

South Australian Aboriginal Sexually Transmissible Infections and Blood Borne Viruses Action Plan 2020-2024



Government of South Australia

About the artist

Anna Dowling was born in Adelaide, South Australia. Anna is a descendant of the Badimia people of the Yamatji region in Western Australia. In her artwork, she reflects on her mixed cultural heritage and draws on traditional symbols and patterns. Anna works to create art that reflects the beauty, diversity and incredible value of Aboriginal culture. She seeks to further her artistic skills and knowledge by learning from artists and community leaders. More information regarding Anna's artwork can be found here: **annadowling.net**

About the artwork

The hand surrounds gathering symbols to represent the need to have a strong, unified approach in addressing sexually transmissible infections and blood borne viruses within the Aboriginal community. It also represents that we are all human and need to have this in mind when facing the stigma and judgement around sexual health topics. Using the symbols of unification also makes a strong statement about accountability and involvement from a range of stakeholders.

The background shows strings of different landscape environments across South Australia; from the beach, coastline, river lands, red gum forests, grasslands to the desert. Bringing together these elements represents inclusion across South Australia. The landscapes involve details such as plants, leaves, trees and water symbols. Using the natural landscapes also reminds us that health, for Aboriginal people, is tied strongly to our connection to Country.

This publication may be reproduced in whole or in part for work, study or training purposes, subject to the inclusion of an acknowledgement of the source.

Any enquiries about or comments on this publication should be directed to:

Communicable Disease Control Branch SA Health PO Box 6, Rundle Mall, 5000 South Australia, Australia. Telephone: (08) 7425 7101 Email: healthcommunicablediseases@sa.gov.au

© Department for Health and Wellbeing, Government of South Australia, 2020

Contents



Acknowledgements	4
Minister's foreword	5
Acronyms	6
Introduction	7
Development of the Action Plan	7
Policy framework	8
Purpose of the Action Plan	8
Principles	9
The South Australian Aboriginal STI and BBV Action Plan 2020-2024	10
Goals and targets	10
Priority groups and settings	
Strategic framework	12
Governance	17
Roles and responsibilities of parties to this Action Plan	
Monitoring and reporting	17
Appendix 1: Epidemiological context	18
STI and BBV incidence among Aboriginal people in South Australia	19
Impact of STI and BBV infection	
Appendix 2: Program, service and research context	
STI and BBV screening and linkage to care in primary health care services	
Immunisation	
Sexual health and BBV knowledge and behaviour	
Appendix 3: Stakeholder list	43
Appendix 4: Useful links	46
References	48



Acknowledgements



SA Health acknowledges and respects the traditional custodians of country throughout South Australia, and recognises their continuing connection to land, waters and community. We pay our respects to them, their cultures, contributions, and to Elders past, present and emerging.

We would like to thank Aboriginal organisations, communities and stakeholders for their leadership in the development of this first 'South Australian Aboriginal Sexually Transmissible Infection and Blood Borne Virus Action Plan 2020-2024' (Action Plan). The development of this Action Plan involved the commitment of many people whose time and contribution is greatly appreciated.

The Action Plan represents a framework for a culturally respectful partnership response to sexually transmissible infections (STI) and blood borne viruses (BBV) in Aboriginal communities between the Aboriginal Health Council of SA (AHCSA), Aboriginal Community Controlled Health Services (ACCHS), primary health care, researchers, community organisations and other health services in partnership with the Commonwealth Department of Health and SA Health.

It is acknowledged that significant work has already been undertaken by these agencies to address the burden of STI and BBV among Aboriginal people across South Australia.

The continued commitment and work of all partners means that South Australia is well placed to build on this progress, and achieve the ambitious goals and targets set out in this strategy.

The term Aboriginal is used at times in this document as an all-encompassing term for South Australian Aboriginal and Torres Strait Islander people and culture. Aboriginal and Torres Strait Islander is also used in this document in the national context, including when referring to or comparing against national epidemiological data.

Minister's foreword



Hon. Stephen Wade MLC Minister for Health and Wellbeing

On behalf of the South Australian government I am pleased to present the first 'South Australian Aboriginal Sexually Transmissible Infection and Blood Borne Virus Action Plan 2020-2024' (Action Plan).

I would like to acknowledge the leadership of the Aboriginal health and STI and BBV sectors, and thank them for the progress they have made to date in driving the response to this significant public health issue. Their efforts provide a strong foundation of collegiality and a commitment to an evidence-based, culturally safe and community-led public health response that has already delivered a number of noteworthy positive outcomes for the community.

Together with its companion document, the 'South Australian Syphilis Outbreak Response Plan', this Action Plan represents a commitment from the South Australian government and from all agencies listed within this document to strengthen and build upon this foundation, to work in true partnership with affected communities, and to collectively do more to improve STI and BBV health and wellbeing outcomes for Aboriginal people.

Developed following extensive engagement drawing on the expertise and insights of the Aboriginal led Action Plan Project Steering Group and other key stakeholders, and guided by the recommendations of the 'Fifth Aboriginal and Torres Strait Islander STI and BBV National Strategy 2018-2022', the Action Plan provides a strategic framework of principles, goals and targets, and 15 priority actions that set a clear direction to address concerning trends and gaps in the South Australian response.

The South Australian government is committed to supporting effective implementation of all 15 priority actions towards addressing these gaps, and achieving the ambitious goals and targets this Action Plan commits to.

I look forward to seeing the positive outcomes of this Action Plan, and significant progress to closing the gap in STI and BBV health outcomes between Aboriginal and non-Indigenous South Australians over the next four years.

Acronyms

ABS	Australian Bureau of Statistics
ACCHS	Aboriginal Community Controlled Health Services
AHCSA	Aboriginal Health Council of South Australia
ALOS	average length of stay
AOD	alcohol and other drugs
APHN	Adelaide Primary Health Network
APY	Anangu Pitjantjatjara Yankunytjatjara
ASHC	Adelaide Sexual Health Centre, SA Health
ATLAS	Aboriginal and Torres Strait Islander Sexual Health Surveillance Network
BBV	blood borne virus
CDCB	Communicable Disease Control Branch, SA Health
CDNA	Communicable Disease Network Australia
CNP	clean needle program
CQI	continuous quality improvement
CRE-ASH	Centre for Research Excellence in Aboriginal Sexual Health and Blood Borne Viruses
GP	general practitioner
HBV	hepatitis B
HCV	hepatitis C
HIV	human immunodeficiency virus
HPV	human papillomavirus
HTLV-1	human t-cell lymphotropic virus type 1
LHN	Local Health Network
MATOD	medication assisted treatment for opioid dependence
MBS	Medicare Benefits Schedule
MJSO	Multijurisdictional Syphilis Outbreak Working Group
NACCHO	National Aboriginal Community Controlled Health Organisation

ОТР	opioid treatment program
PEP	post-exposure prophylaxis
PHN	Primary Health Network
PLHIV	people living with HIV
POC	point of care
PrEP	pre-exposure prophylaxis
PSG	Project Steering Group
QALYs	quality adjusted life years
SA	South Australia
SA2 / SA3	statistical area level 2 / statistical area level 3
SA2 / SA3 SAHMRI	statistical area level 2 / statistical area level 3 South Australian Health and Medical Research Institute
SA2 / SA3 SAHMRI SAPHS	statistical area level 2 / statistical area level 3 South Australian Health and Medical Research Institute SA Prison Health Service, SA Health
SA2 / SA3 SAHMRI SAPHS STI	statistical area level 2 / statistical area level 3 South Australian Health and Medical Research Institute SA Prison Health Service, SA Health sexually transmissible infection
SA2 / SA3 SAHMRI SAPHS STI STRIVE	statistical area level 2 / statistical area level 3 South Australian Health and Medical Research Institute SA Prison Health Service, SA Health sexually transmissible infection STI in remote communities: improved and enhanced primary health care
SA2 / SA3 SAHMRI SAPHS STI STRIVE TasP	statistical area level 2 / statistical area level 3 South Australian Health and Medical Research Institute SA Prison Health Service, SA Health sexually transmissible infection STI in remote communities: improved and enhanced primary health care treatment as prevention
SA2 / SA3 SAHMRI SAPHS STI STRIVE TasP TTANGO	statistical area level 2 / statistical area level 3 South Australian Health and Medical Research Institute SA Prison Health Service, SA Health sexually transmissible infection STI in remote communities: improved and enhanced primary health care treatment as prevention Test, Treat ANd Go

Introduction

SA Health is committed to addressing the health inequities faced by Aboriginal people, and reducing the gap in health outcomes between South Australia's Aboriginal people and the rest of South Australia's population.¹

The Government of South Australia is a signatory to the 'National Cultural Respect Framework for Aboriginal and Torres Strait Islander Health 2016-2026', and its vision of an Australian health system that is 'accessible, responsive and safe for Aboriginal and Torres Strait Islander people where cultural values, strengths and differences are recognised and incorporated into the governance, management and delivery of health services'.² SA Health acknowledges that engaging Aboriginal stakeholders throughout the development of programs will result in more effective and culturally respectful programs.³

Sexually transmissible infections (STI) and blood borne viruses (BBV) in South Australian Aboriginal communities are a public health issue requiring coherent policy and program responses to promote the future health and wellbeing of the State's population.

The 'South Australian Aboriginal STI and BBV Action Plan 2020-2024' (Action Plan) will address the significant STI and BBV related health disparities between Aboriginal and non-Indigenous South Australians and reinvigorate the current STI and BBV program and service landscape.

To achieve this, a strengths based approach will be adopted that recognises the critical importance of culture as a health protective factor for Aboriginal people, and the inherent strengths of individuals, families and communities. A strengths based approach is underpinned by respect for culture, forming genuine working partnerships, and engagement with families and communities to ensure care is consumer centred.⁴

The Action Plan provides a framework for a coordinated effort by SA Health, Aboriginal Community Controlled Health Services (ACCHS), the Aboriginal Health Council of South Australia (AHCSA), other non-government organisations, researchers and clinicians to address the high incidence, prevalence, morbidity and mortality associated with STI and BBV infection (including HIV, hepatitis B and hepatitis C) in Aboriginal communities in South Australia.

Development of the Action Plan

The Action Plan was developed in partnership through a Project Steering Group (PSG) chaired by AHCSA. Members of the PSG included representatives from both the government and non-government sectors:

- > AHCSA
- > SA Health:
 - Aboriginal Health
 - Adelaide Sexual Health Centre (ASHC), Royal Adelaide Hospital (RAH)
 - Communicable Disease Control Branch (CDCB)
 - Aboriginal Directorate, Country Health SA Local Health Network (CHSALHN)
 - Drug Policy and Population Programs, Drug and Alcohol Services South Australia (DASSA)
 - SA Health Watto Purrunna Aboriginal Primary Health Care Services, Northern Adelaide Local Health Network (NALHN)
- > Wardliparingga Aboriginal Health Research Unit, SAHMRI
- > Adelaide Primary Health Network (APHN)
- > Country SA Primary Health Network (CSAPHN)
- Ceduna Koonibba Aboriginal Health Service Aboriginal Corporation (now known as Yadu Health Aboriginal Corporation).

Further consultation activities included:

- key informant interviews and consultation sessions with South Australian ACCHS from metropolitan, regional and remote areas
- a targeted survey of relevant stakeholders identified by the PSG.

¹Devolved into six regional local health networks from 1 July 2019.

Introduction

Policy framework

The Action Plan is guided by the 'Fifth National Aboriginal and Torres Strait Islander BBV and STI Strategy 2018-2022' (National Strategy).

The National Strategy (from which the principles, goals and priority actions of this Action Plan were adapted) was informed by consultation with Aboriginal and Torres Strait Islander communities as well as government, clinicians, researchers, community organisations and the health workforce around Australia, including South Australia.⁵

In addition to the suite of other jurisdictional, national and international policy instruments outlined in the National Strategy that contribute to the national response to STI and BBV in Aboriginal and Torres Strait Islander peoples, the Action Plan exists within the framework of complementary South Australian implementation and action plans to address HIV, STI, hepatitis B, hepatitis C, blood borne viruses in prisons and the syphilis outbreak.

The Action Plan also contributes to a number of other commitments and initiatives of the Commonwealth Government and the Government of South Australia, including the:

- > National Cultural Respect Framework for Aboriginal and Torres Strait Islander Health 2016-2026
- > National strategic approach for an enhanced response to the disproportionately high rates of STI and BBV in Aboriginal and Torres Strait Islander people
- National Action Plan: Enhanced response to addressing STI and BBV in Indigenous populations
- > National Drug Strategy 2017-2026
- > SA Aboriginal Health Care Framework 2019-2024
- > SA Health Aboriginal Health Impact Policy Directive
- > SA Health Aboriginal Workforce Framework 2017-2022
- > SA Health Guide for Engaging with Aboriginal People
- > SA Aboriginal Cancer Control Plan 2016-2021
- > SA Aboriginal Education Strategy 2019-2029
- > SA Aboriginal Affairs Action Plan 2019-2020
- > State Public Health Plan 2019-2024
- > SA Health and Wellbeing Strategy 2020-2025
- > Wellbeing SA Strategic Plan 2020-2025
- > SA Alcohol and Other Drugs Strategy 2017-2021.

Purpose of the Action Plan

In order to reduce disparities between Aboriginal and non-Indigenous South Australians with respect to the transmission of, and morbidity and mortality caused by STI and BBV, and to minimise the clinical and social impact of STI and BBV for Aboriginal people in South Australia, this Action Plan is a statewide document that:

- > commits to local strategies and actions required to progress the targets of the National Strategy
- > identifies current, and proposes new, relationships and activities required to undertake agreed actions, leveraging the strengths of key stakeholders to enhance the quality, accessibility and efficiency of health services
- > defines local performance indicators, output measures, and lines of governance required to monitor the effectiveness of the actions.

Principles

The National Strategy outlines four guiding principles to support high-quality, evidence based and equitable responses to STI and BBV in Aboriginal and Torres Strait Islander people.⁵

- Aboriginal and Torres Strait Islander community control and engagement
 - There is full and ongoing participation by Aboriginal and Torres Strait Islander people and organisations in all levels of decision-making affecting their health needs.
- > Health equality and a human rights approach
 - The principles of the 'United Nations Declaration on the Rights of Indigenous Peoples' and other human rights instruments, including the 'International Strategic Plan on HIV & AIDS for Indigenous Peoples and Communities from 2011-2017' and the 'HIV Toronto Charter 2006', support Aboriginal and Torres Strait Islander people in attaining the highest standard of physical, mental and social health.
- > Partnership
 - Partnership and shared ownership between Aboriginal and Torres Strait Islander peoples, governments and service providers operates at all levels of health planning and delivery.
- > Accountability
 - Structures are in place for the regular monitoring and review of implementation as measures against indicators of success, with processes to share knowledge on what works.

Building on this, the Action Plan PSG endorsed a set of foundation principles to guide development and implementation of the Action Plan specifically that all partners will commit to:

- > working with, for and through Aboriginal people
- focusing on the strengths and resilience of Aboriginal communities
- contributing to protecting, preserving and celebrating Aboriginal culture
- > ensuring Aboriginal leadership is embedded in decisionmaking and governance, in recognition of the fact that Aboriginal people are the experts in Aboriginal health and wellbeing.

Further, the Action Plan should strive to ensure that STI and BBV programs and services are:

- > appropriate, effective and equitable in access and delivery of outcomes for Aboriginal people
- > delivered by a workforce with appropriate clinical, management and cultural skills for the provision of culturally-safe and responsive health care.

Data sovereignty and governance

Data sovereignty, as it relates to Aboriginal people, is the "right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as their right to maintain, control, protect and develop their intellectual property over these".⁶ The data sovereignty movement emphasises the centrality of local data guiding local solutions. It is strengths based and focused on best practice in health service delivery towards a productive pathway forward.⁷

Relevant information is a precondition for devising and monitoring the effectiveness of policy responses to address inequity in access to services and health outcomes. Ensuring locally held and managed data is both readily accessible and understood by health service providers is pivotal to scale up STI and BBV diagnosis and management to reduce incidence and adverse outcomes associated with these infections.

To this end, enhancing data quality and consistency is a priority for this Action Plan. Furthermore, proactive use of data to facilitate contact tracing and strong coordination of care for all diagnoses will continue to be prioritised through use of service level data and through statewide initiatives like Viral Hepatitis Notification Referral and the Syphilis Register.

In addressing this need, due consideration should be given to the importance of data sovereignty, and to the various legislative and policy frameworks governing the collection and use of data by partners to this Action Plan. The collection and use of Aboriginal STI and BBV data to inform strategy and monitor progress against Action Plan targets will be guided by the 'National Aboriginal and Torres Strait Islander Health Data Principles'.⁸

The South Australian Aboriginal STI and BBV Action Plan 2020-2024

Goals and targets

The Action Plan adopts and modifies, where required, the goals and targets of the National Strategy.⁵

Goals

- Significantly reduce the transmission of STI and BBV among Aboriginal people.
- > Close the gap in STI and BBV incidence, prevalence, testing and treatment rates between Aboriginal and non-Indigenous populations.
- Reduce the morbidity and mortality related to STI and BBV among Aboriginal people.
- Minimise the personal and social impact of STI and BBV among Aboriginal people.
- Minimise the negative impact of stigma, racism, discrimination, and legal and human rights issues on Aboriginal people's health.

Targetsⁱⁱ

- Achieve and maintain hepatitis B childhood vaccination coverage of 95 per cent at 12 and 24 months.
- 2. Achieve and maintain HPV adolescent vaccination coverage of 80 per cent.
- Increase STI testing coverage with a focus on areas of highest need.
- 4. Increase the use of sterile injecting equipment for every injecting episode.
- Reduce the incidence and prevalence of infectious syphilis with a particular focus on areas of highest disease burden.
- 6. Eliminate congenital syphilis.
- 7. Reduce the incidence and prevalence of gonorrhoea and chlamydia with a focus on young people.
- Reduce the number of newly acquired hepatitis C infections by 60 per cent.
- 9. Reduce the incidence of HIV transmissions.

