Victorian sexually transmissible infections plan

2022–30

VICTORIA State Government | Department of Health

Front cover photo: Ashleigh Colquhoun, Anne-Marie Kelly and Sourav Jain, Centre for Excellence in Rural Sexual Health.

Images by On Location Photography

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Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne.

In this document, 'Aboriginal' refers to both Aboriginal and Torres Strait Islander people.

ISBN 978-1-76096-839-7 (PDF/online/MS Word) or 978-1-76096-838-0 (Print)

Printed by Hornet Press, Knoxfield.

Available from the **Department of Health website** <https://www.health.vic.gov.au/victorian-sexual-reproductive-health-viral-hepatitis-strategy-2022-30>.

Acknowledgement of Aboriginal Victorians

We recognise the diversity of Aboriginal people living throughout Victoria. In this strategy we have used the term 'Aboriginal' to include all people of Aboriginal and Torres Strait Islander descent living in Victoria.

The Victorian Government proudly acknowledges Victoria's Aboriginal communities and the richness and depth of the world's oldest living culture and pays respect to Elders past and present. We acknowledge Aboriginal people as Australia's first peoples and as the Traditional Owners and custodians of the land and water on which we live, work and play. We recognise and value the ongoing contribution of Aboriginal people and communities to Victorian life and how this enriches our society more broadly. We embrace self-determination and reconciliation, working towards equality of outcomes and ensuring an equitable voice.

Within Aboriginal Victorian communities, there is a rich landscape of cultural and spiritual diversity, with varied heritages and histories both pre- and post-invasion. We understand and acknowledge that people may have multiple and intersecting gender and sexuality identities including: young people, women, gay, bisexual and other men who have sex with men, trans and gender diverse people including Sistergirls and Brotherboys. We also acknowledge priority groups within the Aboriginal Victorian population who particularly experience poor sexual and reproductive health outcomes. We recognise that these groups have a right to enjoy and have control over their own sexual and reproductive behaviours in line with cultural values, kinship practices and individual ethics, and may need support to access culturally inclusive reproductive health services and programs.

Victorian Aboriginal communities continue to lead with strength and resilience in the face of ongoing transgenerational trauma, systemic racism and the impacts of colonisation, dispossession and removal of families and Country. Cultural and social determinants of health affect Aboriginal Victorians' experiences of wellbeing, blood-borne viruses (BBV), sexually transmissible infections (STI) and reproductive health choices. In this context, wellbeing is not a narrow experience of the physical body, it is a cultural, emotional and spiritual experience. This wellbeing includes the right to be free from diseases that may interfere with sexual life.

To achieve these freedoms, we have established a continued willingness to work in partnership to address BBV and STI and to promote reproductive health. This partnership, defined by the hallmarks of the community-controlled and -led response, is best practice and improves quality-of-life and health outcomes for individuals, families and communities.

The Victorian Government notes that, in partnership with the First Peoples' Assembly of Victoria, Victoria is currently establishing a framework to begin treaty negotiations with Traditional Owners and Aboriginal Victorians. Government will work to ensure relevant actions outlined in this strategy align with treaty negotiations and delivering future treaties in Victoria. This includes corresponding funding, implementation of actions and governance mechanisms. We are deeply committed to Aboriginal self-determination and to supporting Victoria's treaty process. We acknowledge that treaty will have wide-ranging impacts for the way we work with Traditional Owners and Aboriginal Victorians. We seek to create respectful and collaborative partnerships. We will develop policies and programs that respect Aboriginal self-determination and align with treaty aspirations.

We acknowledge that Victoria's treaty process will establish a framework for transferring decision-making power and resources to support self-determining Aboriginal communities to take control of matters that affect their lives. We commit to working proactively to support this work in line with the aspirations of Traditional Owners and Aboriginal Victorians.

As we work together to ensure Victorian Aboriginal communities continue to thrive, the government acknowledges the invaluable contributions of generations of Aboriginal warriors and matriarchs that have come before us, who have fought tirelessly for the rights of their people and communities towards Aboriginal self-determination. We are now honoured to be part of that vision.

"Access to available, affordable, appropriate and acceptable quality sexual health care is vital if we are to reduce STI rates. While we are lucky to have outstanding sexual health services in Victoria, the digital world offers exciting opportunities to explore innovative ways of reaching those who need to access STI care."

Professor Jane Hocking, Chair of Research, Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, The University of Melbourne

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About this plan

The *Victorian sexually transmissible infections plan 2020–30* is one of seven plans that form the *Victorian sexual and reproductive health and viral hepatitis strategy 2022–30*.

It builds on the objectives, focus areas and actions in the *Victorian sexually transmissible infections action plan 2018–2020*. It outlines the priority actions implemented to date and includes new and refocused priority actions needed to reduce the transmission and impact of sexually transmissible infections (STI) in Victoria.

This plan aligns with the *Fourth national sexually transmissible infections strategy 2018–2022*, which provides a framework for a high-quality and coordinated national response. The plan also aligns with and supports the *Victorian public health and wellbeing plan 2019–2023* and the *Victorian cancer plan 2020–2024*.

The STI plan was developed in consultation with clinicians, advocates, researchers and the broader sexual health, reproductive health and viral hepatitis sectors. It reflects the Victorian Government's commitment to working together to achieve our shared vision that Victorians achieve optimal sexual health and wellbeing.

Figure 1 shows where this plan fits within the Victorian sexual and reproductive health and viral hepatitis strategy.

The STI plan is supported by a strategy companion document made up of an overview (which frames our approach and details our guiding principles, priority populations and settings) and a system enabler plan.

The system enabler plan acknowledges the enablers that make a significant contribution to outcomes across Victoria's sexual and reproductive health and viral hepatitis response, specifically:

- reducing stigma, racism and discrimination
- strengthening workforce capacity
- fostering partnerships and collaboration
- strengthening and supporting data and research.

This approach aims to strengthen shared priority actions across the sexual and reproductive health system to address common system challenges faced by Victorians in having their sexual and reproductive health and care needs understood and met.

This will involve establishing and deepening partnerships outside the sexual and reproductive health sector, such as with organisations in the mental health, housing, alcohol and other drug, and refugee health sectors.

These partnerships will help us develop pathways and programs tailored to our priority populations.

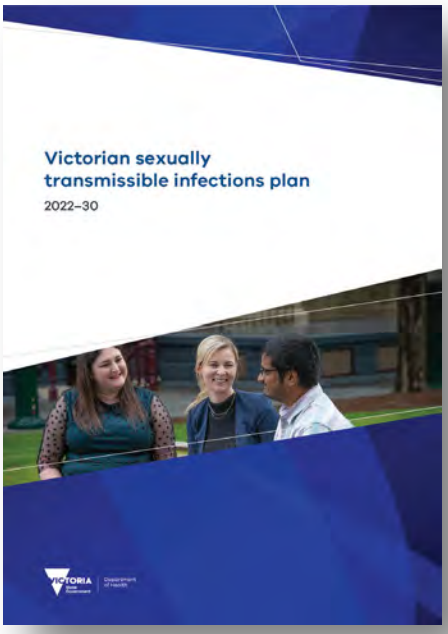
Our models of care must respond to intersectionality, diversity, increasing complexity, co-occurring needs and stigma, racism and discrimination as experienced by our priority populations.

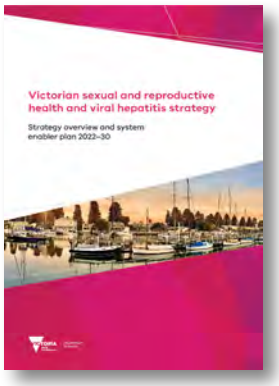
Aboriginal Victorians are a priority population of the *Victorian sexual and reproductive health and viral hepatitis strategy 2022–30*. Recognising the unique needs of Aboriginal Victorians, the *Victorian Aboriginal sexual and reproductive health plan 2022–30* outlines priority actions needed to improve Aboriginal Victorians' wellbeing through reducing the transmission and impact of blood borne viruses (BBV) and STI and improving sexual and reproductive health outcomes.

