



# **Mid-Term review of:**

**The Second Western Australian  
Aboriginal Sexual Health and Blood-  
borne Virus Strategy and Regional  
Implementation Plan Template 2010 -  
2014**

**February 2013**

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## Executive Summary

*The Second Western Australian Aboriginal Sexual Health and Blood-borne Virus Strategy (2010-2014)* (the Strategy) provides direction and a framework for cooperation and support between government and non-government agencies, including Aboriginal Community Controlled Health Services (ACCHS), research organisations and community groups to work together to reduce the transmission of, and morbidity and mortality caused by sexually transmitted infections (STIs) and blood-borne viruses (BBVs), and to minimize the personal and social impact of these infections among Aboriginal people in Western Australia (WA). Through a combination of feedback from people working in the area of Aboriginal sexual health in WA, and through relevant epidemiological and service indicators, this mid-term review of the Strategy has provided a brief 'snapshot' of progress to date.

There has been a range of achievements identified, as well as areas of priority which still require action over the remaining two years of the Strategy.

Achievements identified by this review include:

- That the Strategy and Implementation Plan are a useful guide for planning and practice
- A significant number of partnerships, planning and management activities particularly in the endemic regions have increased access to services and support
- A range of resources and training programs in health promotion and community awareness are being used successfully to raise awareness about STIs and BBVs particularly in young Aboriginal people
- Opportunistic testing is being undertaken regularly in some but not all services
- Availability of training for health professionals and assistance with clinical audits has enhanced clinical services
- Additional youth services in the south metropolitan region and a mobile service in Kalgoorlie are now available
- Ongoing clinical services and staff orientation are being provided by Regional Sexual Health Teams in endemic regions
- There is good accessibility to free condoms in rural and remote areas in the Kimberley
- Availability of testing and other data has provided evidence on which health professionals evaluate their practice, target gaps and monitor trends
- Education/training and workforce initiatives are readily accessible including to staff from remote and regional areas
- On-line training, and face-to-face training provided by FPWA are effective workforce initiatives
- Testing rates for chlamydia and gonorrhoea have increased over the three year period of the Strategy.

However the review also identified the following gaps and priorities for the future, including:

- Partnerships, collaboration and planning are limited in the metropolitan and some non metropolitan areas
- Additional education in schools (with Aboriginal students) is needed

- Increased health promotion and prevention strategies for all target groups but particularly for Aboriginal males, people in custodial settings, for those who inject drugs, and men who have sex with men is required
- Regular opportunistic testing in all clinical services including ACCHSs, hospitals and GP services needs to be adopted
- Better use of adult health checks to provide screening for STIs and BBVs is required along with maintenance of testing in all clinical settings
- Contact tracing and partner notification in rural and remote regions remains a challenge
- More youth friendly services are required to increase accessibility for young Aboriginal people
- Accessibility to injecting drug equipment in some areas, and particularly provision from non judgmental staff is required
- Enhanced data availability including testing data can improve targeted service delivery
- Behavioural research and research focused on effective community based Aboriginal health promotion strategies is required
- Recruitment and retention of sexual health staff particularly Aboriginal males remains an ongoing issue
- Low pay rates for Aboriginal Health promotion positions, lack of trained sexual health staff and housing difficulties in regional areas are a challenge
- Gaining support for the importance of sexual health from the Regional Aboriginal Health Planning Forums and improving engagement with the ACCHSs is critical
- Aboriginal people have higher rates of STIs than non-Aboriginal people but of particular concern are the continuing and unchanged high rates of gonorrhoea over the period of the review
- The highest notification rates of chlamydia and gonorrhoea are in 15-24 year olds
- Despite annual chlamydia testing being recommended for all 15-24 year olds, testing rates in this group are lower than expected, most particularly in males. Improved strategies are needed to increase testing for all STIs, but particularly gonorrhoea and chlamydia, in young Aboriginal males.

Findings from this review will be used to strategically plan for the final two years of the Strategy. A final review will be undertaken at the end of 2014 by an independent body to evaluate implementation and measure the achievement of the goals and objectives of the Strategy.

## Background

*The Second Western Australian Aboriginal Sexual Health and Blood-borne Virus Strategy (2010-2014)* (the Strategy) provides direction and a framework for cooperation and support between government and non-government agencies, including ACCHS, research organisations and community groups to work together to reduce the transmission of, and morbidity and mortality caused by sexually transmitted infections (STIs) and blood-borne viruses (BBVs), and to minimize the personal and social impact of these infections among Aboriginal people in Western Australia (WA). The Strategy outlines a collaborative and comprehensive approach to tackling this problem and most particularly provides a guide for planning and implementation through the implementation template.

The Strategy and the Implementation Plan support the goals and principles that underpin the *Third National Aboriginal and Torres Strait Islander Blood-Borne Virus and Sexually Transmissible Infections Strategy 2010-2013 (DoHA 2010)* (the National Strategy).

To develop the Strategy, the Department of Health's Sexual Health and Blood-Borne Virus Program (SHBBVP) undertook significant consultation over a 12 month period with major stakeholders, most particularly the Aboriginal Community Controlled Health Services, WA Country Health Service and the metropolitan population health units. In addition staff from the SHBBVP presented to all the Regional Aboriginal Health Planning Forums (RAHPFs) across WA.

The draft was endorsed by the WA Aboriginal Sexual Health Advisory Committee (WAISHAC) in February 2011 and the final draft was presented to the State Aboriginal Health Planning Forum in May 2011 for consideration and endorsement.

The Strategy was developed as a document which provides evidenced based responses to sexually transmitted infections and blood borne virus transmission in the priority target groups. The Implementation Plan template was designed to be used as the tool for regional and localised planning with SHBBVP providing as much assistance and support with this process as required by the regions. The planning template is based on the eight way model originally adopted by the Nganampa and then the Ngaanyatjarra Health Services. It identifies the eight components of a successful sexual health program: planning and management; health promotion and community education; data collection and monitoring; health hardware; clinical services; training; research and evaluation.

A commitment was made that a mid-term review would be conducted by the SHBBVP. In line with a similar process undertaken for the National Strategy, the review is intended as a 'snapshot' of the progress of the Strategy and not an in depth recording of all activities undertaken or planned. A more comprehensive assessment of the Strategy will be conducted at the time of completion in late 2014.

## Purpose of the review

The aim of the review is to determine achievements of the Strategy and Implementation Plan to date, priorities which still require action in the remaining time of the Strategy.

## Methodology

The review included both a desk-top analysis of the performance indicators specified within the Strategy, an on-line survey of key informants and stakeholders and regular reports from 2010 and 2011 from regions of WA with very high rates of STIs in the local Aboriginal population.

### Stakeholder survey

A stakeholder survey formed the primary component of the consultation for this review, running over a three week period in September and early October 2012. In order to provide an efficient and non-burdensome method of completion, the survey was set up as an online questionnaire using Survey Monkey™. The survey was sent via email to stakeholder organisations including; government health service providers, Aboriginal Community Controlled Health Services (ACCHS), and non-government organisations. Appendix A includes a list of organisations and individuals invited to participate in the online survey.

A mix of closed and short open ended questions were included in the survey to elicit information about progress against the action areas of the Strategy for the period of implementation (from early 2011 to the present time) and to identify priority areas and target groups, and emerging challenges and future directions. Survey completion took around twenty minutes and a copy of the survey can be found in Appendix B.

### Six monthly reporting

Regional sexual health teams (RSHTs) for the Kimberley, Pilbara and the Goldfields (the endemic regions) and the Midwest provide six monthly reports to the SHBBVP based on the 'eight way model'. These are compiled into an annual summary report for the Minister for Health. An analysis of these reports for 2010-2011 also provided information for this review.