- **10.** Achieve the 95-95-95 HIV diagnosis and treatment targets:
 - i. Increase to 95 per cent the percentage of people with HIV who are diagnosed
 - ii. Increase to 95 per cent the percentage of people diagnosed with HIV on treatment
 - iii. Increase to 95 per cent the percentage of those on treatment with an undetectable viral load.
- Increase the proportion of people living with hepatitis C who are diagnosed to 90 per cent and the cumulative proportion who have initiated direct acting antiviral treatment to 65 per cent.
- 12. Increase the proportion of people living with hepatitis B who are diagnosed to 80 per cent; and the proportion of people diagnosed with hepatitis B who are receiving guideline-based care to 100 per cent.^{III}
- 13. Reduce hepatitis C attributable mortality by 65 per cent.
- 14. Reduce hepatitis B attributable mortality by 30 per cent.
- Reduce the reported experience of stigma among Aboriginal people with STI and BBV, and the expression of stigma, in relation to STI and BBV status.

some stages of infection as a component of guideline-based care for chronic hepatitis B.

It is noted that for some of these targets, Aboriginal specific data is currently unavailable in SA. Identifying and addressing gaps in Aboriginal specific STI and BBV data to inform local strategy and monitor progress against these targets is a priority for this Action Plan.
Target 12 modified to reflect that the prescription of antiviral treatment is indicated during

Priority groups and settings

Priority groups

Among the principles guiding development and implementation of the Action Plan, it is noted that "the Action Plan should strive to ensure that STI and BBV programs and services are effective, equitable, appropriate and accessible for Aboriginal people".

Some groups within the Aboriginal population are particularly impacted by STI and BBV. It is acknowledged that many individuals may identify with or exist across multiple populations, resulting in a diverse and often complex intersection of characteristics, needs and risk factors unique to individuals and populations.⁹

These groups include:

- > Aboriginal women
- > Aboriginal men
- > Aboriginal young people
- > Aboriginal sex workers
- > Aboriginal people in regional and remote communities
- > Aboriginal people who inject drugs
- > Aboriginal people in or recently exited custodial settings
- > Aboriginal gay men and other men who have sex with men
- Aboriginal trans and gender-diverse people, including Sistergirls/Sistagirls and Brotherboys
- > Aboriginal people living with BBV and their household and intimate contacts
- > Aboriginal people experiencing homelessness.

Aboriginal men and Aboriginal people experiencing homelessness are not listed among the priority groups in the National Strategy, but are considered priority groups for this Action Plan. Research has shown that Aboriginal men are under-represented in terms of testing, linkage to care and research.^{910,11} There is an over-representation of Aboriginal people among people who are homeless, which influences their access to appropriate health care and vulnerability to a range of health issues.¹¹

Through the implementation of the Action Plan, factors that influence inequity in access to STI and BBV programs and services and inequality in STI and BBV related health outcomes for these groups must be considered and addressed as a priority.

Priority settings

Priority settings to address inequity in access to health services and inequality in health outcomes for these priority groups include:

- > geographic locations with high prevalence and incidence of STI and BBV
- > places where Aboriginal priority groups live, work and socialise
- > Aboriginal Community Controlled Health Services
- community, primary, antenatal care and other health services
- > custodial settings
- other services that support Aboriginal priority groups, including community and peer-based services, homelessness services and mental health services
- > clean needle programs^{iv}
- > alcohol and other drug services.

Through development and implementation of initiatives to inform and enhance the response to STI and BBV among South Australian Aboriginal communities, these settings should be prioritised.

 $^{\scriptscriptstyle {\rm IV}}$ Referred to as 'Needle and Syringe Programs' (NSP) in other jurisdictions.

The South Australian Aboriginal STI and BBV Action Plan 2020-2024

Strategic framework

The Action Plan adopts the seven overarching priority areas listed in the National Strategy⁵:

- 1. Education and prevention
- 2. Testing, treatment and management
- 3. Addressing stigma and creating an enabling environment
- 4. Culturally responsive, coordinated and accessible services
- 5. Workforce
- 6. Data, surveillance, research and evaluation
- 7. Outbreak detection and response.

Through consultation with the Project Steering Group and other key stakeholders, and mapping of the current South Australian STI and BBV epidemiological, program, research and service landscape against these seven overarching priority areas and the 59 key areas for action listed in the National Strategy, a number of existing strengths in the response to STI and BBV among South Australian Aboriginal communities have been recognised.

Existing strengths of the South Australian response

- Strong, established partnerships across the sector, with Aboriginal leadership in the design, development and implementation of STI and BBV initiatives targeting Aboriginal people.
- > A network of ACCHS supported by AHCSA through facilitation of an annual enhanced STI screening program, community engagement activities, provision of safer sex resources and tools, quality improvement initiatives including workforce development and enhanced systems to ensure active patient management and strong coordination of care of ACCHS clients living with BBV, and co-ordination of specialist outreach to regional and remote services, supporting equity of access to care for Aboriginal people living with BBV across SA.
- Nganampa Health Council's continued delivery of a highly effective STI control program in the APY Lands, highlighted in the National Strategy.
- Six SA Health Aboriginal primary health care services (Watto Purrunna and Aboriginal Family Clinics) situated across metropolitan Adelaide providing free, comprehensive, culturally sensitive primary health care to Aboriginal people from urban, rural and remote regions of SA.

- > Skilled Aboriginal cultural consultants and health workers practicing across a range of services.
- > Commonwealth funded dedicated sexual health positions at most SA ACCHS to facilitate an enhanced response to STI and BBV in Aboriginal communities.
- Prioritisation of Aboriginal people by STI and BBV nongovernment contracted health services (e.g. delivery of case management and counselling support for Aboriginal people living with BBV by MOSAIC, evidence-based BBV education for Aboriginal people in prisons by Hepatitis SA, and sexual health training for Aboriginal Health Workers by SHINE SA, in partnership with AHCSA).
- > Targeted education to Aboriginal communities at risk of STI and BBV through the 'Young Deadly Free' campaign.
- > Decline in rates of hepatitis B (HBV) and genital warts among Aboriginal people, reflecting the success of childhood and adolescent vaccination programs for HBV and human papillomavirus (HPV), and a decline in cervical cancer attributed mortality among Aboriginal people, attributable to national HPV vaccination and cervical screening programs.
- Prioritisation of Aboriginal people for HIV pre-exposure prophylaxis (PrEP) through the PrEPX-SA trial. Evidence suggests PrEP uptake among South Australian Aboriginal gay and bisexual men at high risk of HIV remains suboptimal, and that targeted strategies are required to increase coverage.¹²
- > Expansion of clean needle program infrastructure coverage across South Australian ACCHS and other Aboriginal services, supporting enhanced equity of access to harm reduction for Aboriginal people who inject drugs across SA.
- Statewide co-ordination for rapid scale up of access to highly effective and tolerable direct acting antiviral (DAA) treatments for hepatitis C (HCV), including in custodial settings (supported by the 'Nursing Model of Care for Viral Hepatitis Management in South Australia'). It is acknowledged that South Australia is nation leading in its progress to achieve the HCV elimination targets, with an estimated 49.5% of all South Australians living with HCV initiating treatment between 2016 and 2019.¹³ However, data to quantify statewide treatment uptake among Aboriginal people living with HCV is currently limited.
- > Routine referral of all positive HBV and HCV pathology tests from the Communicable Disease Control Branch to SA Health Viral Hepatitis Clinical Practice Consultants for enhanced follow up.



- Contribution to and leadership of state and national research initiatives including TTANGO2, the GOANNA Survey, STRIVE, ATLAS, SCALE-C, etc.
- > Ongoing participation in the multi-jurisdictional response to the current outbreak of infectious syphilis, including development and implementation of the 'South Australian Syphilis Outbreak Response Plan' (coordinated by the SA Health Syphilis Outbreak Response Working Group), and establishment of a syphilis register to support consistent follow up of all new diagnoses and their contacts, and the provision of guideline-based care.

In accordance with the National Strategy, these activities will continue to be implemented. It is noted that the success of this Action Plan and of the response to STI and BBV among Aboriginal people in South Australia for the period 2020 to 2024 is dependent on sustaining and strengthening support for these activities.

Priority actions for an enhanced South Australian response

In addition to these existing strengths, the consultation and mapping exercise also identified specific gaps in the South Australian response that must be addressed.

Accordingly, 15 South Australian priority actions were developed.

These priority actions encompass successful existing initiatives requiring capacity building or resourcing for scale up and/or a redefined strategic focus, and new initiatives aligned with recommendations made in the National Strategy.

They have been identified as key priorities to ensure an effective, comprehensive, targeted response to STI and BBV among South Australian Aboriginal communities, and achievement of the various goals and targets of this Action Plan commits to.









The South Australian Aboriginal STI and BBV Action Plan 2020-2024

South Australia's priority actions 2020-2024

Priority actions	Lead agency and partners	National priority area(s) addressed
 Develop and implement a comprehensive, targeted, culturally relevant sexual health and BBV education program for young Aboriginal people in schools, and in non-school settings for young people not engaged in the school environment. 	Lead: SA Health (CDCB) SA Health (Aboriginal Health) Department for Education Metro Youth Health (WCHN) SA Health (Aboriginal primary health care services)	 Education and prevention. Culturally responsive, coordinated and accessible services.
 Investigate new and scale up successful existing models of STI and BBV education and support, including peer education and support, by and for Aboriginal people. 	Lead: AHCSAHepatitis SASINSAMESHHeadspaceSHINE SAResearch institutesRelationships Australia SA	 Education and prevention. Testing, treatment and management. Addressing stigma and creating an enabling environment. Workforce.
 Enhance access to the full suite of evidence- based harm reduction strategies for the primary prevention of BBV infection among Aboriginal people who inject drugs across priority settings. 	Lead (community): AHCSA / SA Health (DASSA)ACCHSMetro Youth HealthAboriginal Drug & Alcohol Council(WCHN)Alcohol CouncilSA Health (Aboriginal primary health care services)SINServices)Lead (custodial settings*): DCS and SA Health (CDCB, DASSA, SAPHS)	1 Education and prevention.
4. Enhance access to other STI and BBV prevention strategies, including biomedical prevention strategies such as pre-exposure prophylaxis (PrEP), post-exposure prophylaxis (PEP) and treatment as prevention (TasP), by Aboriginal people at risk of or living with STI or BBV, across priority settings.	Lead: AHCSA / SA HealthACCHSRDNS SALocal Health NetworksSHINE SASA Health (AboriginalMOSAICprimary health careSAMESHservices)Research institutesPrimary Health NetworksFrimary Health Networks	 Education and prevention. Testing, treatment and management.
 Resource South Australian Aboriginal primary health care services to employ adequate full-time equivalent (FTE) staff to effectively, sustainably and equitably respond to the burden of STI and BBV infections among Aboriginal communities within each region. 	Lead: Commonwealth Government Department of Health / SA Health NACCHO AHCSA ACCHS SA Health (Aboriginal primary health care services)	 Testing, treatment and management. Addressing stigma and creating an enabling environment. Workforce.
6. Enable Aboriginal Health Practitioners to undertake relevant activities within their full scope of practice to support culturally safe, accessible, high quality STI and BBV clinical service provision to Aboriginal people (e.g. provide education, initiate testing, contact tracing, immunisation etc.).	Lead: SA Health (CDCB) AHCSA NACCHO SA Health (Aboriginal primary health care services)	 Education and prevention. Testing, treatment and management. Culturally responsive, coordinated and accessible services. Workforce.

 $^{\rm v}$ in line with the 'South Australian Prisoner Blood Borne Virus Prevention Action Plan 2017-2020'.

Priority actions	Lead agency and partners		National priority area(s) addressed	
 7. Develop and implement targeted, evidence-based strategies (including the use of Medicare items, patient management systems, quality improvement, notification follow up, point of care technologies, integrated models of care, etc.) to sustain: a. high STI and BBV testing coverage; and b. timely, consistent linkage to care and support post-diagnosis for Aboriginal people across priority settings. 	Lead: SA Health (CDCB) Local Health Networks Primary Health Networks AHCSA ACCHS RDNS SA SHINE SA	MOSAIC Research institutes SASBAC Viral Hepatitis Model of Care Reference Group	 2 Testing, treatment and management. 4 Culturally responsive, coordinated and accessible services. 	
 Promote and support consistent implementation of the SA Perinatal Practice Guidelines across all clinical services co-ordinating care of pregnant Aboriginal people at risk, including antenatal screening for STI and BBV, and consistent referral of all Aboriginal people diagnosed with STI or BBV during pregnancy for specialist management (reducing risk of vertical transmission and/or birth anomalies). 	Lead: SA Health (CDCB) AHCSA ACCHS Local Health Networks SA Health (Aboriginal primary health care services)	Primary Health Networks ASHC SHINE SA SA Syphilis Outbreak Response Group	 Education and prevention. Testing, treatment and management. 	
 9. Increase primary care provider access to: a. evidence-based STI and BBV clinical guidelines (through development and/ or promotion of SA HealthPathways, Communicare handbook, CARPA manual, STI and BBV Control in Remote Communities manual, etc.); and b. workforce development to support consistent application of guidelines. 	Lead: Primary Health Netv AHCSA SHINE SA Hepatitis SA ASHM ASHC Research institutes	vorks / SA Health /	 2 Testing, treatment and management. 3 Addressing stigma and creating an enabling environment. 5 Workforce. 	
 Increase the cultural safety and respectfulness of the non-Indigenous workforce providing STI and BBV services to Aboriginal people (e.g. through embedding cultural safety and respect training into professional development frameworks). 	Lead: SA Health (CDCB) SA Health (Workforce Servic Local Health Networks Primary Health Networks AHCSA SHINE SA Hepatitis SA	ces)	 3 Addressing stigma and creating an enabling environment. 4 Culturally responsive, coordinated and accessible services. 5 Workforce. 	
 Enhance the quality and consistency of Aboriginal STI and BBV data collection by: identifying gaps in Aboriginal specific STI and BBV data by infection, service type, region, etc. establishing mechanisms to routinely report against Aboriginal specific STI and BBV data to inform strategy (including service quality improvement) and monitor progress against Action Plan targets. 	Lead: SA Health (CDCB) SA Pathology AHCSA Primary Health Networks Local Health Networks SA Health (Aboriginal prima Non-government organisati Aboriginal people at risk of Research institutes	ry health care services) ons providing services to or living with STI or BBV	 2 Testing, treatment and management. 6 Data, surveillance, research and evaluation. 	

Priority actions	Lead agency and partners	National priority area(s) addressed	
 12. Establish appropriate governance structures and partnerships to monitor, evaluate and drive accountability for implementation of the Action Plan, with a focus on identifying and developing strategies to address: a. stigma and discrimination towards Aboriginal people living with or at risk of STI and BBV; and b. barriers (institutional, regulatory, systems and legal) for Aboriginal people accessing STI and BBV prevention, testing, care and support. 	Lead: SA Health (CDCB) / AHCSA All partners	 3 Addressing stigma and creating an enabling environment. 4 Culturally responsive, coordinated and accessible services. 6 Data, surveillance, research and evaluation. 	
 Identify and address research gaps by leading and participating in state and national research initiatives. 	Lead: AHCSA Research institutes SA Health (CDCB) Local Health Networks	 4 Culturally responsive, coordinated and accessible services. 6 Data, surveillance, research and evaluation. 	
 Implement and maintain a South Australian syphilis register and ensure robust, culturally respectful contact tracing and strong coordination of care for all new diagnoses. 	Lead: SA Health (CDCB) ACCHS Local Health Networks	 6 Data, surveillance, research and evaluation. 7 Outbreak detection and response. 	
 Develop and implement rapid, effective response strategies to STI and BBV outbreaks in Aboriginal communities as required. 	Lead: SA Health (CDCB) AHCSA SA Syphilis Outbreak Working Group	Outbreak detection and response.	



Governance

Roles and responsibilities of parties to this Action Plan

The National Strategies and this Action Plan acknowledge that achieving the goals and targets set requires collaboration between Commonwealth, state and territory governments, clinical services, community organisations, service delivery organisations, professional bodies, research organisations and people living with BBV and/or STI and their families and communities.

Key stakeholder organisations involved in the development and/or implementation of this Action Plan are listed in Appendix 3.

Monitoring and reporting

The Government of South Australia is committed to highquality monitoring and evaluation, and to public accountability for its efforts to address disproportionately high rates of STI and BBV among Aboriginal people. This Action Plan includes targets to drive progress and measure effectiveness. These actions are specific, achievable, realistic, measureable and time-bound.

Overall, monitoring of this Action Plan will be undertaken by the South Australian Aboriginal STI and BBV Action Plan Implementation Committee, administered by SA Health and chaired by the Aboriginal Health Council of SA.

Progress reports will be prepared annually by the Implementation Committee and presented to the South Australian STI and BBV Advisory Committee (SASBAC). Coordination of this process will be led by SA Health.

Collection of performance indicators and/or output measures will contribute to a mid-term stocktake and final review of this Action Plan.

In 2022, the mid-term stocktake will be conducted by SA Health. The aim of the stocktake report is as follows:

- > provide a brief on any major changes to the epidemiological, social, economic, clinical and political context through an environmental scan
- > broadly describe the successes, difficulties and learnings gained from the first part of the implementation process
- > assess the degree of completion of each of the priority action areas and related strategies
- report on available performance indicators and/or output measures
- > recommend an updated set of priorities for the remaining life of this Action Plan
- > describe an agreed process for the final review of this Action Plan.

A range of state and national sources were identified to map Aboriginal STI and BBV epidemiological trends and the service landscape, and frame the South Australian response to this public health issue.

Through analysis of this evidence, priorities aligned with relevant state and national STI and BBV strategic documents have been identified to address gaps in the cascade of care for these conditions, and any inequity in access to health services and health outcomes for Aboriginal people at risk of or living with STI and/or BBV in South Australia.

