

**FOURTH**

# National Sexually Transmissible Infections Strategy

**2018–2022**



**Australian Government**  
**Department of Health**

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# Foreword



Australia has continued to make significant progress in addressing blood-borne viruses (BBV) and sexually transmissible infections (STI) over the period of the previous national strategies.

The National BBV and STI Strategies for 2018-2022 set the direction for Australia's continuing response. Together they outline a framework for a high-quality and coordinated national response.

The national strategies are endorsed by all Australian Health Ministers. The ambitious targets and goals outlined in the national strategies will continue to guide Australia's efforts to significantly reduce the transmission of BBV and STI, and improve rates of diagnosis and treatment. Importantly, they will also focus actions on improving the quality of life for people with BBV and/or STI and addressing the stigma people still experience.

The national strategies capitalise on the significant headway that has been made in recent years in our response to BBV and STI. This includes the listing of Pre-Exposure Prophylaxis (PrEP) for HIV prevention, additional HIV treatment medicines, and ensuring the broadest possible access to new direct acting antiviral treatments for hepatitis C on the Pharmaceutical Benefits Scheme. Maintaining our momentum is essential—we now have the potential to considerably advance our response across some critical areas.

The success of these strategies relies on continuing to build a strong evidence base to better inform our responses, evaluating our approaches to identify what is most effective, and further strengthening our workforce, partnerships and connections to priority populations.

These national strategies recognise the considerable work already being progressed collaboratively by governments, community-based organisations, researchers, health professionals and communities.

Despite our efforts, the strategies identify trends of concern and gaps in our response. The development of these strategies has highlighted the significant collegiality and commitment of stakeholders to strengthening our BBV and STI response. With this foundation, Australia can continue to strive to achieve great things, building on our reputation as a world leading model of best-practice.

A handwritten signature in black ink, appearing to read 'Greg Hunt'. The signature is fluid and cursive, written over a white background.

**The Hon Greg Hunt MP**  
*Minister for Health*

# Contents

<b>1</b>	Introduction	<b>05</b>
<b>2</b>	Guiding principles	<b>08</b>
<b>3</b>	Snapshot of STI in Australia	<b>10</b>
<b>4</b>	About this strategy	<b>12</b>
<b>5</b>	Measuring progress	<b>16</b>
<b>6</b>	Priority populations and settings	<b>18</b>
<b>7</b>	Priority areas for action	<b>24</b>
<b>8</b>	Implementing this strategy	<b>34</b>
	<b>Appendix A: References</b>	<b>36</b>

# 1.

## Introduction

Australia has made some notable progress in the management of sexually transmissible infections (STI) in recent years; however, there are persistent and emerging issues that require a concerted effort over the life of this Fourth National Sexually Transmissible Infections Strategy 2018–2022.

Australia has significantly increased the number of young people vaccinated against Human Papillomavirus (HPV). Australia is the first country in the world to document substantial declines in HPV infection, genital warts and cervical pre-cancer as a result of its HPV vaccination program.<sup>1,2,3,4,5,6,7,8,9</sup> The introduction of Gardasil®9, which protects against nine types of HPV, to the National Immunisation Program in 2018 is expected to further reduce cervical cancer rates.<sup>10</sup>

Australia has also boosted STI testing rates in gay and bisexual men; is close to eliminating donovanosis—a bacterial infection which was previously endemic in remote Aboriginal and Torres Strait Islander communities; and has sustained strong health promotion programs for sex workers, resulting in STI rates in this priority population that are among the lowest in the world compared with sex workers in other countries.

Despite these advances, STI remain a public health challenge in Australia. Over the past five years, the prevalence of some STI has continued to rise in several priority populations. In particular, increased rates of syphilis in gay men and

Aboriginal and Torres Strait Islander people, gonorrhoea in gay men and other men who have sex with men (MSM); and gonorrhoea and chlamydia in young people are all of significant concern.

There is a critical need to improve knowledge and awareness of STI among priority populations, health professionals and the wider community. This includes re-emphasising the importance of STI prevention, including the central role of condoms; the need for timely testing and treatment; and the potential long-term consequences of STI. Approaches must counter STI-related stigma, as this is a known barrier to people accessing prevention, testing, treatment and support.<sup>11</sup>

Understanding the social drivers that influence the rates of STI in Australia, such as social media and other technology platforms and changing sexual behaviours, is also critical.<sup>12,13,14</sup> Messaging about STI and the importance of prevention needs to be targeted and capture the attention of priority populations.

There are also emerging issues that require close monitoring and proactive response. The detection of extensively and multi-drug resistant gonorrhoea is one such issue.<sup>15</sup> Another is the emergence of sexual transmission of diseases typically not associated with sexual exposure, such as hepatitis A and B viruses and shigellosis.<sup>16,17,18,19</sup>

Meeting and exceeding international obligations and targets for STI is a critical part of Australia's response. Internationally, Australia supports the World Health Organization's Global Health Sector Strategy on Sexually Transmitted Infections 2016–2021, which has an overarching goal of ending sexually transmitted infection epidemics as major public health concerns.<sup>a</sup> Milestones for 2020 relate to the provision of STI services, including in antenatal and Human Immunodeficiency Virus (HIV) care; HPV vaccine coverage; and reporting on antimicrobial resistance (AMR). Global targets for 2030 include a reduction in the incidence of syphilis, congenital syphilis and gonorrhoea. Given Australia's strong health systems and partnership approach, we should aim beyond many of these global targets, including for the elimination of congenital syphilis and addressing STI-related stigma and discrimination.

Since the first national STI strategy in 2005, Australia's response has been underpinned by a partnership approach between Australian, state and territory governments, priority populations, community organisations, researchers and clinicians.

The Australian Government acknowledges the significant contribution of the national community and health peak organisations, and other organisations, representing communities and the clinical workforce over the course of the previous STI strategies. These organisations, including the Scarlet Alliance, Australian Sex Workers' Association and the Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine, the Australian Federation of AIDS Organisations and the National Association of People with HIV Australia, play a critical role in Australia's response to STI.

This strong foundation and the commitment and work of all partners means that Australia remains well placed to continue to build on the Third National STI Strategy 2014–2017 to realise gains for all priority populations and reduce the transmission and impact of STI in Australia.

**Gratitude is expressed to all those who participated in the stakeholder consultations and contributed to the strategy development process—in particular, the members of the Blood Borne Viruses and Sexually Transmissible Infections Standing Committee (see Figure 1).**

<sup>a</sup> Defined in the Global Health Sector Strategy on Sexually Transmitted Infection 2016–2021 by the 'reduction of cases of *N. gonorrhoeae* and *T. pallidum*; as well as by the elimination of congenital syphilis and of pre-cervical cancer lesions through the high coverage of human papillomavirus vaccines'.

**Figure 1:  
Blood Borne Viruses and Sexually  
Transmissible Infections Standing  
Committee (BBVSS)**

**Peak organisations**

Australasian Society for HIV, Viral Hepatitis and  
Sexual Health Medicine (ASHM)

Australian Federation of AIDS Organisations  
(AFAO)

Australian Indigenous Doctors' Association (AIDA)

Australian Injecting and Illicit Drug Users League  
(AIVL)

Hepatitis Australia

National Association of People with HIV Australia  
(NAPWHA)

Scarlet Alliance, Australian Sex Workers  
Association

**State and territory governments**

ACT Health

NSW Ministry of Health

NT Department of Health

Queensland Health

SA Department for Health and Wellbeing

Tasmanian Department of Health and Human  
Services

Victorian Department of Health and Human  
Services

WA Department of Health

Australian Government Department of Health

*BBVSS is a key advisory body reporting to the Australian Health Ministers' Advisory Council through the Australian Health Protection Principal Committee on strategic policy, programs, social issues and activities related to HIV, viral hepatitis and sexually transmissible infections (STI).*

# 2.

## Guiding principles

**The Fourth National STI Strategy 2018–2022 includes guiding principles to support a high-quality, evidence-based and equitable response to STI. These are included in each of the blood borne viruses (BBV) and STI strategies and are drawn from Australia’s efforts over time to respond to the challenges, threats and impacts of HIV, viral hepatitis and STI. Perhaps most critical is the ongoing and meaningful participation of priority populations in all aspects of the response. This is central to the partnership approach and is key to the success of this strategy.**

### **1. Meaningful involvement of priority populations**

The meaningful participation of priority populations in all aspects of the response is essential to the development, implementation, monitoring and evaluation of effective programs and policies.

### **2. Human rights**

People with STI and priority populations have a right to participate fully in society, without experience of stigma or discrimination. They have the same rights to comprehensive and appropriate information and health care as other members of the community, including the right to the confidential and sensitive handling of personal and medical information.

### **3. Access and equity**

Health and community care in Australia should be accessible to all, based on need. The multiple dimensions of inequality should be addressed, whether related to gender, sexuality, disease status, drug use, occupation, socio-economic status, migration status, language, religion, culture or geographic location, including custodial settings. Special attention needs to be given to working with Aboriginal and Torres Strait Islander people to close the gap between Aboriginal and Torres Strait Islander health status and that of other Australians.

#### **4. Health promotion**

The Ottawa Charter for Health Promotion provides the framework for effective action under this strategy. It facilitates the active participation of affected communities and individuals to increase their influence over the determinants of their health, and the formulation and application of laws and public policies to support and encourage healthy behaviours and respect for human rights.