## Performance indicators

### Performance indicators

In the Strategy it was stated that performance indicators collected at a state level as a requirement of the range of National and State Strategies and Models of Care relating to HIV, STIs and BBVs would be used to assist with the evaluation of the Strategy. This information is collected and reported using a range of demographic variables including, where available, Aboriginal status. While this information provides broad indicators of success relevant to this Strategy, it is important to also evaluate the Strategy through the process and impact of the activity generated in its implementation at a regional and local level. Therefore the indicators of success also include:

- number of regions that have developed plans
- actions implemented
- results of actions implemented.
- achievements/barriers/opportunities and trends in implementing the Strategy.

While these indicators are partially addressed in this review they will be evaluated more explicitly in the final review of the Strategy in 2014.

In this review the performance indicators above have been reported in the Results section of this document where they are available, through the collection of epidemiological and other relevant performance data.

## **3. Results**

### **3.1 Stakeholder Survey and Endemic Region Reporting**

The questions in the survey relate to priority areas for action in the Strategy and form a significant part of the Implementation Plan. They also reflect the format for reporting for the endemic regions. The results below are a combination of the survey and the endemic region activity reports under 6 program headings.

The stakeholder survey yielded 15 responses. The survey was sent to 30 individuals and sent out to the Aboriginal Health Council of WA (AHCWA) members and via the WA Sexual Health Network. Responses by topic area were evenly distributed.

#### **Partnerships, Planning and Management**

The first part of the survey required respondent's views on partnerships, planning and management in the first two of the four year terms of the Strategy. The majority (66.7%) of respondents felt the Strategy and Implementation Plan is useful to guide planning and practice and that the partnership approach has increased access to services and support (66.7%). Respondents were asked to highlight new partnerships within the last two years and responses included participation in monthly regional teleconferences, relationship with the SHBBVP, new clinic in Mandurah trialled, and several local partnerships.

However the formation of an Aboriginal sexual health action group or Committee has not occurred in most areas, with half (50%) of the respondents reporting there is no group in their region. Since the endorsement of the Strategy in 2011 only four (4) regions have developed Regional Sexual Health and Blood borne Virus Plans using the Implementation Plan template as a guide. The regions are the Kimberley, Pilbara, Goldfields and the Great Southern regions. The Midwest holds a quarterly Sexual Health Forum of service providers to plan for service provision but has not developed a formal Plan. The Kimberley is the only region which has an ongoing planning group which is a subcommittee of the Kimberley Aboriginal Health Planning Forum. It meets quarterly and represents all significant stakeholder groups.

In the endemic region reporting a large number and variety of local partnerships, planning and management activities were identified across the four regions including collaboration between ACCHS and WA Country Health Service staff, other non government agencies, hospitals, schools, local prisons, youth services, general practitioners and remote communities.

#### **Health Promotion, Prevention and Community Awareness**

The second section of the stakeholder survey required respondent's views on health promotion, prevention, community awareness and clinical services. Respondents generally agreed (53.3%) that access to prevention and education had improved, with those who disagreed (20%) citing lack of additional education in schools, and limited engagement of Aboriginal leaders. The majority (66.7%) of respondents agreed resources and information are available to Aboriginal priority populations.

Respondents cited strategies that are successful in raising awareness of STIs and BBV as;

- new health promotion resources
- training of Aboriginal educators
- the Mooditj program
- HITnet machines located in Aboriginal Medical Services
- Education sessions in schools.

The next series of questions related to the following priority population groups within the Strategy:

- Young people aged 15 -30 years
- People in custodial settings
- People who are at risk of, or who inject drugs
- People living with HIV and Blood-borne Viruses
- Gay men and Men who have sex with men.

The majority (66.7%) of respondents agreed there are targeted STI/BBV programs for Aboriginal young people. Of the respondents who agreed the following successful programs were highlighted:

- Education programs such as Mooditj *“Mooditj is a well received program by the Aboriginal youth”*
- Kaiyai girl resource guide
- Education in schools
- Specific STI screening programs such as the Banksia and Rangeview Hills clinic
- Health promotion initiatives such as the Goldfields face book page
- New health promotion resources.

Respondents were asked whether there are targeted STI/BBV programs for Aboriginal people in custodial settings and just over half (55.3%) of respondents agreed with the remainder neither agreeing nor disagreeing. Of the respondents who agreed the following successful education programs were highlighted:

- HIP HOP *“this is a success because it is mandatory in some prisons. It gives educators time to speak with an audience we do not usually have access to”*; and
- FPWA sexual health training in some parts of WA.

On availability of targeted BBV programs for Aboriginal people who are at risk of, or who inject drugs, a portion of the respondents agreed (44.7%), a smaller number (20%) disagreed with the remainder neither agreeing nor disagreeing with the statement. The respondents who agreed selected the Drug and Alcohol Office BBV Project as one program targeting this priority population. Feedback from one respondent was *“more could be done but at the same time, we need to figure out how to access more Aboriginal people who are injecting or at risk of, injecting and provide them with the necessary education and information as to what is out there and how it can affect them and those close to them”*.

In relation to availability of targeted programs for Aboriginal people living with HIV and other BBVs, the majority (46.2%) of respondents neither agreed nor disagreed and the remainder of respondents (38.5%) agreed with the statement. In relation to the provision of targeted programs for gay men and other men who have sex with men, the majority of respondents (40%) disagreed, some agreed (33.3%) and the remainder neither agreed nor disagreed.

The endemic region reports support the results of the survey. Many of the health promotion and community education activities undertaken in the reporting period in all regions targeted young people in schools, TAFE's, and youth services. Training through Mooditj occurred in the Pilbara while in the Kimberley a regular segment on local radio had the capacity to reach a wide audience. The Pilbara also targeted people working in the mining industry with access to workers provided through some large companies, and through promotional resources at the local airport. Women's groups were mentioned in all reports, as receiving health education through specific sessions, or women's health events. The Goldfields reported some success targeting young men through the efforts of the male Aboriginal health promotion officer accessing young men through sporting club activities. However the biggest gaps in access to the target groups was in reaching young men with sexual health promotion messages, and with no reporting highlighting the specific targeting of men who have sex with men or injecting drug users.

### **Clinical Services**

The next section related directly to diagnosis, opportunistic testing, contact tracing and availability of services. Respondents were asked if access to diagnosis and testing has improved. There were a balanced number of people who either agreed (42.9%) or neither agreed nor disagreed (35.7%). Of the respondents who disagreed (21.4%) the gaps identified were clinical services for at risk groups of Aboriginal youth and homeless people. The next question asked whether opportunistic testing was a regular part of service provision and more than half of respondents either strongly agreed or agreed (53.3%). The gaps in clinical services identified were:

- Getting 15 - 25 year olds to present at clinics
- Adult health check needing to be better utilised and to include sexual health
- Hospitals and GPs services not doing enough opportunistic testing.

The responses indicated that contact tracing and partner notification within rural and remote locations has not changed.

Among the greatest achievements listed by respondents with regards to clinical services (including treatment services) for people at risk of STI/BBV were:

- Training for health professionals
- Additional youth services in Rockingham and Mandurah
- Clinical audit services provided by a sexual health physician
- Mobile clinic in Kalgoorlie run by Bega Garnbirringu.

Among the greatest priorities listed by respondents with regards to clinical services (including treatment services) for the remaining term of the Strategy were:

- Recruitment and retention of Aboriginal staff
- Youth friendly services
- Maintenance of testing
- Increase prevention, education and awareness raising strategies
- More Aboriginal Health Workers encouraged to promote opportunistic testing
- Engagement of agencies outside of sexual health clinics to conduct opportunistic testing
- Increase testing in GPs clinics and ACCHS.

In regards to Aboriginal people living with HIV and BBVs and access to appropriate care and support services in rural and remote locations, respondents equally agreed (50%) with this statement and (50%) neither agreed nor disagreed.