Census data

According to the '2016 Australian Bureau of Statistics (ABS) Census of Population and Housing':¹⁴

- > Australia:
 - 649,171 people living in Australia identified as Aboriginal and/or Torres Strait Islander, representing 2.8 per cent of the overall Australian population.¹⁵ 90.9 per cent identified as of Aboriginal origin, 5.0 per cent as of Torres Strait Islander origin, and 4.1 per cent as being of both Aboriginal and Torres Strait Islander origin.
 - Aboriginal and Torres Strait Islander people have a younger age profile than the non-Indigenous population: 53 per cent of Aboriginal and Torres Strait Islander people were under 25 years of age compared to 31 per cent of non-Indigenous people. The median age for Aboriginal and Torres Strait Islander people was younger (23 years of age) than the median age for non-Indigenous people (38 years of age).

- About one in 10 Aboriginal and Torres Strait Islander people spoke an Indigenous language at home; with a total of around 150 unique Indigenous languages spoken.
- > South Australia:
 - 34,184 people living in South Australia identified as Aboriginal and/or Torres Strait Islander, representing 2.0 per cent of the overall South Australian population.
 95.4 per cent identified as of Aboriginal origin, 2.7 per cent as of Torres Strait Islander origin, and 1.8 per cent as being of both Aboriginal and Torres Strait Islander origin.
 - The age profile of the South Australian Aboriginal and Torres Strait Islander population reflects that seen at the national level.
 - The three most identified Australian Indigenous languages spoken at home were Pitjantjatjara (55 per cent), Ngarrindjeri (8.6 per cent) and Adnymathanha (3.9 per cent).

Table 1: Aboriginal population distribution by Local Health Network (LHN), South Australia, 2016^{15,16}

SA Health Local Health Network	Estimated resident Aboriginal population ^{vi}		
	n	%	
Northern Adelaide LHN	8,054	23.6%	
Central Adelaide LHN	4,975	14.6%	
Southern Adelaide LHN	4,218	12.3%	
Country SA LHN ^{vii}	16,937	49.5%	
Barossa Hills Fleurieu LHN	2,000	5.9%	
Eyre and Far North LHN	5,000	14.6%	
Flinders and Upper North LHN	4,400	12.9%	
Limestone Coast LHN	1,150	3.4%	
Riverland Mallee Coorong LHN	2,500	7.3%	
Yorke and Northern LHN	1,800	5.3%	
South Australia	34,184		

^{vi} Persons count based on place of usual residence on Census night.
^{vii} Devolved into six regional local health networks from 1 July 2019.

STI and BBV incidence among Aboriginal people in South Australia

Notifiable STI infections

This section is intended to be read as an addendum to commentary on national STI and BBV epidemiology described in the National Strategy and in national STI and BBV surveillance reports prepared by the Kirby Institute, providing additional relevant South Australian epidemiological data, where available, to inform targeted local strategy and service planning.

Surveillance data must be interpreted with care, as notifications and trends may be influenced by community and targeted testing levels, data capture and access to health services. It therefore may not truly represent the incidence of disease in a population. In addition, while notification data provides important information about changing rates of STI and BBV in a community, it does not measure the broader implications of STI and BBV, such as the psychosexual, acute, chronic effects, comorbidities and reproductive impacts of STI and the long term health implications associated with BBV. Age standardisation techniques were applied to data in this section to remove the effect of the differing age structures for comparisons between Aboriginal and non-Indigenous populations, with the age structure of the former considerably younger than that of the latter. The age standardised estimates are those rates that 'would have occurred' should the Aboriginal and non-Indigenous populations both have the standard age composition.

Notification data for STI and BBV highlight the disproportionate rates of each STI and BBV relative to non-Indigenous Australians and trends over time, recognising that some of this data lacks information to determine the true extent of infection and burden of disease. Incompleteness of Aboriginal and Torres Strait Islander status in notification data arising from some clinical services is a contributing factor, and there is currently no available estimate on the prevalence of HCV amongst Aboriginal people. Improving the collection and reporting of Aboriginal and Torres Strait Islander status remains a priority area for STI and BBV surveillance.¹⁷

Table 2 provides a snapshot of disparities both in South Australia and nationally between Aboriginal and non-Indigenous people with respect to STI and BBV notification rates in 2017.

Figure 1, Figure 2, and Table 3 illustrate trends in these disparities nationally over time.

Table 2: Ratio of Aboriginal and Torres Strait Islander to non-Indigenous age standardised notification rates per 100,000 population, by infection, South Australia and Australia, 2017¹⁷

SOUTH AUSTRALIAN NOTIFICATIONS					AUSTRALIA	
	Total notifications (Aboriginal notifications)	Overall rate	Aboriginal rate	Non-Indigenous rate	Aboriginal rate vs non-Indigenous rate	Indigenous rate vs non-Indigenous rate
Chlamydia	5,910 (346)	367.9	623	361.1	1.7x higher	2.8 x higher
Gonorrhoea	1,271 (248)	80	509.8	66.2	7.7x higher	6.6 x higher
Infectious syphilis	158 (29)	9.6	65.9	8.0	8.2x higher	6.6 x higher
HIV	60 (4)	2.9	14.5	2.6	5.5x higher	1.6 x higher
HBV (newly acquired) ^{viii}	11 (O)	0.7	0	0.6	N/A	2.2 x higher
HBV (newly diagnosed) ^{viii}	283 (6)	17.1	26	17.1	1.5x higher	2.3 x higher
HCV (newly acquired) ^{viii}	32 (11)	2.2	31.9	1.4	22.6x higher	13.7 x higher
HCV (newly diagnosed) ^{viii}	429 (70)	26.7	196.2	22.5	8.7x higher	4.5 x higher

** Newly diagnosed' is inclusive of 'unspecified' and 'newly acquired' infections of hepatitis B and C. The case definitions used by SA Health and the Kirby Institute for classifying STI and BBV infections are consistent with the criteria agreed upon nationally by the Communicable Diseases Network Australia (CDNA). For a case to be classified as 'newly acquired', evidence of acquisition within two years before diagnosis is required. Cases that do not meet any of the criteria for a 'newly acquired' case definition and are aged more than 24 months at time of diagnosis are classified as 'unspecified'.



Figure 1: Ratio of Aboriginal and Torres Strait Islander to non-Indigenous notification rates, 2013-2017, by infection (Australia)¹⁷

Figure 2: Ratio of Aboriginal and Torres Strait Islander to non-Indigenous notification rates, 2013-2017, by infection (Australia)¹⁷





Infection	2013 Fold difference	2017 Fold difference	% Change (2013-2017)
Chlamydia	3.3	2.8	-15.2%
Gonorrhoea	16.4	6.6	-59.8%
Infectious Syphilis	2.7	6.6	+144.4%
HIV	1.3	1.5	+15.4%
HBV (newly acquired)	2.5	2.2	-12.0%
HBV (newly diagnosed)	2.8	2.4	-14.3%
HCV (newly acquired)	8.7	13.8	+58.6%
HCV (newly diagnosed)	3.3	4.4	+33.3%

Nationally, between 2013 and 2017:17

- > There was divergence in the difference (expressed as a ratio) between the age standardised notification rates for infectious syphilis, HIV and HCV (newly acquired and newly diagnosed), highlighting elevated and increasing risk of acquiring these infections for Aboriginal and Torres Strait Islander people relative to the non-Indigenous population during this period.
- > There was convergence in the difference between Aboriginal and Torres Strait Islander and non-Indigenous gonorrhoea age standardised notification rates. In 2013, rates among the Aboriginal and Torres Strait Islander population were 16.4 times higher than in the non-Indigenous population, decreasing to 6.6 times as high in 2017. This convergence in notification rates between these populations should be considered in the context that there has been a significant increase in the age standardised notification rate for gonorrhoea for both populations during this period.
- Smaller decreases in the ratio of Aboriginal and Torres Strait Islander to non-Indigenous age standardised notification rates were observed for newly diagnosed HBV, while the five year trend in relative risk of infection between the two populations for newly acquired HBV remained stable.

In South Australia, between 2013 and 2017:17

- > While the trend for elevated risk of acquiring HCV infection (newly diagnosed and newly acquired) for Aboriginal and Torres Strait Islander people relative to the non-Indigenous population seen at the national level was also seen in South Australia, the magnitude of the difference in rates between these populations was greater in South Australia.
- > Trends in the difference in relative risk (expressed as a ratio) between the Aboriginal and Torres Strait Islander population and non-Indigenous population for gonorrhoea, syphilis, HBV (newly diagnosed and newly acquired) and HIV infection have reflected trends seen at the national level during this period.
- It is noted that trends in HIV and newly acquired HBV notification rates in the South Australian Aboriginal and Torres Strait Islander population are based on small numbers (11 and three notifications respectively during this period) and therefore are more susceptible to variance than national rates, and should be interpreted with caution.

Chlamydia

Figure 3: Chlamydia age standardised notification rate per 100,000 population, by Indigenous status¹⁷



In South Australia:17, 18

- From 2014 to 2017, there was a trend towards a decreasing age standardised chlamydia notification rate among Aboriginal and Torres Strait Islander people, while the notification rate among non-Indigenous people has remained relatively stable. Conversely, the national trend has remained relatively stable for both cohorts over this period (see Figure 3). At both the state and national level, the Aboriginal and Torres Strait Islander rate remains significantly elevated relative to the non-Indigenous rate.
- From 2016 to 2018, 1,167 notifications of chlamydia were reported among Aboriginal and Torres Strait Islander people in South Australia (6.6% of all notifications), of whom¹⁹:
 - 64.1% were female and 83.2% were amongst 15-29 year olds (compared to 55.8% and 77.0% of all notifications, respectively).
 - 29.6% were living in the Far North region, and 44.3% were living in the Adelaide metropolitan region at the time of diagnosis.
 - 35.9% were reported by Aboriginal Health Services,
 23.3% by metropolitan GPs and 14.7% by country GPs.

Gonorrhoea

Figure 4: Gonorrhoea age standardised notification rate per 100,000 population, by Indigenous status¹⁷



In South Australia:17, 18

- > After a decline from 2013 to 2015, there has been a trend towards an increasing age standardised gonorrhoea notification rate among both Aboriginal and Torres Strait Islander people (26.2% increase from 2015 to 2017) and non-Indigenous people (68.9% increase from 2015 to 2017) in South Australia. This reflects the national trend for both cohorts over this period (see Figure 4). At both the state and national level, the Aboriginal and Torres Strait Islander rate remains significantly elevated relative to the non-Indigenous rate.
- From 2016 to 2018, 825 notifications of gonorrhoea were reported among Aboriginal and Torres Strait Islander people in South Australia (22.5% of all notifications), of whom:¹⁹
 - 52.7% were female and 67.9% were amongst 15-29 year olds (relative to 35.8% and 57.1% of all notifications, respectively).
 - 62.7% were living in the Far North region, and 18.2% were living in the Adelaide metropolitan region at the time of diagnosis.
 - 69.8% were reported by Aboriginal Health Services, 8.7% by metropolitan GPs, and 5.2% by country GPs.

Syphilis (Infectious)

Figure 5: Syphilis (Infectious) age standardised notification rate per 100,000 population, by Indigenous status¹⁷



In South Australia:17, 18

- > There has been a trend towards an increasing age standardised infectious syphilis notification rate among Aboriginal and Torres Strait Islander and non-Indigenous people in SA since 2013, reflecting the national trend during this period (see Figure 5).
- In May 2017, the CDCB declared an outbreak of infectious syphilis in the northern and western parts of SA in response to a clustering of cases amongst Aboriginal and Torres Strait Islander people in the Far North and Western and Eyre regions of SA between November 2016 and May 2017. In November 2018, the CDCB declared that the outbreak of infectious syphilis had extended to metropolitan Adelaide. The SA outbreak of infectious syphilis has been linked to an outbreak in northern and central Australia that began in 2011 and as of January 2019 had affected over 2,500 people in South Australia, Queensland, Northern Territory and Western Australia, including deaths from congenital syphilis.
- > Between November 2016 and January 2019, 66 cases of infectious syphilis were reported among Aboriginal and Torres Strait Islander people in outbreak affected regions of SA, of whom, six diagnoses were in pregnant women, and one child was born with congenital syphilis (the first case notified in South Australia since 1999). During this period, the South Australian outbreak had a differing age profile to that seen in other states, only 50% of cases were reported among people aged 15-29 years (compared to 66%, 63% and 70% of cases in the North Queensland, NT and WA outbreak regions, respectively), and 26% of cases were among people over 35 years of age. 71% of cases were reported in the Far North of the state.^{19, 20}

- In 2015, a Multijurisdictional Syphilis Outbreak Working Group (MJSO) of the Communicable Diseases Network Australia (CDNA) was formed in response to the on-going outbreak among young Aboriginal and Torres Strait Islander people living in remote areas of northern Australia. The MJSO meets regularly with the objective of advising governments on co-ordinating the public health response for outbreak control and preventing transmission of syphilis from infected women to their babies, through rigorous antenatal testing and care.
- In 2019, a South Australian Syphilis Outbreak Response Plan was developed that complements the objectives of this Action Plan and provides a framework for a coordinated, rapid, effective, local response to this outbreak.

Human Immunodeficiency Virus (HIV)

Figure 6: HIV age standardised notification rate per 100,000 population, by Indigenous status¹⁷



Nationally from 2010 to 2017, the age standardised HIV notification rate among non-Indigenous people^{ix} decreased by 12.5%, diverging from the Aboriginal and Torres Strait Islander rate which increased by 21.1% during this period.¹⁷

Trends in HIV notification rates in the South Australian Aboriginal and Torres Strait Islander population are based on small numbers and therefore are more susceptible to variance than rates amongst the non-Indigenous population. Rates may reflect localised occurrences rather than statewide or national trends, and should be considered in this context. In South Australia:19

- > From 1985 to 2018, 47 new diagnoses of HIV were reported among Aboriginal and Torres Strait Islander people in South Australia, 23 (48.9%) of whom were diagnosed in the 11 years from 2008 to 2018.
- From 2014 to 2018, 11 new diagnoses of HIV were reported among Aboriginal and Torres Strait Islander people in South Australia (4.2% of all notifications), at a mean rate of 2.2 notifications per year, of whom:
 - 54.5% were male, 66.7% of whom identified as MSM.
 Though a large proportion of cases during this period were female, the long term trend in SA for
 HIV diagnoses among Aboriginal and Torres Strait
 Islander women has been low and stable, reflecting the national trend.
 - Recent and long term epidemiological trends in SA are consistent with national trends highlighting injecting drug use as an important exposure risk factor reported by Aboriginal and Torres Strait Islander people diagnosed with HIV.
 - 72.7% were living in metropolitan Adelaide at time of diagnosis.
 - 36.4% were diagnosed by a metropolitan GP, 27.3% in a public hospital, and 18.2% by a country GP.
 - For diagnoses with a documented CD4+ count, 56% were classified as 'late' (CD4+ cell count <350 cells/µL), reflecting trends in late diagnosis for all HIV notifications in SA during this period (55%). These notifications are likely to have been among people who acquired HIV at least four years prior to diagnosis without being tested.¹⁷

To close the gap between Aboriginal and non-Indigenous HIV rates and ensure Aboriginal people are not left behind in progress to HIV elimination targets, tailored approaches are needed to build community awareness and ensure equitable access to combination prevention including condoms, sterile injecting equipment and biomedical strategies such as HIV treatment as prevention (TasP), post-exposure prophylaxis (PEP) and pre-exposure prophylaxis (PrEP) for Aboriginal people at medium and high risk of HIV infection. This must also be accompanied by culturally responsive HIV and STI prevention education, including peer education; regular and comprehensive HIV and STI testing; ongoing commitment to partner notification; and culturally responsive clinical management and support for people living with HIV (PLHIV).⁵

^{ix} When comparing HIV notification rates among the Aboriginal and Torres Strait Islander and the non Indigenous populations, the non Indigenous population is restricted to those born in Australia. This is done to exclude HIV notifications in overseas born people, in whom trends can fluctuate in response to immigration patterns, and to focus on HIV infection endemic to Australia.

The subsidisation of HIV PrEP for people at medium and high risk of HIV through the Pharmaceutical Benefits Scheme (PBS) as of 1 April 2018 is a significant development that needs to be capitalised on. Of an estimated 129 Aboriginal men in South Australia at high risk of HIV, 15 (12 per cent) were enrolled in the PrEP-X-SA trial.¹² Improving access to PrEP for Aboriginal people at risk of HIV is a priority in SA and nationally.

PLHIV who take antiretroviral treatment daily as prescribed and achieve and maintain sustained viral suppression have effectively no risk of sexually transmitting the virus to a HIV-negative partner. This is known as undetectable equals untransmittable (U=U) and TasP. There is evidence that a higher proportion of Aboriginal PLHIV on antiretroviral therapy do not achieve undetectable viral load relative to non-Indigenous PLHIV.^{5, 21} Identifying and addressing factors that contribute to these disparities is a priority in SA and nationally.

These recommendations are reflected in the priority actions for this Action Plan.

