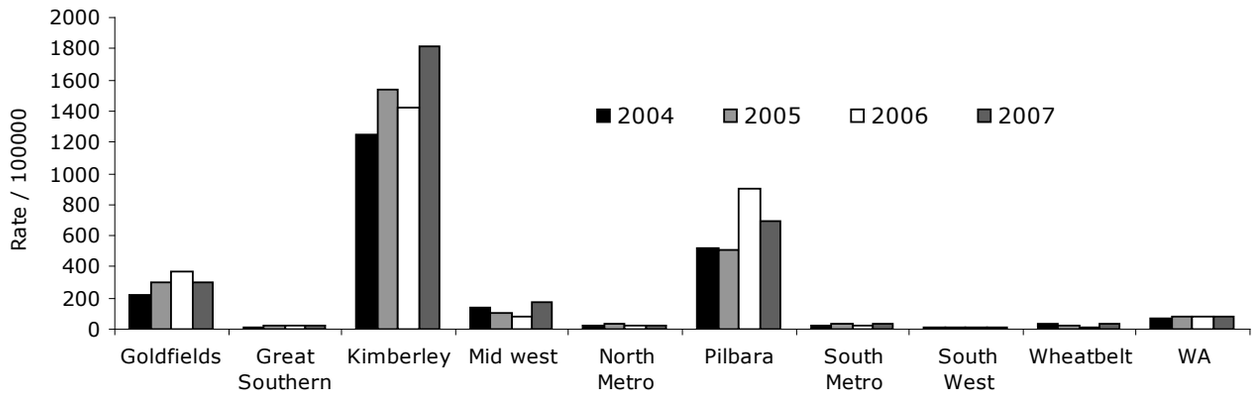
More recently, the national upward trend has reversed with a 13% decrease in gonorrhoea notifications between 2006 and 2007. This decline was not observed in WA where gonorrhoea notifications increased by 4% from 1667 in 2006 to 1735 in 2007. This upward trend appears to be continuing with the 927 notifications in the first six months of 2008 representing a 5.6% increase on levels for the same period in 2007.[16] More gonorrhoea cases in WA are notified in males than females[11] and gonorrhoea diagnosis is more common in younger age-groups (figure 18).[11 14]

Figure 18: Number of gonorrhoea notifications by sex, WA, 1997 to 2006 [11]



The highest numbers and rates of gonorrhoea notifications in WA occur in the Kimberley region (figure 19). Aboriginality in gonorrhoea notifications in WA is well defined, only 2% -3% were unidentified from 2004 to 2007. The majority of gonorrhoea diagnoses in WA are reported in Aboriginal people, 73% or more between 2004 and 2006 and 76% in 2007.[14] The gonorrhoea infection rate in Aboriginal people far exceeds the infection rate in non-Aboriginal people (crude rate ratio: 2006: 105.6:1 and 2007: 88.9:1).[14] Elsewhere in Australia, the rates of gonorrhoea diagnosis are higher in the Aboriginal population than the non-Aboriginal population.[35]

Figure 19: ASR* of gonorrhoea notifications by region, WA, 2004 to 2007



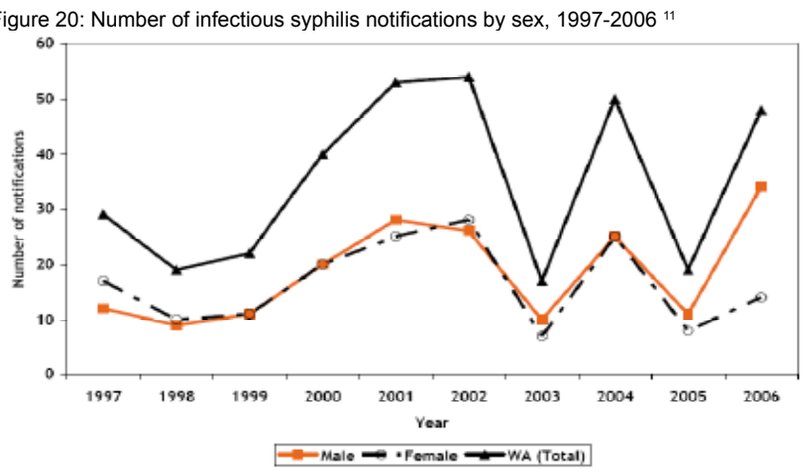
*Notification rate for 2007 is a crude rate as age standardised rates were not available

Syphilis

In WA, the number of infectious syphilis notifications – encompassing primary and secondary stages of syphilis - increased from 1999-2002 mainly because of an outbreak in the Kimberley commencing in 2000.[11 12] Notifications fluctuated considerably from 2003-2005 and since 2005 have increased sharply; by 152% from 19 in 2005 to 48 in 2006; (figure 20) and by a further 51% to 98 in 2007.[11-13] This trend seems to be continuing in 2008 with a further 78 cases notified in the first half of this year. The recent increases in infectious syphilis notifications in WA have been attributed largely to an outbreak amongst MSM in the Perth metropolitan area starting in October 2006[11 36] and follows national increases in infectious syphilis in MSM, which began in the Eastern states in 2002.[11 15]

