

NSW Sexually Transmissible Infections Strategy 2016 – 2020







FOREWORD

Sexually transmissible infections (STIs) have significant impacts on the health and wellbeing of individuals, their relationships and communities at large.

In NSW over the last decade, our communities have experienced increases in STI notification rates, particularly for gonorrhoea, syphilis and chlamydia. While some of these numbers are attributed to increases in STI testing, we also know that STIs disproportionately impact on key populations in NSW, namely on young people, Aboriginal people, and gay and other homosexually active men.

Addressing STIs therefore requires a coordinated, systematic approach that targets the needs of priority population groups. The *NSW STI Strategy 2016-2020* sets out our approach towards achieving effective prevention, early detection, and comprehensive treatment and management of STIs in NSW. It articulates the specific and measurable goals we know we can achieve and provides a clear set of actions that ensures our success.

This Strategy continues our strong commitment to sustaining the central role of condoms in the prevention of STIs, while also noting the need to increase comprehensive STI screening for priority populations, as well as improve STI service delivery, to further augment our response. The success of our Strategy is contingent on aligning it with the *NSW HIV Strategy 2016-2020* to ensure better integration of services and improved health outcomes for priority populations.

The *NSW STI Strategy 2016-2020* builds on the great work we have already achieved.

I am continually inspired by the health professionals, community representatives, public health organisations, researchers and countless other stakeholders who work passionately and tirelessly to reduce the impact of STIs and HIV. Our goals can only be achieved if we work together across the sector, including primary care and general practice, to respond to the health impacts presented by STIs.

A handwritten signature in black ink that reads "Jillian Skinner". The signature is written in a cursive, flowing style.

Hon Jillian Skinner MP
Minister for Health

STRATEGY AT A GLANCE

OUR GOALS

To reduce gonorrhoea and syphilis infections and reduce the burden of disease of chlamydia infection

and to

Sustain the low rates of STIs amongst sex workers

Sustain the virtual elimination of congenital syphilis

Maintain high coverage of HPV vaccination

HOW WE WILL SUCCEED



Strengthen primary prevention programs to support a safe sex culture

Sustain the central role of condoms in preventing the transmission of STIs

Increase comprehensive STI screening in priority populations in accordance with risk

Strengthen systems for the integration of STI and HIV screening for priority populations across priority settings, including drug and alcohol treatment services, mental health services and general practice and primary care

Strengthen links with general practice and primary care to improve the management of priority STIs among high-risk clients, address the health implications of STIs and HIV and access for diverse communities

Support general practice and primary care to integrate STI screening, treatment, management and partner notification as part of routine care

Strengthen systems and quality assurance processes to support STI screening in antenatal settings according to clinical guidelines

Strengthen systems and service integration for STI prevention, diagnosis and management for Aboriginal people

Enhance systems for timely collection and reporting of data to monitor progress, report outcomes and strengthen our response to STIs

PRIORITY POPULATIONS



Aboriginal people



Gay and homosexually active men



Sex workers



Young people
15-29 years of age

PRIORITY SETTINGS



General practice and primary health care



Publically funded HIV and sexual health services



Aboriginal Community Controlled Health Services



Community



Antenatal settings



Drug and alcohol services



Youth services



Mental health services

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GLOSSARY

ACCHS	Aboriginal Community Controlled Health Service
ACRRM	Australian College of Rural and Remote Medicine
AH&MRC	Aboriginal Health and Medical Research Council of NSW
ASHM	Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine
BRISE	BBV and STI Research, Intervention and Strategic Evaluation
FPNSW	Family Planning NSW
GP	General Practice / General Practitioner
HARP	HIV and Related Programs
LHD	Local Health District
NSW MoH	New South Wales Ministry of Health
NSW STIPU	New South Wales Sexually Transmissible Infections Programs Unit
PFSHS	Publically Funded Sexual Health Service
RACGP	The Royal Australian College of General Practitioners
RANZCOG	The Royal Australian and New Zealand College of Obstetricians and Gynaecologists
SHIL	NSW Sexual Health Infolink
STIGMA	STIs in Gay Men Action Group
SWOP	Sex Workers Outreach Project

1. STIs IN NSW

Sexually transmissible infections (STIs) remain a significant public health burden in NSW. If left untreated, STIs can be transmitted to sexual partners, facilitate the sexual transmission of HIV, and contribute to the development of severe complications such as infertility, ectopic pregnancy and congenital infection. STIs can be associated with social stigma and cause long-term emotional suffering and stress. STIs can also act as an indicator for sexual and psychosocial risk behaviours. Most STIs, however, can be easily prevented, diagnosed and treated¹.