Hepatitis C

Figure 7: Hepatitis C (newly diagnosed) age standardised notification rate per 100,000 population, by Indigenous status¹⁷



..... Non-Indigenous (National)

Nationally from 2013 to 2017, the age standardised notification rate for newly diagnosed HCV among non-Indigenous people decreased by 11.9%, diverging from the Aboriginal and Torres Strait Islander rate which increased by 14.8% during this period (Figure 7).¹⁷

In South Australia:17, 18

- From 2013 to 2017, the age standardised notification rate for newly diagnosed HCV among Aboriginal and Torres Strait Islander people was stable and elevated relative to the non-Indigenous rate, which decreased by 22.4% during this period. The South Australian Aboriginal and Torres Strait Islander rate was 6.7 times higher than the non-Indigenous rate in 2013, and 8.7 times higher in 2017 (Figure 7).
- > From 1995 to 2018, 1,806 notifications of newly diagnosed HCV were reported among Aboriginal and Torres Strait Islander people in South Australia, at a mean rate of 78.5 notifications per year.¹⁹
- > From 2014 to 2018, 341 notifications of newly diagnosed HCV were reported among Aboriginal and Torres Strait Islander people in South Australia (13.8% of all notifications), at a mean rate of 68.2 notifications per year, of whom:¹⁹
 - 58.1% were male (compared to 65.0% of non-Indigenous notifications)
 - the median age of diagnoses was 36 years (range: 16-59 years) (compared to 44 years (range: 0-94 years) for non-Indigenous notifications)
 - 85.0% reported a history of injecting drug use, 31.1% reported a history of imprisonment and 21.1% reported tattooing as exposure risk factors (compared to 66.0%, 10.0% and 22.0% of non-Indigenous notifications, respectively)
 - 55.1% were living in metropolitan Adelaide (compared to 68.0% of non-Indigenous notifications) at time of diagnosis
 - 27.0% were diagnosed by Prison Health Service (compared to 10.0% of non-Indigenous notifications), 17.9% by Country GPs, 17.0% in public hospitals, and 10.0% by Aboriginal Health Services. The most common notification source for non-Indigenous diagnoses during this period were metropolitan GPs (40.0%).

Figure 8: Hepatitis C (newly acquired) age standardised notification rate per 100,000 population, by Indigenous status¹⁷



Nationally from 2013 to 2017, the notification rate for newly acquired HCV among Aboriginal and Torres Strait Islander people increased by 19.4%, diverging from the non-Indigenous rate which decreased by 21.7% during this period (Figure 8).¹⁷

In South Australia:17, 18

- > Trends in newly acquired HCV notification rates in the South Australian Aboriginal and Torres Strait Islander population are based on small numbers and therefore are more susceptible to variance than rates amongst the non-Indigenous population.
- The age standardised notification rate for newly acquired HCV among Aboriginal and Torres Strait Islander people in South Australia reduced by 24.0% from 2013 to 2017, but remained elevated relative to the non-Indigenous rate, which decreased by 54.8% during this period. The South Australian Aboriginal and Torres Strait Islander rate was 13.5 times higher than the non-Indigenous rate in 2013, and 22.8 times higher in 2017 (Figure 8).
- From 2014 to 2018, 64 notifications of newly acquired HCV in SA were reported among Aboriginal and Torres Strait Islander people in South Australia (31.1% of all notifications), at a mean rate of 12.8 notifications per year. In 2018, the median age of Aboriginal and Torres Strait Islander cases was 29.5 years, compared to 35 years for non-Indigenous cases.¹⁹

Access to testing and treatment, over-representation in custodial settings and complex social and medical factors mean that Aboriginal and Torres Strait Islander people are more frequently exposed to environments and situations where there is an increased risk of exposure to HCV. They are therefore disproportionately impacted compared with the non-Indigenous population.²² To ensure Aboriginal people are not left behind in progress to HCV elimination targets, access to culturally responsive education, clean needle programs and evidence-based opioid treatment programs, as well as improved diagnosis and treatment rates, are critical.⁵ Strategies should be co-designed and tailored to meet community needs, and priority settings should consider geospatial distribution of HCV diagnoses through regional and rural areas of South Australia as well as metropolitan Adelaide.

ACCHS, Aboriginal medical services and other priority settings for HCV including clean needle programs, custodial settings, alcohol and other drug services, primary health services, homelessness services and mental health services have a pivotal role to play in addressing these barriers.⁵

These recommendations are reflected in the priority actions for this Action Plan.

Hepatitis **B**

Figure 9: Hepatitis B (newly diagnosed) age standardised notification rate per 100,000 population, by Indigenous status¹⁷



Nationally from 2013 to 2017, the notification rate for newly diagnosed HBV among Aboriginal and Torres Strait Islander people decreased by 37.0%, converging towards the non-Indigenous rate which decreased by 25.0% during this period (Figure 9).¹⁷

In South Australia:17, 18

- From 2013 to 2017, the notification rate for newly diagnosed HBV among Aboriginal and Torres Strait Islander people decreased by 54.6%, converging towards the non-Indigenous rate which remained relatively stable during this period, reflecting long term trends.
- > From 1995 to 2018, 566 notifications of newly diagnosed HBV were reported among Aboriginal and Torres Strait Islander people in South Australia, at a mean rate of 24.6 notifications per year.¹⁹
- From 2014 to 2018, 68 notifications of newly diagnosed HBV were reported among Aboriginal and Torres Strait Islander people in South Australia (4.4% of all notifications), at a mean rate of 13.6 notifications per year, of whom:
 - 77% reported a known household contact living with HBV, 13% reported a history of injecting drug use, and 9% reported a history of imprisonment as exposure risk factors.

- 56% were diagnosed by Aboriginal Health Services,
 13% in public hospitals, and 12% by Prison Health Service.
- Relative to population distribution, notifications were disproportionately higher in the Far North and Eyre and Western regions of South Australia during this period.
- With the exception of median age, which has increased steadily over time (reflective of national trends), epidemiological characteristics of newly diagnosed HBV notifications among Aboriginal and Torres Strait Islander people in SA from 2014 to 2018 are reflective of long term trends.
- > Trends in newly acquired HBV notification rates in the South Australian Aboriginal and Torres Strait Islander population are based on small numbers and therefore are more susceptible to variance than rates amongst the non-Indigenous population. Rates may reflect localised occurrences rather than statewide or national trends, and are not presented here.
- There were five notifications of newly acquired HBV amongst Aboriginal and Torres Strait Islander people from 2008 to 2018 (and no notifications between 2016 and 2018), compared to 14 notifications between 1996 and 2007, reflecting the declining trend observed nationally during this period.

Declining trends in HBV notification rates among Aboriginal and Torres Strait Islander people reflect the impact of the high coverage of childhood and adolescent vaccination programs. However, despite the success of primary prevention programs, chronic HBV still significantly impacts older Aboriginal and Torres Strait Islander people, with evidence suggesting that this burden is particularly high in rural and remote areas of South Australia.⁵ Linkage to and retention in guideline-based care to support secondary and tertiary prevention for this cohort remains a priority for this Action Plan.

Non-notifiable STI and BBV infections

Trichomoniasis, HTLV-1, human papillomavirus (HPV) and *Mycoplasma genitalium* are not notifiable conditions under the *South Australian Public Health Act 2011* and, as such, statewide South Australian surveillance data is not available for these infections.

Trichomoniasis

Through its annual STI screening program, AHCSA collects sentinel surveillance data on trichomoniasis from participating ACCHS.

Testing at participating sites increased six-fold from 2008-2016. Testing positivity peaked at 15.0% in 2011 and declined by 59% (to 6.1%) by 2016. A significant decline in positivity rates was observed for females, but there was no change in positivity among males. Higher test positivity was associated with regional and remote services compared to urban services.^{10, 23}

Human T-lymphotrophic virus 1 (HTLV-1)

A forum on HTLV-1²⁴ in Central Australia was held in August 2018 in Alice Springs, Northern Territory. Following the meeting, the Australian Government Department of Health released a communique on the meeting outcomes:

- Preliminary data suggests high rates of HTLV-1 in some communities in Central Australia.
- > Current evidence shows that infection with this virus is not likely to cause disease in a majority of people. International research shows that, in a small proportion of people after many decades, HTLV-1 causes a rare form of leukaemia and/or a spinal cord disease. Studies have suggested associations with other diseases but it is not yet known whether it causes those diseases or not.
- > Further research is required to provide clarity on the true burden of disease of HTLV-1 in our communities.
- > The forum committed to working collaboratively to integrate community priorities, research findings and clinical and public health guidelines into a coordinated approach to HTLV-1 in Australia.

Mycoplasma genitalium

Little is currently known about the prevalence of *Mycoplasma genitalium* in Australia. Treatment is available; however, it appears that *Mycoplasma genitalium* is becoming increasingly resistant to azithromycin, which is the usual first-line treatment.⁵

Human papillomavirus (HPV)

HPV is a precursor to a range of cancers in both females and males (particularly cervical cancer, other anogenital cancers and oropharyngeal cancer). An estimated 80% of Australians will be exposed to oncogenic HPV genotypes at some point in their lives.²⁵

While effective public health interventions have led to a decline in overall cervical cancer rates in Australia, there remain disparities in incidence and mortality rates for cervical cancer between Aboriginal and Torres Strait Islander and non-Indigenous people:²⁶

- Nationally, no statistically significant increasing or decreasing trend was observed in the age-standardised incidence rate of cervical cancer for Aboriginal and Torres Strait Islander people from 1998 to 2013, which remained substantially elevated relative to the non-Indigenous rate. Conversely, for non-Indigenous people, the agestandardised incidence of cervical cancer decreased from 7.6 to 5.8 cases per 100,000 population during this period.
- From 1998 to 2015, cervical cancer related mortality decreased for both Aboriginal and Torres Strait Islander people (from 15.7 to 8.2 deaths per 100,000), and non-Indigenous people (from 2.7 to 1.7 deaths per 100,000). During the period 2011 to 2015, cervical cancer incidence and five year mortality rates were 2.5 times and 3.8 times higher for Aboriginal and Torres Strait Islander people relative to non-Indigenous people.
- > Differences between cervical cancer incidence and mortality rates for Aboriginal and Torres Strait Islander and non-Indigenous people may be related to a range of risk and/or protective factors such as access to health care services, including consistent screening towards early detection of precancerous abnormalities.
- > The National HPV Vaccination Program was introduced in 2007 for females and in 2013 for males. Vaccination and cervical screening are important public health measures to reduce the incidence of cancer and other HPV associated complications. The SA Cervix Screening Program has a specific team working with Aboriginal communities across SA to promote Well Women's Screening Checks, which includes cervical screening.

The proportion of oropharyngeal cancers associated with HPV has increased over the last decade in Europe and North America to an estimated 70%.²⁵ One Australian study estimated HPV-positivity among patients presenting with oropharyngeal cancer from 2005 to 2017 at 83%, with increasing incidence over this period largely attributed to HPV-positive disease.²⁷ There is evidence to suggest oropharyngeal cancer has now overtaken cervical cancer as the most common HPV associated cancer in some countries. Unlike cervical cancer, currently there is no evidence-based screening method for HPV associated head and neck cancers.²⁸

Research is currently underway in SA to provide evidence of the prevalence of oncogenic HPV genotypes in the mouth and oropharynx, the impact of HPV vaccination on rates of HPV-related cancers, and the efficacy and cost-effectiveness of targeted, extended HPV vaccination among Aboriginal and Torres Strait Islander Australians.²⁵

Impact of STI and BBV infection

STIs

The consequences of late diagnosis, undiagnosed and untreated STI include increased risk of onward transmission, infertility, adverse pregnancy outcomes, chronic pelvic pain, stigma, discrimination, poor mental health, and increased risk of acquiring HIV.²⁹

The increasing rate of syphilis among pregnant women and women of child bearing age is of particular concern given the risk of mother-to-child transmission and the significant risk of infant morbidity (including permanent disability) and mortality associated with congenital syphilis. The 'South Australian Syphilis Outbreak Response Plan' provides a framework for a co-ordinated, rapid, effective, local response to this outbreak.

Among women presenting to Western Australian hospitals from 2002-2013, a history of chlamydia or gonorrhoea infection was associated with increased risk of ectopic pregnancy or tubal infertility. Further, the majority of women positive for gonorrhoea were Aboriginal (78%), while almost all ectopic pregnancies and all of the tubal infertility cases in those positive for gonorrhoea were among Aboriginal women.³⁰

HIV

Compounding disproportionately high rates of HIV among Aboriginal people described in this report, there is evidence to suggest that relative to national trends, late diagnosis of HIV is particularly prevalent in South Australia among both Aboriginal and non-Indigenous diagnoses.^{17, 19} Furthermore, once diagnosed a higher proportion of Aboriginal PLHIV on antiretroviral therapy do not achieve undetectable viral load relative to non-Indigenous PLHIV.³¹ These factors place Aboriginal PLHIV at greater risk of advanced immunosuppression and HIV associated illness, and onward transmission. The latter should be considered in the context of sub-optimal uptake of biomedical HIV prevention strategies such as HIV PrEP by Aboriginal people.^{12, 17}

Viral Hepatitis

Diagnosis and linkage to care for people living with HBV (PLHBV) remains sub-optimal and inequitable in South Australia, and Aboriginal people remain overrepresented among PLHBV.³² Data presented in the 'Australian NSP Survey' suggests lower rates of DAA treatment uptake among Aboriginal relative to non-Indigenous HCV antibody positive respondents.¹⁷

Chronic HBV and HCV can progress to advanced liver disease, liver failure, and are the predominant causes of liver cancer, the fastest increasing cause of cancer related mortality in Australia.³² Nationally, liver cancer is the second most common cause of cancer related mortality amongst Aboriginal people.³³ Aboriginal people diagnosed with liver cancer between 2007 and 2014 had a five-year mortality rate of 91%. During this period, liver cancer incidence and mortality attributed to liver cancer was significantly higher for Aboriginal people living in outer regional, remote and very remote areas compared to those living in major cities or inner-regional areas.³⁴

Poorer health outcomes among Aboriginal PLHBV may be linked to reduced access to culturally appropriate health care and therefore reduced likelihood of receiving timely diagnosis, monitoring and treatment.

^x The Action Plan sets a target of reducing hepatitis B and C attributable mortality by 30% and 65% respectively.

Lifelong monitoring, including biannual blood and liver function tests and non-invasive fibrosis assessment, is the cornerstone of appropriate care recommended for all PLHBV, with antiviral treatment offered where clinically indicated.⁵ Adherence to these guidelines can be particularly challenging in remote areas where access to some health technologies may be limited. Identifying and addressing barriers to accessing diagnostic tools for early detection of liver cancer will be vital in reducing HBV attributable mortality among Aboriginal people in South Australia.

South Australian research provides evidence of the impact of addressing these disparities and enhancing rates of diagnosis and linkage to care for people living with viral hepatitis at risk of disease progression, on adverse clinical events and on associated direct costs borne by the health system:

- > Chinnaratha et al. (2017) estimate that increasing the proportion of all PLHBV on treatment from 2.9% (2013 SA rate) to 15% (and associated increases in the proportion of PLHBV engaged in guideline-based care) would deliver savings to the health system of \$23.8 million over a 10 year time horizon, driven by reductions in the cumulative incidence of HBV associated liver cancer, decompensated cirrhosis, liver transplants, and mortality^x (50%, 65%, 60% and 30% reductions, respectively), and a gain of approximately 8.2 quality adjusted life years (QALYs) per patient.³⁵
- Ramachandran et al. (2019) confirm international evidence of the cost effectiveness of increasing HCV treatment through decentralized models of care, estimating approximately 12.5 QALYs gained and net monetary benefit of approximately \$550,000 per person living with HCV treated through these models.³⁶

From 2017-2018, despite comprising around 2% of the South Australian population, Aboriginal people represented 13% of the 43,676 patient bed days reported by South Australian hospitals where viral hepatitis or HIV were among the top five reasons for admission.³⁷

The disproportionate personal, clinical, social and economic impact of these infections on Aboriginal communities in South Australia underlines the importance of identifying and addressing local barriers to early, consistent diagnosis and linkage to care and support for those at risk of or living with STI or BBV infection, and prevention of avoidable sequelae and mortality attributed to these infections.









* The Action Plan sets a target of reducing hepatitis B and C attributable mortality by 30% and 65% respectively.

This section is intended to be read as an addendum to commentary on the national program, service and research landscape throughout the National Strategy, providing additional relevant national and South Australian data and information where available to highlight successful existing approaches for scale up, and to inform more targeted local strategy and service planning.

STI and BBV screening and linkage to care in primary health care services

This Action Plan calls for an "increase in STI testing coverage with a focus on areas of highest need", and to increase the proportion of Aboriginal people living with HIV, HBV and HCV that are diagnosed to 95%, 90% and 80% respectively by 2022.

Modelling by Hui *et al.* (2019) of sexual transmission of syphilis among heterosexual Aboriginal and Torres Strait Islander people aged 15-34 years of age living in regional and remote areas of Australia predicts that annual syphilis testing coverage of 56% (42% in males, 70% in females) of this cohort is required to reduce incidence rates to pre-outbreak levels by 2023.³⁸

The Action Plan also calls for enhancing access to biomedical prevention strategies including TasP for Aboriginal people. TasP is an individual and community prevention strategy that involves regular testing for early detection of infection and, following diagnosis, immediate initiation of treatment. Implementation of TasP consistently and at scale contributes to reducing STI and BBV prevalence and consequently, opportunities for transmission to occur, as well as improving health outcomes and quality of life, and is a priority for this Action Plan.³¹

Achievement of these targets will require a range of diverse, evidence-based testing strategies targeted to priority groups and settings identified in this Action Plan, sufficient statewide clinical infrastructure to meet population need, as well as systematic, active patient management and strong coordination of care post-diagnosis.

Primary health care services in particular have a pivotal role to play in achieving these targets and, through integrated models of care in partnership with tertiary clinical services where required, contributing to the primary, secondary and tertiary prevention of STI and BBV infection and related sequelae.

^{xi} Nganampa Health Council operate a standalone sexual health and BBV program.
^{xii} Until 2016, target age group was 16 to 30 years of age.

Evidence presented in this section provides an indication of current levels of STI and BBV testing for Aboriginal people in some settings. Priority settings in South Australia will be engaged to provide data on screening, diagnosis and management of STI and BBV among Aboriginal people, to identify gaps in the cascade of care by infection, service type and region, inform continuous quality improvement processes, and monitor progress to achieve these targets over the life of the Action Plan.

Primary Health Care Services

Aboriginal Health Council of South Australia STI and BBV Program

AHCSA is the peak body for Aboriginal health in South Australia with a network of member ACCHS^{xi}, registered training organisations and advocacy bodies.