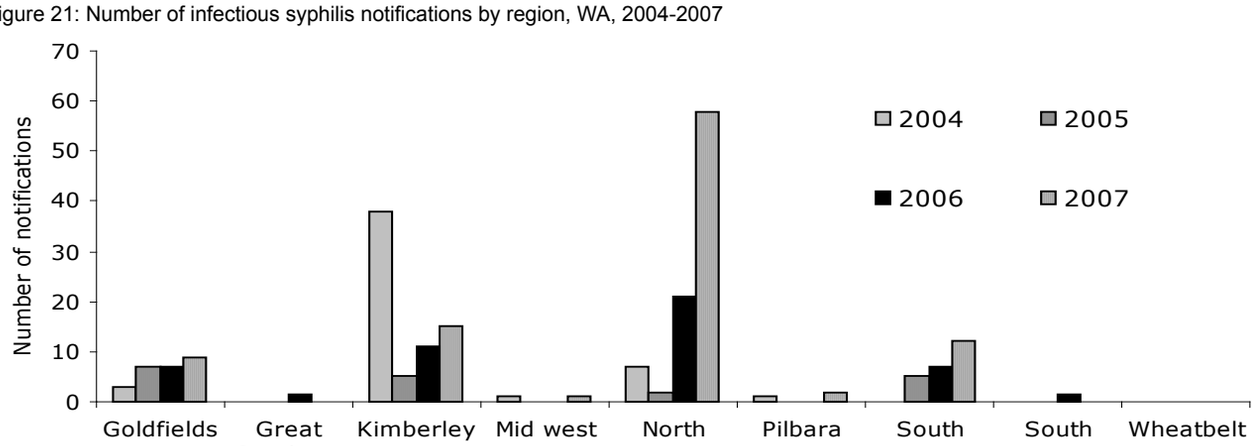
Infectious, or incident, syphilis cases are most common in young people aged 15-24 although non-infectious cases – cases of latent, late-latent and tertiary syphilis - are more commonly notified in older age groups, with 35% of cases in WA in 2006 notified in people aged over 50 years.[11] From 1998 until 2005, numbers of infectious syphilis notifications were similar for both sexes but in 2006, 70% of notifications were in males.[11]

Figure 20: Number of infectious syphilis notifications by sex, 1997-2006 [11]



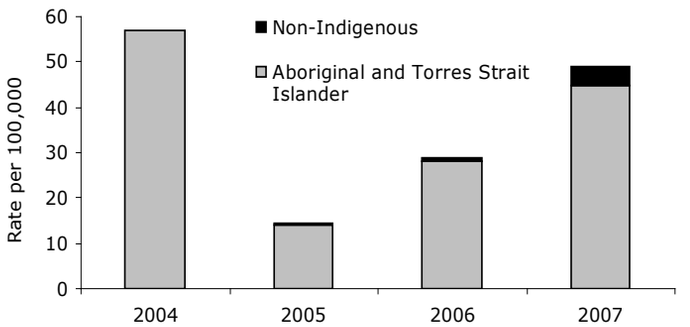
In 2004, the majority of infectious syphilis notifications in WA occurred in the Kimberley (76%) and from 2005 – 2007, the majority occurred in the metropolitan region (64%). However, when expressed as an age-standardised population rate per, the highest infectious syphilis notification rates occurred in the Kimberley and Goldfields (figure 21).

Figure 21: Number of infectious syphilis notifications by region, WA, 2004-2007



The majority of infectious syphilis cases notified in WA from 1997 – 2005 were in Aboriginal people.[11] Whilst, in 2006 and 2007 more cases were notified in non-Aboriginal people (67%) due to the outbreak amongst non-Aboriginal MSM in Perth, when expressed as rate per head of population, notification rates remain far higher amongst Aboriginal people (figure 22).

Figure 22: Infectious syphilis notification rate by Aboriginality, WA, 2004-2007



Other STIs

Lymphogranuloma venereum (LGV), a particularly virulent form of the chlamydia bacteria is not often notified in WA. Eight cases were recently notified to the Department of Health, mainly in MSM who are also infected with HIV and primary or secondary syphilis in metropolitan Perth, suggesting that the outbreak of LGV is associated with the outbreak of infectious syphilis starting in late 2006 amongst MSM in metropolitan Perth.[36]

STIS in children: The majority of STI notifications in children aged 14 years or younger are in adolescents aged 13 to 14.[11]

Appendix 6: Guiding Principles of the Action Plans and Strategy.