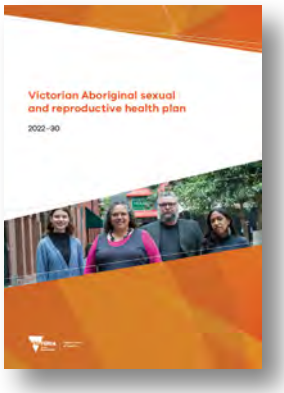
The Victorian Government will undertake a mid-point review in 2025–26 to assess progress against achieving the 2030 targets. The mid-cycle progress report will be used to refresh and refocus priority actions and activities outlined in this plan and aligned plans under the *Victorian sexual and reproductive health and viral hepatitis strategy 2022–30*.

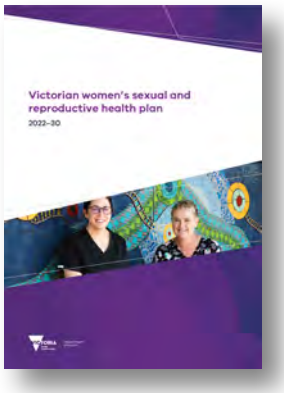
Figure 1: Components of the *Victorian sexual and reproductive health and viral hepatitis strategy*

Victorian sexual and reproductive health and viral hepatitis strategy 2022-30









The indicators and monitoring framework currently in development will form the basis of understanding the impact of the strategy and each plan.

"Innovations in STI testing, treatment and care will emerge over the next decade, resulting in enhanced sexual health outcomes for all Victorians. Cross-sector collaborations including health, education, community and government sectors will ensure we are building the capacity of the system in its broadest sense to create the conditions for both Melbourne based and regional Victorians to achieve the best possible sexual health outcomes, regardless of where they live, work and play."

Professor Jane Tomnay,
Director, Centre for Excellence
in Rural Sexual Health,
The University of Melbourne

Introduction

The Victorian Government's vision is for Victorians to achieve optimal sexual health and wellbeing. Central to this is working together to support Victorians to reduce the transmission and impact of STI through mobilising prevention, testing and treatment efforts.

The *Victorian sexually transmissible infections plan 2022–30* sets out the government's commitment to:

- eliminate congenital syphilis
- sustain human papillomavirus (HPV) adolescent vaccination coverage
- reduce the prevalence and impact of STI in the Victorian population.

Our goals are bold and ambitious and will require concerted system capacity building and a refocusing of our prevention, testing and treatment efforts. This will require partnering with clinicians, researchers, advocates and community to implement collective actions across the care continuum.

This plan provides the framework to strengthen Victoria's response to STI. It identifies the priority actions required to deliver a more comprehensive, collaborative and contemporary sexual health system in Victoria.

Sexual health encompasses not only prevention of disease but also sexual development and reproductive health across the life course. It also covers issues such as respectful relationships across genders and sexualities, access to services, gender equality and sexual relationships that are free from violence.

It is affected by diverse issues such as infertility, reproductive cancers (which can result from an STI), sexual dysfunction, mental health, physical abilities, acute and chronic illnesses and domestic and sexual violence.

Most STI are preventable, easy to test for and are treatable. But without early diagnosis and appropriate and timely treatment, STI can lead to acute and chronic health consequences. These include pelvic pain and inflammatory disease, infertility, foetal and neonatal death, congenital abnormalities in newborns, neurological disease and the facilitation of HIV transmission.

STI continue to be a major burden of disease in the Victorian population. Victoria has recorded a decade-long trend increase in rates of STI. This is consistent with increasing trends in other Australian jurisdictions and comparable international jurisdictions such as North America and the United Kingdom. These epidemics disproportionately affect particular groups and communities.

STI generate a substantial social and economic burden on the Victorian community. Preliminary research from the Kirby Institute has estimated that in 2019 the annual direct medical costs on the Australian healthcare system attributable to *Neisseria gonorrhoea* was $52 million and $80 million for *Chlamydia trachomatis* (Wiseman & Watts 2021).

These estimates do not include costs of following up sexual partners, emergency presentations in regional and rural areas, infections not specified in hospital admissions, lost productivity or the intangible personal costs.

A focus on the prevention end of the care continuum offers the best opportunity to maximise available resources, improve service access, promote sustained behaviour change and, most importantly, improve sexual health outcomes.

Rising STI rates present new challenges and opportunities for our health system and communities. For example, emerging cases of drug-resistant *Neisseria gonorrhoeae* are a critical national and international public health concern. In response, the government is developing Victoria's first *Victorian antimicrobial resistance (AMR) strategy 2022–32*. This strategy will align with Australia's *National antimicrobial resistance strategy* released in 2020. Our strategy aims to establish a collaborative approach that effectively contains the risk of AMR and mitigates its impacts on the Victorian community.

Another emerging public health priority is the shift in syphilis transmission networks resulting in increased infections in women of reproductive age. As a result, congenital syphilis has re-emerged in Victoria, with cases increasing since 2017.

AMR and congenital syphilis are two examples of changing disease patterns that bring challenges for individuals and the health system, requiring strengthened public health responses. Also, recognising the sexual transmission of diseases not typically associated with sexual exposure, such as hepatitis A and B and shigellosis, presents other issues that need monitoring and response.

Understanding the underlying drivers of STI transmission can also help explain current epidemiological trends, predict future trends and inform policy and program actions needed to target these causes.

In 2019 the Victorian Government undertook the Review of Victorian Sexual Health and Service Needs (Department of Health and Human Services 2019a). The review highlighted the following drivers of transmission that have informed the priority actions in this plan:

- **Individual behaviour** is the main driver of the risk of acquiring, transmitting or not treating STI or BBV such as HIV or viral hepatitis. This is influenced by the interaction between factors such as mental health and wellbeing, experiences of stigma, racism, discrimination or shame, health literacy, access to primary prevention and information.
- **Peer norms and attitudes** can influence individual behaviour but also affects risk due to the behaviour of others in people's social and sexual networks (Amirkhanian 2014; Buhi & Goodson 2007; Peterson et al. 2008; Smith et al. 2004).
- **Availability and accessibility of quality health services** determine whether people use services to prevent, test or treat STI.
- **Intersecting social and cultural factors** such as where people are born, live, grow, work and age also drive transmission rates. Other factors include education, employment, income, housing, religion, culture, intersectionality and diversity.

This plan responds to the findings of the review and identifies actions required to achieve reductions in STI, improve greater access to services and address disparity of access between population groups and across geographical areas.

Most sexual health care is optimally delivered in primary care settings as part of routine care.

STI prevention, screening, testing, immunisation, diagnosis, treatment, management, monitoring and care can all be delivered at the local level, with supportive referral pathways to specialist services when necessary.

A sexual health system more strongly anchored within primary care will better align with current and future needs and better support a system-strengthening approach to STI prevention, testing, treatment and care.

Pictured: Emily Mackie and Dr Tash McLellan, Gateway Health Wodonga

Local Public Health Units (LPHUs) provide the capacity for a stronger, more responsive public health system delivered in partnership with local communities and services. The local place-based role and function can support efforts to strengthen the Victorian sexual health service system. This will enable a more responsive and coherent public health system response to the priorities identified in this plan.

Vital to our efforts to improve the Victorian sexual health system is recognising and responding to intersectionality and diversity. This plan outlines the actions that foster culturally safe, person-centred care that is targeted to locations and populations of highest need. This will ultimately deliver comprehensive, coordinated care when and where people need it.

This will inevitably challenge us also to think outside the 'health' system and deliver services and programs in settings where priority populations live, learn, work and socialise. We have good examples of how prevention and health care, including sexual health care, has been made more accessible to secondary school students.