#### **5. Prevention**

The transmission of STI can be reduced through the appropriate combination of evidence-based biomedical, behavioural and social approaches within a supportive enabling environment. Education and prevention programs, together with access to the means of prevention, are prerequisites for adopting and applying prevention measures.

#### **6. Quality health services**

A strong multidisciplinary workforce of motivated, trained and regularly updated health professionals, community and peer-based workers from, and who work with, priority populations are vital to delivering culturally appropriate, high-quality services across Australia. Coordination and integration of health services across a number of settings is essential in order to respond to new technologies, best practice, and to best support people with or at risk of STI to make informed choices about their treatment and prevention.

#### **7. Shared responsibility**

Individuals and communities share responsibility to prevent themselves and others from becoming infected, and to inform efforts that address education and support needs. Governments and community organisations have a responsibility to provide the necessary information, resources and supportive environments for prevention.

#### **8. Commitment to evidence-based policy and programs**

The national response to STI has at its foundation an evidence base built on high-quality research and surveillance, monitoring and evaluation. A strong and constantly refining evidence base is essential to meet new challenges, evaluate current and new interventions and develop effective social policy. The development and dissemination of evidence-based national clinical guidelines and other information resources on testing, treatment, care and support is critical.

#### **9. Partnership**

Effective partnerships exist between affected communities, national peak organisations representing the interest of communities, and the clinical workforce, government and researchers. These partnerships are characterised by consultation, cooperative effort, clear roles and responsibilities, meaningful contributions, empowerment, respectful dialogue and appropriate resourcing to achieve the goals of the strategies. It includes leadership from the Australian, state and territory governments and the full cooperative efforts of all members of the partnership to implement agreed directions.

# 3.

## Snapshot of STI in Australia



### What are STI?

STI encompass a number of different bacterial, viral and parasitic infections which are transmitted through sexual contact.

There are four nationally notifiable STI: syphilis, gonorrhoea, chlamydia, and donovanosis.#

Non-notifiable STI include *Trichomonas vaginalis*\*, human papillomavirus (HPV), Human T-lymphotropic type 1 (HTLV-1)\*, herpes simplex virus (HSV) and *Mycoplasma genitalium* (MG).

There is also emerging sexual transmission of hepatitis A and shigellosis.



### How are STI managed?

Management varies across STI, but most STI are treatable. Early detection and treatment is important in the management of all STI.

Bacterial and parasitic STI, such as chlamydia, gonorrhoea and *T.vaginalis* are treated with antibiotics. HSV is treated with antivirals. HPV is vaccine-preventable. While HPV cannot be cured, associated cervical cancer and genital warts are treatable.

There is currently no effective cure for HTLV-1. Rather, treatment is based on development of HTLV-1 associated disease. Medical understanding of MG is rapidly evolving. Treatment with antibiotics is currently recommended, though increasing resistance is likely to be problematic.



### What health issues do STI cause?

STI are often asymptomatic, particularly in women. Chlamydia is only symptomatic in an estimated 25% of women and up to 50% of men. Many men and most women with gonorrhoea are asymptomatic or have very mild symptoms.

Untreated STI can lead to serious complications, though the health impact varies across the infections in type and severity. Direct and indirect acute health consequences include:

- pain and discomfort
- ectopic pregnancy
- foetal and neonatal death

Direct and indirect chronic health consequences include:

- pelvic inflammatory disease
- infertility
- facilitation of HIV transmission
- cellular changes preceding cancer
- congenital defects and severe long term disability
- neurological disease, including deafness and blindness

Congenital syphilis can have severe and lifelong impacts on infants, and can result in death.

The physical consequences of STI can significantly impact on quality of life. Social stigma of STI can create barriers to people accessing early testing and treatment.

**Figure 2:**  
**Snapshot of STI in Australia**<sup>20,21,22</sup>

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## Prevention

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There are a **broad range of preventative strategies** for STI. These include sexual health education, including peer education; condoms, water-based lubricants, and other barrier methods; and early detection and treatment, including as part of antenatal care.

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## Routes of transmission

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The primary route of transmission is through **sexual contact**.

Some STI can also be transmitted vertically from **mother to child**, through **blood contact** and **orally**.

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## Syphilis

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**3367** notifications in 2016. Between 2012 and 2016, the notification rate increased by **100%** in the **non-Indigenous** population and by **193%** in the **Aboriginal and Torres Strait Islander** population.

Among **gay and bisexual men**<sup>b</sup>, an estimated **62–70%** attending selected health clinics were tested for syphilis each year between 2012 and 2016.

There were 16 cases of **congenital syphilis** notified between 2012 and 2016.

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## Donovanosis

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**Donovanosis** is on track to be eliminated with **only two cases** notified between **2011 and 2016**.

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## Gonorrhoea

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**23 887** notifications in 2016. Between 2012 and 2016 the notification rate increased by **72% in males** and **43% in females**.

In 2016, of the total estimated new cases of gonorrhoea in gay and bisexual men, an estimated **25%** were diagnosed.

Medicare-rebated gonorrhoea tests increased by **59% in males** and **50% in females** between 2012 and 2016.

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## Chlamydia

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**71 751** (excluding Victoria) notifications in 2016. Overall notification rate stable from 2012 to 2015. 75% of notifications in 2016 among **young people** aged **15 to 29 years**.

An estimated **28%** of people aged 15–29 years with chlamydia were **diagnosed** in 2016. Testing among 15–29 year olds attending GPs increased by **16%** between 2012 and 2016, but remains low.

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## HPV

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Of women aged **under 21 years** visiting selected sexual health clinics, there was a **92% decline** in diagnoses of genital warts between 2007 and 2016, and an **83% decline** of diagnoses in women aged **21 to 30 years**.

**Vaccination coverage** among people turning 15 years of age in 2016 was **79% for females** and **73% for males**.

*Note: STI surveillance data must be carefully interpreted because notifications and trends may not reflect true population prevalence and may be influenced by testing practices and access to health services. While notification data provides important information about changing rates of STI in the community, it does not measure the psychosexual or reproductive impacts of STI.*

*\*Notifiable in the Northern Territory*

*#HIV and Hepatitis B and C can also be sexually transmitted. These are discussed in separate strategies*

*<sup>b</sup>Where the term 'gay and bisexual men' is used in the document, this is in line with the description used in the data set referred to—notably, the data collected by the Australian Collaboration for Coordinated Enhanced Sentinel Surveillance (ACCESS). For the purposes of this strategy, the terminology used elsewhere is 'gay men and other men who have sex with men.'*

# 4.

## About this strategy

The Fourth National STI Strategy sets the direction for Australia's continuing response to STI for 2018 to 2022. It builds on achievements and lessons learned from previous strategies.

It is one of five national strategies that, together, outline a framework for a high-quality and coordinated national response to BBV and STI in Australia. These five strategies are:

**1. Third National Hepatitis B Strategy 2018–2022**

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**2. Fifth National Hepatitis C Strategy 2018–2022**

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**3. Eighth National HIV Strategy 2018–2022**

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**4. Fourth National Sexually Transmissible Infections Strategy 2018–2022 (this strategy)**

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**5. Fifth National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmissible Infections Strategy 2018–2022.**

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Each strategy has a specific focus but shares some structural elements, including guiding principles, goals, targets, priority areas (see Section 5, 'Measuring progress') and defined priority populations. Also, all five national BBV and STI strategies have key priority areas for action, including education and prevention, testing, treatment and management, equitable access and coordination of care, workforce, improving data and surveillance, and stigma and discrimination.

The Fourth National STI Strategy aims to provide a framework for the efforts of all partners in the response to STI, guide resourcing decisions and monitor progress. It is informed by progress made under the Third National STI Strategy 2014–2017; the effectiveness of current and past responses to STI in Australia and internationally; the identification of gaps and opportunities; and consultation with governments, community organisations, researchers, health professionals and other stakeholders across the country. This strategy is also informed by a range of surveillance data and research on STI in Australia, including the impact of STI on priority populations.

This strategy complements other jurisdictional, national and international policy documents that contribute to the national STI response and supports the achievement of existing commitments. These include:

- state and territory STI strategies and action plans
- National Antimicrobial Resistance Strategy 2015–2019
- National Drug Strategy 2017–2026
- National Immunisation Strategies 2013–2018 and 2019–2024
- National Strategic Framework for Aboriginal and Torres Strait Health Plan 2013–2023
- Action Plan: Enhanced response to addressing sexually transmissible infections (and blood borne viruses) in Indigenous populations
- World Health Organization (WHO) Global Health Sector Strategy on Sexually Transmitted Infections 2016–2021
- Regional Action Plan on the Triple Elimination of mother-to-child transmission of HIV, Hepatitis B and Syphilis.

This strategy also supports progress towards Sustainable Development Goal 3 ('Ensure healthy lives and promote wellbeing for all at all ages') of the United Nations 2030 Agenda for Sustainable Development.

This strategy acknowledges that some states and territories have set or may set different targets to drive progress and that the goals and targets of this strategy are intended to facilitate jurisdictional efforts. Wherever possible, other jurisdictions are encouraged to match or exceed the targets of this strategy.