HIV Action Plan

- **Leadership** – The Australian Government provides national leadership and a policy framework. Within WA, the DoH provides overall strategic direction for the control and management of HIV/AIDS.
- **The HIV/AIDS partnership** – This recognises the importance of developing, maintaining and strengthening partnerships between the government sector, community-based organisations representing priority target groups, and the education, medical, scientific, health and research communities, with a commitment to consultation and joint decision making.
- **The centrality of PLWHA** – This recognises the importance of PLWHA's participation in policy and program development, implementation, monitoring and evaluation.
- **An enabling environment** – The success of the Plan is dependent upon a supportive social, legal and policy environment that encourages health education and prevention, promotes access to appropriate testing, treatment and care services, and addresses stigma and discrimination.
- **A non-partisan response** – According to the National HIV/AIDS Strategy, this involves "support for pragmatic social policy and for innovative interventions that effect sustainable behaviour change among more marginalised groups in society".
- **Health promotion and harm minimisation** – Health promotion is set within the overall framework of the *Ottawa Charter for Health Promotion* (WHO 1986). Harm reduction (one of the three elements that make up the principle of harm minimisation) supports access to any necessary and proven technologies, such as new or safe injecting equipment, or condoms, which reduce or prevent the transmission of HIV/AIDS.

STI Action Plan

- **Evidence-based policy** – This ensures improved efficiency and effectiveness through adoption of and continuous evaluation of proven interventions and current knowledge.
- **Health promotion** – Based on the 1986 *Ottawa Charter for Health Promotion*, health promotion is defined as a process of enabling people to increase control over and thereby improve their health (WHO 1986). It includes equity in health, education, social mobilisation and advocacy.
- **An enabling environment** – The success of the Plan is dependent on sustaining a supportive social, legal and policy environment that encourages health education and prevention, promotes access to appropriate services, and addresses stigma and discrimination.
- **Early detection and intervention** – This reduces the morbidity and mortality associated with STIs. Early detection involves testing of asymptomatic persons who are at risk of STIs as well as encouraging those with symptoms to present early for diagnosis and treatment. Early intervention includes providing access to appropriate, affordable and non-judgemental care.
- **Access to appropriate health care** – This requires the physical presence of affordable, timely diagnosis and treatment services and also the provision of culturally and socially appropriate care.
- **The involvement of affected people and communities** – Participation by affected and at risk people and communities ensures that policies and programs are responsive to needs, and are designed for maximum positive effect.

Hepatitis C Action Plan

The Hepatitis C Action Plan is firstly underpinned by the principles for health promotion as defined by the Ottawa Charter. Other guiding principles are:

- **Harm reduction**, which aims to reduce drug related harm to individuals and communities through a wide range of policies and programs. Harm reduction interventions encompass a variety of approaches including needle and syringe programs (NSPs).

- A **partnership approach** between all levels of government, community based organisations, health care professionals, researchers and people affected by hepatitis C is fundamental to the prevention and control of hepatitis C.
- Recognition that **social factors** such as poverty, housing, education, income, employment and legal issues influence a person's ability to manage their own health.
- **Involvement of people with or who are at risk of hepatitis C** is critical in the development, implementation and evaluation of all hepatitis C related interventions.
- **Equitable access** for all people with or at risk of hepatitis C to the means of prevention, information, education, testing, treatment and care and support.
- **Commitment to the nine principles** of the *National Strategic Framework* ***for Aboriginal and Torres Strait Islander Health*** *- Framework for Action by Governments* (National Aboriginal and Torres Strait Islander Health Council 2003). These principles are:
  - cultural respect
  - a holistic approach
  - health sector responsibility
  - community control of primary health care services
  - working together
  - localised decision making
  - promoting good health
  - building the capacity of health services and communities
  - accountability.
- Actions will be based on the best available **evidence**.

<u>Aboriginal Sexual Health Strategy</u>

- Partnerships and comprehensive programs
- Proactive community responses
- Primary health care approaches