The first is the Victorian Doctors in Secondary Schools program. This program provides access to GPs for students at 100 secondary schools in disadvantaged areas. The second is the Secondary School Nursing Program. That program focuses on health promotion and primary prevention to improve student health, wellbeing and learning outcomes in 198 targeted schools.

Strengthened partnerships and collaborations across disciplines in priority settings are needed to provide place-based approaches to STI prevention, testing, treatment and care.

This approach, as highlighted in the review and in consultation advice, will enable our service system to respond and adapt to new and emerging evidence and best practice health care. This will drive better access, quality and coordination of services, plus sustainability over time. Working alongside and in partnership with priority populations to design and implement actions is also an essential principle for improving sexual health and wellbeing for sexually active Victorians.

While there are significant challenges posed by population-level control of STI, it is also important to stay focused on what works.

This includes continuing investment in prevention and early intervention and building on our proven successes. The adolescent HPV vaccination program is one such example. Implemented in Australia since 2007, the program has seen us almost halve the number of young Victorian women (under 18 years) with high-grade cervical abnormalities. It has also substantially reduced the burden of genital warts.

Victoria continues to exceed national benchmarks for HPV vaccination coverage of females and males (Department of Health and Human Services 2020). Because of a long lead time from HPV infection to developing cancer, the true impact of vaccination against HPV, including various cancer outcomes, will become more visible with time (National Centre for Immunisation Research and Surveillance 2021). Victoria is, however, on track to become one of the first jurisdictions in Australia and internationally to eliminate cervical cancer as a public health problem by 2030 (Cancer Council Victoria 2020). This is largely due to the combination of the effective HPV vaccination and cervical screening programs.

Seeking health care early and treatment, when necessary, are critical to controlling disease transmission and decreasing the period of infection. Investing in early intervention and prevention services results in cost savings to the health system, together with decreased broader societal costs associated with delayed disease diagnoses, potential greater complexity or inability of treatment or interventions and significantly poorer health outcomes. The risks and effects of STI can be greatly reduced with appropriate early detection and diagnosis, engagement in care, appropriate treatment and ongoing management (in some instances).

Normalising a positive and healthy sex life is key to ensuring Victorians achieve optimal sexual health and wellbeing. Central to this is reducing the impact that shame, stigma, racism and discrimination have on sexual choices and behaviours.

Data collected in 2020 by the Centre for Social Research in Health shows that 44 per cent of Victorians would behave negatively towards other people because of their STI status. This was less than the 61 per cent who reported any negative behaviour towards people with an STI in 2017 (Broady et al. 2020). It still, however, continues to be higher than for HIV, hepatitis B and hepatitis C. By normalising sexual health, we will reduce STI-related stigma and discrimination, which we know affects how people access services and care.

The changing disease epidemiology, science, technology and practice in the sexual health sector means that proactively addressing the sexual health needs of individuals has never been more important for better overall health and wellbeing.

There are exciting opportunities to innovate in our public health response to STI and to improve sexual health and wellbeing. These include novel laboratory testing such as whole genome sequencing, which will provide new ways to understand transmission networks and respond to disease outbreaks.

Also, leveraging technological innovations introduced during the pandemic such as telehealth, online and point-of-care testing and e-prescriptions will all form part of the next suite of solutions to reduce the impact and burden of STI on Victorians.

This plan provides clear direction on responding to contemporary drivers to improve sexual health and wellbeing for Victorians. These actions focus on:

- improving access to prevention tools
- increasing testing
- engagement in treatment and care (where appropriate).

> "Increased uptake of telehealth in response to COVID 19 has positive implications for rural Victorians and provides policy opportunities for the future. Telehealth consultations have provided increased access to high quality sexual health care for rural residents, thus creating a service system that is more equitable for all Victorians."

Professor Jane Tomnay and the CERSH team

Pictured: Centre for Excellence in Rural Sexual Health (CERSH) team: Sourav Jain, Ashleigh Colquhoun and Anne-Marie Kelly

Coronavirus (COVID-19) recovery and care

STI prevention, testing and treatment services were defined as essential services and therefore continued during the 2020–2021 Victorian COVID-19 pandemic lockdown restrictions.

The disruption caused by COVID-19 in Victoria and the associated restrictions have created service system capacity constraints. The leadership, resilience and fortitude of the sexual health sector and the reproductive health and viral hepatitis sectors more broadly has ensured people could access the care needed during this exceptionally disruptive time.

The extent to which COVID-19 restrictions affected access to services is not yet fully understood. But Victorians did experience interruptions to their usual care and how they engaged with health care during restrictions. Sexual health services reported decreases in the number of people without symptoms seeking STI testing (ASHM 2020; Chow et al. 2021). People may have also deferred vaccination or sexual health treatment and care. We also observed variations in sexual behaviours during pandemic restrictions, with changes to and decreases in sexual acts, the number of partners, use of pre-exposure prophylaxis (PrEP) for HIV prevention and condoms (Combe et al. 2021; Hammoud et al. 2020; 2021).

Interruption and deferral of sexual health care has major public health implications for individuals and the community, particularly because many STI are asymptomatic. We are considering this across all prevention, testing, treatment, care and support programs.

COVID-19 has also highlighted the need for applying an equity lens on recovery efforts. Victorian agencies have highlighted the disengagement from care and hardship resulting from financial impacts caused by restrictions. These may have resulted in increases in a range of health and access issues for priorities populations. These include Aboriginal communities, culturally diverse communities, LGBTIQ+ people, people living with HIV and viral hepatitis, sex workers and people who use drugs.

The COVID-19 pandemic was also a catalyst for change. It accelerated the design and implementation of new and innovative models of service delivery and care. Commonwealth-funded telehealth programs helped Victorians to access health care during the pandemic, especially in regional and rural areas, noting that not all sexual health care is suitable for virtual appointments.

Flexible models of shared care, increased referral pathways and the uptake of e-prescriptions have also proven to be acceptable and effective for sexual health treatment, management and care. However, telehealth or online support is not right for everyone.

We will be in a sustained pandemic environment for some time. We will continually need to adapt our services, workforce models and messaging to ensure people are accessing the care they need.

There is an opportunity to leverage health innovations that occurred as a result of the pandemic such as telehealth and e-prescribing. Encouraging patients who have deferred or interrupted their sexual health care to re-engage with treatment and screening services is a priority. Community-controlled, community health and primary care settings are well placed to address delays in testing, treatment and care.

In response to our learnings from COVID-19, we will:

Re-engage people in testing, treatment and care

Build on understanding prevention, risk recognition, risk reduction, testing and contact tracing

Build on new and innovative models of care

STI in Victoria

Rates of STI cases in Victoria continue to rise rapidly. In 2019 we saw the highest number of notified cases since records began in 1991.

Between 2016 and 2019, notifications for chlamydia, gonorrhoea and infectious syphilis combined rose by 23 per cent, followed by a reduction for 2020–21 of 7 per cent[1].

A summary of Victorian STI notification surveillance data for 2016 to 2021 is provided here and in the appendix.

Chlamydia (2016-2021)

137,587
notified cases.

15%
increase in notified cases from 2016-2019.

13%
decrease in notified cases from 2020-2021.

51%
of notified cases were males.

49%
of notified cases were females.

Most cases were aged
20–29 years

Gonorrhoea (2016-2021)

48%
increase in notified cases from 2016-2019.

31%
decrease in notified cases in 2020.

24%
increase in notified cases from 2020-2021 (slower increasing trend).

Most cases were aged
20–39 years
(median age 30).

79%
of notified cases were males.

21%
of notified cases were females.

32%
increase in notification rates of females.

1 The decline in disease notifications seen in 2020 and 2021 should be interpreted with caution. They are likely to under-represent true disease incidence. Disease reductions are likely to be strongly influenced by the ongoing COVID-19 pandemic, resulting in changes in sexual behaviours, health care access, health seeking and testing practices and interstate and international travel restrictions.

Syphilis[2] (2016-2021)

40%
increase in total syphilis notifications from 2016-2019.