Further detail on the implementation of this strategy, including the associated action plan, is provided under Section 8, 'Implementing this strategy'.

**Figure 3: Key achievements under the Third National STI Strategy 2014–2017**<sup>1,22</sup>



Increases in HPV vaccination coverage for young women have led to **sustained reductions in HPV-related disease** (genital warts in women and in men, due to increased herd immunity) and **declines in high-grade cervical abnormalities**



Donovanosis is **close to elimination**, with two cases notified since 2011



Proportion of gay and bisexual men reporting having an **STI test** in the past year increased **from 37% in 2012 to 45% in 2016**



Strong and sustained health promotion programs among **sex workers** have led to **rates of STI** in this priority population **among the lowest** in the world

### **Progress under the Third National STI Strategy 2014–2017**

Progress under the Third National STI Strategy 2014–2017 provides a context for the achievements in Australia to date (see Figure 3). These achievements reflect the joint efforts of governments, community organisations, affected communities, researchers and clinicians through the partnership approach.

While progress has been made in some important areas under the previous strategy, there are other significant challenges to overcome.

Overall, the prevalence of the most common STI in Australia can be predominantly characterised as increasing, with some notable exceptions. The most concerning increases have been seen in syphilis and gonorrhoea.

Over the past five years there have been significant gains in the vaccination of adolescents for HPV, and our strong and sustained health promotion programs among sex workers have meant that rates of STI in this priority population continue to be among the lowest in the world. However, the rate of new diagnoses for several STI has risen significantly in recent years. This partly reflects an increase in testing—a key achievement of the previous strategies—but is a concerning trend for several priority populations.

The following summarises progress in relation to the specific targets set under the previous strategy:

- Coverage of HPV vaccination reached an estimated 79 per cent and 73 per cent for females and males respectively in 2016,<sup>22</sup> exceeding the previous target of 70 per cent coverage nationally. Among Australian-born women and heterosexual men under 21 years attending sexual health clinics, the proportion diagnosed with genital warts fell to less than 1 per cent for both groups in 2016, and there has been a fall in the rate of detection of high-grade cervical histological abnormalities in women aged under 25 years.<sup>22</sup>
- There was some progress towards increasing STI testing coverage in priority populations—a target in the previous strategy. There was success in boosting comprehensive STI testing (in the 12 months prior to the survey) in gay and bisexual men—the rate rose from 37 per cent in 2012 to 45 per cent in 2016.<sup>22</sup> Testing and diagnoses of chlamydia have increased since 2012,<sup>22</sup> with the use of dual testing for gonorrhoea and chlamydia contributing to the rise in diagnoses of both of these infections.
- The notification rate for chlamydia remained stable between 2012 and 2015. However, there was an increase in 2016.<sup>22</sup> This did not meet the previous stated target of reducing the incidence of chlamydia. Of the estimated 250 000 people aged 15 to 29 years with new chlamydia infections in 2016, only 28 per cent were diagnosed, indicating a significant and concerning gap in testing for STI in young people.<sup>22</sup>
- The notification rate for gonorrhoea increased by 63 per cent between 2012 and 2016 despite the previous national target of a reduction in incidence.<sup>22</sup>

- An analysis of Medicare-rebated chlamydia tests, also used as a proxy for gonorrhoea due to the introduction of dual testing, indicates that the increase in notifications of gonorrhoea nationally is likely to be due to true increased transmission, including a significant increase in women since 2007, while, for chlamydia, the increase in 2016 may be due to an increase in testing.<sup>22</sup> However, these are likely to still only represent a proportion of people who are currently infected with these STI.

- Progress towards reducing the incidence of syphilis and elimination of congenital syphilis was not achieved. New diagnoses of infectious syphilis more than doubled between 2012 and 2016.<sup>22</sup> This largely reflected a multijurisdictional syphilis outbreak in remote Aboriginal and Torres Strait Islander communities in northern and central Australia and a persistent increase in syphilis diagnoses among gay men and other MSM in urban areas. However, increased rates were also seen in females in non-remote areas.<sup>22</sup>

- The elimination of congenital syphilis in Australia remains an urgent public health priority. Between 2012 and 2016 there were 16 notifications of congenital syphilis nationally.<sup>22</sup> The notification rate was 18 times higher in the Aboriginal and Torres Strait Islander population compared with the non-Indigenous population (5.4 and 0.3 per 100 000 live births respectively).<sup>23</sup>

Young people continue to experience a significant burden of STI in Australia. There is also a disproportionate burden of STI among Aboriginal and Torres Strait Islander people, who experience notification rates many times that of the non-Indigenous population. Other priority populations are also at increased risk of exposure to STI. Further detail about the epidemiology of STI in specific priority populations is provided in Section 6, 'Priority populations'.

The limited progress against some of the targets of the previous national strategy indicates that a significantly revitalised response to these challenges is needed.

# 5.

## Measuring progress

This strategy has overarching goals, targets and priority areas which will guide the national response to STI for 2018–2022. Indicators and associated data sources for measuring progress towards each target are included in the Surveillance and Monitoring Plan for the five national BBS and STI strategies.

### Goals

- Reduce transmission of, and morbidity and mortality associated with, STI in Australia
- Eliminate the negative impact of stigma, discrimination and legal and human rights issues on people's health
- Minimise the personal and social impact of STI

### Targets

#### By the end of 2022:

1. Achieve and maintain HPV adolescent vaccination coverage of 80 per cent
2. Increase STI testing coverage in priority populations<sup>c</sup>
3. Reduce the prevalence of gonorrhoea, chlamydia and infectious syphilis<sup>d</sup>
4. Eliminate congenital syphilis<sup>e</sup>
5. Minimise the reported experience and expression of stigma in relation to STI

<sup>c</sup> Compared with 2016.

<sup>d</sup> Compared with 2016. Targets specific to Aboriginal and Torres Strait Islander people are included in the Fifth National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmissible Infections Strategy.

<sup>e</sup> No new cases of congenital syphilis nationally notified (as defined by the global surveillance case definition) for two consecutive years.

<sup>f</sup> Links to Section 7, 'Priority areas for action': Priority population and priority settings are described in Section 6, 'Priority populations and settings.'

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## Priority areas<sup>f</sup>

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- Implement prevention education and other initiatives, including supporting sexual health education in schools and in community settings where people live, work and socialise, to improve knowledge and awareness of healthy relationships and STI and reduce risk behaviours associated with the transmission of STI
  - Reinforce the central role of condoms in preventing the transmission of STI
  - Support further increases in HPV vaccination coverage in adolescents in line with the National Immunisation Strategy
  - Increase comprehensive STI testing to reduce the number of undiagnosed STI in the community
  - Increase early and appropriate treatment of STI to reduce further transmission and improve health outcomes
  - Ensure equitable access to prevention programs and resources, testing and treatment in a variety of settings, including sexual health, primary care, community health and antenatal care services, with a focus on innovative and emerging models of service delivery
  - Increase health workforce and peer-based capability and capacity for STI prevention, treatment and support
- Implement a range of initiatives to address STI-related stigma and discrimination and minimise the impact on people's health-seeking behaviour and health outcomes
  - Continue to work towards addressing the legal, regulatory and policy barriers which affect priority populations and influence their health-seeking behaviours
  - Continue to build a strong evidence base for responding to STI and associated new and emerging challenges, informed by high-quality, timely data and surveillance systems
-

# 6.

## Priority populations and settings

STI disproportionately impacts on a number of key populations. This strategy identifies priority populations and settings (see Figure 4) and acknowledges that many individuals may identify with multiple priority populations and settings. This results in a diverse variety of intersecting characteristics and risk factors unique to each individual. In accordance with the guiding principle of access and equity, the unique challenges and experiences within all priority populations need to be considered in the response. This includes, but is not limited to, all gender expressions and experiences, disabilities, cultural and ethnic identities, different geographic settings, sexual orientations and religious affiliations.

While women are not represented in this strategy as a distinct priority population, women are recognised across most of the priority populations. Women are impacted by STI differently from men—they are more likely to be asymptomatic, their anatomy is a conducive environment for the sexual transmission of bacteria and viruses, and they disproportionately bear the long-term impacts of STI, including serious reproductive consequences and mother-to-child transmission.<sup>24</sup> Rates of all notifiable STI in females in Australia have increased since 2012, particularly for gonorrhoea and syphilis.<sup>22</sup> It is important the unique experiences and needs of women are considered and addressed in the response.

People who use drugs are not represented as a distinct priority population in this strategy but are represented across the priority populations.