In the endemic regions clinical service activities provided over the reporting period included sexual health clinical services in major regional towns as well as in some remote areas, while staff also worked with other health providers to promote the importance of opportunistic testing particularly for at risk young people. An example of this was in the Broome Regional Hospital with the “Yes Wee Can” project where staff in the Emergency Department (ED) were encouraged to screen young people coming into ED for reasons other than for STI’s. All regions were involved in providing clinical services through Well Women’s Clinics, some provided services targeting youth through schools and youth centres, and in the Goldfields clinical services were also provided in the prison.

### **Health Hardware**

Two thirds of respondents mostly agreed (40%) or strongly agreed (13.3%) that there was adequate availability and access to condoms and injecting drug use equipment. In one third of responses people disagreed and the following gaps were identified:

- Gaps in different parts of the state around availability of condoms metropolitan, regional and remote
- Local councils not being pro-active in making condoms more widely available
- Condoms not supplied through schools.

In relation to the availability and access to injecting drug use equipment the following gaps were identified:

- Privacy and access to non-judgemental supply
- Challenges in getting a location to provide fit packs due to some community and health professional staff resistance
- Remote locations disadvantaged in relation to access.

The endemic region reporting supported the survey findings. Some regions particularly the Kimberley reported a vast network of condom distribution points throughout the region, particularly through the use of the ‘condom tree’ where condoms are made available in a receptacle hanging from the branches of trees. These are provided by and replenished by the public and community health staff in both remote and regional areas. Other regions provide them through more traditional means such as the local ACCHS, the Public Health Unit, vending machines, community health and youth centres.

Availability of needles and syringes was relatively consistent across the 4 regions with all reporting availability at the local hospitals. Most regions also had needles and syringes available through the local Public Health Unit, pharmacies, and some vending machines in specific regional towns. However their availability in more remote areas was not reported.

### **Data Collection and Monitoring**

The next section of the survey related to data collection and monitoring. The majority of respondents either strongly agreed (7.1%) or agreed (57.1%) that current data collection and dissemination systems provide adequate information to meet their organisations needs. Testing

data is used to track trends in areas/groups and identify gaps in service delivery with approximately half of respondents agreeing (53.8%) with this statement.

Among the greatest areas of importance in relation to research and/or surveillance for the remaining term of the Strategy respondents identified:

- Regional testing data
- Better data on GP testing
- Research into barriers to seeking care and to safe sex practices
- Evidence translated into action
- Rates and appropriate treatment for gonorrhoea.

The endemic region reporting identifies that current levels of data collection and analysis provides evidence on which the RSHTs evaluate their practice, identify gaps and work with other health care providers to encourage better targeting of young people for opportunistic testing for STIs, and to monitor local trends. Some use their own data collection systems to provide this information while others use the regular and specifically requested reports from the Epidemiology and Surveillance Program at the Communicable Disease Control Directorate (CDCD).

### **Workforce Development/training**

The final sections focused on workforce, education and training. The majority of respondents (78.6%) felt education/training/staff development initiatives are accessible including to rural and regional areas. For the next question respondents were divided in the availability of support and professional development provided for teachers and school nurses with 40% in agreement, while an equal number (40%) neither agreed nor disagreed, and a small group disagreed (20%).

The area of recruitment and retention of Aboriginal sexual health staff working in STIs and BBVs is of concern with the majority of respondents disagreeing with the statement that there has been an increase in the number of Aboriginal sexual health workers particularly male during the last 2 years. In addition respondents were divided in relation to whether appropriate support is provided to increase staff recruitment and retention of Aboriginal staff. Just over half of respondents disagreed (50.0%) or strongly disagreed (7.1%) with this statement, while 35.7% agreed, and 7.1% neither agreed nor disagreed.

The respondents stated the most effective workforce initiatives to date as:

- Training provided by FPWA
- Online education via ECU
- Online education available for teachers
- Aboriginal Educator program at FPWA
- Recruitment of Aboriginal Health Promotion Officer
- Support to regional teams via bursaries, PD days, and monthly teleconferences.

The greatest workforce challenges identified were:

- Recruitment and retention of Aboriginal and non-Aboriginal staff
- Housing for staff in some regional locations
- Lack of trained sexual health staff
- Low pay rates for the Aboriginal health promotion positions.

The endemic region reporting demonstrates the important role that the RSHTs have played over the past two years, particularly in their ability to provide training and support to other health professionals. All reports indicated the range of workforce training undertaken which included staff orientation around STIs and BBV's and regular regional updates. For example in both the Goldfields and the Kimberley from January to June 2011 each RSHT had provided training, both in groups and one to one, with new staff for around 70 professionals, including doctors, nurses and Aboriginal health workers. Additionally in the Kimberley at their annual public health professional development workshop over 90 people had participated in updates around STI epidemiology, screening and management. RSHTs also provide workforce development across the region, such as the Goldfields where in a 6 month period training sessions were provided in Kalgoorlie, Coolgardie, Laverton, Leonora, Esperance and Ravensthorpe.

Resources that are used in orientation for health professionals include the "*Silver Book*" which provides guidelines for STI testing, treatment and management and includes an "Endemic Supplement" and the *Sexual Health Orientation Manual for Endemic Regions*. More general updates are also provided to police, teachers, Department of Child Protection staff and non government agencies.

In line with the survey responses the endemic region reporting also identified staff recruitment and retention as a major challenge in workforce, along with mechanisms for orientating fly-in-fly out health staff to the specific STI issues in endemic areas. In all areas, but particularly the Kimberley, during the reporting period there have been vacant RSHT positions which has been a barrier to providing ongoing support and STI services to local health professionals and communities.

### Other comments

Finally respondents of the survey were able to make comments in relation to the Strategy. Responses were:

- Partnership approach, and reminder of 'eight way' strategy useful
- Many of the issues are "beyond " our influence so require a bigger shift in attitude
- Research has been lacking in the review of community based Aboriginal health promotion strategies. Further support is required to encourage staff to learn to evaluate health promotion activities.
- Getting support from Regional Aboriginal Health Planning Forums. Sexual health not a priority in relation to other health issues. Improved engagement with the ACCHS important.

### 3.2 Limitations

Identified limitations to this review include the small number of responses (15) to the survey and the great variety of positions and regions from which the respondents came. It is difficult to comprehensively assess the progress of the Strategy with such limited qualitative feedback from such a vast diversity of geographical and role related circumstances. It was also evident that a small number of people who responded were not familiar with the Strategy due to their length of time in the sector.

However some analysis has been possible using the quantitative data below and the survey responses and regular reporting from the endemic regions over the first two years of the Strategy, which will inform its ongoing implementation during 2013-14.

## 3.3 Performance indicators

### 3.3.1 STI and BBV notification data 2009/2010 to 2011/2012

Unless otherwise specified, data is presented in this section (3.3.1) for financial year time periods. For example, 2011/2012 is referring to the time period 1 July 2011 – 30 June 2012, and 'year' refers to financial year.

#### Number, rates and proportions of STI notification per year by age, Aboriginality and region

##### Chlamydia

There were a total of 11,744 notifications of genital chlamydia between 1 July 2011 – 30 June 2012 which is comparable to the 11,509 notifications received in 2010/2011 but an increase of 25% above the 9,454 notifications received in 2009/2010. The notification rate increased by 18% over the three year period between July 2009 and June 2012 (412 to 485 notifications per 100,000 population). The age distribution was similar for each of the three years, with the largest proportion of notifications reported among 15 to 24 years old (65%).

In 2011/2012, 13% of chlamydia notifications were reported in Aboriginal people, 79% in non-Aboriginal people and 7% of notifications with unknown Aboriginal status. This is similar to the proportions reported for 2010/2011 and 2009/2010, except the proportion of notification with an unknown Aboriginal status was slightly higher in 2009/2010. There has been a decrease in the Aboriginal to non-Aboriginal rate ratio over the three year period from 6.51 in 2009/2010 to 5.19 in the 2011/2012 year (Appendix C Table 1).