The priority areas of prevention, testing and treatment and management outlined in this Strategy are applicable to a range of STIs. The Strategy particularly focuses on gonorrhoea, syphilis and chlamydia due to the recent increases in notification rates, disease burden, role in facilitating the transmission of other infections (such as HIV) and their amenability to prevention and control efforts.

In addition to a focus on gonorrhoea, syphilis and chlamydia, the Strategy is responsive to other infections including HPV (human papillomavirus), LGV (*lymphogranuloma venereum*), shigellosis and antimicrobial resistant *Neisseria gonorrhoeae* as well as new and emerging STIs. The Strategy provides a framework to effectively respond to STI outbreaks in NSW and changes in STI epidemiology.

Gonorrhoea, syphilis and chlamydia are notifiable to NSW Health under the *Public Health Act 2010*, and are notified by laboratories. Hospitals and doctors are also required to notify cases of syphilis. While notifications represent only a proportion of the number of cases occurring in the community, notification data provides limited information that can be used to assess the epidemiological patterns of these infections. Additionally, gonorrhoea and chlamydia infections are often asymptomatic and so people who are infected may not present to a health service for testing. Therefore, notification rates do not solely reflect changes in the prevalence or incidence of STIs, but rather are heavily influenced by screening programs, health seeking patterns and testing practices over time.



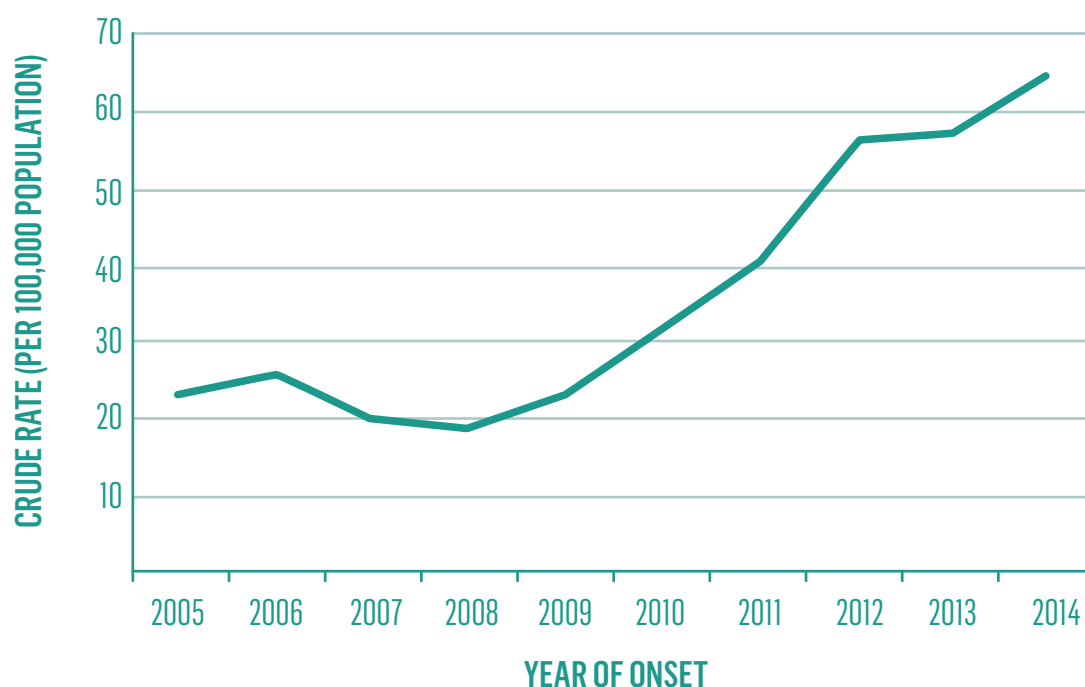
1.1 GONORRHOEA

Gonorrhoea remains one of the most commonly diagnosed STIs in NSW. Over the last decade, notifications for gonorrhoea diagnoses have more than doubled in NSW rising from 23 per 100,000 in 2005 to 64 per 100,000 in 2014². 83% of gonorrhoea notifications in 2014 were made in men with the highest rate seen in men in their twenties^{3,4}. Approximately half of notifications occur among gay and homosexually active men and one-third occurring among heterosexual contact⁵. Aboriginal people in NSW experience a disproportionate burden of gonorrhoea. Enhanced surveillance data from 2013 indicates that the rate of gonorrhoea was approximately two and a half times higher than for non-Aboriginal people, amongst those whose Aboriginality was known⁶.