Research suggests that the use and misuse of some illicit and licit drugs and risky alcohol consumption may increase the likelihood of high-risk sexual contact and STI transmission.<sup>25,26,27,28</sup>

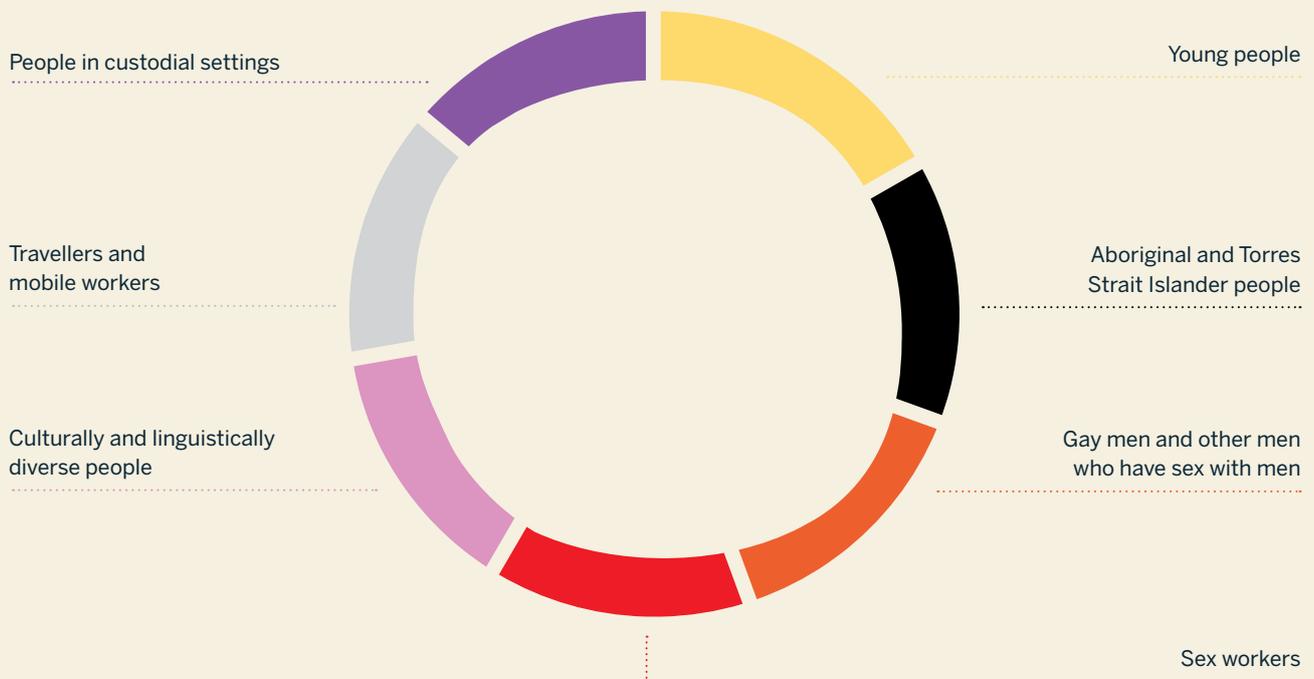
The correlation between methamphetamine use and increased risk of STI has been well documented, and there is increasing evidence that this may also apply more widely to injecting drug use, non medical use of prescription drugs and other illicit drug use.<sup>29,30,31</sup> The priority populations outlined in the National Drug Strategy 2017–2026 also align closely with those in this strategy. It is important that the response considers and addresses the unique challenges and experiences of people within this group in relation to STI.

While not represented as a distinct priority population in this strategy, people with HIV are an important sub-population of all the listed priority populations. People who live with HIV are at a higher risk of other STI as a result of increased susceptibility to infection due to lowered immunity and increased vulnerability due to the presence of other existing infections. They have a unique set of needs in relation to STI which can complicate diagnosis, treatment and management and which need to be addressed.

STI prevalence among trans and gender-diverse people is unknown in Australia due to a paucity of data. However, international studies in low- and high-income countries have found that STI prevalence among trans and gender-diverse people is greater than that of the general population.<sup>32</sup> Many trans and gender-diverse people are already part of existing priority populations such as trans MSM; non-binary sex workers; Aboriginal and Torres Strait Brotherboys and Sistagirls/Sistergirls; and people who inject drugs and may share some of the same risk exposures of other priority populations. However, trans and gender-diverse people may also have specific sexual health needs and barriers to prevention, treatment and care that need to be taken into consideration in the response to STI.<sup>33</sup> Improved data and research is needed to better understand how STI impacts on this population.

**Figure 4: Priority populations for the Fourth National STI Strategy 2018–2022**

**Priority populations**



**Priority settings**



Geographic locations with high prevalence and/or incidence of STI



Other services that support priority populations, including peer-based services, homelessness services and mental health services



Places where priority populations live, work and socialise.



Custodial settings



Community, primary health and other health services, including Aboriginal Community Controlled Health Services/ Aboriginal Medical Services

*Note: This graphic is not intended to reflect equal priority or prevalence among groups*

## Young people

Young people aged between 15 and 29 years continue to be significantly impacted by STI, and effectively engaging them in prevention, testing and treatment presents a significant challenge. Collectively, the majority of cases of infection with STI in young people remain undiagnosed and untreated.<sup>22</sup> Greater exposure of young people to risk factors for STI when compared with older adults—for example, high risk sexual contact, misuse of some illicit and licit drugs and risky alcohol consumption—is likely to be contributing to the disproportionate burden.<sup>34,35,36,37</sup>

A range of factors have been identified that place young people at increased risk of STI and act as potential barriers to STI testing and treatment.<sup>38</sup> These include personal barriers, such as underestimating risk or seriousness of STI; structural barriers, including financial costs; and social barriers, including fear of stigmatisation.<sup>38</sup> A sustained effort is needed to engage with each generation using approaches that address these risks and barriers and to provide young people with services which are acceptable to them and meet their needs.

Young people aged 15 to 29 accounted for 75 per cent of chlamydia notifications in 2016.<sup>22</sup> While there has been a decline in notifications of chlamydia in young people aged 15 to 19 years since 2012, notification rates in the 20 to 24 and 25 to 29 years age groups have increased since 2007.<sup>22</sup> However, of the total number of people attending general practices who had a Medicare-rebated chlamydia test,<sup>g</sup> testing in 15-to 29-year-olds only accounted for 15 per cent, indicating low overall testing in this age group.<sup>22</sup>

Notification rates of gonorrhoea and syphilis continue to increase in young people, with over half and more than a third of new gonorrhoea and syphilis diagnoses respectively occurring in people aged less than 29 years in 2016.<sup>22</sup> The notification rate for infectious syphilis has increased over the past five years, with the highest rate in people aged 25 to 29 years in 2016.<sup>22</sup> The rate of syphilis in young people is of particular concern given the risk of

mother-to-child transmission and the morbidity and mortality associated with congenital syphilis. The notification rate of syphilis in females is highest in the 15-to 19-year-old age group, followed by those between 20 and 29 years.<sup>22</sup>

## Aboriginal and Torres Strait Islander people

As a population, Aboriginal and Torres Strait Islander people are disproportionately impacted by STI compared with the non-Indigenous population.<sup>23</sup> Lack of access to testing and treatment 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 STI and are therefore disproportionately impacted compared with the non-Indigenous population.<sup>23</sup>

There is a critical and ongoing need to identify and address the barriers experienced by Aboriginal and Torres Strait Islander people in accessing STI prevention, testing, treatment and support services. The development of enhanced programs to close this gap is facilitated by culturally appropriate education, prevention, testing, treatment and care programs being delivered through Aboriginal Community Controlled Health Services (ACCHS), Aboriginal Medical Services and mainstream services.

Notification rates of chlamydia, gonorrhoea and syphilis are significantly higher in the Aboriginal and Torres Strait Islander population and are particularly focused in young people in this population. Despite a 17 per cent decrease in notification rates for gonorrhoea in the Aboriginal and Torres Strait Islander population since 2012, in 2016 the rate was still almost seven times higher than in the non-Indigenous population.<sup>23</sup> Among Aboriginal and Torres Strait Islander people, almost a third of notifications were in people aged 15 to 19 years, compared with 7 per cent in the non-Indigenous population.<sup>23</sup>

<sup>g</sup>Testing conducted in government hospitals and sexual health services may not be included in this data.

The pattern of positive tests for STI in Aboriginal and Torres Strait Islander people also differs from that in the non-Indigenous population, with a greater proportion of new notifications for gonorrhoea, chlamydia and syphilis in young people aged 15 to 29 years in 2016.<sup>23</sup> In 2016, there was near equal representation of gonorrhoea in men and women in the Aboriginal and Torres Strait Islander population compared with the non-Indigenous population, where diagnoses are predominantly in gay men and other MSM in urban settings.<sup>23</sup>

An ongoing outbreak of syphilis concentrated among Aboriginal and Torres Strait Islander communities is of significant concern. In 2016, 16 per cent of all syphilis notifications were among the Aboriginal and Torres Strait Islander population<sup>21</sup> with new diagnoses concentrated among communities in northern and central Australia. The rate of notification of infectious syphilis in Aboriginal and Torres Strait Islander people was 5.4 times as high as in the non-Indigenous population, increasing by 193 per cent between 2012 and 2016.<sup>23</sup> In remote and very remote areas, the rate of syphilis is 50 times higher than in the non-Indigenous population nationally.<sup>23</sup> In 2016, the proportion of infectious syphilis notifications in 15- to 19-year-old Aboriginal and Torres Strait Islander people was more than 10 times higher than in the non-Indigenous population (21 per cent compared to 2 per cent).<sup>23</sup>

Of the 16 cases of congenital syphilis reported from 2012 to 2016, 10 were in the Aboriginal and Torres Strait Islander population.<sup>22</sup>

For the non-notifiable STI, rates of trichomoniasis remained high in many remote Aboriginal communities despite being very low overall.<sup>23</sup> Human T-lymphotropic virus type 1 (HTLV-1) remains endemic in many remote Aboriginal communities.<sup>39</sup>

The implementation of targeted approaches using culturally appropriate education, prevention, testing, treatment and care programs are imperative. This includes culturally inclusive and safe approaches which are tailored for people from remote, rural,

regional and urban areas, women, people who are highly mobile, people who use drugs, people with complex needs and people in custodial settings; and expansion of existing culturally appropriate programs and services. Where possible, responses developed within, by and for the community will best account for cultural complexities which might be otherwise overlooked.