The Kimberley, Pilbara and Goldfields regions (the 'endemic' regions) had the highest notification rates for chlamydia for all three years 2009/2010 to 2011/2012. The chlamydia notification rate decreased slightly in the Goldfields and Pilbara between 2010/2011 and 2011/2012. All other regions showed an increase in notification rates over the three year period. The proportionate change in notification rates varied across regions, with the largest increase observed in the Wheatbelt region (37% increase in the notifications between 2009/2010 and 2011/2012) (Appendix C Table 2).

##### Gonorrhoea

There were a total of 2,040 notifications of gonorrhoea between 1 July 2011 – 30 June 2012 which is an increase of 30% from 2010/2011 and an increase of 61% from 2009/2010. The age distribution was similar for each of the three financial years, with the largest proportion of notifications reported among 15 to 24 years old (55% in the 2011/2012).

In 2011/2012, 60% of gonorrhoea notifications were reported in Aboriginal people, this is similar to the proportion reported for 2010/2011 and 2009/2010 (Appendix C Table 3).

The Kimberley had the highest notification rates for gonorrhoea for all three years and has also reported a significant increase in notification from 938 per 100,000 persons in 2009/2010 to 1950 per 100,000 persons in 2011/2012. The Wheatbelt, Great Southern, Midwest, and North and South Metropolitan regions all reported an increase in notifications rate over the three year period (Appendix C Table 4).

## Infectious Syphilis

Between July 2011 and June 2012 a total of 97 infectious syphilis notifications (primary and secondary cases) were received by the Department of Health WA.

In 2011/2012, 18% of infectious syphilis notifications were reported in Aboriginal people, this is similar to the proportion reported for 2010/2011 but lower than in 2009/2010 in which 30% of notifications were reported among Aboriginal people (Appendix C Table 5). There has been a decrease in the Aboriginal to non-Aboriginal rate ratio over the three year period from 15.5 in 2009/2010 year to 7.33 in the 2011/2012.

There were small decreases in the number of infectious syphilis notifications across most of the regions over the three year period (Appendix C Table 6). Notification rates continued to be highest in the Kimberley and Goldfields.

## HIV

There were a total of 127 notifications of HIV between 1 July 2011 – 30 June 2012 which is higher than both 2010/2011 and 2009/2010 which recorded a total of 99 and 113 HIV notifications respectively (Appendix C Table 7).

The rate ratio between Aboriginal and non-Aboriginal over the three year period has had a small increase from 0.5 in 2009/2010 to 0.7 in 2011/2012. Note, however, that the HIV notification rate for Aboriginal people is sensitive to small changes in the number of cases notified. The total number of notifications remain small in the Aboriginal population, 2 in 2009/2010, 4 in 2010/2011 and 3 in 2011/2012. (Appendix C Table 8)

Finally, the majority of HIV notifications reported for each of the three years were reported among people who reside in the metropolitan area, accounting for over 85% of the notifications received between July 2011 and June 2012 (Appendix C Table 9).

## **Number of newly acquired and unspecified hepatitis B notifications per year by region where acquired (WA/interstate overseas)**

In WA, hepatitis B notifications are classified as newly acquired (evidence of infection having been acquired in the 24 months prior to diagnosis) or unspecified (infections of unknown duration).

Between 1 July 2011– 30 June 2012 there were a total of 601 hepatitis B notifications received, 18 newly acquired notifications and 583 unspecified notifications. This was slightly higher than the number of notifications received in 2010/2011 when a total of 584 notifications were received; 19 newly acquired and 565 unspecified notifications. The highest number of notifications for the three year period was received in 2009/2010 when a total of 664 hepatitis B notifications were received of which 37 were reported as newly acquired notifications and 627 unspecified notifications (Appendix C Table 10).

In 2011/2012, 12.1% of notifications were reported in Aboriginal people, an increase from 5.1% in 2009/2010 (Appendix C Table 10). The Aboriginal to non-Aboriginal rate ratio has increased over the three year period from 1.5 in 2009/2010 to 3.7 in 2011/2012. The Metropolitan area recorded the highest number of Hepatitis B notifications (Appendix C Table 11).

### **Number of newly acquired hepatitis C notifications per year by age, gender, Aboriginality, region**

In WA, hepatitis C notifications are classified as “newly acquired” (evidence of acquiring infection in the 24 months prior to diagnosis) or “unspecified” (infections of unknown duration).

In 2011/2012, a total of 1,041 hepatitis C notifications were reported, 100 newly acquired notifications and 941 unspecified notifications. This was slightly lower than the number of notifications in 2010/2011 (1,087 notifications; 107 newly acquired and 980 unspecified notifications). The highest number of notifications was reported in 2009/2010 with a total of 1,117 hepatitis C notifications (83 newly acquired and 1,034 unspecified notifications) (Appendix C Table12).

In 2011/2012, 18% of Hepatitis C notifications were reported in Aboriginal people. There has been a slight increase from 17% in 2011/2010 and 13% in 2010/2009. There has been an increase in the Aboriginal to non-Aboriginal rate ratio over the three year period from 3.9 in 2009/2010 to 5.7 in 2012/2011 year (Appendix C Table 13)

Finally, the distribution of hepatitis C notifications is shown in Appendix C Table 14. For each year the Metropolitan regions made up the majority of notifications, while the South West, Midwest and Goldfields recorded the highest number of notifications among the rural and remote regions.

### **3.3.2 STI and BBV testing data**

#### **Number, rates and proportion of STI tests carried out per year by age, gender and region**

While this data does not include Aboriginality, the information by region provides testing rates in areas where there is a significant population of Aboriginal people such as the Kimberley, Pilbara and Goldfields. Furthermore in relation to reporting of testing in custodial settings, while this data does not include Aboriginality, WA has the highest Aboriginal imprisonment rate with 4,057 Aboriginal and Torres Strait Islander prisoners per 100,000 adult Aboriginal and Torres Strait Islander population (Australian Bureau of Statistics, 2012).

Overall testing data reported here indicates that over the period of the Strategy testing rates have increased particularly for chlamydia (6%) and gonorrhoea (7%) with testing for the other infections remaining stable. However there was a wide variation in testing rates across the State and between remote regions with testing rates in the Kimberley being far higher than in the Goldfields and the Pilbara.

#### **Chlamydia**

Between January to December 2011 there were a total of 132,576 chlamydia tests performed in WA which was higher than both the 2010 and 2009 calendar years in which 121,283 and 119,006 chlamydia tests were performed respectively.

Between 2009 and 2011 calendar years, chlamydia testing rates in 15-24 year olds (target group for WA’s chlamydia campaigns), increased by 8% (71 to 77/1,000) and 4% (223 to 231/1,000) in males and females, respectively. There was wide variation in testing rates between remote regions with rates in the Kimberley (714/1,000 in 2011) being far higher than those in other regions.

If current Australian preventive health guidelines recommending annual chlamydia testing for all sexually active young people were being followed, testing rates among 15-24 year olds would be expected to be in the order of 734/1,000 population. This estimate is based on data from *Secondary students and sexual health 2008* which indicates that 27.4% and 56.1% of year 10 (16 year olds) and year 12 (18 year olds) students, and 100% of people aged 19 years and over are sexually active (Smith et al., 2008) and Australian Bureau of Statistics census data (Australian Bureau of Statistics, 2011). Only the Kimberley region has testing rates in this vicinity.

The age distribution of chlamydia tests performed were similar for each of the three years, with the majority (approximately 60%) of the tests performed in over 25's. Thirty-nine percent of test performed in each year were performed in 15-24 year olds, however, the testing rate was the highest in this age group and increased 5% over the three year time periods (141 to 155/1, 000 population) (Appendix D, Table 1).

The majority of chlamydia tests for each of the three years were performed in females, in 2011 86% of tests were performed in females. In addition, the testing rate for females was considerably higher than males for each of the three time periods, in 2011 the testing rate among females was 81 per 1,000 compared to 32 per 1,000 in males (Appendix D, Table 2). The Kimberley and Pilbara reported the highest rates of chlamydia test for each of the three years and in 2011 reported a testing rate of 287/1,000 population and 103/1,000 population respectively. Testing rates in the other 7 regions range from 22/1, 000 population to 62 per 1,000 population (Appendix D, Table 3).