The Aboriginal STI and BBV Program delivered by AHCSA acts as a coordination point for the prevention, testing, diagnosis, monitoring and management of STI and BBV among Aboriginal communities in South Australia. The program works in partnership with South Australian ACCHS to enhance the capacity of ACCHS staff to provide guidelinebased information and education, testing, treatment and management of STI and BBV; and develops and supports the provision of culturally and developmentally appropriate sexual health promotion material and activities for South Australian Aboriginal people in primary care settings.

In partnership with AHCSA's member services, the Aboriginal STI and BBV Program coordinates routine opportunistic STI and BBV screening of Aboriginal people aged 16 to 35 years of age^{xii} and an annual enhanced screening program across all ACCHS in SA aimed at testing and treating the population concurrently.

AHCSA has supported ACCHS to develop systems to ensure active patient management and strong coordination of care of ACCHS clients living with BBV.

The program also seeks to build the capacity of workforces in other priority settings to meet the needs of Aboriginal and Torres Strait Islander people at risk of or living with STI and/ or BBV.

Aboriginal Community Controlled Health Services

There is a network of ACCHS in metropolitan Adelaide and in regional and remote areas across SA that provide comprehensive primary health care services to local Aboriginal people (Figure 10). Since 2009, these services have been supported by a centrally coordinated sexual health program delivered by AHCSA.^{23, 39}



Figure 10: Map of Aboriginal Health Council of South Australia) Member Services, 2018⁴⁰

AHCSA receives de-identified, clinic-level testing and positivity data from nine ACCHS for the purposes of quality improvement in their STI programs:

- > Metropolitan Health Services: Nunkuwarrin Yunti (Adelaide)
- Regional Health Services: Nunyara (Whyalla), Pangula Mannamurna (Mount Gambier), Pika Wiya (Port Augusta)
- Remote Health Services: Ceduna-Koonibba (Ceduna), Maralinga Tjarutja (Oak Valley), Tullawon (Yalata), Umoona Tjutagku (Coober Pedy), Port Lincoln Aboriginal Health Service.

AHCSA feed this data back to services to inform continuous quality improvement.

Priority areas for participating South Australian ACCHS include:

- Increase HIV and syphilis testing. AHCSA recommends offering HIV and syphilis testing when testing for chlamydia, gonorrhoea and trichomonas. AHCSA also recommends that all clients diagnosed with an STI are offered syphilis and HIV testing if not initially done.
- > Increase STI testing of male clients.
- > Ensure that trichomonas is tested consistently with chlamydia and gonorrhoea testing for all clients.
- Increase the number of clients in the target age group receiving annual STI testing.
- Increase follow-up testing at three-months in all clients with a positive STI diagnosis.

Table 4 illustrates significant improvements in STI testing rates across participating services during the period 2008-2016, demonstrating the impact of quality improvement initiatives implemented in partnership by AHCSA and member ACCHS. Of note, across participating ACCHS between 2008 and 2016: $^{\mbox{\tiny 10}}$

- > 5,325 unique individuals were tested at least once (total 10,917 testing episodes). The AHCSA supported annual enhanced STI screening program accounted for 30% (range 24-35%) of overall STI testing per year on average.
- Repeat testing of individuals was infrequent, with 58% of individuals tested only once during the nine-year study period. Sensitivity analysis conducted using patient date of birth and sex in place of unique identifier still found over 50% of the study population was tested only once during the nine years. Even once the program was relatively established, only 6% of 1,189 patients tested in 2013 (8% of females, 2% of males) was tested annually during subsequent years of the study period (2014-16).
- STI testing episodes (chlamydia, gonorrhoea and trichomonas) increased for all age groups, and particularly among 16 to 30 year olds.
- > Fewer males were tested (range 27-38% of all tests annually) than females, consistent with long term STI testing trends in SA and nationally among both Aboriginal and non-Indigenous people.

Table 4: Aggregated STI testing data, participating South Australian ACCHS, 2008-2016¹⁰

	2008	2012	2016	% Change (2008-2016)
STI Tests	656	1,340	1,398	+113.1%
Unique individuals tested	559	1,121	1,155	+106.6%
STI Tests among people aged 16 to 30 years (% of all tests)	283 (50%)	571 (51%)	672 (58%)	+137.5%
Males (% of all tests)	166 (30%)	426 (38%)	368 (32%)	+121.7%
Females (% of all tests)	393 (70%)	694 (62%)	785 (68%)	+99.7%
Proportion of clients aged 16-30 years to have at least one STI test (Regional/Remote ACCHS Only)	-	-	26%	-

- Mean STI testing coverage among current clients of regional and remote services aged 16-30 years during the period 2013-2016 was 28% (range 25-33% of clients annually).
- Increasing STI testing rates and the introduction of the AHCSA sexual health program were associated with declines in positivity rates at first STI testing episode per calendar year for clients of participating services during the study period. Between 2013 and 2016, testing was stable and changes in positivity could more likely be inferred to indicate changes in prevalence. During this period there was:
 - a reduction^{xiii} in chlamydia positivity (adjusted^{xiv} odds ratio (aOR) 0.4, 95% confidence interval (CI) 0.2-0.5);
 - a reduction^{xiii} in trichomonas positivity (aOR 0.6, 95% CI 0.4-0.9); and
 - no significant reduction in gonorrhoea positivity (aOR 0.9, 95% CI 0.5-1.5).
- Elliott et al. (2019) note that "these findings are consistent with outcomes reported from other Aboriginal communities with comprehensive sexual programs, including the APY Lands of SA, the Tiwi Islands of the Northern Territory and the Ngaanyatjarra Lands of Western Australia. Key common features of these programs include a dedicated program coordinator, annual community-wide STI screening combined with opportunistic screening throughout the rest of the year (targeting the high risk age group), clinical support, community education and monitoring of testing (and treatment) data".¹⁰ These recommendations are reflected in priority actions for this Action Plan.
- More recent, unpublished data for the period 2016-2018 indicates that STI testing rates across these services have continued to increase. Furthermore, significant increases in the proportion of clients tested for and/or diagnosed with chlamydia, gonorrhoea or trichomonas who underwent a follow-up test for syphilis and HIV within 30 days have also been reported.
- > AHCSA have also facilitated audits of viral hepatitis diagnosis and linkage to care among clients of participating ACCHS. Data generated through this project informs service specific quality improvement and supports systematic linkage to guideline-based care for all ACCHS clients living with viral hepatitis.³⁹
 - Of clients with a HCV diagnosis on record as identified through this audit, treatment uptake was comparable to estimates of statewide treatment uptake to 2018 for all South Australians living with HCV.

- Of clients with a HBV diagnosis on record as identified through this audit, initial data analysis has indicated gaps in linkage to guideline-based care.
- AHCSA and participating ACCHS will continue to use this data to identify and support all remaining clients living with viral hepatitis to access guideline-based care and treatment.
- > This data will continue to be monitored by AHCSA and through the Action Plan governance structure to inform quality improvement in these services, statewide strategy, and to monitor progress towards Action Plan targets.

Nganampa Health Council

The National Strategy notes that the "highly successful STI control program delivered by Nganampa Health Council in the APY lands has kept STI testing comprehensively embedded in community controlled primary care in these remote communities".

Servicing a community of about 3,000 residents over 105 square kilometres in the north-west of South Australia, Nganampa Health Council includes seven clinics staffed by registered nurses, Aboriginal Health Workers and visiting or resident Medical Officers.

During the 2017 population wide STI screen, 80% of permanent residents and 36% of transient residents were screened, with data demonstrating low prevalence of chlamydia (2.6%), syphilis (0.1%) and gonorrhoea (4.6%) in this population, indicative of the impact of sustained, proactive STI control efforts.

High participation of the core population in syphilis screening is the cornerstone of a strategy that has contributed to creating a buffer around the APY lands population, limiting the development of networks of syphilis infection within the population, and effectively excluding the syphilis outbreak from the region until late 2016 despite high rates in surrounding regions. Screening participation remains a core element of the response to syphilis in this region.

The region also receives biannual hepatology outreach specialist visits from the Flinders Medical Centre Hepatology and Transplantation Unit to address inequity in access to care. Updates to patient information management systems including new clinical items have also been initiated to support guidelinebased management of people living with HBV.⁴¹

xiii Statistically significant for females only.

xiv Adjusted for age category, sex and health service location.

SA Health Aboriginal Primary Health Care Services

In addition to the 11 ACCHS across South Australia; free, comprehensive, culturally sensitive primary health care services are also available through Aboriginal Primary Health Care Services (four Watto Purrunna sites in Adelaide's northern and central regions; two Aboriginal Family Clinics in southern Adelaide).¹

Adelaide Primary Health Network

Based on data from 44% of metropolitan Adelaide GP practices in the Adelaide Primary Health Network (APHN) (n=109) from 2016-2018:

> 8,247 (42% males; 58% females) Aboriginal people were identified as regular users of participating GP practices (defined as three or more visits in two years), almost half the total population of Aboriginal people living in Adelaide per the 2016 Census.^{14,42}



Figure 11: STI and BBV screening among Aboriginal people presenting to participating metropolitan Adelaide PHN GP practices, by infection and age cohort, 2016-2018⁴²

Figure 12: STI and BBV screening among Aboriginal people presenting to participating metropolitan Adelaide PHN GP practices, by infection and age cohort, 2016-2018⁴²



Figure 11 and Figure 12 illustrate screening rates for STI and BBV among Aboriginal patients presenting to participating metropolitan Adelaide GP clinics on at least three occasions from 2016-2018. The dataset identifies whether a test had been ordered during the reporting period, it does not identify whether patients had multiple tests, or whether patients were tested at other health services during this period. The National Strategy calls for prioritisation of screening of specific age groups for some infections. Where data is available, rates of age-specific screening of relevance to each infection are provided.

Particularly low screening rates for HCV in this setting are noted. For comparison, approximately nine and five times as many patients were tested for HBV and HIV respectively during the reporting period, despite HCV being more frequently notified among Aboriginal people in SA. Nationally, the notification rate for unspecified HCV among Aboriginal and Torres Strait Islander people aged 15 to 24 years increased by 49% from 2012 to 2016.⁷⁷

20.4% of Aboriginal people aged 16-34 years presenting to participating metropolitan Adelaide PHN GP practices were tested for syphilis during the period 2016 to 2018.

Available estimates of annual syphilis testing coverage required to reduce incidence rates to pre-outbreak levels by 2023 are applicable only to heterosexual Aboriginal and Torres Strait Islander people aged 15-34 years of age living in regional and remote areas.³⁸ It is unclear what level of testing coverage is required to have a similar impact on syphilis incidence among other groups. For example, Aboriginal men who have sex with men, or Aboriginal and Torres Strait Islander people living in cities such as Adelaide, currently listed as an outbreak affected region by the Multijurisdictional Syphilis Outbreak Working Group.⁴³

APHN also captures STI and BBV antenatal screening data for pregnant Aboriginal people (Table 5).

Table 5: Antenatal screening for STI and BBV amongpregnant Aboriginal people presenting to participatingmetropolitan Adelaide PHN GP practices, by infection,2016-201842

Infection	Proportion screened (n=157)
Chlamydia	46.5%
Gonorrhoea	29.9%
Syphilis	73.9%
Hepatitis B	61.1%
Hepatitis C	7.0%
HIV	44.6%

The 'South Australian Perinatal Practice Guidelines'⁴⁴ currently recommends routine antenatal screening for HBV, HCV, HIV and syphilis for all women, and for chlamydia for all women less than 25 years of age or living in areas with high prevalence of STI, at their first antenatal appointment. Additional syphilis screening is recommended for all Aboriginal women residing in high risk areas (or who have travelled through an outbreak area) as well as any woman (regardless of cultural background) with an Aboriginal partner residing in high risk areas (or who has travelled through an outbreak area). This dataset does not identify whether the recommended additional syphilis tests were ordered for each patient, only whether a test had been ordered for a patient presenting to a participating metropolitan Adelaide PHN GP practice during the reporting period.

This dataset does not capture STI and BBV tests ordered in tertiary hospitals, including patients managed under the 'South Australian GP Obstetric Shared Care Model', and therefore may underestimate testing coverage in this cohort.

Antenatal screening for gonorrhoea is currently not specifically referenced in the 'South Australian Perinatal Practice Guidelines'.⁴⁴ It is noted that most Australian laboratories use dual chlamydia and gonorrhoea tests, ensuring automated gonorrhoea testing occurs whenever a chlamydia test is ordered, so gonorrhoea testing rates for this cohort may be underestimated here.⁴⁵

Country SA Primary Health Network

Data was not available at the time of publication. However, Country SA Primary Health Network (CSAPHN) now has capacity to share aggregated, de-identified data with external parties to inform population health planning for some regions.

South Australian Prison Health Service

Custodial settings are listed as a priority setting for this Action Plan.

Aboriginal people are vastly overrepresented in the Australian justice system, representing only two per cent of the population aged over 18 in the Australian community, but 27 per cent of the prisoner population. The prevalence of HIV, HBV and HCV is disproportionately high in custodial settings, and amongst Aboriginal people, relative to the overall population.⁴⁶

To address this, and ensure high quality service provision to improve the health and wellbeing of Aboriginal people including those at risk of or living with BBV in South Australian custodial settings, a range of initiatives have been implemented, including:

> Engagement of Wardliparingga Aboriginal Health Research Unit (SAHMRI) to design a 'South Australian Model of Care for Aboriginal Prisoner Health and Wellbeing' (model of care) that attends to the broad needs of the Aboriginal adult prisoner population within the nine adult prisons across South Australia.⁴⁷

This Action Plan contributes to implementation of recommendations listed within the model of care. For example, Priority Actions relating to integrated models of care. Integration between South Australian Prison Health Service (SAPHS), ACCHS and other external service providers with expertise in Aboriginal health and/or BBV has potential to improve health service delivery and outcomes for Aboriginal people at risk of or living with BBV during periods of incarceration and during transition to and from custodial settings.⁴⁷

> Through implementation of the 'South Australian Prisoner Blood Borne Virus Prevention Action Plan 2017-2020' (SA Prisoner BBV Plan), progress has been made to improving access to BBV services for Aboriginal people in prison.⁴⁶ Building on this, and sustaining high rates of STI and BBV testing as well as timely, consistent linkage to care and support post-diagnosis for Aboriginal people in this setting, remains a priority. While testing and treatment for HCV has increased significantly in this setting since 2016, data stratifying BBV testing and linkage to care within custodial settings by Indigenous status is currently not available. Establishing mechanisms to source and routinely report this data remains a priority both for the SA Prisoner BBV Plan, and this Action Plan.

This Action Plan also calls for enhanced access to the full suite of evidence-based harm reduction strategies for the primary prevention of BBV infection among Aboriginal people who inject drugs across priority settings, including in custodial settings (aligned with the SA Prisoner BBV Plan). Rates of HIV in Australian prisons are similar to rates in the wider Australian community. However, activities that carry a risk for HIV transmission, such as sharing injecting equipment, unprotected sex and unsterile body art increase the risk of ongoing, unchecked transmission in the absence of the highly effective harm reduction strategies available to the wider community. Studies have demonstrated that outbreaks of HIV do occur within Australian prisons, which has onward public health implications for the wider community.⁴⁶ Accordingly, opportunities to improve access to combination prevention strategies including HIV PrEP are also listed as a priority for this Action Plan, and should be considered in this setting.

Opportunities to improve STI and BBV screening and linkage to care in primary health care settings

Improving data quality: CRE-ASH ATLAS Project

The Centre for Research Excellence in Aboriginal Sexual Health and Blood Borne Viruses (CRE-ASH) clinical network comprises five peak Aboriginal health agencies, including AHCSA. These geographically dispersed CRE-ASH clinical hubs coordinate research and research translation, and implement capacity development initiatives at the local level.

The cornerstone of the CRE-ASH is establishing the ATLAS project – an Aboriginal primary care surveillance network to track and interpret patterns of STI and BBV testing and treatment as well as complementary behavioural data in Aboriginal medical services across regions, informing targeted strategies to improve STI and BBV service delivery.⁴⁸

Continuous quality improvement programs: the STRIVE study

The 'STI in remote communities: improved and enhanced primary health care' (STRIVE) cluster randomised trial sought to determine whether continuous quality improvement (CQI) programs (e.g. upgraded patient information management systems) can have an impact on prevalence of STI across 68 remote communities in northern and central Australia over a three year study period.⁴⁹ In sites implementing CQI initiatives relative to control sites, the following were noted:⁵⁰

- > significant increases in rates of STI testing
- slight improvements in rates of retesting for reinfection per clinical guidelines
- increasing but still sub-optimal rates of HIV and syphilis testing following a positive STI test per clinical guidelines (100% recommended for both)
- > no significant reduction in STI prevalence.
- > The authors recommend that "CQI strategies will need to be intensified and sustained over time if they are to affect STI community prevalence and ideally be implemented alongside other STI control strategies".⁴⁹

Point of Care Testing: Test, Treat ANd GO

A key public health strategy for control of STI is the provision of accurate testing and timely treatment through primary care services.⁵¹ Point of care (POC) testing for chlamydia, gonorrhoea and trichomonas offers an opportunity to reduce time to treatment and support better control of STI with improved outcomes for patients. The 'Test, Treat ANd GO (TTANGO) Trial Final Report to Health Services'⁵² found that POC testing for STI was (a) acceptable to key stakeholders, (b) as accurate as conventional laboratory-based tests for chlamydia and gonorrhoea, and (c) associated with timely treatment, reducing delays on average by nine days.

The TTANGO2 research project expands access to this technology, and integrates POC testing for STI into routine programming at 29 health services/clinics across Western Australia, South Australia, Northern Territory and Queensland, including at two clinics on the APY Lands. Nganampa Health Council noted "the benefits of point of care testing in reducing the time to treatment continue to be evident".⁴¹

Similar benefits are reported for HCV and HIV POC testing. The enhanced response to the syphilis outbreak in northern and central Australia is utilising syphilis POC testing to increase the options available to health professionals in areas with high numbers of cases. Opportunities for use of POC testing technologies to address barriers to consistent STI and BBV testing and timely linkage to care post-diagnosis in priority settings will be investigated through this Action Plan.