1,674
notified cases in 2019 (notification peak).

1,451
notified cases in 2020.

1,519
notified cases in 2021.

Infectious syphilis (less than two years duration)

Notification rates are now almost
5 times
higher than 10 years ago.

48%
increase in notified cases from 2016-2019.

9%
decrease in notified cases in 2021 compared to 2019.

Most cases were aged
20-39 years
(median age is 34).

Almost
doubling
of infection rate in females in 2021 compared to 2016.

Cases diagnosed in pregnancy

11 times
higher in 2019 compared to 2016.

17%
decrease from 2020 to 2021.

Late syphilis (two years or more or unknown duration)

4,557
notified cases.

78%
of notified cases were males.

21%
of notified cases were females.

Cases diagnosed in pregnancy

>5.5 times
higher in 2019 compared to 2016.

10%
decrease in 2021 compared with 2020.

Congenital syphilis

12
notified cases since 2017.

4
foetal deaths.

2 Syphilis surveillance definitions are available from the **department's website** <www.health.vic.gov.au/infectious-diseases/notifiable-infectious-diseases-conditions-and-micro-organisms>.

Victorian STI plan

Vision: Victorians are supported to achieve optimal sexual health and wellbeing and to reduce the transmission and impact of STI.

Goals

Systems support individuals and communities to enjoy positive sexual health and wellbeing.

Victorians are supported to reduce their risk of acquiring an STI.

Victorians with an STI know their status.

Victorians with an STI have access to best practice evidence-based treatment and care.

The morbidity and mortality associated with STI among Victorians is minimised.

Stigma, racism and discrimination are not a barrier to STI prevention, testing or treatment and care.

Targets for 2030

Eliminate congenital syphilis[3]

Achieve and maintain HPV adolescent vaccination coverage of 80 per cent.

Increase STI testing coverage in priority populations (compared with 2019).

Reduce the prevalence of chlamydia, gonorrhoea and infectious syphilis (compared with 2019).

Reduce the reported experiences of stigma, racism and discrimination for people living with or affected by STI in health and social support settings to less than 10 per cent.

3 No new cases of congenital syphilis notified for two consecutive years (as defined by the Australian Series of National Guidelines).

Focus areas

- Increase prevention
- Increase testing
- Increase treatment and care
- System enablers:
  - Reduce stigma, racism and discrimination
  - Strengthen workforce capacity
  - Foster partnerships and collaboration
  - Strengthen and support data and research

Priority populations

Priority populations are based on the social and cultural determinants of health, behavioural risk factors, medical/biological factors or conditions, epidemiological burden of disease, health service access and geographical factors.

People not eligible for Medicare may have increased risk for BBV, STI and reproductive health issues. They may be a part of one or more priority population groups.

The priority populations for this plan are people who are sexually active, with a particular focus on:

- young people (15–29 years)
- Aboriginal people
- gay, bisxual and other men who have sex with men
- women of reproductive age
- culturally diverse communities
- trans and gender diverse people
- sex workers
- people living with HIV
- people in custodial settings.

Mid-point review

The Victorian Government will undertake a mid-point review in 2025–26 to assess progress against achieving the targets. The findings of the mid-cycle progress report will be used to refresh and refocus priority actions and activities outlined in this plan and aligned plans under the *Victorian sexual and reproductive health and viral hepatitis strategy 2022–30*.

Prevent

At the population-health level, prevention is critical for controlling STI outbreaks and epidemics.

Sexual health promotion needs to be located in a social and cultural determinants of health framework to address and respond to various factors including:

- diversity and intersectionality
- race and culture
- gender and sexual diversity
- education and employment
- disability
- age.

Sexual and reproductive health are intrinsically linked. Good sexual and reproductive health involves gender equality, respect, safety and freedom from stigma, racism, discrimination, coercion and violence. Most importantly, factors producing poor sexual and reproductive health outcomes often share the same common forces such as stigma, marginalisation and heightened risk environments creating vulnerability.

Building sexual and reproductive health literacy through prevention and education programs is central to increasing people's awareness of risk and to increase knowledge and awareness of STI and its impacts.

The COVID-19 pandemic presents an opportunity to leverage increased community knowledge about asymptomatic infection and ways to prevent disease transmission. Delivering comprehensive and inclusive programs in priority settings, using a variety of approaches and mediums, will improve sexual health knowledge and prevention and the effectiveness of education programs.

This plan supports developing tailored awareness and prevention campaigns in partnership with priority populations. Broadening the focus of disease-specific campaigns, where relevant and possible, will promote holistic views of sexual health and improve sexual health outcomes. These should include messaging about positive sexual health and diversity, respectful relationships, consent, safer sex and harm reduction.

Sexual health and safety at music festivals

For many young people, attending music festivals is an important part of their social and cultural development. It offers opportunities to express themselves, explore new experiences and connect with others. Research from the University of New South Wales, however, shows that sexual violence is a significant issue at Australian music festivals, with perpetrators commonly drug- or alcohol-affected (Fileborn et al. 2019). Study participants who had experienced or were involved in responding to sexual violence at a festival reported negative and ongoing health and wellbeing impacts. Most didn't report the incident to police, security or festival staff. Also, in 2019, the Victorian Ecstasy and Drug Related Reporting System showed that 34 per cent of Victorians reported that drugs or alcohol impaired their ability to negotiate their wishes during sexual intercourse over a six-month period (Ciupka & Dietze 2020).

Music festivals also offer a unique environment to shape young people's attitudes, beliefs and behaviours. They can foster respectful and safe health and wellbeing for self and others. The Pennington Institute has developed a Sexual Health and Safety at Music Festivals toolkit to support event organisers to implement strategies to make festivals safer for attendees. It provides a framework to assist organisers to incorporate sexual health and safety considerations when planning and running their festivals. Developed in consultation with an advisory group, the toolkit complements other harm reduction measures to minimise health and safety risks to patrons and deliver safer music festivals overall.

To reduce infection rates, STI prevention and education programs must be coupled with easy access to information and contemporary prevention tools including condoms (and other barrier methods), other contraception options, HPV vaccination and pre-exposure prophylaxis (or PrEP) and Treatment as Prevention for HIV prevention.

Treatment as prevention reduces the viral load in people living with HIV to undetectable levels (undetectable equals untransmittable, U=U), eliminating the risk of transmitting the virus.

Also, access to regular testing to diagnose and treat infections and local access to non-judgemental and inclusive health services is essential.

Behavioural surveillance data indicates that condom use among young people is variable and decreasing over time. More than half (62.9 per cent) of the Victorian sexually active young people (aged 14–18 years) who completed the 2018 National Survey of Secondary Students and Sexual Health used a condom often or always over the preceding year. It showed that 76.3 per cent used a condom during their first sexual experience but fewer used a condom (58.3 per cent) and/or oral contraception (44.1 per cent) during their last sexual experience (Kauer & Fisher 2021).

> My continued driver for working in this area is striving to reduce stigma and discrimination related to sexual health and blood borne viruses within the community, and promote health education to strengthen the Victorian response of timely screening, diagnoses and treatment to STI.

Rochelle Hamilton, Sexual & Reproductive Clinical Nurse Consultant and Nurse Manager of the BRaSH Clinic, Barwon Health

Pictured: Barwon Health Reproductive and Sexual Health team: Dr Amanda Wade, Peter Gordon, Rochelle Hamilton, Sarah Huffam, Prof Eugene Athan OAM, Dr Heidi Zoumboulakis

For gay and bisexual men who completed the Gay Community Periodic Survey: Melbourne 2021, 69 per cent reported not using a condom during any anal sex with a casual partner. This is in the context of increasing use of biomedical HIV prevention methods such as PrEP, U=U and increasing STI testing rates (Chan et al. 2021). Regular STI testing requirements for people accessing PrEP offers an opportunity for sexual health prevention education, including the importance of condom use, to reduce the risk of acquiring other STI.