### Gonorrhoea

There were a total of 118,613 gonorrhoea tests performed in WA during the 2011 calendar year, which is higher than the 109,085 and 105,963 tests performed in the 2010 and 2009 calendar years respectively. Between 2009 and 2011, the WA gonorrhoea testing rate increased by 7% (47 to 50/1,000 population) (Appendix D, Table 4).

The age distribution of gonorrhoea tests performed were similar for each of the three years, with the majority (approximately 60%) of the tests performed in over 25 year olds.. Thirty-nine percent of tests performed in each year were performed in 15-24 year olds, however, the testing rate was the highest in this age group and increased 5.5% over the three year time periods (128 to 135/1, 000 population) (Appendix D, Table 4).

The majority of gonorrhoea tests for each of the three years were performed in females, in 2011 69% of tests were performed in females. In addition, the testing rate for females was considerably higher than males for each of the three time periods, in 2011 the testing rate among females was 71 per 1,000 compared to 30 per 1,000 in males (Appendix D Table 5).

As for chlamydia testing rates, the Kimberley and Pilbara reported the highest rates of gonorrhoea tests for each of the three years and in 2011 reported a testing rate of 287/1,000 population and 101/1,000 population respectively. Testing rates in the other 7 regions range from 20/1, 000 population to 58/1,000 population (Appendix D, Table 6).

## Infectious syphilis

There were a total of 83,634 infectious syphilis tests performed in WA during the 2011 calendar year, which is higher than the 78,206 and 78,119 tests performed in the 2010 and 2009 calendar years respectively. Between 2009 and 2011, the WA infectious syphilis testing rate remained stable (34 to 35/1,000 population) (Appendix D, Table 7).

The age distribution of infectious syphilis tests performed were similar for each of the three years. In 2011, 71% of infectious syphilis tests were performed in over 25's compared to 28% tests performed among 15-24 year olds. However, the testing rates recorded were highest among the 15-24 year old age group for each of the three years and increased 4.5% over the time period (66 to 69/1,000 population) (Appendix D, Table 8).

The gender distribution of infectious syphilis tests remained stable over the three year time periods, with approximately two-thirds of tests performed in females (Appendix D, Table 8).

Once again, the Kimberley and Pilbara reported the highest rates of infectious syphilis tests for each of the three years and in 2011 reported a testing rate of 176/1,000 population and 65/1,000 population respectively. Testing rates in the other 7 regions range from 17/1,000 population to 39/1,000 population (Appendix D, Table 9).

## HIV

Between January to December 2011 a total of 120,079 HIV tests were performed in WA which was higher than both the 2010 and 2009 calendar in which 114,665 and 116,558 HIV tests were performed respectively. Between 2009 and 2011, the WA HIV testing rate remained stable (50 to 52/1,000 population) (Appendix D, Table 10).

The age distribution of HIV tests performed were similar for each of the three years. In 2011, 75% of infectious syphilis tests were performed in over 25's compared to 24% tests performed among 15-24 year olds. However, the testing rates recorded were highest among the 15-24 year old age group and remained relatively stable over the three year period (85 to 87/1,000 population) (Appendix D, Table 10).

The gender distribution of HIV tests remained stable over the three year time periods, with approximately 60% of tests performed in females (Appendix D, Table 11).

The Kimberley reported the highest rates of HIV tests for each of the three years and in 2011 reported a testing rate of 146/1,000 population. The Pilbara, North Metropolitan and Goldfields region reported the next highest testing rates and in 2011 reported testing 69/1,000 population, 61/1,000 population and 59/1,000 population respectively (Appendix D, Table 12).

## **Number of people tested for hepatitis B in the past twelve months, including people in custodial settings**

There were a total of 101,402 hepatitis B tests performed in WA during 2011, which was similar to the number of tests performed in both the 2010 and 2009 calendar years. Between 2009 and 2011 the hepatitis B testing rates remained relatively stable in WA (Appendix E, Table 13).

Data on the number of people tested for hepatitis B in custodial settings was provided by the WA Department of Corrections. Only data from March to October 2012 is available, during this six month period a total of 2366 hepatitis B Surface Antibody tests were performed.

### **Number of people tested for hepatitis C per year, including people in custodial settings**

Similar to hepatitis B the number of hepatitis C test performed and the testing rates remained relatively stable over the three year period between 2009 to 2011. There were a total of 116,983 hepatitis C tests performed in WA during 2011 which equates to a testing rate of 50/1,000 population (Appendix E, Table 14).

Similarly to hepatitis B, data on the number of people tested for hepatitis C in custodial settings was provided by the WA Department of Corrections. Only data from March to October 2012 is available, during this six month period a total of 2431 hepatitis C Surface Antibody tests were performed.

### **3.3.3 Service development and implementation**

#### **Number and type of outreach STI services established in the metropolitan area**

Over the past two years the B2 Clinic at Fremantle Hospital have established three new outreach STI services including:

- A GP session at Rockingham in conjunction with the B2 nurses clinic (0.1FTE) and a register that attends once every fortnight (0.05 FTE).
- A screening clinic at Fremantle needle and syringe exchange program (NSEP) (0.1FTE).
- Clinic at Headspace (0.2 FTE).

#### **Number of gaps in clinical services in rural and remote regions identified**

This data is not currently available.

#### **Number of new NSP sites established**

Between July 2010 and June 2012 there were a total of six new NSP established throughout WA, two within the metropolitan area and four in regional areas. Four out of these six new NSP sites were established as needle and syringe exchange programs (NSEPs); WA AIDS Council Fremantle fixed site, WA Substance User's Association's (WASUA) Bunbury fixed site, Palmerston Mandurah fixed site exchange and the Midwest Community Drug Service fixed site NSEP in Geraldton. The other two new NSP sites were established within health care centres.

#### **Number and location of nurse practitioners working in sexual health**

Among WA Department of Health services and Community Sector Organisations funded by the Sexual Health and Blood-borne Virus Program, WA Department of Health there a total of 7.3 FTE nurse practitioners working in sexual health across WA. All except one of these nurse practitioners are located in the metropolitan area.

#### **Number and location of sexual health promotion officers**

Among WA Department of Health services and Community Sector Organisations funded by the Sexual Health and Blood-borne Virus Program, WA Department of Health there a total of 31.75 FTE sexual health promotion officers working in sexual health across WA. The majority of these sexual health promotion officers are located in the metropolitan area, except for 0.5 FTE in the Pilbara, 0.2 FTE in the Wheatbelt and 2 FTE in the Goldfields.

## 4. Conclusion

This Strategy review, through a combination of feedback from people working in the area of Aboriginal sexual health in WA, and through relevant epidemiological and service indicators, has provided a brief 'snapshot' of progress to date. There has been a range of achievements identified, as well as areas of priority which still require action over the remaining two years of the Strategy.

Findings from this review will be used to strategically plan for the final two years of the Strategy. A final review of the Strategy will be undertaken at the end of 2014 by an independent body to evaluate the implementation of the Plan and measure the achievement of the goals and objectives of the Plan.

## 5. References

Australian Bureau of Statistics (2011). Census community profiles, basic community profile. Available from:

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<http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4512.0Main+Features1September%20Quarter%202012?OpenDocument>

Smith A, Agius P, Mitchell A, Barrett C and Pitts M (2009). Secondary students and sexual health 2008. Melbourne: Australian Research Centre in Sex, Health & Society, La Trobe University.