Medicare utilisation

This Action Plan calls for Medicare utilisation to be considered among a suite of strategies to enhance STI and BBV screening and linkage to care for Aboriginal people.

The aim of Medicare Benefits Schedule (MBS) Item 715 is to help ensure that Aboriginal people receive primary health care matched to their needs, by encouraging early detection, diagnosis and intervention for common and treatable conditions that cause morbidity and early mortality.⁵³ This Item was used by participating APHN region GPs on 2,341 occasions from 2016 to 2018.⁴²

MBS Items are also available to assist GPs to co-ordinate the care of people living with chronic conditions. MBS Items related to the Chronic Disease Management pathway (721, 721 and 732) were used by participating APHN region GPs to support co-ordination of care for Aboriginal patients living with chronic disease on 3,803 occasions during the period 2016 to 2018.⁴²

This data indicates familiarity of GPs in the APHN region with MBS Items to support prevention and management of chronic diseases within their patient cohort. This is validated by the 'GOANNA Survey' (2014), which found that 55% of respondents reported having an adult health check (MBS Item 715) in the last year.⁵⁴ In their evaluation of variation in STI testing and counselling across Aboriginal primary care centres and the impact of continuous quality improvement initiatives in these settings, Nattabi et al. (2017) note that "clients had three times the odds of receiving testing for all three STI and counselling if they had an adult health check. Health checks are primarily diagnostic and preventive, and the MBS allows for the Health Assessment for Aboriginal and Torres Strait Islander People (MBS Item 715) at least once every nine months including a sexual health history, cervical screening and testing for STI. Combining STI testing with an adult health check may be a way of normalising STI screening and reducing stigma by removing emphasis from the individual's risk behaviour".⁵⁵

Opportunities for partnership with APHN and CSAPHN to implement data driven quality improvement initiatives to support consistent, guideline-based screening and management of STI and BBV for Aboriginal people in primary care will be investigated through this Action Plan.

Linkage to care and contact tracing: South Australian Syphilis Register

The SA Syphilis Register (the Register) is an important element of the 'SA Syphilis Outbreak Response Plan', and is modelled on successful registers in other jurisdictions operating for many years, prior to the national outbreak.

The Register is a secure, confidential, single statewide database that includes all laboratory positive syphilis cases diagnosed in Aboriginal and Torres Strait Islander South Australians that meet the national syphilis case definition.

The Register aims to improve the management of Aboriginal people affected by syphilis by:

- > providing the treating clinician with information about a client's history of syphilis infection to assist in diagnosis, staging, management, education and treatment
- > supporting enhanced surveillance, screening, treatment of cases, and tracing of contacts
- actively assisting clinicians in the partner notification (contact tracing) process, to identify and treat contacts where appropriate
- improving the accuracy of reporting and monitoring trends in notifications

Implementing and maintaining the Register is a key priority for this Action Plan.

Linkage to care and contact tracing: Viral Hepatitis Notification Follow Up

The 'South Australian Public Health Act 2011' requires medical practitioners and diagnostic laboratories to notify SA Health of cases (including deaths) suspected of having or diagnosed with specified infections and diseases. These infections or diseases are commonly referred to as 'notifiable conditions', and include HBV and HCV.

The Communicable Disease Control Branch routinely refer notifications of positive HBV and HCV pathology tests to the SA Health Viral Hepatitis Clinical Practice Consultants, enabling these specialist nurses to contact diagnosing clinicians and if required, offer support to facilitate the follow up of patients and contacts and the provision of guidelinebased care.

In conjunction with service-specific data driven quality improvement initiatives, this statewide system offers opportunities to improve consistency and timeliness of linkage to care post-diagnosis for Aboriginal and non-Indigenous people living with viral hepatitis across all settings, and to facilitate targeted mentoring and capacity building of clinicians diagnosing people with viral hepatitis.

Immunisation

Hepatitis **B**

Achieving and maintaining HBV childhood vaccination coverage of 95% at 12 and 24 months is a target for this Action Plan.

Complete HBV vaccination coverage among South Australian Aboriginal children aged 24 months has increased from 92.4% in March 2015 to 98.2% in March 2018, consistent with evidence of high coverage for this age cohort across most areas of the country.⁵⁶ All individuals up to 19 years of age are eligible for catch-up vaccines through the National Immunisation Program, including for HBV. Aligned with the 'Australian Immunisation Handbook' recommendations, the SA Health High Risk Hepatitis B Immunisation Program offers free vaccination for adults of Aboriginal and Torres Strait Islander descent who missed or were not eligible for childhood and adolescent catch up vaccination programs.⁵⁷

Nationally, a continued decline in HBV notification rates has been observed among younger Aboriginal and Torres Strait Islander people, reflecting the impact of high coverage of childhood and adolescent vaccination programs.⁵

Between 2012 and 2016, the age standardised notification rate of unspecified HBV infection in the Aboriginal and Torres Strait Islander population halved from 62 per 100,000 in 2012 to 31 per 100,000 in 2016, whilst there were declines in all age groups the greatest decline was in people under 40 years of age.¹⁷ This reduction in incidence is also reflected in South Australian notification data.¹⁸ A 2019 meta-analysis of 84 estimates of HBsAg (hepatitis B surface antigen) prevalence found that overall pooled prevalence among Aboriginal and Torres Strait Islander people across Australia decreased from 10.89% before 2000 to 3.51% after 2000.⁵⁸

However, despite the success of primary prevention programs, chronic hepatitis B still significantly impacts older Aboriginal and Torres Strait Islander people.⁵ At the end of 2016, it was estimated that 11 per cent of the total number of people living with chronic HBV in Australia were Aboriginal and Torres Strait Islander people despite composing three per cent of the national population. Linkage to care and secondary and tertiary prevention for this cohort remains a priority for this Action Plan.

Figure 13: Hepatitis B vaccination coverage rates at 12 and 24 months, South Australia, 2015 to 2018, by Indigenous status⁵⁶



^{*}Action Plan Target 1: Achieve and maintain hepatitis B childhood vaccination coverage of 95 per cent at 12 and 24 months.

Human papillomavirus

The National HPV Vaccination Program was introduced in 2007 for females and in 2013 for males. Data illustrating trends in HPV vaccination coverage by Indigenous status are not readily available. Previous research suggests that three-dose coverage for Aboriginal and Torres Strait Islander females is high, although there is evidence that coverage has been lower in this cohort than among non-Indigenous females (for example, an estimated 15% lower coverage than among 12-17 year old non-Indigenous females in Queensland in 2007).⁵⁹

The Aboriginal and Torres Strait Islander population aged 21 years or younger being diagnosed with genital warts at their first sexual health clinic has shown an 82 per cent reduction in men and 100 per cent reduction in women between 2007 and 2017.⁶⁰ However, as of 2015, there remained disparities in incidence and mortality rates for cervical cancer between Aboriginal and Torres Strait Islander and non-Indigenous people.²⁶

Sustained, high HPV vaccine coverage rates, as well as participation in national screening programs, are needed to close the gap between Aboriginal and Torres Strait Islander people and non-Indigenous Australians in the rates of cervical and other HPV-related cancers.

Sexual health and BBV knowledge and behaviour

The GOANNA Survey

The 'GOANNA Survey' is the first national survey of Aboriginal and Torres Strait Islander people aged 16-29 years in relation to STI and BBV, with an emphasis on young people's levels of knowledge, risk behaviours and health service utilisation. A total of 2,877 Aboriginal and Torres Strait Islander people aged 16-29 years participated in the face-to-face survey through 40 community events between 2011 and 2013. In SA, 415 people responded to the survey. Key findings from this survey included:⁵⁴

- > Knowledge of STI and BBV risk:
 - Despite having good knowledge overall, participants reported poorer knowledge about chlamydia (particularly in relation to its effect on pregnancy) and HBV transmission. Levels of knowledge were lower for the youngest age groups, men and for residents in more remote areas.

- Greater efforts are required to ensure safe sex and sexual health information is appropriate and accessible for young people, particularly young men. This includes providing information translated into local Aboriginal languages in communities where English is not the primary spoken language.⁶¹
- > Behaviour:
 - 59% of respondents reported being single. 81% of respondents reported having ever had sex, and 91% of respondents reported having sex during the last year (45% of whom had more than one partner). 37% of sexually active respondents reported always using a condom, 22% reported not using a condom for any sexual activity during the last year.
 - 3% of respondents reported injecting drug use during the last year, 37% of whom reported sharing needles/ syringes, and 45% of whom reported sharing other injecting equipment. This reflects the findings of the 'Australian Needle and Syringe Program Survey 2013-2017', which found that receptive needle and syringe sharing was more prevalent among Aboriginal and Torres Strait Islander needle and syringe program (NSP) participants (26% in 2017) than non-Indigenous participants (15% in 2017).⁶²
 - The National Strategy notes that "despite their proven efficacy, harm reduction and NSPs are not widely available or accessible in many parts of Australia for Aboriginal and Torres Strait Islander people who use drugs". "Increasing the use of sterile injecting equipment for every injecting episode" is listed as a target for the Action Plan.⁵
- > <u>Testing:</u>
 - 42% of all respondents and 52% of sexually active respondents reported that they had been tested for STI in the last 12 months. Testing for both STI and HIV are lowest for the 16-19 year old age group. Men attend testing less frequently and report lower testing rates, compared with women.
 - Strategies to address men's health are required, as are strategies to ensure testing occurs more frequently when people aged 16-29 years attend health services.⁶⁰
- > Access to health services:
 - 55% of respondents reported having an adult health check in the last year, 66% and 32% of which occurred at Aboriginal Medical Services and private GPs, respectively.

- Aboriginal Medical Services were reported by participants as the:
 - best way to seek help for STI/BBV advice (58%), followed by sexual health clinics (24%)
 - best way to seek help for alcohol and other drug (AOD) issues (51%), followed by AOD services (29%)
 - most common place where STI testing occurred (55%), followed by private GPs (34%) and sexual health clinics (7%).
- Health service access for young Aboriginal and Torres Strait Islander people appears reasonable. Aboriginal Medical Services are the most commonly utilised health service by young Aboriginal and Torres Strait Islander people with respect to STI and BBV health.⁶¹

South Australian Sexual Health Survey ('Let's Talk About It')

The 'South Australian Sexual Health Survey' ('Let's Talk About It') provides data on sexual health behaviours and knowledge among young people in South Australia. 2,380 South Australians aged 16-29 years completed the online survey in 2019, 10% of whom were Aboriginal and/or Torres Strait Islander.⁶³

When compared against the findings of the 'GOANNA Survey'^{xv}, the 'Let's Talk About It' survey provides evidence of comparable sexual health knowledge, risk behaviour and health service utilisation among young Aboriginal and non-Indigenous people.

Among respondents to the 'Let's Talk About It Survey':

- > 75% of respondents correctly answered at least 6 of 10 questions designed to test knowledge of sexual health and BBV. By comparison, 69% of respondents to the 'GOANNA Survey' correctly answered at least 9 of 12 questions.
- > 36% of respondents reported always using a condom with a casual sexual partner during the past year, compared to 37% of respondents to the 'GOANNA Survey'.
- > 43% of respondents (and 50% of sexually experienced respondents) reported having ever been tested for an STI. By comparison, 61% of respondents to the 'GOANNA Survey' reported having ever been tested for an STI.
- > Of respondents who reported a history of STI testing, 70% had accessed testing at a GP clinic and 25% had accessed testing at a sexual health clinic. By comparison, 55% of respondents to the 'GOANNA Survey' reported accessing testing at an ACCHS, 34% reported accessing testing at a GP clinic, and 7% reported accessing testing at a sexual health clinic.

^{xv} Comparisons should be considered in the context of differences in the methodology of the two surveys.

These findings are validated by comparative analysis of responses to the 'GOANNA Survey' and to the 'Victorian Sex, Drugs and Rock 'n' Roll (SDRR) Survey' of musical festival attendees, which also identified similarities in sexual relationships, protective and risk behaviours among Aboriginal and Torres Strait Islander and non-Indigenous young people. Encouragingly, findings from this study also suggest that relatively more Aboriginal and Torres Strait Islander than non-Indigenous young people are being tested for STI, which may reflect the success of targeted sexual health campaigns.⁶⁴

A range of factors contribute to Aboriginal and Torres Strait Islander people more frequently being exposed to environments and situations where there is an increased risk of STI and BBV, and to subsequently elevated rates of these infections. These may include:⁵

- > a lack of access to culturally responsive services
- > complex social and medical factors
- > concerns around privacy, confidentiality, stigma and shame
- > overrepresentation in custodial settings.

Experiences of racism and the ongoing impacts of colonisation also contribute to an increased burden of infection and sexual health risk. In addition, individual Aboriginal or Torres Strait Islander people are more likely to be exposed to STI and BBV in sexual and/or other risk contexts due to the higher prevalence of STI and BBV in Aboriginal and Torres Strait Islander communities.⁵

Relationships, sexual health and BBV education programs

The National Strategy calls for education programs that "build on the strength of community and effective peer networks, are culturally safe and linguistically appropriate, co-designed, co-developed and led by the community", noting that "the most effective education and prevention approaches are those based on a sound understanding of the behaviours, knowledge, beliefs and practices that they are trying to influence".⁵

The National Strategy also suggests "education strategies which effectively harness the lived experience of young Aboriginal and Torres Strait Islander people in delivering prevention education and in better engaging young people with services", and "embedding STI and BBV prevention and education activities into broader Aboriginal and Torres Strait Islander health promotion and comprehensive primary health care programs supports a more holistic approach to health and wellbeing".⁵ An evidence review of the 'Western Australian Aboriginal Sexual Health and Blood Borne Virus Strategy 2019-2023' noted the following: "Several issues remain in Aboriginal sex education and prevention, namely stigma-based avoidance of sexual health discussions and a lack of education regarding sexual health and blood borne viruses, despite the provision of education by doctors, schools, and community organisations. One fundamental systematic barrier to appropriate education and prevention strategies is a lack of consistent funding and appropriate resources.

Rural and remote sexual health education continues to be restricted due to a lack of resources and community-specific approaches, as well as potential differences in the way sex education is delivered in urban and rural environments. Additionally, some clinic services in rural regions fail to attract appropriate rates of Aboriginal patients, partly due to a lack of awareness of services in those communities."¹¹

SAHMRI community education projects

SAHMRI have developed and delivered two complementary projects that aim to increase STI and BBV testing and treatment rates for young people in remote Aboriginal and Torres Strait Islander communities through peer education, resource development (including resources tailored to the South Australian Aboriginal population), and support for clinicians.⁶⁵

- > The Remote STI and BBV Project 'Young, Deadly, STI and BBV Free'.
- > The Syphilis Campaign 'Young, Deadly, Syphilis Free'.

Forming one component of the 'Young, Deadly, STI and BBV Free' project, a peer education program was implemented, involving training of up to 100 young Indigenous people in 19 remote and very remote communities, across four jurisdictions, on the transmission, testing, and treatment of STI and BBV for the purpose of sharing such knowledge with, and positively impacting behavioural intentions and attitudes of, other young people in their respective communities.

The preliminary findings from an evaluation of this program demonstrated that the training program "contributed to knowledge gains in STI and BBV among the young people training as peer educators and positively influenced behavioural intentions and attitudes in this cohort". The review recommended further evaluation of this approach as part of a broader evaluation of 'Young Deadly Free' projects.⁶⁶

The Action Plan calls for "investigation of new and scale up of successful existing models of STI and BBV education and support, including peer education and support, by and for Aboriginal and Torres Strait Islander people".

Sexual health education in the education system

From 2009 to 2017, SHINE SA developed and implemented a respectful relationships and sexual health education program specifically targeting young Aboriginal people in SA ('Yarning On').

'Yarning On' comprised of two components: the 'Investing in Aboriginal Youth Program' and the 'Aboriginal Focus Schools Program', which worked with communities and schools respectively and aimed to build the capacity of community members and the workforce to develop culturally appropriate solutions to promote respectful relationships, improved sexual health literacy and ultimately sexual health, wellbeing and safety for young Aboriginal people in SA.⁶⁷

SHINE SA continue to provide a comprehensive relationships and sexual health education program in most SA government secondary schools as well as in over half of primary schools, and engage some young Aboriginal and Torres Strait Islander people through this program. D'Costa *et al.* (2019) note that "sexual health education within the school context is an obvious and effective approach for improving sexual health outcomes for young people, however the often lower school attendance and retention rates of Indigenous young people compromise the ability of such programs to reach this population".⁶⁶

To ensure that all young South Australian Aboriginal people (particularly those in communities that are geographically isolated or where poor sexual health outcomes and their determinants are prevalent) receive equitable access to culturally relevant, high quality relationships and sexual health education aligned with recommendations for delivery of such programs outlined in the National Strategy, additional resourcing and capacity building is required.

To this end, the Action Plan calls for the "development of a comprehensive, targeted, culturally relevant sexual health and BBV education program for young Aboriginal people in schools, and in non-school settings for young people not engaged in the school environment".





Appendix 3: Stakeholder list

The following organisations were involved in the development, and will be partners in the implementation, of this Action Plan:

Aboriginal Health Council of South Australia

Working in partnership with ACCHS, the Aboriginal STI and BBV Program delivered by AHCSA acts as a coordination point for the prevention, testing, diagnosis, monitoring and management of STI and BBV among Aboriginal and Torres Strait Islander communities in South Australia.

Phone: 08 8273 7200 ahcsa.org.au

Adelaide Primary Health Network and Country SA Primary Health Network

Adelaide Primary Health Network and Country SA Primary Health Network (PHN) are membership based organisations focused on improving health outcomes, and the experience of primary health care within the Adelaide metropolitan and Country SA regions. Established and funded by the Federal Government, Adelaide PHN and Country SA PHN are not-for-profit organisations, and are two of 31 PHNs operating across Australia.