Victoria is proud of its HPV vaccination program. HPV vaccination coverage in the Victorian cohort who turned 17 years in 2021, with completed two-dose courses, was

89.4%

(Services Australia 2022).

The uptake of HPV vaccines during the period of eligibility is not equitable for all Victorians. Those at risk of not being vaccinated include (Department of Health and Human Services 2020):

- adolescents in out-of-home care
- medically at-risk people
- Aboriginal Victorians
- refugees and adolescents seeking asylum.

Maintaining and increasing adolescent coverage, with a focus on timely vaccination of priority populations and vulnerable groups, will provide protection to young people at greater risk of infection and increase herd immunity.

There is still significant work to do, particularly for priority populations such as young people and Aboriginal Victorians, who continue to be disproportionately affected by STI. Health, education and community settings all offer opportunities to deliver prevention education and support programs.

Addressing barriers to accessing sexual and reproductive health services and vaccination programs, supported by community and peer-led initiatives, will help us to strengthen our approaches to better reach and respond to the sexual health needs of priority populations. They are also the foundational system pillars upon which to strengthen our responses to priority and emerging STI.

Key achievements in prevention (2018–20)

Sexual Health Out and About (SHOUT)

For rural young people, issues of privacy, lack of transport, cost and perceived stigma are some of the barriers that prevent them from accessing condoms, STI testing and treatment. The Centre for Excellence in Rural Sexual Health's SHOUT program promotes positive sexual health messages, improving access to condoms and encouraging regular STI testing. The condom vending machine project is an innovative example of working in partnership with local government to increase affordable and anonymous access to condoms in public locations across regional Victoria. At the end of 2020, the program had provided 85 new condom vending machines across regional Victoria. These allowed private, affordable access to condoms for more than 57,000 rural young people. A series of SHOUT posters, designed by young people, promote local availability of condoms and STI testing and treatment services.

In 2019 the SHOUT project expanded in a joint venture with Youth Affairs Council Victoria. The SHOUT Working Party brings together more than 30 rural youth, community and health organisations and services to improve sexual health outcomes for rural young people. They focus on improving access to sexual and reproductive health information, service provision and strengthening workforce capacity. In partnership with 1800 My Options, they launched the 'Be Proud of Your Choices' campaign in July 2020, amid pandemic restrictions. The content for this campaign was developed in consultation with groups of rural young people, facilitated by young people. This campaign was commissioned to support the 2020 STI Testing Week campaign, with social media advertising targeting regional and rural young people.

Sexuality, relationship and consent education

Sexuality and consent education are part of the Victorian school curriculum, mandated for government and Catholic schools in Victoria. Sexuality, relationship and consent education, aligned to young people's ages and stages, helps young people make healthy, positive and informed choices about consensual relationships, engaging in safer sexual practices and negotiating sexual experiences positively and responsibly. Access to timely, contemporary and inclusive education that addresses gender and sexual diversity and behaviours is sought after by young people (Kauer & Fisher 2021).

Sexual Health Victoria (formerly Family Planning Victoria) has delivered sexuality, relationship and consent education since the early 1970s. They provide workshops and mentoring for teachers and community organisations and education sessions and resources for parents, carers and students. They also deliver sexual health literacy and relationships education to young people in community settings and for people with cognitive disability. During 2018–2020, Sexual Health Victoria provided sexuality and relationships education to more than 70,000 young people (mainly primary and secondary school students in education settings) and the adults that work with and care for them. In response to the pandemic, all education and training courses and resources were translated into online options for remote delivery. Embracing remote training has also expanded the reach of their education programs. This has enabled more opportunities for teachers and workers in regional and rural areas to access information sessions.

Promoting awareness and access to vaccination

Thorne Harbour Health and Harm Reduction Victoria delivered innovative public health awareness campaigns to promote the time-limited availability of four free vaccines for men who have sex with men (hepatitis A and B, HPV and meningococcal C) and a free hepatitis A vaccine for people who use or inject drugs and rough sleepers. Outreach vaccination programs were delivered to sex-on-premises venues to increase vaccine access and uptake.

STI Testing Week

STI Testing Week is an annual campaign to remind all sexually active Victorians to look after their sexual health and wellbeing through regular testing. Since 2017, targeted communication campaigns have been delivered for young people, culturally diverse communities, Aboriginal Victorians and the LGBTIQ+ community. These were delivered in partnership with the Centre for Excellence in Rural Sexual Health, Multicultural Health and Support Service, Victorian Aboriginal Community Controlled Health Organisation and Thorne Harbour Health respectively.

Since 2019, STI Testing Week has also promoted syphilis awareness for people planning or starting a family and re-engagement with STI prevention, testing and treatment services in a COVID-19 environment.

Victorians are supported to reduce their risk of acquiring an STI

By 2030:

Victorians know how to prevent STI infections and reinfections and are supported to do so.

Victorians are supported to use safe sexual practices and harm reduction strategies to reduce infection risk.

Vaccination coverage of HPV among Victorian adolescents is as high as possible.

There is an overall and ongoing reduction in new STI cases.

Pictured: Charlotte Thompson, Department of Health

Priority actions – prevention

Increase sexual and reproductive health knowledge, literacy and awareness of prevention behaviours, with a focus on priority populations

- Develop and implement co-designed and targeted prevention and education programs to normalise sexual and reproductive health and STI
- Use digital platforms and tools for targeted prevention and education programs where appropriate
- Support and strengthen community and peer-led initiatives to improve understanding of STI prevention
- Support age-appropriate, contemporary and inclusive sexual, menstrual and reproductive health education in schools, aligned to the Victorian curriculum
- Increase access to comprehensive and inclusive sexuality, relationship and consent education outside the school setting for all young people
- Foster capacity building and collaborations in priority settings to support community engagement and mobilisation
- Build the system response to COVID-19 and undertake community engagement to promote access to prevention tools for people at risk of STI

Increase the uptake of harm reduction tools for priority populations

- Promote increased access to and use of condoms and other barrier methods to decrease the risk of acquiring an STI

Increase vaccination programs for priority populations

- Deliver and monitor adolescent HPV vaccinations under the National Immunisation Program, with attention to timely vaccination of priority groups of adolescents and those who miss vaccinations

Strengthen systems to respond and manage priority and emerging STI

- Monitor the incidence and impact of emerging STI and identify response options as needed
- Develop a public health framework and guidance to manage transmission risks associated with STI
- Strengthen surveillance and public health action for gonorrhoea and other STI in response to increases in AMR threat, aligned with national and Victorian AMR strategies
- Coordinate and strengthen public health actions to reduce rates of syphilis and eliminate congenital syphilis
- Deliver targeted, culturally appropriate communications, community mobilisation and vaccination programs to priority populations, as required

Test

Regular testing, early detection and treatment decreases STI transmission.

With STI often being asymptomatic, particularly in women, and reinfection common, identifying, testing and treating sexual partners further reduces ongoing transmissions and minimises disease complications.

To meet our targets, we must improve efforts to regularly test sexually active people and their sexual partners. Reduced rates of STI testing observed during pandemic restrictions in 2020 and 2021 means that undiagnosed disease remains prevalent in the community (ASHM 2020; Chow et al. 2021).

Primary care, including community-controlled and -led services, are the cornerstone in Victoria's STI response. More Victorians are now diagnosed with an STI in primary care settings than at specialist services or hospitals. Improving the capability and capacity of primary care services to embed STI testing in routine care will increase access to testing and diagnosis rates. Working in collaboration with Primary Health Networks, community health and Aboriginal Community Controlled Organisations will be key to achieving our goal.

There is also a need to increase service and workforce capacity to diagnose STI earlier. Helping health professionals to routinely offer STI testing and identify people with increased infection risk is important to address diversifying disease epidemics and re-engagement in care. Opportunities to ensure STI testing is embedded as a part of holistic health care include:

- routine antenatal and cervical screening
- presenting for reproductive choices
- opt-out informed-consent testing linked to other routine blood tests
- bundled care arrangements.