## **Appendix A - List of stakeholders invited to participate in the survey**

Aboriginal Health Council of WA

Western Australian Country Health Service – Public Health Units in the Kimberley, Pilbara, Wheatbelt, Goldfields, Midwest/ Gascoyne, Great Southern, South West

South Metropolitan Public Health Unit

North Metropolitan Public Health Unit

FPWA

Drug and Alcohol Office

Office of Aboriginal and Torres Strait Islander Health

Department of Corrective Services

Fremantle Hospital

Members of the Aboriginal Health Council of Western Australia –ACCHS

Members of the WA Sexual Health Network

## Appendix B - Stakeholders Survey

### Mid Term Review of the Second Western Australian Aboriginal Sexual Health and Blood-borne Virus Strategy and Regional Implementation Plan 2010 – 2014

1. Name:
2. Organisation:
3. Title:
4. The Second Western Australian Aboriginal Sexual Health and Blood-borne Virus Strategy and Regional Implementation Plan 2010 -2014 has been useful to guide planning and practice  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree  
If disagree, what key barriers exist and how could these be addressed?

#### **PARTNERSHIPS, PLANNING AND MANAGEMENT**

5. The partnership approach has worked to increase access to sexual health and blood-borne virus services and support Aboriginal priority populations  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree  
If disagree, what key barriers exist and how could these be addressed?
6. Has a regional Aboriginal STI/BBV Action Group or Committee been formed in your region?  
Yes – No - N/A  
Comments
7. Where applicable, please highlight one or two new partnerships that have been developed under the Aboriginal Strategy. Please describe how they have resulted in increased access to sexual health and blood-borne virus services and support Aboriginal priority populations.

#### **HEALTH PROMOTION & PREVENTION, COMMUNITY AWARENESS AND HEALTH LITERACY**

8. Access to prevention and education has improved  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree  
-If disagree, what areas of prevention and education are not improving and what do you see as the barriers to their improvement?
9. Appropriate resources and accessible information on STIs/BBVs is available to Aboriginal priority populations  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree
10. Please highlight one or two strategies that are being successfully implemented to raise STI/HIV/HCV awareness in the Aboriginal population?

## **PRIORITY POPULATION:**

YOUNG PEOPLE 15-30 YEARS

PEOPLE IN CUSTODIAL SETTINGS

PEOPLE WHO INJECT DRUGS

PEOPLE LIVING WITH HIV AND OTHER BLOOD BORNE VIRUSES

GAY MEN AND OTHER MEN WHO HAVE SEX WITH MEN

11. There are targeted STI/BBV programs for Aboriginal young people  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree  
If agree, highlight one or two of the most successful and comment on the reason for their success?
12. There are targeted STI/BBV programs for Aboriginal people in custodial settings  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree  
If agree, highlight one or two of the most successful and comment on the reason for their success?
13. There are targeted BBV programs for Aboriginal people who are at risk of, or who inject drugs in your region  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree  
  
If agree, highlight one or two of the most successful and comment on the reason for their success?
14. There are targeted STI/BBV programs for Aboriginal people living with HIV and other blood-borne viruses  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree  
  
If agree, highlight one or two of the most successful and comment on the reason for their success?
15. There are targeted STI/BBV programs for gay men and other men who have sex with men  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree  
  
If agree, highlight one or two of the most successful and comment on the reason for their success?

## **CLINICAL SERVICES**

16. Access to diagnosis and testing for Aboriginal people has improved  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree  
  
If disagree, which at-risk groups need to be better reached?
17. Opportunistic testing is a regular part of service provision  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree

If disagree, what are the gaps?

18. Contact tracing/partner notification capacity within the rural and remote WA has been enhanced  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree

If disagree, which areas require more capacity?

19. Strategies are being implemented to improve availability of clinical services, (including treatment services) including through primary care providers, for people at risk of STI/BBV.

Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree

If agree, highlight one or two of the most successful and comment on the reason for their success?

20. Appropriate care and support services are being made available, particularly in rural and remote areas, for people living with or affected by HIV/BBVs

Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree

If agree, are they being accessed?

21. What are the greatest priorities in clinical services for the remaining term of the Strategy?

## **HEALTH HARDWARE**

22. There is adequate availability of and access to condoms and water-based lubricant  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree

If disagree, what are the gaps?

23. There is adequate availability and access to injecting drug use equipment  
Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree

If disagree, what are the gaps?

## **DATA COLLECTION AND MONITORING**

24. Current data collection and dissemination systems are providing adequate information to meet the needs of your organisation

If disagree, what information needs do you have? Please describe how access to this information would change what you currently do.

25. Please highlight the research and/or surveillance areas of greatest importance in the remaining term of Aboriginal Strategy and Implementation Plans.

26. Testing data is used to track trends in areas and groups tested, and identify gaps in service delivery.

Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree

If disagree, what are the gaps?

## WORKFORCE DEVELOPMENT AND TRAINING

27. Education/training/staff development initiatives are being developed and are accessible, including in rural and regional areas?

Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree

If disagree, why?

28. There has been an increase in the number of Aboriginal sexual health and BBV workers particularly focusing on the recruitment and support of male personnel

Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree

If disagree, what are the gaps?

29. Appropriate support is being provided in the sector to increase staff recruitment and retention of Aboriginal staff

Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree

If disagree, what additional appropriate support needs to be provided?

30. There is support and professional development for teachers & school nurses providing sexual health education

Strongly agree – agree – neither agree nor disagree - disagree — strongly disagree

If disagree, what are the gaps?

31. Please highlight one or two workforce initiatives that have been the most effective to date

32. What are the greatest workforce challenges and how can they be addressed in the remaining time of the Strategy?

## Appendix C– STI and BBV notification data

### Chlamydia

Table 1 Number, proportion and crude rate of chlamydia notifications in WA by Aboriginality, for the three most recent financial years.

Aboriginality	2009/2010			2010/2011			2011/2012		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Aboriginal	1422	15%	1895	1618	15%	2129	1585	13%	2057
non-Aboriginal	6453	68%	291	8447	76%	370	9282	79%	396
Unknown	1579	17%	N/A	994	9%	N/A	877	7%	N/A
<b>Total</b>	<b>9454</b>	<b>100%</b>	<b>412</b>	<b>11059</b>	<b>100%</b>	<b>469</b>	<b>11744</b>	<b>100%</b>	<b>485</b>

Table 2 Number, proportion and crude rate of chlamydia notifications in WA by region, for the two most recent 12 month periods.

Region	2009/2010			2010/2011			2011/2012		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Wheatbelt	153	2%	198	162	1%	207	216	2%	272
Goldfields	384	4%	677	430	4%	743	410	3%	700
Great Southern	149	2%	241	180	2%	286	195	2%	304
Kimberley	620	7%	1736	661	6%	1797	687	6%	1828
Midwest	351	4%	535	397	4%	594	429	4%	631
North Metropolitan	3512	37%	371	4114	37%	422	4402	37%	440
Pilbara	363	4%	747	402	4%	809	398	3%	781
South Metropolitan	3378	36%	403	4058	37%	470	4308	37%	484
South West	466	5%	287	538	5%	322	584	5%	339
Other	69	1%	N/A	99	1%	N/A	108	1%	N/A
Unknown	9	0%	N/A	18	0%	N/A	7	0%	N/A
<b>Total</b>	<b>9454</b>	<b>100%</b>	<b>412</b>	<b>11059</b>	<b>100%</b>	<b>469</b>	<b>11744</b>	<b>100%</b>	<b>485</b>

### Gonorrhoea

Table 3 Number, proportion and crude rate of gonorrhoea notifications in WA by Aboriginality, for the three most recent financial years.