Epidemiology, policy context and priority areas for action in relation to STI, including syphilis and HTLV-1, in Aboriginal and Torres Strait Islander people are more specifically addressed in the Fifth National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmissible Infections Strategy. Controlling the syphilis outbreak in northern and central Australia is a primary objective of the 'national strategic approach for an enhanced response to the disproportionately high rates of STI and BBV in Aboriginal and Torres Strait Islander people'.

## **Gay men and other men who have sex with men**

Gay men and MSM are disproportionately affected by STI compared with the general population; there is a high prevalence and incidence of almost all STI in this priority population.<sup>40</sup>

There has been an increase in the number of new chlamydia and gonorrhoea infections each year amongst gay and bisexual men since 2012, with a greater rate of both in HIV-positive gay and bisexual men.<sup>22</sup> The number of new syphilis infections each year in these groups fluctuated between 2012 and 2016 but remained higher in HIV-positive gay and bisexual men compared with HIV-negative gay and bisexual men<sup>22</sup> and was concentrated in urban settings.<sup>22,41,42</sup> HIV-positive gay men and other MSM are at risk of other STI as a result of a number of factors, including increased rates of asymptomatic infection, increased vulnerability due to the presence of existing infections, and unprotected anal intercourse with casual partners.<sup>43</sup>

An increased number of hepatitis A cases was reported in gay men and other MSM in Australia and

internationally in 2017 and 2018.<sup>16,17,44</sup> Hepatitis A is transmitted through the faecal–oral route, including through sexual contact. All affected jurisdictions are currently offering free vaccination to individuals at risk, including MSM, as part of the outbreak response, and several states are working with peak organisations to raise awareness of the outbreaks and encourage vaccination amongst gay men and MSM. Outbreaks of shigellosis in gay men and other MSM have been occurring overseas, with an outbreak identified in New South Wales in 2016.<sup>19</sup> Evidence of antibiotic resistance was also found in a number of isolates tested in New South Wales in 2013 and 2014.<sup>19</sup> Continued efforts to raise awareness of hepatitis A and shigellosis, including transmission risks and prevention, are crucial for this priority population.

The Gay Community Periodic Surveys found that comprehensive STI testing increased over this period, which may have contributed to higher rates of diagnosis. Among gay and bisexual men attending sexual health clinics in the ACCESS network, the average number of syphilis tests per person has increased between 2012 and 2016.<sup>20</sup> Prevention education, with an emphasis on the importance of safer sex practices and condom use, along with regular STI testing, are critical in reducing STI transmission and supporting early diagnosis and treatment. This is also important in the context of the use of pre-exposure prophylaxis (PrEP) for HIV prevention. STI risk factors are not equivalent across this priority population, and tailored interventions are required.

## **Sex workers**

Australia's strong and sustained health promotion programs among sex workers mean that rates of STI in this group continue to be among the lowest in the world compared with sex workers in other countries. However, there has been an increase in the incidence of chlamydia and gonorrhoea in this population in recent years.<sup>22</sup> Chlamydia incidence for female sex workers attending sexual health clinics increased by 35 per cent from 2012 to 2016.<sup>22</sup> Over the same period, gonorrhoea incidence also increased; however, the incidence of syphilis in female sex workers has remained low.<sup>22</sup>

Sex workers experience specific barriers to accessing health services, including stigma and discrimination and regulatory and legal issues—criminalisation, licensing, registration and mandatory testing in some jurisdictions.<sup>45</sup> These can impede access to evidence-based prevention, testing, treatment and support services and can result in increased risk of STI, loss of livelihood, and risk to personal and physical safety.<sup>46</sup>

Within this population, tailored approaches are needed for sub-populations of sex workers, including street based sex workers, sex workers who work in isolation, mobile sex workers, sex workers in rural and remote areas, migrant and culturally and linguistically diverse (CALD) sex workers, Aboriginal and Torres Strait Islander people engaged in sex work, male sex workers, trans and gender-diverse sex workers, sex workers with HIV, people with complex needs and people from other priority populations.

## **People with culturally and linguistically diverse backgrounds**

STI prevalence among CALD people is unknown in Australia due to a paucity of data. However, some studies have indicated a high prevalence of certain STI in CALD populations, a lack of knowledge of STI and the potential for the emergence and increasing incidence of STI in urban CALD populations.<sup>47,48,49</sup>

Australia's CALD population continues to grow. The number of permanent and temporary migrants and international students increased by 12 per cent between February 2017 and 2018,<sup>50</sup> and the 2016 Census demonstrates that over 26 per cent of Australia's population was born overseas.<sup>51</sup> This population encompasses a broad range of people, including people from countries with high prevalence of STI<sup>52</sup> and people who may experience barriers (for example, language, stigma, cost and lack of awareness) to accessing sexual health services.<sup>53</sup> Tailored approaches, resources and services are needed to address specific cultural, language and gender issues across all aspects of the response to STI.

Within this population, specific approaches are needed for gay men and other MSM; people who use drugs; young people; people who are ineligible for subsidised health care; refugees; humanitarian entrants; sex workers; and women. Improving sexual health literacy and ability to navigate available sexual health services is particularly important for young CALD people, including international students.<sup>54</sup>

## **Travellers and mobile workers**

The increasing mobility of people, both domestically and globally, provides opportunities for the rapid spread of STI. The affordability of international travel for tourism and work means more Australians are travelling overseas, and there are more visitors to Australia. This includes the movement of people to and from countries with high prevalence of STI,<sup>54</sup> including extensive drug-resistant infections which are very difficult to treat. Evidence demonstrates that it is not uncommon for people to behave differently when they travel, and this includes engaging in unsafe sexual practices.<sup>55</sup> Fly-in fly-out and seasonal workers, and the communities they have contact with, are important sub-populations for consideration in the response to STI.

Tailored approaches for this population are needed, including the delivery of targeted STI health promotion and education for mobile populations both prior to travel and upon return. The provision of STI services for people within this priority population who are ineligible for Medicare is also an important consideration.

## **People in custodial settings**

While the burden of STI on people in custodial settings is not well understood, there is evidence that custodial settings are high-risk environments for STI transmission.<sup>56,57,58</sup> There is often limited access to STI prevention education and the tools for prevention for this population, both within and outside of the custodial setting. The intersection this population has with other priority populations also contributes to the risk factors for STI transmission.

The National Prison Entrants' Bloodborne Virus Survey (NPEBBVS) screens for three STI—syphilis, gonorrhoea and chlamydia. The most recent NPEBBVS report found very few of these infections among incoming prisoners, with rates no higher than in the general population.<sup>59</sup> Around 4 per cent of men and 17 per cent of women had markers consistent with past or present syphilis infection.<sup>59</sup>

While the existing data does not appear to demonstrate heightened rates of STI in entrants to custodial settings, a uniform approach to testing of entrants would enable more consistent and comparable data. There is a lack of data demonstrating STI rates in people within custodial settings and upon leaving. International research suggests heightened levels of STI in custodial settings and that these infections are acquired in prison.<sup>60,61,62</sup> There is a need to investigate and improve data sources on both the transmission risks and impact of STI on this population in Australia.

# 7.

## Priority areas for action

**This strategy includes a set of priority areas for action designed to support the achievement of the goals and targets. Each priority area for action relates to one or more of the targets. It is the interaction of these actions as a whole that is essential to the achievement of this strategy.**

Australia's response to STI builds on the achievements and lessons learned in response to STI since the first national strategy was released in 2005, and it is shaped by a number of key challenges and opportunities.

Some of the key challenges and opportunities include increasing STI-related knowledge among priority populations, including awareness around the often asymptomatic nature of STI; increasing vaccination rates for HPV; increasing testing and treatment uptake; improving access to health professionals and services; and improving surveillance and response to emerging issues. This strategy is designed to address these while recognising the need to maintain key aspects of the response that remain pivotal to its success and respond flexibly to other issues as they arise.

A sustainable response to the disproportionately high rates of STI and BBV in Aboriginal and Torres Strait Islander communities will be implemented under the Fifth National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmissible Infections Strategy 2018–2022. This strategy works in conjunction with the 'Enhanced Response to addressing sexually transmissible infections (and blood borne viruses) in Indigenous populations' (the Enhanced Response). The Enhanced Response was established by the Australian Health Protection Principal Committee in 2017 primarily to address the current outbreak of syphilis in Aboriginal and Torres Strait Islander communities in northern and central Australia. The actions under this strategy will support the work of the Enhanced Response and the Fifth National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmissible Infections Strategy and ensure the approaches are coordinated and complementary.