The key objectives of the PHNs are to increase the efficiency and effectiveness of medical services for patients, particularly those at risk of poor health outcomes, and to improve the coordination of care to ensure patients receive the right care in the right place at the right time. PHNs will achieve this through:

- population health planning (needs assessments/data analysis) including service gap identification
- > health care commissioning particularly for vulnerable populations
- > practice support services so that GPs are better placed to provide care to patients and avoid hospital
- > supporting general practices with safety and quality
- > assisting general practices with eHealth.

Phone: 08 8219 5900 (Adelaide PHN) or 08 8565 8900 (Country SA PHN)

adelaidephn.com.au or countrysaphn.com.au

Hepatitis SA

Hepatitis SA provides information, education and support services to South Australians affected by hepatitis B and hepatitis C. All services are free and include the Prison Hepatitis Helpline (prisoners dial '8' for a free 10 minute phone-call with Hepatitis SA), Hepatitis SA Helpline (1800 437 222), face to face information sessions (prior bookings required), support groups, community and workforce education sessions, printed resources, and online information including a website and online hepatitis library.

Phone: 1800 437 222 hepatitissa.asn.au

MOSAIC Blood Borne Viruses Support Services, Relationships Australia South Australia

MOSAIC Blood Borne Viruses Support Services provides free and confidential counselling, case management support, advocacy and problem solving support, as well as information and referrals to other relevant community or health services, to people affected by HIV or viral hepatitis.

Phone: 1300 364 277 or 1800 182 325 (country callers) rasa.org.au

National Aboriginal Community Controlled Health Organisation

The National Aboriginal Community Controlled Health Organisation (NACCHO) is the national peak body representing 143 ACCHS across the country on Aboriginal health and wellbeing issues.

Phone: 02 6246 9300 naccho.org.au

Nganampa Health Council

Nganampa Health Council is an Aboriginal Community Controlled Health Organisation operating on the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands in the far north west of South Australia. Across this area, Nganampa Health Council operates seven clinics, the Tjilpi Pampaku Ngura Aged Care facility and assorted health related programs including aged care, sexual health, environmental health, health worker training, dental, women's health, male health, children's health, immunisation, eye health and mental health.

Nganampa Health Council has maintained a comprehensive strategy for STI control and HIV Prevention since 1994. The program has been very successful at reducing the rates of STI on the APY Lands.

Phone: 08 8954 9040 nganampahealth.com.au

Appendix 3: Stakeholder list

SA Health, Aboriginal Health

Aboriginal Health in the Department for Health and Wellbeing:

- > provides strategic advice and analysis on Aboriginal health and wellbeing matters
- > conducts project work to increase the cultural capacity and responsiveness of the health system to Aboriginal people's needs.
- > represents Aboriginal health needs and interests at state and national health and non-health forums
- > plays an important advocacy role to ensure the public health system operates in the best possible way for Aboriginal people
- > supports the South Australian Aboriginal Health Partnership.

Phone: 8226 6344

sahealth.sa.gov.au/Aboriginalhealth

SA Health, Adelaide Sexual Health Centre, Royal Adelaide Hospital

Adelaide Sexual Health Centre (formerly Clinic 275) provides a free and confidential specialist sexual health service for South Australia. This includes medical consultations and advice, testing and treatment for all sexually transmitted infections including HIV, on-site laboratory testing, partner notification and support, and much more.

Phone: 7117 2800

sahealth.sa.gov.au/Adelaidesexualhealthcentre

SA Health, Aboriginal Primary Health Services

SA Health has a range of Aboriginal-specific services across the state (Watto Purrunna, Northern Adelaide Local Health Network and Aboriginal Family Clinics, Southern Adelaide Local Health Network) as well as community health services, such as GP Plus centres. SA Health Aboriginal primary health services work together with local communities and offer a range of services such as:

- > health screening tests
- > healthy lifestyle advice
- chronic disease management
- > adult and child health checks

> health care plans

> referrals.

- > illness prevention
- > counselling

of the Health Regulation and Protection Division of the Department of Health and Wellbeing, and aims to reduce

The Communicable Disease Control Branch (CDCB) is part

SA Health, Communicable Disease Control Branch

the incidences of communicable and infectious diseases in South Australia.

Phone: 1300 232 272

sahealth.sa.gov.au

South Australian STI and BBV Advisory Committee (SASBAC)

SASBAC is administered by the CDCB and is the peak structure of the partnership between government, nongovernment organisations, researchers, clinicians and affected communities in South Australia, which underpins the public health response to HIV, STI and viral hepatitis (hepatitis B and hepatitis C). It monitors surveillance and epidemiology and provides expert strategic advice on the planning, implementation, monitoring and evaluation of the strategies and activities that make up the South Australian health system's response to STI and BBV.

> Viral Hepatitis Model of Care Reference Group

The Viral Hepatitis Model of Care Reference Group is administered by the CDCB and includes clinical representation from key tertiary and primary care services, as well as government, non-government organisations, and affected communities. It oversees the initiatives to increase access to viral hepatitis care in South Australia, including the SA Health Viral Hepatitis Nursing Support Program and the Viral Hepatitis Model of Care.

sahealth.sa.gov.au/hepatitisnurse

SA Health, Drug and Alcohol Services SA

Drug and Alcohol Services SA (DASSA)is a statewide health service that offers a range of prevention, treatment and education services for people with alcohol, and other drug issues, including co-ordination of the statewide Clean Needle Program (CNP) in South Australia. DASSA is part of the Department for Health and Wellbeing, and provides policy and planning advice to the Minister and the Chief Executive of the Department. DASSA's strategic intention is the prevention and management of alcohol, tobacco and other drug-related issues across South Australia.

Alcohol and Drug Information Service: 1300 131 340 sahealth.sa.gov.au/dassa

Online Service Locator: knowyouroptions.sa.gov.au

Appendix 3: Stakeholder list

SHINE SA

SHINE SA provides education, clinical services and counselling to the community about sexual, reproductive and relationship health and wellbeing. Amongst other services, SHINE SA provides clinical services from Hyde Street, Woodville Road, and at some SAPHS prison sites, delivers a statewide sexual health workforce development and education program, and operates a Sexual Healthline.

Phone: 1300 794 584

Sexual Healthline: 1300 883 793 or country callers 1800 188 171 shinesa.org.au

SAMESH (South Australia Mobilisation + Empowerment for Sexual Health)

SAMESH is a joint program of SHINE SA and Thorne Harbour Health. It provides support, education and training about sexual health and HIV for men who have sex with men and people living with HIV in South Australia. SAMESH also provides condoms, HIV point of care testing (Rapido!) and resources to their priority populations.

Phone: 08 7099 5300

samesh.org.au

SIN (Sex Industry Network)

SIN provides a statewide, peer-led, targeted STI and BBV prevention initiative for South Australian sex workers. This program addresses the needs of the diversity of sex workers who are vulnerable to STI and BBV (including outreach to marginalised and isolated sex workers) through delivery of best practice approaches in STI and BBV prevention, education and health promotion.

Phone: 08 8351 7626

sin.org.au

South Australian Health and Medical Research Institute: Aboriginal Health Theme

The Wardliparingga Aboriginal Health Research Unit within the South Australian Health and Medical Research Institute (SAHMRI) conducts research of direct relevance to Aboriginal people in South Australia, focused on the significant gap between the health status and life opportunities available to Aboriginal people when compared to other Australians.

In 2020, several of the STI and BBV projects delivered by this group were transferred to the Poche Centre for Indigenous Health, University of Queensland.

Phone: 08 8128 4000

sahmriresearch.org/our-research/themes/aboriginal-health/ theme-overview



Appendix 4: Useful links

National strategic documents

- National Cultural Respect Framework for Aboriginal and Torres Strait Islander Health 2016-2026: www1.health.gov. au/internet/main/publishing.nsf/Content/indigenous-crf
- > Fifth National Aboriginal and Torres Strait Islander BBV and STI Strategy 2018-2022: www1.health.gov.au/internet/main/ publishing.nsf/Content/ohp-bbvs-1
- > National strategic approach for an enhanced response to the disproportionately high rates of STI and BBV in Aboriginal and Torres Strait Islander people: www1.health.gov.au/internet/main/publishing.nsf/Content/ ohp-infectious-syphilis-outbreak.htm
- Action Plan: Enhanced response to addressing STI and BBV in Indigenous populations:
 www1.health.gov.au/internet/main/publishing.nsf/Content/ ohp-infectious-syphilis-outbreak.htm
- > National Drug Strategy 2017-2026: www.health.gov.au/ resources/publications/national-drug-strategy-2017-2026

National research programs and data reports

- > National Aboriginal and Torres Strait Islander health data principles: https://healthinfonet.ecu.edu.au/key-resources/ publications/34136/
- > 2016 Australian Bureau of Statistics (ABS) Census of Population and Housing: www.abs.gov.au/ausstats/abs@. nsf/mf/2071.0
- > Australian Needle and Syringe Program Survey: https://kirby.unsw.edu.au/project/ansps
- > Centre for Research Excellence in Aboriginal Sexual Health and Blood Borne Viruses (CRE-ASH): http://cre-ash.org.au/
- STI in Remote Communities: Improved and Enhanced Primary Health Care (STRIVE): https://healthinfonet. ecu.edu.au/key-resources/programs-andprojects/952/
- > Test, Treat ANd GO (TTANGO): https://www.ttango.com.au/ about-ttango-2
- > GOANNA Survey: https://kirby.unsw.edu.au/report/goannasurvey-july-2014
- > Victorian Sex, Drugs and Rock 'n' Roll Survey: https://www. burnet.edu.au/projects/17_sex_drugs_and_rock_n_roll_ big_day_out_study

National programs and organisations

- > Young Deadly Free: https://youngdeadlyfree.org.au/
- > National HPV Vaccination Program: www.hpvregister.org.au/
- National Aboriginal Community Controlled Health Organisation (NACCHO): www.naccho.org.au

South Australian strategic documents

- SA Health, Aboriginal Health: www.sahealth.sa.gov.au/ Aboriginalhealth
 - Aboriginal Health Care Framework 2019-2024
 - Aboriginal Health Impact Policy Directive
 - Aboriginal Workforce Framework 2017-2022
 - Guide for Engaging with Aboriginal People
- South Australian Prisoner Blood Borne Virus Prevention Action Plan 2017-2020: www.sahealth.sa.gov.au/ PrisonerBBVPlan
- > Nursing Model of Care for Viral Hepatitis Management in South Australia: www.sahealth.sa.gov.au/hepatitisnurse
- South Australian Syphilis Outbreak Response Plan: www.sahealth.sa.gov.au/Syphilis
- > Wellbeing SA: www.sahealth.sa.gov.au/WellbeingSA
 - Wellbeing SA Strategic Plan 2020 2025
- > Other SA Health documents: www.sahealth.sa.gov.au
 - SA Aboriginal Cancer Control Plan 2016-2021
 - SA Health and Wellbeing Strategy
 - State Public Health Plan 2019-2024
 - SA Alcohol and Other Drugs Strategy 2017-2021
 - South Australian Perinatal Practice Guidelines
 - South Australian GP Obstetric Shared Care Model
 - South Australian Model of Care for Aboriginal Prisoner Health and Wellbeing
- SA Aboriginal Education Strategy 2019-2029: https://www.education.sa.gov.au/teaching/projects-andprograms/aboriginal-education-strategy
- SA Aboriginal Affairs Action Plan 2019-2020: https://www.dpc.sa.gov.au/responsibilities/aboriginal-affairsand-reconciliation/aboriginal-affairs-action-plan-2019-2020
- South Australian Public Health Act 2011: https://www. legislation.sa.gov.au/LZ/C/A/SOUTH%20AUSTRALIAN%20 PUBLIC%20HEALTH%20ACT%202011.aspx

South Australian research programs and data reports

- > PrEPX-SA Trial: https://www.alfredhealth.org.au/research/ research-areas/infectious-diseases-research/prepx-southaustralia
- 'Lets Talk About It': South Australian Sexual Health Survey: https://www.sahmri.org/aboriginal-health-equity-theme/ news-270/

South Australian programs and organisations

- > SA Syphilis Register: www.sahealth.sa.gov.au/Syphilis
- > Aboriginal Health Council SA: www.ahcsa.org.au
- > Nganampa Health Council: www.nganampahealth.com.au
- > Hepatitis SA: https://hepatitissa.asn.au/
- > SHINE SA: www.shinesa.org.au
- > SAMESH: www.samesh.org.au
- > SIN: www.sin.org.au
- > Adelaide Primary Health Network: www.adelaidephn.com.au
- > Country SA Primary Health Network: www.countrysaphn.com.au
- > Adelaide Sexual Health Centre: www.sahealth.sa.gov.au/ Adelaidesexualhealthcentre
- > Viral Hepatitis Nursing Support Program: www.sahealth.sa.gov.au/hepatitisnurse
- > SA Health, Drug and Alcohol Services SA: www.sahealth.sa.gov.au/dassa
 - Clean Needle Program
- > Relationships Australia SA: www.rasa.org.au
 - MOSAIC Blood Borne Viruses Support Services
- > SA Health, Aboriginal Health Services: www.sahealth.sa.gov.au/Aboriginalhealth
 - Watto Purrunna Aboriginal Primary Health Care Service (northern and central regions)
 - Aboriginal Family Clinics
- > Other SA Health programs: www.sahealth.sa.gov.au
 - SA Cervix Screening Program
 - Aboriginal and Torres Strait Islander Well Women's Screening Program
 - High Risk Hepatitis B Immunisation Program.

References

¹ SA Health (2019). Aboriginal Health, Adelaide: SA Health, Government of South Australia. Accessed online at: https://www.sahealth.sa.gov.au/wps/ wcm/connect/public+content/sa+health+internet/about+us/about+sa+health/aboriginal+health

² National Aboriginal and Torres Strait Islander Health Standing Committee (2016). *Cultural Respect Framework 2016-2026 for Aboriginal and Torres Strait Islander Health: A national approach to building a culturally respectful health system*, Australian Health Ministers' Advisory Council (AHMAC). Canberra. Accessed online at: https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/about+us/ about+sa+health/aboriginal+health/national+cultural+respect+framework+2016-2026

³ SA Health (2014). Checklist of Best Practice Program Development for Aboriginal Health Policy Guidelines, Adelaide: SA Health, Government of South Australia. Accessed online at: https://www.sahealth.sa.gov.au/wps/wcm/connect/d96eb20042d0ef199181fdab5a7b992c/Guideline_+Checklist+of+Best+Practice+Program_Feb2013.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-d96eb20042d0ef199181fdab5a7b992c-IDLAmUA

⁴ SA Health. (2017). SA Health Aboriginal Cultural Learning Framework, Adelaide: SA Health, Government of South Australia. Accessed online at: https://www.sahealth.sa.gov.au/wps/wcm/connect/cf14c892-fdf2-48fb-82a3-011f29a675c1/SA+Health+Aboriginal+Cultural+Learning+Framework.pdf ?MOD=AJPERES&CACHEID=ROOTWORKSPACE-cf14c892-fdf2-48fb-82a3-011f29a675c1-mKO-zY4

⁵ Australian Government Department of Health. (2018). *Fifth National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmissible Infections Strategy 2018-2022*, Canberra: Australian Government Department of Health. Accessed online at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-bbvs-1/\$File/ATSI-Fifth-Nat-Strategy-2018-22.pdf

⁶ Kukutai, T., Taylor, J. (2016). *Indigenous Data Sovereignty: Toward An Agenda*. Research Monograph No. 38. Canberra: Centre for Aboriginal Economic Policy, Australian National University. Australian National University Press. Accessed online at: http://press-files.anu.edu.au/downloads/press/n2140/pdf/book.pdf?referer=2140

⁷ Australian Indigenous HealthInfoNet. (2018). Overview of Aboriginal and Torres Strait Islander health status 2017. Perth: Australian Indigenous HealthInfoNet, Edith Cowan University, Western Australia. Accessed online at: https://healthinfonet.ecu.edu.au/healthinfonet/getContent. php?linkid=609266&title=Overview+of+Aboriginal+and+Torres+Strait+Islander+health+status%2C+2017

⁸ National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data (2006). *National Aboriginal and Torres Strait Islander Health Data Principles*. Canberra. Accessed online at: https://healthinfonet.ecu.edu.au/key-resources/publications/34136/

⁹ WA Health. (2019). Western Australian Aboriginal Sexual Health and Blood-borne Virus Strategy 2019-2023. Perth: Department of Health, Government of Western Australia. Accessed online at: https://ww2.health.wa.gov.au/~/media/Files/Corporate/general%20documents/Sexual%20 Health/PDF/Strategy/2019-2023/Aboriginal-STI-BBV-strategy.pdf

¹⁰ Elliott, S, Betts, S, Hobbs, K, Wand, H, Rumbold, A, Ward, J, Johnson, D (2019). Analysis of diagnostic data for sexually transmissible infections in South Australian Aboriginal Community Controlled Health Services (2008-2016), *Sexual Health*. Accessed online at: https://www.publish.csiro.au/SH/justaccepted/SH18189

¹¹ Rosenberg, S., Lobo, R., Hallet, J. (2019). *An evidence review from Australia, Aotearoa/New Zealand and Canada for the WA Aboriginal Sexual Health and Blood Borne Virus Strategy*. Perth: Department of Health, Government of Western Australia. Accessed online at: https://siren.org.au/evidence-review-for-the-wa-aboriginal-shbbv-strategy/

¹² Stephens, J, Vaccher, S, Grulich, A, Wright, E, Russell, D, Bradley, C, Harfield, S, Wand, H, Lewis, D, Woodward, S, Rodriguez, M, Callander, D, Prestage, G, Ward, J (2019), *'Estimating the Population of Aboriginal and/or Torres Strait Islander men who would benefit from HIV Pre-Exposure Prophylaxis*', poster presented at the 2019 Australasian HIV and AIDS Conference, Perth, 17-19 September 2019. Accessed online at: https://az659834.vo.msecnd.net/eventsairaueprod/production-ashm-public/3d60596abfae4d349e93122fa318757c

¹³ WHO Collaborating Centre for Viral Hepatitis, Doherty Institute, ASHM. (2020). *Viral Hepatitis Mapping Project: National Report 2018-19.* Accessed online at: https://ashm.org.au/resources/hcv-resources-list/viral-hepatitis-mapping-project-national-report-2018-2019/

¹⁴ Australian Bureau of Statistics. (2016). *Aboriginal and Torres Strait Islander Population, 2016: Census Article*. Cat.no. 2071.0. Canberra: Australian Bureau of Statistics, ACT. Accessed online at: https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2071.0~2016~Main%20 Features~Aboriginal%20and%20Torres%20Strait%20islander%20Population%20Article~12

¹⁵ Australian Bureau of Statistics. (2016). *Aboriginal and Torres Strait Islander Population: 2016 Census Data Summary*. Cat.no. 2071.0. Canberra: Australian Bureau of Statistics, ACT. Accessed online at: https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2071.0~2016~Main%20 Features~Aboriginal%20and%20Torres%20Strait%20Islander%20Population%20Data%20Summary~10

¹⁶ Health Performance Council South Australia. (2020). *Institutional racism – audit of South Australia's Local Health Networks*. Accessed online at: https://www.hpcsa.com.au/reports/institutional-racism

¹⁷ Kirby Institute. (2018). Bloodborne viral and sexually transmissible infections in Aboriginal and Torres Strait Islander people: Annual surveillance report 2018. Sydney: Kirby Institute, UNSW Sydney. Accessed online at: https://kirby.unsw.edu.au/report/Aboriginal-surveillance-report-hiv-viral-hepatitis-and-stis-2018

¹⁸ Fearnley, E., Tribe, I., Waddell, R., Solly, A. (2018). Surveillance of sexually transmitted infections and bloodborne viruses in South Australia, 2017. Epidemiological report 31. Adelaide: SA Health, Government of South Australia. Accessed online at: www.sahealth.sa.gov.au/ SurveillanceNotifiableConditions ¹⁹ SA Health. (2019). South Australian Notifiable Diseases Dataset (Unpublished). Adelaide: SA Health, Government of South Australia.