It is also important that there are strong links between comprehensive STI and HIV testing. National and clinical guidelines recommend symptomatic testing for individuals and asymptomatic screening based on risk or request. This will continue to guide improved testing efforts.

Tailored and creative approaches must recognise and overcome known barriers to testing such as cost, confidentiality, stigma, racism and discrimination. Outreach models and nurse- and peer-led approaches support further expansion of primary care service delivery and improve and increase reach and engagement with priority populations.

Data from the Kirby Institute on the Australian gonorrhoea diagnosis and care cascade for gay and bisexual men shows that the greatest cascade gap was at the diagnosis stage, with 75 per cent of infections undiagnosed and 40 per cent of those treated not retested (Kirby Institute 2018). Community engagement and co-design of services in consultation with priority populations will ensure we deliver services and reach priority populations that are unaware of their STI status.

A review of congenital syphilis cases in Victoria has identified (Department of Health and Human Services 2019b):

- lack of awareness of syphilis and risk
- lack of antenatal care due to complex social issues
- delays in treatment
- cases lost to follow-up and incomplete notifications
- lack of referral pathways and management of pregnant women with syphilis.

At the national level, contributing risk factors reported in women diagnosed with infectious syphilis giving birth to a baby with congenital syphilis have included homelessness, illicit drug use, mental illness, incarceration during pregnancy, partners infected during pregnancy and a previous syphilis infection.

This shows a need to also collaborate across delivery systems, working in partnership with social support services such as alcohol and other drug and mental health services to support coordinated testing and care for people with complex and co-occurring health needs.

Alongside workforce strengthening and partnerships, the COVID-19 response offers opportunities to capitalise on increased testing habits through innovative and adaptive models of STI testing. This includes point-of-care testing, e-pathology clinics, peer-led approaches, pop-up testing where priority populations already engage in and self-testing. Telehealth has further removed distance and cost barriers to testing, particularly in regional areas.

We need a better understanding of Victorians who are not accessing testing. This will help us deliver more tailored testing programs. Greater use of online platforms and adopting technological diagnostic advances will support convenient, accessible testing and earlier diagnosis. These must be supported by community mobilisation activities, health promotion and referral pathways to care and support. Advocacy to the Commonwealth will also be required for Medicare Benefits Schedule reform to increase the availability of testing options and nurse- and peer-led testing and models of care.

> In the next few years we are likely to confront even higher rates of STI so it will be critical that we optimise our most powerful tool for controlling STI; ensuring access to testing and treatment for individuals at risk of STI. We are excited about the interventions we are implementing to optimise the effect of health care on STI control.

Professor Christopher Fairley AO, Director, Melbourne Sexual Health Centre

Pictured: Melbourne Sexual Health Centre team:
Adjunct Prof Marcus Chen, Ria Fortune, and Prof Christopher Fairley

Key achievements in testing (2018–20)

Building capacity through service delivery innovations

The Melbourne Sexual Health Centre has led the way in Victoria with innovations in STI testing and service delivery. As part of Alfred Health, the centre has continued to respond to increasing STI rates and service demand through:

- changes in technology (electronic medical records, computer-assisted history taking, SMS for negative results)
- workforce training (medical and nurse practitioner development program)
- patient management processes (express testing clinics for asymptomatic gay and bisexual men, self-collection of samples, triage of walk-in patients and referral of asymptomatic patients).

Websites 'Check your risk' (for asymptomatic people), 'iSpySTI' (for people who may have an STI) and 'Let Them Know' (partner notification) have bolstered these initiatives.

The GP advice line continues to provide secondary consultations for health professionals looking for more support and clinical guidance.

Since 2020, to further increase primary care capacity for STI testing and treatment, the centre has established six general practice sexual health clinics, three in metropolitan Melbourne and three in regional Victoria. An evaluation of the initial three pilot clinics demonstrated effectiveness in:

- increasing general practitioner and nurse confidence, knowledge and skills to provide sexual health care
- increases in STI testing
- broadening diversity of priority populations accessing the clinic's services (Ong et al. 2022).

Promoting sexual health awareness, testing and treatment in primary care has been further supported through the new StaySTIfree website and communication campaign.

The Victorian syphilis and gonorrhoea notification forms have been amended to collect enhanced surveillance data fields including risk factor and treatment history. This helps ensure our surveillance system responds better to emerging public health issues. It also deepens our understanding of STI epidemiology in Victoria.

Victorians with an STI know their status

By 2030:

Victorians with an STI know their status, are diagnosed early and are supported to do so.

Regular testing for STI is normalised and offered to Victorians across local primary and community health settings, including in antenatal care.

Testing services for STI are targeted to meet the needs of priority populations.

Victorians at greater risk of an STI understand the need to be tested.

Priority actions – testing

Increase access to STI testing for priority populations

- Promote STI testing and patient management in routine primary care with specialist advise when required
- Increase STI testing in public hospital emergency and maternity departments and community health services
- Improve delivery of comprehensive sexual and reproductive health care
- Explore opportunities to remove barriers to STI testing for young people and people not eligible for Medicare
- Ensure comprehensive STI and HIV testing is conducted in accordance with national clinical testing guidelines
- Support innovative models of STI testing including digital testing services, point-of-care and home testing, new diagnostic technologies and models of care
- Advocate for Medicare Benefits Schedule reform to support nurse- and peer-led models of care and the use of innovative testing technologies
- Work with Primary Health Networks, local government, social support settings and community organisations to support place-based testing approaches to increase testing of people who are at risk
- Explore 'opt-out' consent-informed models of STI testing in healthcare settings
- Support peer-led testing strategies linked to community mobilisation activities

Increase early detection through evidence-based STI testing and models of care

- Identify and address geographic, economic and other structural and cultural barriers to testing to facilitate access and early diagnosis
- Improve health professionals' identification of people who are at risk, the need and frequency of regular testing and provide testing services for them and their sexual partner(s), including antenatal screening and retesting
- Support an evidence-based review of national clinical STI, pregnancy and perinatal testing and management guidelines to ensure consistency of syphilis screening and management for population groups who are at risk
- Support implementation of legislative reform to remove mandatory STI testing requirements for sex workers, including peer-led health promotion and harm reduction approaches

Treat and care

Increasing access and early linkage to effective and affordable treatment and care reduces time to treatment uptake.

By improving partner notification, sexual partners are better supported to access STI testing and treatment, where necessary, decreasing ongoing disease transmission and reinfections.

Strengthening care referral pathways will help with managing lower complexity patients within primary care, with links to specialist providers where required. Clinical pathways will also improve integrated patient management and care through appropriate STI treatment and enhanced follow-up of sexual partners.

Initiatives to increase retesting in primary care after treatment must be encouraged to improve sexual and reproductive health outcomes and decrease complications of infections. The Australian chlamydia diagnosis and care cascade for young people aged 15 to 29 years shows the greatest gaps in the cascade were in diagnosis and retesting stages, with 72 per cent of infections undiagnosed and 83 per cent of those diagnosed not retested. Both were especially low among men, and overall treatment rates were lower than recommended guidelines (Gray et al. 2020). Enhanced strategies are needed to improve treatment and retesting coverage.

We also need to consider partnerships with services outside the health model of care to develop pathways and programs tailored to meet the sexual health needs of Victorians. In-scope sectors include alcohol and other drug, mental health, housing and youth services. Working in partnership to deliver combined care approaches with peer agencies and social support services will build more flexible and innovative models of care. This will make every pathway adaptable and multipronged. Greater use of nurse practitioners for prescribing will also increase the types of services where we can deliver treatment.

Timely and appropriate evidence-based treatment, in accordance with national clinical guidelines, is essential to decreasing ongoing STI transmission, supporting better antimicrobial stewardship and reducing AMR.