## Education and prevention

- *Implement prevention education and other initiatives, including supporting improved sexual health education in schools and in community settings where people live, work and socialise, to improve knowledge and awareness of healthy relationships and STI and reduce risk behaviours associated with the transmission of STI*

- *Reinforce the central role of condoms in preventing the transmission of STI*

- *Support further increases in HPV vaccination coverage in adolescents in line with the National Immunisation Strategy*

Health promotion and prevention education initiatives are critical to increasing the understanding of STI among priority populations, promoting the importance of safe sexual practices and achieving positive behavioural change. Education needs to include the importance of consistent and effective condom use and other safe sex practices, including when traveling abroad; the often asymptomatic nature of STI; common symptoms when they do occur; the longer term consequences of untreated STI; when and how to access appropriate services; and the importance of vaccination. Effective strategies should also assist to normalise and promote early testing and treatment and reduce STI-related stigma and discrimination.

Raising awareness and knowledge of STI and their consequences among priority populations continues to be essential. This should include addressing skills to reduce sexual risk behaviour and in accessing and navigating the health system. These activities must be relevant and accessible to the priority populations while acknowledging different cultural, social and language needs.

Education and prevention initiatives need to be tailored to priority populations, STI prevalence and impact, as different STI affect priority populations

in different ways across geographic regions. A variety of approaches and components have been demonstrated to be effective, including sex education in school; training of teachers, community leaders, peer educators and counsellors; distribution of educational materials; provision of condoms and condom demonstrations; workshops; communication skills-building and community events. There is also emerging evidence that interventions utilising digital media can improve sexual health and STI knowledge.<sup>63,64,65</sup> Mass media, as part of a comprehensive response, may also be effective in assisting to promote conversation and awareness and improve safer sex attitudes and behaviours.<sup>66,67</sup> Where education and prevention initiatives are delivered is also critical and must be in the context of priority settings specific to each priority population, including where they live, work and socialise.

When used correctly and consistently, condoms offer one of the most effective methods of protection against STI.<sup>68</sup> Trends in condom use and condomless sex are of concern. Consistent condom use with casual partners has been declining over the past five years among gay and bisexual men.<sup>22</sup> Whilst research in relation to condom use among sex workers in Australia has shown sustained high rates of consistent condom use by both female and male sex workers,<sup>69</sup> there are some emerging issues in relation to unprotected oral sex, which emphasise the need for targeted health promotion initiatives in this area.<sup>70</sup>

Consideration of the rate of notifications across all age groups indicates that young people are the group most affected by STI in Australia. The development and delivery of health promotion interventions targeted at young people, both in and out of school, is a priority. A research review found that no single public health intervention had a sustained long-term impact on the sexual health of young people and young adults and that programs were most effective in increasing protective behaviours for STI when they targeted multiple

components of young people's lives and the context in which they live and addressed interpersonal, social and structural levels.<sup>71</sup>

The timing of prevention education is critical to ensure it precedes sexual activity and is delivered incrementally in an age appropriate way as young people transition through adolescence and into young adulthood. Effective culturally and age appropriate sex education should be delivered to Australian school students as well as to young people who are of school age but are no longer in the school system. There is also room for primary, sexual and other healthcare services to be more effective and proactive in engaging with young people on STI issues, including prevention education, promotion of immunisation, STI testing and treatment, and connecting young people to other STI education and support services.

Peer education and support have played important roles in reducing the risk of STI transmission and in connecting with some hard-to-reach populations. Peers are credible, trusted sources of information and can assist in overcoming physical and socio-cultural barriers. Sex workers, for example, have played a longstanding and pivotal role in health promotion by establishing partnerships in community health initiatives and acting as pioneers in peer education programs. For some priority populations, effective STI education will also include the use of digital platforms and social networking sites that are frequently used to meet sexual partners.

HPV vaccination is delivered to adolescents as part of the high school based programs conducted by states and territories. A recent study has shown that this vaccination program is generating herd immunity for certain types of HPV in Australia.<sup>72</sup> Gardasil<sup>®</sup>9, introduced on the National Immunisation Program in 2018, protects against nine types of HPV, including seven types that are associated with over 90 per cent of cervical cancers in Australia. Sustained efforts are needed to continue to improve adolescent vaccination, particularly in males, to meet the target of 80 per cent coverage by 2022. The HPV vaccination is also recommended for MSM, with a catch-up program

providing access to individuals up to the age of 19 as well as humanitarian entrants. Heightening awareness and education on the HPV vaccination and associated catch-up program is critical for preventing transmission in populations at greater risk of STI.

From 1 April 2018 PrEP was subsidised through the Pharmaceutical Benefits Scheme for people at medium and high risk of HIV. PrEP needs to be combined with regular testing for STI, timely treatment and prevention education, including the importance of condom use. The requirement for regular STI testing among people accessing PrEP will support earlier detection and treatment of other STI and provide opportunities for sexual health education. STI surveillance and monitoring is also an important part of PrEP implementation to measure and respond to any changes in STI prevalence.

## KEY AREAS FOR ACTION

- 1.** Implement a national STI education initiative for priority populations to improve the community's understanding of STI, improve knowledge of risk behaviours and safer sex practices, assist in reducing STI-related stigma and support pathways to early testing and treatment
- 2.** Implement targeted, age and culturally appropriate STI prevention education initiatives and resources for priority populations using a variety of relevant channels, including digital platforms (for example, social media) and sites frequented by priority populations
- 3.** Better connect priority populations to STI prevention education and services, including through outreach and peer-based approaches in priority settings
- 4.** Promote consistent and effective condom and other barrier method use and increase access to and acceptability of condoms amongst priority populations, including by increasing knowledge of where to access free and affordable condoms and other barrier methods and how to correctly and safely use them

5. Encourage partnerships between health services, schools, educational institutions and community organisations to improve the delivery, availability and accessibility of sexual health education and services for all young people and strengthen linkages to testing and treatment
6. Support comprehensive relationships and sexuality education in schools that improve knowledge, attitudes, skills and behaviours to engage in respectful relationships and reduce risky behaviours and encouraging help-seeking behaviour in a holistic manner
7. Ensure PrEP for HIV prevention is combined with STI prevention education, access to condoms, and recommended regular STI testing<sup>20</sup>
8. Increase access to HPV vaccination of eligible individuals under the National Immunisation Program and support the actions to expand vaccination coverage outlined in the National Immunisation Strategy

## Testing and treatment

- *Increase comprehensive STI testing to reduce the number of undiagnosed STI in the community*
- *Increase early and appropriate treatment of STI to reduce further transmission and improve health outcomes*

The most effective response to STI combines sustained prevention strategies with regular STI testing and early treatment for priority populations. The early detection and treatment of STI is essential to reduce further transmission and minimise the development of complications.

Regular, comprehensive and voluntary testing for priority populations on the basis of risk plays an important role in identifying people with STI who may be asymptomatic and who would otherwise go undetected. Asymptomatic people in high-risk groups should be offered opportunistic testing when they present to a health service and be encouraged to seek testing even if they have no other reason to attend for health care. Identifying, testing and treating sexual partners is also important to prevent transmission and reinfections.

Given the high prevalence of STI among young people, comprehensive STI testing is part of best-practice routine health care for all sexually active young people.<sup>20,73</sup> Widespread testing, including point of care, is also critical in effectively responding to the outbreaks. This includes ensuring testing and treatment as part of routine antenatal care to minimise mother to child transmission.

Options for health system changes include strengthening the integration of testing into existing health service delivery and reorienting existing services. Opportunities for integration with existing services include offering STI testing with appropriate routine activities (for example, during visits for contraception, general health checks, antenatal visits and appropriate vaccinations).

Targeted approaches are needed that address the range of factors that influence STI testing and treatment uptake in specific priority populations and geographic locations. These influences may include an individual's perceived vulnerability to STI, perceived benefits of testing, experience (or lack) of STI-related symptoms, anxiety about having had unprotected intercourse and fear of negative attitudes. Social and system-related aspects include physical access to testing, delivery of test results, costs, and concerns about privacy and confidentiality, particularly in smaller and remote communities. STI prevention education initiatives need to build the skills and confidence of priority populations in accessing and navigating the healthcare system to support increased STI testing and treatment—including increasing the promotion of referral pathways to appropriate health services.

Primary care, including sexual health services, makes a significant contribution to STI detection and management. It is essential to engage and support primary care and sexual health care providers, specifically general practitioners, to integrate STI testing, treatment, management, patient delivered partner therapy and partner notification as part of routine care.

Peer educators and counsellors play an important role in engaging priority and sub-populations. Street outreach, self-collection, and peer-based and online testing have demonstrated their effectiveness in reaching priority populations.<sup>74,75,76,77</sup> These efforts also need to be supported by a systematic increase in opportunities for priority groups to have voluntary STI tests, including by appropriate use of new testing technologies. Building on the trend for nurse and peer-led testing and treatment models for other disease will be essential over the life of this strategy, particularly to support equitable access across locations and settings.

Improvements in contact-tracing activities need to be built on, with a particular focus on partner notification and treatment systems and remote and very remote populations, especially those with mobile populations. Reducing STI transmission is dependent on increasing the likelihood of diagnosis and treatment of the sexual contacts of people diagnosed with an STI. Effective partner notification has the potential to reduce reinfection rates and allow diagnosis and treatment in people who may not realise they have been exposed to an STI.