REFERENCES

1. Department of Health Western Australia. Western Australian Sexually Transmitted Infections Action Plan 2006 – 2008. Perth: Department of Health Western Australia, 2006.
2. Department of Health Western Australia. Western Australian HIV/AIDS Action Plan 2006-2008: Department of Health Western Australia, 2006.
3. Department of Health Western Australia. Western Australian Hepatitis C Action Plan 2006-2008. Perth: Department of Health Western Australia, 2006.
4. Department of Health Western Australia. Western Australian Aboriginal Sexual Health Strategy 2005-2008. Perth: Department of Health Western Australia, 2005.
5. Australian Government Department of Health and Ageing. National HIV/AIDS Strategy - Revitalising Australia's Response 2005-2008. Canberra: Commonwealth of Australia, 2005.
6. Australian Government Department of Health and Ageing. National Sexually Transmissable Infections Strategy 2005-2008. Canberra: Commonwealth of Australia, 2005.
7. Australian Government Department of Health and Ageing. National Hepatitis C Strategy 2005-2008. Canberra: Commonwealth of Australia, 2005.
8. Australian Government Department of Health and Ageing. National Aboriginal and Torres Strait Islander Sexual Health and Blood Borne Virus Strategy 2005-2008. Canberra: Commonwealth of Australia, 2005.
9. Department of Health Western Australia. WA Health - organisational chart: Department of Health Western Australia, 2008.
10. Kildea S, Bowden F. Reproductive health, infertility and sexually transmitted infections in Indigenous women in a remote community in the Northern Territory. *Australian and New Zealand Journal of Public Health* 2000;24(4):382-386.
11. Department of Health Western Australia. The Epidemiology of Notifiable Sexually Transmitted Infections and Blood Borne Viruses in Western Australia, 2006: Department of Health, Western Australia, 2007.
12. Department of Health Western Australia. The Epidemiology of Notifiable Sexually Transmitted Infections and Blood-Borne Viruses in Western Australia 2005. Perth: Department of Health Western Australia, 2005.
13. Department of Health Western Australia. The Epidemiology of STIs and BBVs in WA 2004. Perth: Department of Health, Western Australia, 2004.
14. Department of Health Western Australia. Quarterly Surveillance Report of Notifiable STIs & BBVs in Western Australia. 2008;5(1).
15. National Centre in HIV Epidemiology and Clinical Research. HIV/AIDS, viral hepatitis and sexually transmissible infections in Australia, Annual Surveillance Report 2008.: National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney, NSW, 2008.
16. Department of Health Western Australia. Review of Notifiable Disease, January-June 2008. *Disease WAtch* 2008;12(6).
17. Australian Government Medicare Australia. Medicare Group Reports: Australian Government, 2008.
18. Australian Bureau of Statistics. Residential Population data: Australian Bureau of Statistics, 2008.
19. Regional aboriginal sexual health program. Report to the minister for health, September 2007: Western Australian Department of Health, 2007.
20. Zablotska I, Brown G, Frankland A, et al. Gay Community Periodic Survey: Perth 2006 (GCPS Report 3/2007). Sydney: National Centre in HIV Social Research, The University of New South Wales, 2007.
21. Bradstreet B, Yam S, Langdon P. Outcomes of a community based response to a syphilis outbreak among gay men in W.A. *Australian Society for HIV Medicine*. Perth, 2008.
22. Department of Health Western Australia. HIV Model of Care. Perth: Health Networks Branch, Department of Health, Western Australia, 2008.
23. Department of Health Western Australia. Sexually Transmitted Infections Model of Care. Perth: Health Networks Branch, Department of Health, Western Australia, 2008.
24. Department of Health Western Australia. Health Networks - Collaborative health care planning for the whole community. Perth: Health Networks Branch, 2008.
25. WA AIDS Council. Sex in other cities: Western Australian AIDS Council, 2008.
26. Department of Health Western Australia. Going overseas? Get it on.: Sexual Health and Blood-Borne Virus Program, Health Protection Group. Department of Health., 2006.
27. WA AIDS Council. Safe Sex No Regrets: WA AIDS Council, 2008.
28. The Western Australian rural and remote HIV program: A ten year experience. Australian Society for HIV Medicine; 2008; Perth.
29. Australian Society for HIV Medicine. WA Projects Update – October 2008: Australian Society for HIV Medicine, 2008.
30. Sorenson A, Brown G. Report on the Sexual Health Education of Young People in WA. Perth.: WA Health, 2007.
31. Hales J, Scorsonelli L, O'Brien B. Needle and Syringe Program Review: Health Outcomes International, 2008.
32. Department of Corrective Services. www.correctiveservices.wa.gov.au
33. Gray D, Saggers S, Atkinson D, et al. The harm reduction needs of Aboriginal people who inject drugs: National Drug Research Institute, Curtin University, 2001.
34. Goller J, Gold J, Lim M, et al. Victorian Primary Care Network for sentinel surveillance on BBVs and STIs: an

update. *Victorian Infectious Diseases Bulletin* 2007;10(2):37-9.
35. National Centre in HIV Epidemiology and Clinical Research. Bloodborne viral and sexually transmitted infections in Aboriginal and Torres Strait Islander People: Surveillance Report 2007.: National Centre in HIV Epidemiology and Clinical Research, The University of New South Wales, Sydney., 2007.
36. Department of Health Western Australia. Everything Old is New Again: Syphilis and Lymphogranuloma Venereum (LGV) on the Rise in Perth. *Disease WAtch* 2008;12(5).

(Footnotes)

1 Newly acquired infection is where there is evidence of having acquired the infection within 24 months of diagnosis. Unspecified cases are infections of unknown duration and cases infectious for over six months.