The monitoring of AMR for *Neisseria gonorrhoeae* is a national and global priority for the early detection of drug-resistant gonorrhoea. The current treatment recommendation for most gonorrhoea cases in Australia continues to be dual therapy with ceftriaxone and azithromycin. Levels of decreased susceptibility to ceftriaxone remain low (less than 1 per cent of isolates), and only a small number of isolates that are resistant to ceftriaxone are detected each year. Resistance to azithromycin has seen a downward trend in recent years (Lahra et al. 2021).

As with STI testing, leveraging COVID-19 innovative technology and models of service delivery to increase STI treatment and effective care coordination between primary care and specialists includes:

- e-prescriptions
- models of shared care
- telehealth
- virtual platforms
- online/virtual STI clinics
- outreach.

Capitalising on increased awareness of the benefits of contact tracing during the COVID-19 pandemic has the potential to increase partner notification and management efforts. The introduction of telehealth and e-prescriptions has further removed distance and cost barriers to treatment, particularly in regional areas.

Advocating for the Commonwealth to maintain and increase the use of telehealth and e-prescribing across Victoria for STI is vital.

Using this technology presents new and exciting research and epidemiological capabilities to our disease control landscape. We can use it to monitor AMR in shigella, an emerging STI, and apply whole genome sequencing to investigate transmission networks for gonorrhoea, shigella and potentially syphilis.

Also, addressing and decreasing STI-related stigma and discrimination must continue to be a priority focus because it significantly affects people's willingness and ability to seek sexual health treatment and care. A greater understanding of population groups at greater risk currently not accessing services is needed to deliver further tailored services and programs for priority populations.

Patient-delivered partner therapy (PDPT) for chlamydia control is a method of prescribing or providing antibiotic treatment for both the patient diagnosed with chlamydia and their sexual partner(s). It is an effective partner management opportunity that overcomes barriers when sexual partners are unable/unlikely to access STI testing and treatment services and reduces ongoing transmission (Althaus et al. 2014). Victoria is one of only three Australian jurisdictions that has created the policy environment with clinical guidance to support clinicians to use PDPT (Goller et al. 2020). Uptake of PDPT should be encouraged and promoted.

"The continued funding for Bendigo's regional sexual and reproductive health hub has led to the successful integration of reproductive health care, STI testing and on-the-day treatment for rural Victorians. We continue to optimise care and access for consumers through strengthening the capacity of our primary care staff and enhancing our sexual health nurse-led clinics."

Louise Holland,
Sexual Health Nurse Practitioner, Bendigo Community Health Services

Key achievements in treatment and care (2018–20)

Building the skills and knowledge of the workforce

The Victorian public health response to syphilis has included a strong focus on supporting health professionals to:

- identify people at greater risk of infection
- provide testing for them and their sexual partners
- administer correct and early treatment
- implement care linkage pathways for complex cases and babies of mothers diagnosed with syphilis.

Increasing workforce awareness and strengthening collaboration across sectors for engaging populations at greater risk of infection is a priority. Ongoing professional development in syphilis screening, testing and treatment is available through the Victorian HIV and Hepatitis Integrated Training and Learning program, the Centre for Excellence in Rural Sexual Health and the Australasian Society of HIV, Viral Hepatitis and Sexual Health Medicine.

Local responses to emerging issues – syphilis in Mildura

Sunraysia Community Health Service has played a vital role in increasing local testing, treatment and case management services in response to the increase in number of notified infectious syphilis cases in the Mildura area since 2019. The service has partnered with the Mallee District Aboriginal Service to promote community engagement and awareness of syphilis, particularly among people and populations at greater risk of infection. They continue to support women diagnosed with syphilis during pregnancy, working closely with the Department of Health on follow-up, treatment and partner notification of local syphilis cases. The service has also supported workforce development capacity building of local primary care practices to diagnose, treat and manage syphilis cases.

The Sexual Health and Viral Hepatitis Service at Sunraysia Community Health Service was established in 2018 as a pilot to deliver local sexual and reproductive health services in Mildura. An independent evaluation of the pilot service found that the service is cost-effective, valued by its community and is of a high clinical standard. Service intake data showed strong growth and reach into priority populations. The service is essential for improving rural and regional access to comprehensive sexual and reproductive health services, particularly for priority populations in the Mildura area.

Victorians with an STI will have access to best practice evidence-based treatment and care

By 2030:

Victorians with an STI receive the treatment and care they need.

Victorians can easily access non-stigmatising, non-judgemental and culturally appropriate STI treatment and care in local primary and community health settings.

Appropriate treatment in accordance with clinical guidelines reduces the risks of AMR.

Treatment and care services meet the needs of priority populations through a process of co-design with communities, with effective referral pathways between primary, community and specialist care services.

Sexual partners of people diagnosed with an STI are aware, diagnosed and treated.

Victorians living with or at greater risk of STI are aware of the long-term effects of untreated infections and know how to access appropriate treatment and support.

"This is an exciting time for the STI and BBV Sector as a truely consultative, comprehensive and achievable strategy is launched. It is the community of Victoria and beyond who will be the beneficiaries of such great information, options and treatment. Sexual Health Victoria looks forward to continuing to be a valued partner in this initiative."

Claire Vissenga, Chief Executive Officer, Sexual Health Victoria, 2016-22

Priority actions – treatment and care

Increase access to STI treatment and care for priority populations and their sexual partner(s)

- Build awareness and referral pathways for STI treatment and partner notification for patients and their sexual partner(s)
- Support innovative models for STI treatment and care including models of shared care
- Develop primary care and community health capacity to treat people with an STI, seeking specialist advice when required
- Promote the use of nurse practitioner prescribing to increase treatment access
- Explore opportunities to improve access to STI treatment and patient management for people not eligible for Medicare

Increase timely and appropriate treatment and care of priority populations and sexual partner(s) through evidence-based STI treatment and models of care

- Improve integrated case management through enhanced partner notification, correct treatment including use of patient-delivered partner therapy and retesting as recommended for chlamydia control, supported by localised HealthPathways and referrals
- Identify and implement methods to enhance partner notification for STI in primary care
- Develop early treatment and care linkage pathways between primary care and specialist services for babies of women diagnosed with syphilis
- Review STI treatment information provided on laboratory reports to support correct and timely treatment
- Promote culture and PCR testing and implementation of resistance assays to improve antimicrobial stewardship and ensure STI are effectively treated
- Engage with key stakeholders to further explore the establishment of a Victorian syphilis register

Appendix

Figure 2 shows numbers of Victorian chlamydia and gonorrhoea notifications. Figure 3 shows numbers of Victorian infectious, late and congenital syphilis notifications.

Figure 2: Number of chlamydia and gonorrhoea notifications reported, 2000 to 2021