New testing technologies for HIV are progressing more quickly than new technologies for other BBV and STI. However, it is important that the links between HIV and STI testing are strengthened. This is particularly important in some priority populations at higher risk of HIV, such as gay men and other MSM, as there is an increased risk of HIV transmission associated with the presence of an STI in the absence of viral suppression of HIV. This is also important in the context of increasing PrEP uptake.

AMR occurs when microorganisms become resistant to the antimicrobial medicines (such as antibiotics) used to treat them. It is a major global public health concern. AMR can result in limited or in some cases no treatment options for infections, including STI. Promoting the use of evidence-based prescribing guidelines is essential. Best-practice prescribing improves individual patient treatment outcomes and assists to preserve the effectiveness of antimicrobials. Prevention of STI through educating priority populations and the general community about the risks of resistant STI

and the importance of using condoms and other safer sex practices when engaging in all types of sexual activity, including when overseas, is critical. Australia's First National Antimicrobial Resistance 2015–2019 (National AMR Strategy) is coordinating Australia's response to AMR.

## KEY AREAS FOR ACTION

- 9.** Develop and implement tailored promotion and engagement strategies for priority populations to improve the uptake of STI testing and treatment
- 10.** Identify areas of need and frequency required for STI testing for priority populations
- 11.** Regularly update, maintain and promote the use of evidence-based national clinical guidelines and resources for STI testing and treatment, including guidance on AMR and stewardship
- 12.** Provide a range of testing methods and opportunities across settings for priority populations, including point-of-care testing and integration of testing in existing services, with a focus on rural, regional and remote areas
- 13.** Ensure strong links are in place between comprehensive voluntary STI and HIV testing
- 14.** Identify evidence-based approaches for enhancing partner notification systems
- 15.** Identify opportunities to scale up evidence-based interventions aimed at reducing STI, with a focus on repeat chlamydia infections and infections causing pelvic inflammatory disease, and other complications in young people
- 16.** Develop the capacity of health infrastructure in remote and very remote areas to effectively respond to outbreaks and epidemics

## Equitable access and coordination of care

- *Ensure equitable access to prevention programs and resources, testing and treatment in a variety of settings, including sexual health, primary care, community health and antenatal care services, with a focus on innovative and emerging models of service delivery*

Sexual health treatment and care is provided through public sexual health services, general practice, ACCHS and community-based clinics. The type of service accessed or whether a service is accessed at all depends on a number of factors, including the availability of the service and an individual's comfort in accessing the service. This is particularly the case in rural, regional and remote settings, where there may be limited clinical capacity or heightened concerns around privacy and confidentiality. There are opportunities to improve the effectiveness of service delivery in respect to STI and ensure more equitable access to treatment and care for priority populations.

Partnerships between key organisations—including ACCHS, specific community groups, and other health and community organisations—will need to be established or reinvigorated in order to improve the effectiveness of targeted approaches to raising awareness, increasing testing and supporting treatment protocols at the local level. Ensuring the provision of accessible and acceptable local clinical services is particularly important for Aboriginal and Torres Strait Islander communities.

Innovative models of care tailored to local contexts and the needs of priority populations need to be explored to deliver best-practice care and support to increase equity in service provision. There may be opportunities for greater involvement of other appropriately trained and supported health professionals, such as nursing professionals and Aboriginal and Torres Strait Islander Health Workers, in providing STI treatment and care. Ensuring health professionals have access to the necessary tools and resources to support high-quality care is imperative, as is timely referral and advice between specialist and primary healthcare services.

There is also variability in the level of STI-related knowledge and skills among the primary healthcare workforce. Improved access to training opportunities would support a more consistent and effective response to STI across the country. Other innovative models of service delivery, such as peer-based testing and peer support, community-based testing and online testing, also show strong potential to effectively reach priority populations with health promotion, prevention education, testing and treatment services.

A common feature of the priority populations in this strategy is the difficulty they have in accessing health services. Services are encouraged to consider how approachable they are for clients and to ensure they provide a suitable and appropriate service for priority populations. It is important that services and approaches respond and adapt to the needs, experiences and behaviours of priority populations in order to maximise engagement with and effectiveness of prevention education, testing, treatment, care and support.

## KEY AREAS FOR ACTION

- 17.** Increase the coverage of publicly funded sexual health services, particularly in rural, regional and remote areas, in places with high numbers of young people and people who are ineligible for subsidised health care
- 18.** Identify and scale up successful innovative models of STI service delivery tailored to the needs of priority populations and sub-populations, including multidisciplinary team approaches and shared care models
- 19.** Improve the coordination of and partnerships between STI services and other relevant service providers to better link priority populations with STI prevention, testing and treatment and improve access and acceptability of sexual health services
- 20.** Build capacity of health services to provide opportunistic STI testing and enhanced STI management

## Workforce

- *Increase workforce and peer-based capability and capacity for STI prevention, treatment and support*

A strong multidisciplinary workforce of motivated, trained and regularly updated health and education professionals, community health and peer-based workers from, and who work with, priority populations is vital to delivering best-practice, and age and culturally appropriate, sexual health education and services across Australia.

Evidence-based, responsive and accessible clinical guidelines and tools play an essential role in supporting the provision of effective STI prevention and care in Australia. These guidelines must be coupled with education for health professionals to support guideline use and training to build workforce capacity and capability.

Specific education, professional development and specialisation opportunities need to be made available to support the development of essential knowledge and skills across the workforce. Resources and programs should highlight the specific sexual health needs of priority population groups. Hybrid approaches of online learning, web-based resources and mobile applications as well as face-to-face learning opportunities should be tailored to specific workforce needs and locations (including urban, regional, rural and remote). Professional and community-based organisations, working with specialist education providers, are well placed to tailor training in response to local needs and workforce capacity.

Issues in relation to recruitment and retention of staff need to be addressed, particularly in rural, regional and remote areas, to ensure the required expertise, capability and capacity exists in all areas. Innovative models adapted to local contexts can assist in addressing such challenges by utilising the skills of other appropriately trained health professionals, including nursing professionals and Aboriginal and Torres Strait Islander Health Workers.

Most priority populations in Australia regularly interact with primary care services, including sexual health services, which are the foundation of health service delivery. Support must be provided to healthcare professionals at the front line of STI diagnosis and treatment, particularly general practitioners, to ensure they are well informed; are aware of, and have access to, appropriate guidelines on testing and treatment; and can provide optimal information and support to patients. Maintaining a strong workforce to provide support, and referral pathways for care at the community level, is a priority.

Opportunities to facilitate the provision of more nurse-led services, including required education, professional development and specialisation opportunities, should be a particular focus.

## KEY AREAS FOR ACTION

- 21.** Ensure delivery of effective training and education for the multidisciplinary workforce to support the delivery of high quality, non-stigmatising and culturally appropriate STI prevention, testing and treatment services across priority populations
- 22.** Implement initiatives to support the integration of appropriate, opportunistic STI prevention and testing into routine health care
- 23.** Continue to explore and share experiences of innovative multidisciplinary models for STI prevention, testing and treatment, particularly in rural and remote areas and areas of workforce shortage
- 24.** Support the capacity and role of community organisations to provide education, prevention, support and advocacy services to priority populations

## Addressing stigma and creating an enabling environment

- *Implement a range of initiatives to address STI-related stigma and discrimination and minimise the impact on people's health-seeking behaviour and health outcomes*
- *Continue to work towards addressing the legal, regulatory and policy barriers which affect priority populations and influence their health-seeking behaviours*

Stigma has long accompanied STI, primarily due to the association with sexuality and 'taboo' behaviours.<sup>11</sup> The expression, experience and anticipation of stigma and discrimination impacts on prevention and control efforts as well as the health and quality of life of individuals.<sup>67</sup>

Stigma and discrimination associated with STI can prevent people from attending health services to discuss their risk of STI; requesting an STI test or being offered a test; taking STI medication; seeking support from their family, friends and healthcare providers; and notifying their sexual partners. The level of stigma varies depending on both the infection and the population. Legitimate fears of stigmatisation are an important factor which prevents people from seeking STI testing. This can increase the harm caused by the STI and the potential for transmission to new partners.<sup>78</sup>

The stigma and discrimination experienced by individuals with STI can also be influenced by intersecting characteristics and the stigma and discrimination associated with those. This includes sexual orientation, gender and gender identity, cultural background, migrant or refugee status, HIV status, disability, or being a sex worker or person in a custodial setting. Strategies to address stigma and discrimination must acknowledge and account for these. Stigma and discrimination continues to be reported among lesbian, gay, bisexual, trans and gender-diverse, intersex, queer, asexual and/or other (LGBTIQ+) populations, sex workers, people with HIV, people who use drugs, Aboriginal and Torres Strait Islander people and CALD populations.

The level of stigma experienced by patients seeking to access STI testing and treatment is impacted by attitudes of health professionals and clinic staff and also by physical location and environment.<sup>67</sup> Education in relation to stigma in healthcare settings is considered an integral part of training programs for staff of all specialist, primary healthcare and community-based service providers. The level of stigma in the general community can also be impacted by messaging contained in mass and social media, which often reinforces stereotypes and negative perceptions. Public health efforts must work to educate and promote effective action as well as counter stigma, fear and blame.

This strategy supports continued partnerships with community and peer support groups which seek to break the isolation and marginalisation of priority populations, which have been demonstrated to limit the ability of these populations to seek information, health care and support. Programs that address advocacy and empowerment of priority populations to access STI prevention, treatment, care and support in community, education, workplace, healthcare and legal settings should be promoted.