²⁰ Multijurisdictional Syphilis Outbreak (MJSO) Working Group. (2019). *Multijurisdictional Syphilis Outbreak Surveillance Report: February 2019.* Canberra: MJSO, CDNA, Australian Government Department of Health. Accessed online at: https://www1.health.gov.au/internet/main/publishing.nsf/ Content/71E8A32E7518E532CA25801A0009A217/\$File/11th-Surveil-Report-Jan19.pdf

²¹ Ward, J, Hawke, K, Guy, R. (2018), 'Priorities for preventing a concentrated HIV epidemic among Aboriginal and Torres Strait Islander Australians', *Medical Journal of Australia*, Vol. 2019, No. 1, pp. 5-6. Accessed online at: https://www.mja.com.au/journal/2018/209/1/priorities-preventing-concentrated-hiv-epidemic-among-aboriginal-and-torres

²² Australian Government Department of Health. (2018). *Fifth National Hepatitis C Strategy 2018-2022*. Canberra: Australian Government Department of Health. Accessed online at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-bbvs-1/\$File/Hep-C-Fifth-Nat-Strategy-2018-22.pdf

²³ Aboriginal Health Council of SA. (2019). South Australian Aboriginal Sexual Health Program 2017/2018 Annual Evaluation Report. (Unpublished). Adelaide, South Australia.

²⁴ Australian Government Department of Health. (2018). *Communique from the Collaborative Human T-Lymphotropic Virus Type-1 Forum – August 2018.* Canberra: Australian Government Department of Health. Accessed online at: https://www.health.gov.au/internet/main/publishing.nsf/Content/ ohp-bbvs-1//\$File/HTLV-1_Communique.pdf

²⁵ Jamieson, L., Garvey, G., Hedges, J., Mitchell, A., et al. (2018). 'Human Papillomavirus and Oropharyngeal Cancer among Indigenous Australians: Protocol for a Prevalence Study of Oral-Related Human Papillomavirus and Cost-Effectiveness of Prevention'. *JMIR Research Protocols*, Vol. 7, No. 6. Accessed online at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6015268

²⁶ Australian Institute of Health and Welfare (AIHW). (2018). *Cancer in Aboriginal and Torres Strait Islander people of Australia: Cervical cancer (C53).* Cat. no. CAN 109. Canberra, ACT. Accessed online at: https://www.aihw.gov.au/reports/cancer/cancer-in-indigenous-australians/contents/ cancer-type/cervical-cancer-c53

²⁷ Taylor, A, Eade, T, Veivers, D, Gill, A, Pang, L, 2019, 'Human papillomavirus and oropharyngeal squamous cell carcinoma: a 12 year retrospective review in a New South Wales tertiary referral centre', *Australian Journal of Otolaryngology*, Vol. 2. Accessed online at: http://www.theajo.com/ article/view/4143/html

²⁸ Van Dyne, E, Henley, S, Saraiya, M, Thomas, C, Markowitz, L, Benard, V, 2018, 'Trends in human papillomavirus associated cancers – United States, 1999-2015', *Centre for Disease Control and Prevention Weekly Report*, Vol. 67, No. 33, pp.918-924. Accessed online at: https://www.cdc. gov/mmwr/volumes/67/wr/mm6733a2.htm

²⁹ Australian Government Department of Health. (2018). *Fourth National Sexually Transmissible Infections Strategy 2018-2022.* Canberra: Australian Government Department of Health. Accessed online at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-bbvs-1/\$File/STI-Fourth-Nat-Strategy-2018-22.pdf

³⁰ Reekie, J, Donovan, B, Guy, R, Hocking, J, Kaldor, J, Mak, D, Preen, D, Ward, J, Liu, B. (2019). 'Risk of Ectopic Pregnancy and Tubal Infertility Following Gonorrhoea and Chlamydia Infections', *Clinical Infectious Diseases*, Vol. 69, No. 9. Accessed online at: https://academic.oup.com/cid/ article-abstract/69/9/1621/5335756?redirectedFrom=fulltext

³¹ Ward, J, Hawke, K, Guy, R. (2018), 'Priorities for preventing a concentrated HIV epidemic among Aboriginal and Torres Strait Islander Australians', *Medical Journal of Australia*, Vol. 2019, No. 1, pp. 5-6. Accessed online at: https://www.mja.com.au/journal/2018/209/1/priorities-preventing-concentrated-hiv-epidemic-among-aboriginal-and-torres

³² WHO Collaborating Centre for Viral Hepatitis, Doherty Institute, ASHM. (2019). *Viral Hepatitis Mapping Project: National report 2017.* Sydney. Accessed online at: https://ashm.org.au/products/product/Viral-Hepatitis-Mapping-Project-2017

³³ Australian Institute of Health and Welfare (AIHW). (2018). Cancer in Aboriginal & Torres Strait Islander people of Australia. Canberra: Australian Government Department of Health, Accessed online at: https://www.aihw.gov.au/reports/cancer/cancer-in-indigenous-australians/contents/mortality

³⁴ Australian Institute of Health and Welfare (AIHW). (2018). *Cancer in Aboriginal & Torres Strait Islander people of Australia: Liver cancer (C22)*, Canberra: Australian Government Department of Health, Accessed online at: https://www.aihw.gov.au/reports/cancer/cancer-in-indigenous-australians/contents/cancer-type/liver-cancer-c22

³⁵ Chinnaratha, M, Kaambwa, B, Woodman, R, Fraser, R, Wigg, A. (2017). 'Assessing the clinical and economic impact of increasing treatment uptake in chronic hepatitis B infection using a Markov model', *Journal of Gastroenterology and Hepatology*, Vol. 32, No.7, pp.1370-1377.

³⁶ Ramachandran, J, Kaambwa, B, Muller, K, Haridy, J, Tse, E, Tilley, E, Altus, R, Waddell, V, Gordon, D, Shaw, D, Huynh, D, Stewart, J, Nelson, R, Warner, M, Boyd, M, Chinnaratha, M, Harding, D, Ralton, L, Colman, A, Woodman, R, Wigg, A. (2019). 'Cost effectiveness of treatment models of care for hepatitis C: the South Australian state-wide experience', *Journal of Gastroenterology and Hepatology*. Accessed online at: https://www.ncbi.nlm.nih.gov/pubmed/31895911.

References

³⁷ Data and Reporting Services, Quality, Information and Performance, SA Health (as presented in 2019 SASBAC Strategic Performance Framework Report)

³⁸ Hui, B., Regan, D., Gray, R. (2019). 'Modelling of the infectious syphilis outbreak in Indigenous Australians: guidance for the Multi-Jurisdictional Syphilis Outbreak Working Group'. (Unpublished). Kirby Institute, UNSW Sydney.

³⁹ Aboriginal Health Council of SA. (2019). South Australian Aboriginal Blood Borne Virus Program 2017/2018 Annual Evaluation Report. (Unpublished). Adelaide, South Australia.

⁴⁰ Aboriginal Health Council of SA. (2018). *Annual Report 2017-2018*. Adelaide, South Australia. Accessed online at: https://ahcsa.org.au/app/ uploads/2018/12/AHCSA_Annual_Report_2018.pdf

⁴¹ Nganampa Health Council. (2017). Annual Report 2017. Accessed online at: http://www.nganampahealth.com.au/nganampa-health-councilnews/58-annual-report-2017

⁴² Adelaide Primary Health Network. (2019). STI and BBV Screening Dataset. (Unpublished). Adelaide, South Australia.

⁴³ Australian Government Department of Health. (2019). *Infectious syphilis outbreak*. Canberra: Australian Government Department of Health. Accessed online at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-infectious-syphilis-outbreak.htm

⁴⁴ SA Health. (2019). South Australian Perinatal Practice Guidelines. Adelaide: SA Health, Government of South Australia. Accessed online at: https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+programs+and+practice+guidelines/ womens+and+babies+health/perinatal

⁴⁵ Australian Government Department of Health. (2019). *Gonorrhoea – Pregnancy Care Guidelines*, Canberra: Australian Government Department of Health. Accessed online at: https://www.health.gov.au/resources/pregnancy-care-guidelines/part-g-targeted-maternal-health-tests/gonorrhoea

⁴⁶ SA Health and the South Australian Department for Correctional Services. (2017). *South Australian Prisoner Blood Borne Virus Prevention Action Plan 2017-2020.* Government of South Australia. Accessed online at: www.sahealth.sa.gov.au/prisonerbbvplan

⁴⁷ Sivak, L., Cantley, L., Kelly, J., Reilly, R., et al. (2017). Model of Care for Aboriginal Prisoner Health and Wellbeing for South Australia – Final Report. Adelaide: Wardliparingga Aboriginal Health Research Unit, SAHMRI, South Australia. Accessed online at: https://www.sahealth.sa.gov.au/wps/wcm/ connect/d9e831ff-6332-4cc7-95c2-0e3d8e282315/SA+Prison+Health+Service+MOC+for+Aboriginal+prisoner+health+and+wellbeing+for+SA.pdf?M OD=AJPERES&CACHEID=ROOTWORKSPACE-d9e831ff-6332-4cc7-95c2-0e3d8e282315-mMHzc7s

⁴⁸ South Australian Health and Medical Research Institute. (2019). *Centre for Research Excellence in Aboriginal Sexual Health and Blood Borne Viruses (CREASHBBV) homepage*. Adelaide, South Australia. Accessed online at: http://cre-ash.org.au/

⁴⁹ Ward, J, Guy, R, Rumbold, A, McGregor, S, Wand, H, McManus, H, Dyda, A, Garton, L, Hengel, B, Silver, B, Taylor-Thomson, D, Knox, J, Donovan, B, Law, M, Maher, L, Fairley, C, Skov, S, Ryder, N, Kaldor, J. (2019). 'Strategies to improve control of sexually transmissible infections in remote Australian Aboriginal communities: a stepped-wedge, cluster-randomised trial', *The Lancet*, Vol. 7, No. 11, pp.1553-1563. Accessed online at: https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(19)30411-5/fulltext

⁵⁰ Ward, J., Dyda, A., McGregor S., Rumbold, A., Garton, L., *et al.* (2016). 'Low HIV testing rates among people with a sexually transmissible infection diagnosis in remote Aboriginal communities', *Medical Journal of Australia*, No. 4, Vol. 205, pp.168-171.

⁵¹TTANGO2. TTANGO2 homepage. (2019). Accessed online at: https://www.ttango.com.au/

⁵² Test Treat And Go (TTANGO). (2018). *The TTANGO Trial: Test, Treat and Go Final Report to Health Services*. Accessed online at: https://www.ttango.com.au/publications

⁵³ Australian Government Department of Health. (2013). *Medicare Health Assessment for Aboriginal and Torres Strait Islander People (MBS Item 715)*. Canberra: Australian Government Department of Health. Accessed online at: https://www.health.gov.au/internet/main/publishing.nsf/Content/ F55BEF7B8F46193DCA257BF0001F95FF/\$File/715%20-%20Medicare%20Hlth%20Assmnt%20Aboriginal%20Torres%20Strait%20Islander%20 People.pdf

⁵⁴ Ward, J., Bryant, J., Wand, H., Pitts, M., et al. (2014). Sexual Health and relationships in young Aboriginal and Torres Strait Islander people: Results from the first national study assessing knowledge, risk practices and health service use in relation to sexually transmitted infections and blood borne viruses (The GOANNA Survey). Alice Springs: Baker IDI Heart & Diabetes Institute, NT. Accessed online at: https://kirby.unsw.edu.au/report/ goanna-survey-july-2014

⁵⁵ Nattabi, B., Matthews, V., Bailie, J., Rumbold, A., *et al.* (2017). 'Wide variation in sexually transmitted infection testing and counselling at Aboriginal primary health care centres in Australia: analysis of longitudinal continuous quality improvement data'. *BMC Infectious Diseases*, No. 17, Vol. 148.

⁵⁶ National Centre for Immunisation Research and Surveillance (NCIRS). (2019). *Coverage data and reports*. Accessed online at: http://ncirs.org.au/ health-professionals/coverage-data-and-reports

⁵⁷ SA Health. (2019). *High Risk Hepatitis B Immunisation Program*, SA Health. Accessed online at: https://www.sahealth.sa.gov.au/wps/wcm/ connect/public+content/sa+health+internet/health+topics/health+conditions+prevention+and+treatment/immunisation/immunisation+programs/ high+risk+hepatitis+b+immunisation+program

References

⁵⁸ Graham, S., MacLachlan, J., Gunarathnam, P., Cowie, B. (2019). 'Chronic hepatitis B prevalence in Australian Aboriginal and Torres Strait Islander people before and after implementing a universal vaccination program: a systematic review and meta-analysis'. *Sexual Health*, Vol. 16, pp.201-211.

⁵⁹ Brotherton, J., Murray, S., Hall, M., Andrewartha, L., *et al.* (2013). 'Human papillomavirus vaccine coverage among female Australian adolescents: success of the school-based approach'. *Medical Journal Australia*, Vol. 199, No. 9, pp. 614-617.

⁶⁰ Kirby Institute. (2018). *HIV, viral hepatitis and sexually transmissible infections in Australia: annual surveillance report 2017.* Sydney: Kirby Institute, UNSW Sydney. Available online at: https://kirby.unsw.edu.au/sites/default/files/kirby/report/SERP_Annual-Surveillance-Report-2017_compressed.pdf

⁶¹ Ward, J., Bryant, J., Worth, H., Kaldor, J., *et al.* (2013). 'Findings from the GOANNA Study'. *HIV Australia*, Vol. 11, No. 3. Accessed online at: https://www.afao.org.au/article/findings-goanna-study/

⁶² Heard, S., Iversen, J., Geddes, L., Maher, L. (2018). *Australian Needle Syringe Program Survey National Data Report 2013-2017: Prevalence of HIV, HCV and injecting and sexual behaviour among NSP attendees.* Sydney: Kirby Institute, UNSW Sydney. Accessed online at: https://kirby.unsw. edu.au/sites/default/files/kirby/report/ANSPS_National-Data-Report-2013-2017.pdf

⁶³ Elliott, S, Ward, J, et al. (2019). Let's Talk About It - South Australian Sexual Health Survey Results 2019. Accessed online at: https://www.sahmri. org/aboriginal-health-equity-theme/news-270/?fbclid=lwAR2GJnl9v1ksCQjsZxuxPsB130eJG5hu1yWvauK_n9e5qcLqZyeo9M5kirs

⁶⁴ Elliott, S, Wand, H, Douglass, C, Lim, M, Hellard, M, Ward, J. (2019). *Factors underlying sexually transmissible infections (STI) in Aboriginal and Torres Strait Islander people and non-Indigenous music festival attendees: a comparison of two Australian surveys.* (Unpublished).

65 South Australian Health and Medical Research Institute. (2019). Young Deadly Free. Accessed online at: https://youngdeadlyfree.org.au/

⁶⁶ D'Costa, B., Lobo, R., Thomas, J., Ward, J. (2019). 'Evaluation of the Young Deadly Free Peer Education Training Program: Early Results, Methodological Challenges, and Learnings for Future Evaluations'. *Frontiers in Public Health*, Vol. 7. Accessed online at: https://www.frontiersin.org/ articles/10.3389/fpubh.2019.00074/full

⁶⁷ Osborne, K., Laris, P. (2013). 'Yarning On' Initiative Final Evaluation Report: Capacity building to promote sexual health, well-being and safety for young Aboriginal people in SA. Adelaide: Southgate Institute for Health, Society & Equity, Flinders University, South Australia. Accessed online at: https://www.shinesa.org.au/media/product/2015/04/YarningOnfinalreport.pdf

For more information

Communicable Disease Control Branch PO Box 6 Rundle Mall SA 5000 Telephone: (08) 7425 7101 Email: Health.STlandBBVSection@sa.gov.au sahealth.sa.gov.au/SAAboriginalSTIBBVActionPlan



© Department for Health and Wellbeing, Government of South Australia. All rights reserved. FIS: 20155.1 November 2020.