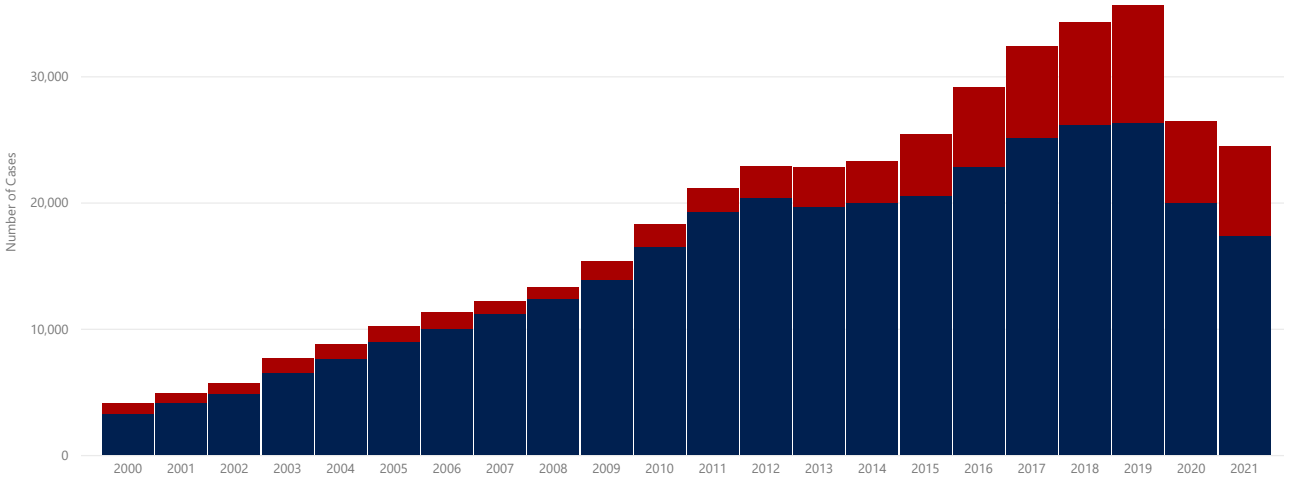
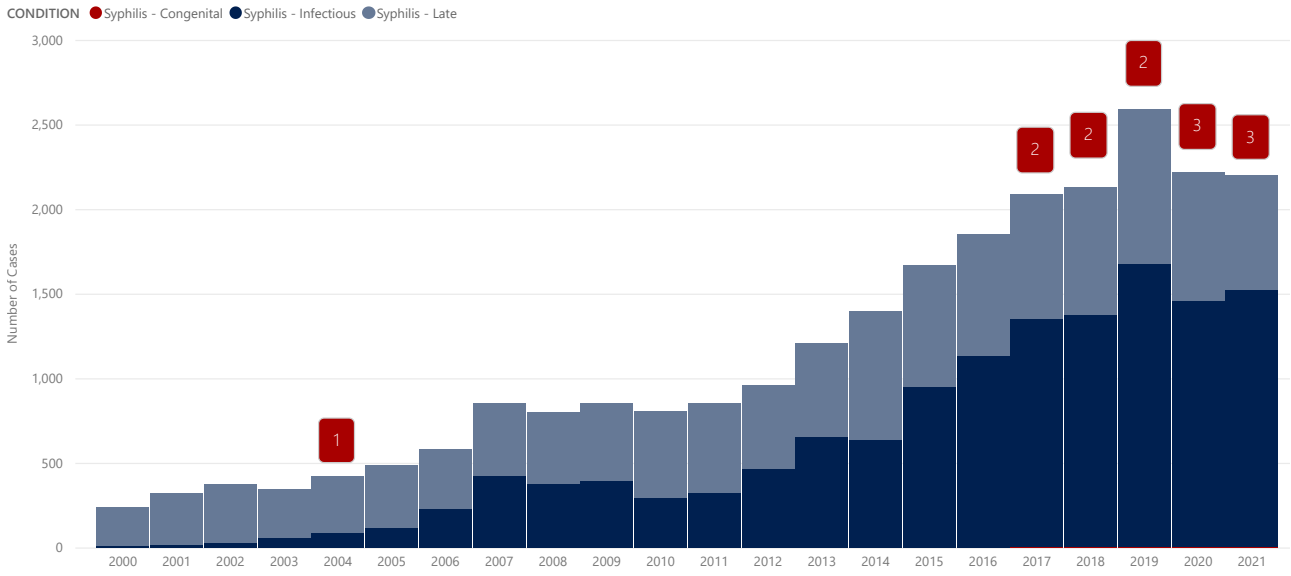


Figure 3: Number of infectious, late and congenital syphilis notifications reported, 2000 to 2021[4]



4 Surveillance reporting definitions of infectious and late syphilis can be found on the department's website <www.health.vic.gov.au/infectious-diseases/notifiable-infectious-diseases-conditions-and-micro-organisms>.

Additional STI disease epidemiology 2016–2021	
Chlamydia	• Infertility is concerning for women of reproductive age (15–49 years) who are diagnosed with chlamydia. From 2016 to 2019, there was an increase of 15 per cent in cases who were female and of reproductive age. From 2020 to 2021, a 14 per cent decrease was observed. • Twenty per cent of total chlamydia cases lived in a rural local government area (LGA). Cases in rural areas decreased by 48 per cent in 2021 compared with 2016. • Enhanced chlamydia data is not routinely collected because chlamydia is a laboratory-only notification.
Gonorrhoea[5]	• Between 2016 and 2021, 44,454 cases were notified in Victoria. • Of the notified male cases, 48 per cent identified as men who have sex with men, 13 per cent identified as men who have sex with women and less than 2 per cent identified as men who have sex with men and women. (Data is not available for 35 per cent of cases). Males continue to experience the higher disease burden. • Men who have sex with men are primarily diagnosed by high–case load clinics (68 per cent)[6]. Women and heterosexual men are mainly diagnosed in low–case load clinics (60 per cent and 73 per cent respectively). • In 2021 the rate of gonorrhoea infections among Aboriginal Victorians was over 2.5 times higher than in the non-Aboriginal population. • Increases in gonorrhoea notification rates among females suggests this disease is increasingly affecting the heterosexual population. • Forty-three per cent of gonorrhoea cases were born in Australia, and 19 per cent were born overseas. Country of birth is unknown for the other 38 per cent. • Overall, between 2016 to 2021, notification rates in rural LGAs increased by 17 per cent and rates in metropolitan LGAs increased by 14 per cent. • Antimicrobial resistance in Neisseria gonorrhoeae is a global concern. Levels of resistance in Victoria are being monitored and remain low and stable (less than 1 per cent of positive cultures return resistance for commonly used antibiotics).

5 Enhanced gonorrhoea surveillance data collection ceased in 2020 during the COVID-19 pandemic.

6 High–case load clinics are Melbourne Sexual Health Centre, Prahran Market Clinic, Northside Clinic, The Centre Clinic and PRONTO!

Additional STI disease epidemiology 2016–2021	
Syphilis	• The syphilis epidemic we are observing in Victoria is diversifying, affecting men who have sex with men in urban areas, women of reproductive age and Aboriginal Victorians. • Similar notification trends are observed in metropolitan and regional Victoria.
Infectious syphilis	• Between 2016 and 2021, 8,501 infectious syphilis cases were notified in Victoria. • Similar to gonorrhoea, males are most affected, with more than 88 per cent of cases notified in males. Of these, 68 per cent identified as men who have sex with men, 15 per cent as men who have sex with women and 3 per cent as men who have sex with men and women. • Between 2016 and 2019, notification trends increased among men who have sex with men (49 per cent), men who have sex with women (61 per cent) and men who have sex with men and women (139 per cent). In 2021, men who have sex with men and men who have sex with women notifications remained similar compared with 2020, whereas men who have sex with men and women decreased by 21 per cent. • Similar to gonorrhoea, cases of infectious syphilis among men who have sex with men are primarily diagnosed by high–case load clinics (63 per cent). Cases among women and heterosexual men are mainly diagnosed in low–case load clinics (59 per cent and 54 per cent respectively). • In 2021 the rate of infectious syphilis among Aboriginal Victorians was 4.5 times higher than in the non-Aboriginal population. In 2021 the rate of infectious syphilis in Aboriginal women was 14 times more than the statewide rate of infectious syphilis in non-Aboriginal women. • Sixty-three per cent of infectious syphilis cases were born in Australia, and 26 per cent were born overseas. Country of birth is unknown for the remainder. The rate of infectious syphilis in rural LGAs is over 2.5 times higher in 2021 than in 2016. • Cases diagnosed in pregnancy have considerable public health implications given the increased risk of congenital syphilis and adverse pregnancy outcomes. Continued active follow-up, timely and appropriate treatment and support of women diagnosed with syphilis during pregnancy remain a priority.
Late syphilis	• In 2021 the rate of late syphilis among Aboriginal Victorians was 4.5 times higher than in the non-Aboriginal population. • A large proportion of cases were within the 20–39-year age range (median age 37 years).
Congenital syphilis	• The incidence of congenital syphilis has been increasing. Before 2017, only two congenital syphilis cases were notified in the preceding 25 years. Congenital syphilis is an entirely preventable public health problem.

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