Aboriginality	2009/2010			2010/2011			2011/2012		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Aboriginal	814	64%	1085	932	59%	1226	1234	60%	1602
non-Aboriginal	448	35%	20	636	41%	28	801	39%	34
Unknown	2	0%	N/A	2	0%	N/A	5	0%	N/A
<b>Total</b>	<b>9454</b>	<b>100%</b>	<b>412</b>	<b>11059</b>	<b>100%</b>	<b>469</b>	<b>11744</b>	<b>100%</b>	<b>485</b>

Table 4 Number, proportion and crude rate of gonorrhoea notifications in WA by region, for the two most recent 12 month periods

Region	2009/2010			2010/2011			2011/2012		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Wheatbelt	6	0%	8	10	1%	13	19	1%	24
Goldfields	155	12%	273	155	10%	268	121	6%	206
Great Southern	2	0%	3	6	0%	10	18	1%	28
Kimberley	335	27%	938	451	29%	1226	733	36%	1950
Midwest	33	3%	50	71	5%	106	109	5%	160
North Metropolitan	243	19%	26	344	22%	35	412	20%	41
Pilbara	276	22%	568	226	14%	455	210	10%	412
South Metropolitan	178	14%	21	277	18%	32	363	18%	41
South West	20	2%	12	10	1%	6	26	1%	15
Other	14	1%	N/A	16	1%	N/A	27	1%	N/A
Unknown	2	0%	N/A	4	0%	N/A	2	0%	N/A
<b>Total</b>	<b>1264</b>	<b>100%</b>	<b>55</b>	<b>1570</b>	<b>100%</b>	<b>67</b>	<b>2040</b>	<b>100%</b>	<b>84</b>

### Infectious Syphilis

Table 5 Number, proportion and crude rate of infectious syphilis notifications in WA by Aboriginality, for the three most recent financial years.

Aboriginality	2009/2010			2010/2011			2011/2012		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Aboriginal	23	30%	31	24	21%	32	17	18%	22
non-Aboriginal	53	70%	2	89	79%	4	79	81%	3
Unknown	0	0%	N/A	0	0%	N/A	1	1%	N/A
<b>Total</b>	<b>76</b>	<b>100%</b>	<b>3</b>	<b>113</b>	<b>100%</b>	<b>5</b>	<b>97</b>	<b>100%</b>	<b>4</b>

Table 6 Number, proportion and crude rate of infectious syphilis notifications in WA by region, for the two most recent 12 month periods

Region	2009/2010			2010/2011			2011/2012		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Wheatbelt	1	1%	1	0	0%	0	0	0%	0
Goldfields	4	5%	7	8	7%	14	6	6%	10
Great Southern	0	0%	0	4	4%	6	2	2%	3
Kimberley	12	16%	34	7	6%	19	5	5%	13
Midwest	3	4%	5	3	3%	4	0	0%	0
North Metropolitan	34	45%	4	55	49%	6	47	48%	5
Pilbara	5	7%	10	4	4%	8	0	0%	0
South Metropolitan	16	21%	2	31	27%	4	33	34%	4
South West	0	0%	0	1	1%	1	3	3%	2
Other	1	1%	N/A	0	0%	N/A	1	1%	N/A
Unknown	0	0%	N/A	0	0%	N/A	0	0%	N/A
<b>Total</b>	<b>76</b>	<b>100%</b>	<b>3</b>	<b>113</b>	<b>100%</b>	<b>5</b>	<b>97</b>	<b>100%</b>	<b>4</b>

## HIV

Table 7 Number of HIV notifications in WA by sex, for the three most recent financial years.

Sex	2009/2010	2010/2011	2011/2012
	Number	Number	Number
Male	80	69	88
Female	33	30	39
<b>Total</b>	<b>113</b>	<b>99</b>	<b>127</b>

Table 8 Number of HIV notifications in WA by Aboriginality, for the three most recent financial years

Aboriginality	2009/2010	2010/2011	2011/2012
	Number	Number	Number
Aboriginal	2	4	3
non-Aboriginal	111	95	124
<b>Total</b>	<b>113</b>	<b>99</b>	<b>127</b>

Table 9 Number of HIV notifications in WA by region, for the three most recent financial years.

Area of residence	2009/2010	2010/2011	2011/2012
	Number	Number	Number
Metropolitan	101	84	109
Rural	6	7	9
Remote	5	6	7
Unknown	1	2	2
<b>Total</b>	<b>113</b>	<b>99</b>	<b>127</b>

## Hepatitis B

Table 10 Number of hepatitis B notifications in WA by Aboriginality, for the three most recent financial years

Aboriginality	2009/2010	2010/2011	2011/2012
	Number	Number	Number
Aboriginal	31	51	57
non-Aboriginal	602	480	469
Unknown	31	53	75
<b>Total</b>	<b>664</b>	<b>584</b>	<b>601</b>

Table 11 Number of hepatitis B notifications in WA by region, for the three most recent 12 month periods.

Region	2009/2010	2010/2011	2011/2012
	Number	Number	Number
Wheatbelt	6	9	3
Goldfields	16	32	29
Great Southern	5	15	9
Kimberley	10	22	21
Midwest	9	10	13
North Metropolitan	301	239	248
Pilbara	16	9	14
South Metropolitan	279	225	238
South West	16	13	22
Other	2	3	2
Unknown	4	7	2
<b>Total</b>	<b>664</b>	<b>584</b>	<b>601</b>

## Hepatitis C

Table 12 Number of hepatitis C notifications in WA by sex, for the three most recent financial years.

Sex	2009/2010	2010/2011	2011/2012
	Number	Number	Number
Female	404	357	346
Male	713	730	695
<b>Total</b>	<b>1117</b>	<b>1087</b>	<b>1041</b>

Table 13 Number of hepatitis C notifications in WA by Aboriginality, for the three most recent financial years

Aboriginality	2009/2010	2010/2011	2011/2012
	Number	Number	Number
Aboriginal	121	153	151
non-Aboriginal	926	894	807
Unknown	70	40	83
<b>Total</b>	<b>1117</b>	<b>1087</b>	<b>1041</b>

Table 14 Number of newly acquired hepatitis C notifications in WA by region, for the three most recent financial years

Region	2009/2010	2010/2011	2011/2012
	Number	Number	Number
Wheatbelt	27	24	16
Goldfields	37	51	49
Great Southern	30	29	29
Kimberley	33	31	27
Midwest	29	31	41
North Metropolitan	397	397	383
Pilbara	34	18	18
South Metropolitan	393	399	371
South West	85	84	73
Other	14	7	12
Unknown	38	16	22
<b>Total</b>	<b>1117</b>	<b>1087</b>	<b>1041</b>

## Appendix D – STI and BBV testing data

### Chlamydia

Table 1 Number, proportion and rate of chlamydia test carried out in WA by age group, for the three most recent calendar years.

Age group (Years)	2009			2010			2011		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
< 15	2,177	2%	5	2,137	2%	4.8	1,891	1%	4.1
15-24	46,902	39%	144	47,427	39%	144	51,248	39%	151
25+	69,927	59%	47	71,719	59%	47	79,437	60%	51
<b>Total</b>	<b>119,006</b>	<b>100%</b>	<b>53</b>	<b>121,283</b>	<b>100%</b>	<b>53</b>	<b>132,576</b>	<b>100%</b>	<b>56</b>

Table 2 Number, proportion and rate of chlamydia test carried out in WA by gender, for the three most recent calendar years.

Sex	2009			2010/2011			2011/2012		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Male	34,164	29%	30	35,868	16%	31	38,864	14%	32
Female	84,842	71%	77	85,415	84%	76	93,712	86%	81
<b>Total</b>	<b>119,006</b>	<b>100%</b>	<b>53</b>	<b>121,283</b>	<b>100%</b>	<b>53</b>	<b>132,576</b>	<b>100%</b>	<b>56</b>

Table 3 Number, proportion and rate of chlamydia test carried out in WA by region, for the three most recent calendar years.