Further research and data is needed to fully understand the impact of expressed and experienced stigma in relation to STI. This will assist to better target responses and measure their impact.

The implementation of this strategy rests within the health sector. However, many of the barriers to equitable access and treatment of affected individuals and communities fall outside of the responsibility of the health system. It is important that effective and meaningful dialogue is maintained across sectors and jurisdictions to support knowledge translation and to discuss the potential impacts of any wider decisions on the health of priority populations.

## KEY AREAS FOR ACTION

**25.** Implement initiatives to address STI-related stigma and discrimination expressed in community and healthcare settings

**26.** Ensure that STI education, prevention, testing and treatment initiatives support efforts to counteract STI-related stigma

**27.** Monitor laws, policies, stigma and discrimination which impact on health-seeking behaviour among priority populations and their access to testing and services and work to ameliorate legal, regulatory and policy barriers to an appropriate and evidence-based response

**28.** Review and address institutional, regulatory and system policies which create barriers to equality of STI prevention, testing, treatment and support for priority populations

**29.** Establish a dialogue between health and other sectors aimed at reducing stigma and discrimination against people with STI and affected individuals and communities

## Data, surveillance, research and evaluation

- *Continue to build a strong evidence base for responding to STI and associated new and emerging challenges, informed by high-quality, timely data and surveillance systems*

Continuous improvement of data collections and systems is important to support a comprehensive understanding of STI in Australia. However, this must be appropriately targeted to avoid unnecessary burden for health services and frontline staff and ensure effective patient privacy and confidentiality.

Opportunities to improve the granularity of data to better identify trends and issues of concern in relation to specific priority populations and other demographics need to be explored. These opportunities include improved reporting of

Aboriginal and Torres Strait Islander status in clinical and pathology settings and improved data on stigma and discrimination, gender and sexuality and quality of life for people with STI. There is also a need to improve the timeliness and consistency of data collections across Australia to better support completeness and comparability. Potential areas for greater involvement of community and peer-based organisations in surveillance also need to be identified given their strong knowledge of priority populations.

There has been progress in improving the surveillance of STI incidence and testing coverage among priority populations. However, gaps in epidemiological, behavioural and demographic data remain. Gaps remain in our knowledge of STI testing coverage and the prevalence, incidence and impact of STI on particular priority populations, including CALD people, Aboriginal and Torres Strait Islander people and other populations including trans and gender-diverse people. This limits capacity to rapidly identify and respond to changes in STI incidence as well as other epidemiological and behavioural changes among priority populations.

Surveillance data are currently only collected for the four notifiable<sup>h</sup> STI at the national level, limiting understanding of the full impact of STI in Australia. Some populations and locations are known to experience high rates of non-nationally notifiable STI, such as the high rates of *Trichomonas vaginalis* and endemic rates of HTLV-1 among many remote Aboriginal and Torres Strait Islander communities.

As well as having access to high-quality, timely surveillance data, it is critical that opportunities to improve the capacity to respond to current and emerging STI issues are explored. Improved patient management and notification systems and clear roles and responsibilities are necessary to support effective responses to increased STI incidence, including during outbreaks. Comprehensive follow-up treatment and effective contact tracing, measures to prevent further transmission, and review of STI treatment guidelines are all essential elements of an effective response.

<sup>h</sup>Notifiable' refers to diseases or disease groups which are defined and listed on the National Notifiable Disease List established under the National Health Security Act 2007.

Partnership arrangements involving general practice and sexual health services may be needed to support active case finding, testing and contact tracing in high-prevalence areas in order to minimise time between infection and treatment and to reduce incidence and prevalence. In some instances, dedicated local or regional staff may also be needed to support the quality and organisation of responses.

Surveillance is vital to the detection and monitoring of emerging issues, including AMR in organisms which cause STI, and to inform appropriate clinical and prescribing guidelines and practices. The National AMR Strategy lists *Neisseria gonorrhoeae* and *Shigella*, both sexually transmissible, as priority organisms for surveillance. There is also increasing concern about resistance in *Mycoplasma genitalium*.<sup>79</sup> Resistance in *Chlamydia trachomatis* is less common, but it remains a risk. Surveillance arrangements under the National AMR Strategy aim to identify and monitor emerging issues and periodically review the list of priority organisms for inclusion.

In partnership with the community sector, research on the social, behavioural, clinical and structural drivers for and barriers to achieving optimal sexual health for all Australians must continue. The epidemiology of STI in Australia is changing rapidly. Understanding the drivers of these changes is key to developing the most appropriate public health response. Research is important to identify and examine the key changes in the epidemiology, knowledge and attitudes about sexual health and sexual health behaviours among priority populations (for example, patterns of sex work, mobility and migration); drivers of high-risk behaviours (such as alcohol and drug use); emerging issues and concerns; and barriers and enablers to accessing evidence-based prevention, testing and treatment across jurisdictions. This research is critical in informing targeted responses in priority populations and settings, including identifying particularly vulnerable or marginalised people.

Partnerships between research institutes, clinicians and community and peer-based organisations are valuable, as clinicians, community and peer-

based organisations are often the first to identify changes in behaviours, social interactions and demographics of priority populations. Maintaining a strong research agenda and program that informs and responds to the priority actions of this strategy ensures that implementation is supported by a strong, relevant evidence base.

The National BBV and STI Surveillance and Monitoring Plan will be developed to measure and monitor the implementation of this strategy through the identification and development of indicators to measure progress towards achieving the strategy's targets. The evaluation of existing, and development of new, STI activities and programs will ensure their alignment with the priority areas for action set out in this strategy.

## KEY AREAS FOR ACTION

**30.** Strengthen systems for identifying, monitoring and collaboratively addressing STI as well as new and emerging issues, including AMR, and increases in prevalence and burden

**31.** Identify opportunities to improve the quality, completeness, timeliness and national standardisation of demographic and disease data, including Aboriginal and Torres Strait Islander status as well as opportunities for enhanced data collection, for surveillance purposes

**32.** Identify ways to support a more coordinated, prompt response between jurisdictions, sexual health services and general practices to STI issues, including real-time accessibility of surveillance data, improved patient management and notification systems, and specialised local and regional support staff

**33.** Build on the existing evidence base by supporting research across disciplines to address data gaps and effectively inform the implementation of the priority actions of this strategy

**34.** Continue to monitor trends in knowledge and attitudes about sexual health and sexual health behaviours among priority populations, and identify opportunities to expand this data and strengthen collaborative efforts

# 8.

## Implementing this strategy

### Leadership, partnership and connections to community

Australia's response to STI is built on a model of partnership between government, community-based organisations, researchers, health professionals and priority populations. The partnership approach depends on clear leadership roles and accountability for all involved.

The Australian Government is committed to providing strong national leadership by working across portfolios and jurisdictions to achieve the goals of this strategy. The Australian Government Department of Health leads the coordination of the national response to STI under the National STI Strategy. However, the success of this strategy is contingent on productive partnerships between Australian, state and territory governments and partners, including peak bodies representing communities, health professionals, researchers and others. In the case of research on BBV and STI, it is imperative that this is conducted in partnership with communities and aligned with the priorities of the five national strategies.

National community and health peak organisations, and other organisations, representing communities and the clinical workforce remain at the forefront of the STI response in Australia. Organisations including the Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine; Scarlet Alliance, Australian Sex Workers' Association; Australian Federation of AIDS Organisations; and the National Association of People with HIV Australia, and the relationship these organisations have with their members, have a critical role to play in the implementation of this strategy.

## Action plan

The National BBV and STI Strategies Action Plan 2018–2022 provides the detail of specific actions for governments and partners. The action plan outlines the roles and responsibilities of governments and partners and the time frames for implementation of the actions. Indicators for measuring the progress towards achievement of the strategies' targets will also be developed. The action plan will be reviewed as required during the lifetime of the strategies.

The five national BBV and STI strategies share a number of key actions related to areas such as workforce, improving data and surveillance, education programs, and stigma and discrimination. The action plan will focus on encouraging connections between existing programs and policies, and build on previously successful approaches, to minimise duplication of effort. It will also look for opportunities to learn from and adapt responses used for other diseases where relevant.

## Governance, reporting and evaluation

The five national BBV and STI strategies are endorsed by Australia's Health Ministers and governed through relevant committees of the Australian Health Ministers' Advisory Council (AHMAC). The Blood Borne Viruses and Sexually Transmissible Infections Standing Committee (BBVSS) coordinates implementation efforts across jurisdictions and reports to the Australian Health Protection Principal Committee (AHPPC) on progress in the implementation of the national strategies. BBVSS and the Communicable Diseases Network Australia (CDNA) will jointly monitor progress towards the targets of each strategy and identify emerging issues and opportunities for action.

## Surveillance and monitoring plan

The National BBV and STI Surveillance and Monitoring Plan 2018–2022 supports the five national BBV and STI strategies and informs and monitors progress on achieving the goals and targets of each strategy. A subcommittee of the CDNA is responsible for overseeing the surveillance and monitoring plan and reporting on progress to the CDNA and BBVSS.

# Appendix A

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FOURTH

# National Sexually Transmissible Infections Strategy



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