Region	2009			2010			2011		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Wheatbelt	1,834	2%	24	1,727	1%	22	1,726	1%	22
Goldfields	3,830	3%	65	3,003	2%	51	3,099	2%	51
Great Southern	2,439	2%	41	2,555	2%	43	3,069	2%	51
Kimberley	9,599	8%	274	9,389	8%	263	10,563	8%	287
Midwest	3,699	3%	57	3,821	3%	58	4,125	3%	62
North Metropolitan	47,699	40%	51	49,674	41%	52	54,638	41%	56
Pilbara	4,924	4%	104	5,132	4%	106	5,132	4%	103
South Metropolitan	40,378	34%	49	41,861	35%	50	45,807	35%	53
South West	4,604	4%	29	4,121	3%	25	4,417	3%	26
<b>Total</b>	<b>119,066</b>	<b>100%</b>	<b>412</b>	<b>121,283</b>	<b>100%</b>	<b>469</b>	<b>132,576</b>	<b>100%</b>	<b>485</b>

### Gonorrhoea

Table 4 Number, proportion and rate of gonorrhoea test carried out in WA by age group, for the three most recent calendar years.

Age group (Years)	2009			2010			2011		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
< 15	2,058	2%	4.7	2,011	2%	4.5	1,778	1%	3.9
15-24	41,700	39%	128	42,515	39%	129	45,915	39%	135
25+	62,205	59%	42	64,559	59%	4	70,920	60%	45
<b>Total</b>	<b>105,963</b>	<b>100%</b>	<b>47</b>	<b>109,085</b>	<b>100%</b>	<b>48</b>	<b>118,613</b>	<b>100%</b>	<b>50</b>

Table 5 Number, proportion and rate of gonorrhoea test carried out in WA by gender, for the three most recent calendar years.

Sex	2009/2010			2010/2011			2011/2012		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Male	31,902	30%	28	33,612	31%	29	36,379	31%	30
Female	74,061	70%	67	75,473	69%	67	82,234	69%	71
<b>Total</b>	<b>105,963</b>	<b>100%</b>	<b>47</b>	<b>109,085</b>	<b>100%</b>	<b>48</b>	<b>118,613</b>	<b>100%</b>	<b>50</b>

Table 6 Number, proportion and rate of gonorrhoea test carried out in WA by region, for the three most recent calendar years.

Region	2009			2010			2011		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Wheatbelt	1,725	2%	23	1,626	1%	21	1,598	1%	20
Goldfields	3,577	3%	61	2,892	3%	49	2,898	2%	48
Great Southern	2,266	2%	39	2,366	2%	40	2,823	2%	47
Kimberley	9,539	9%	272	9,385	9%	263	10,560	9%	287
Midwest	3,452	3%	53	3,589	3%	55	3,902	3%	58
North Metropolitan	41,732	39%	45	44,165	40%	47	48,776	41%	50
Pilbara	4,738	4%	100	5,007	5%	103	5,041	4%	101
South Metropolitan	34,745	33%	43	36,333	33%	43	38,969	33%	45
South West	4,189	4%	27	3,772	3%	23	4,064	3%	24
<b>Total</b>	<b>105,963</b>	<b>100%</b>	<b>412</b>	<b>109,135</b>	<b>100%</b>	<b>469</b>	<b>118,631</b>	<b>100%</b>	<b>485</b>

### Infectious syphilis

Table 7 Number, proportion and rate of infectious syphilis test carried out in WA by gender, for the three most recent calendar years.

Sex	2009/2010			2010/2011			2011/2012		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Male	25,073	32%	22	25,646	33%	22	28,601	33%	24
Female	53,046	68%	48	52,560	67%	46	55,033	67%	47
<b>Total</b>	<b>78,119</b>	<b>100%</b>	<b>35</b>	<b>78,206</b>	<b>100%</b>	<b>34</b>	<b>86,634</b>	<b>100%</b>	<b>35</b>

Table 8 Number, proportion and rate of infectious syphilis test carried out in WA by age group, for the three most recent calendar years.

Age group (Years)	2009			2010			2011		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
< 15	1,368	2%	3.1	1,220	2%	2.7	1,134	1%	2.5
15-24	21,436	27%	66	21,170	27%	64	23,286	28%	69
25+	55,315	71%	37	55,816	71%	37	59,214	71%	38
<b>Total</b>	<b>78,119</b>	<b>100%</b>	<b>35</b>	<b>78,206</b>	<b>100%</b>	<b>34</b>	<b>83,634</b>	<b>100%</b>	<b>35</b>

Table 9 Number, proportion and rate of infectious syphilis test carried out in WA by region, for the three most recent calendar years

Region	2009			2010			2011		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Wheatbelt	1,326	2%	17	1,403	2%	18	1,305	2%	17
Goldfields	2,553	3%	43	2,120	3%	36	2,376	3%	39
Great Southern	1,726	2%	29	1,842	2%	31	1,840	2%	30
Kimberley	6,827	9%	195	6,171	8%	173	6,485	8%	176
Midwest	2,076	3%	32	2,154	3%	33	2,091	3%	31
North Metropolitan	32,395	41%	35	32,144	41%	34	35,195	42%	36
Pilbara	3,158	4%	66	3,270	4%	67	3,217	4%	65
South Metropolitan	25,116	32%	31	26,401	34%	32	27,957	33%	32
South West	2,942	4%	19	2,701	3%	17	3,168	4%	19
<b>Total</b>	<b>78,119</b>	<b>100%</b>	<b>412</b>	<b>78,206</b>	<b>100%</b>	<b>469</b>	<b>83,634</b>	<b>100%</b>	<b>485</b>

## HIV

Table 10 Number, proportion and rate of HIV tests carried out in WA by age group, for the three most recent calendar years.

Age group (Years)	2009			2010			2011		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
< 15	1,209	1%	2.8	1,110	1%	2.5	898	1%	2.0
15-24	28,217	24%	87	28,033	24%	85	29,408	24%	87
25+	87,132	75%	59	85,522	75%	56	89,701	75%	57
<b>Total</b>	<b>116,558</b>	<b>100%</b>	<b>52</b>	<b>114,665</b>	<b>100%</b>	<b>50</b>	<b>120,079</b>	<b>100%</b>	<b>51</b>

Table 11 Number, proportion and rate of HIV tests carried out in WA by gender, for the three most recent calendar years.

Sex	2009/2010			2010/2011			2011/2012		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Male	47,963	41%	42	47,322	41%	41	49,869	42%	42
Female	68,595	59%	62	67,343	59%	60	70,210	58%	61
<b>Total</b>	<b>116,558</b>	<b>100%</b>	<b>52</b>	<b>114,665</b>	<b>100%</b>	<b>50</b>	<b>120,079</b>	<b>100%</b>	<b>51</b>

Table 12 Number, proportion and rate of HIV tests carried out in WA by region, for the three most recent calendar years.

Region	2009			2010			2011		
	Number	Percent	Rate	Number	Percent	Rate	Number	Percent	Rate
Wheatbelt	1,735	1	23	1,872	2	24	1,685	1	22
Goldfields	3,271	3	56	3,346	3	57	3,548	3	59
Great Southern	2,441	2	41	2,388	2	40	2,348	2	39
Kimberley	5,183	4	147	4,753	4	133	5,384	4	146
Midwest	2,612	2	40	2,586	2	39	2,566	2	38
North Metropolitan	57,758	50	62	56,005	49	59	59,017	49	61
Pilbara	3,597	3	76	3,500	3	72	3,444	3	69
South Metropolitan	35,725	31	44	35,895	31	43	37,303	31	43
South West	4,281	4	27	4,320	4	27	4,784	4	29
<b>Total</b>	<b>116,558</b>	<b>100%</b>	<b>412</b>	<b>114,665</b>	<b>100%</b>	<b>469</b>	<b>120,079</b>	<b>100%</b>	<b>485</b>

## **Hepatitis B**

Table 13 Number of hepatitis B tests carried out in WA, for the three most recent calendar years.

<b>Year</b>	<b>Number</b>	<b>Rate</b>
2009	100,877	45
2010	101,240	44
2011	101,402	43

## **Hepatitis C**

Table 14 Number of hepatitis C tests carried out in WA, for the three most recent calendar years.

<b>Year</b>	<b>Number</b>	<b>Rate</b>
2009	112,009	50
2010	112,919	49
2011	116,983	50

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