NSW Health's Denominator Data Project indicates that the overall number of tests for gonorrhoea performed in NSW has increased between 2012 and 2014. However, the proportion of gonorrhoea tests that were positive has not changed significantly during this time, suggesting that the increase in notifications has resulted from increased testing⁷.

Figure 1. Gonorrhoea notifications in NSW, 2005-2014

Data extracted from NSW Notifiable Conditions Information Management System (NCIMS) via SAPHaRI on 23 Oct 2015.



1.2 SYPHILIS

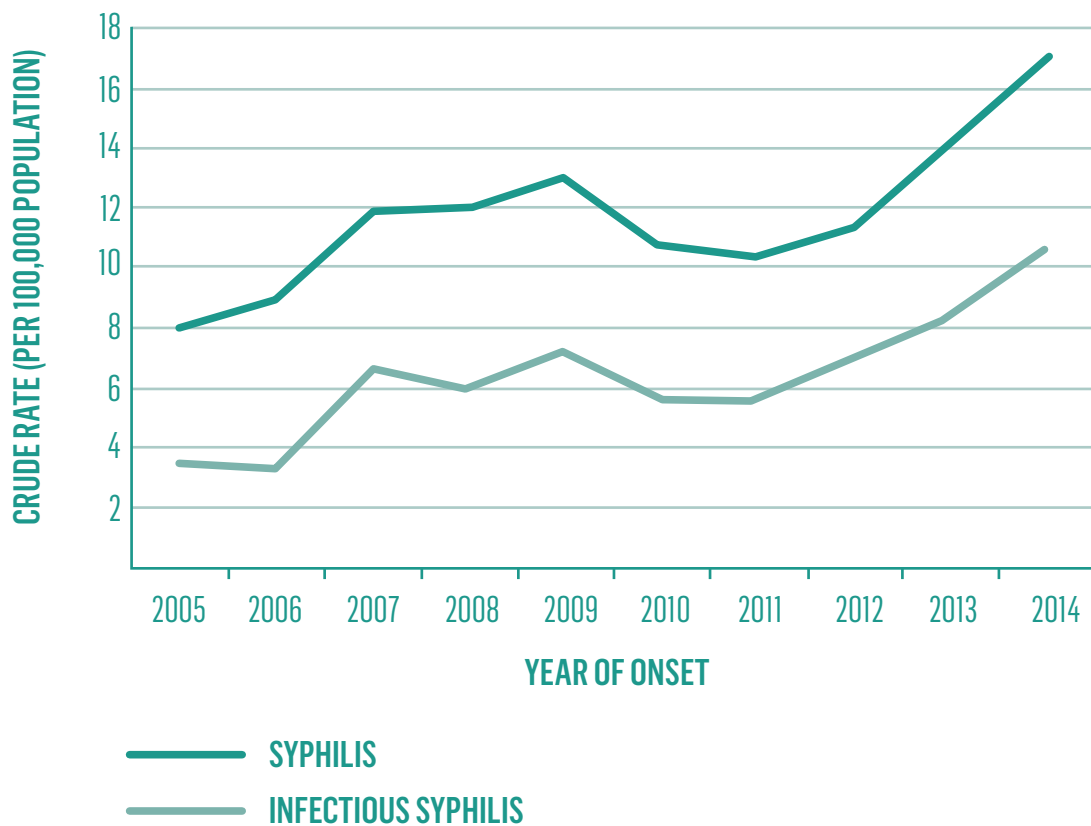
Infectious syphilis remains a significant public health concern in NSW. Over the last decade the rate of infectious syphilis notifications has nearly tripled, rising from 3.6 per 100,000 in 2005 to 10.2 per 100,000 in 2014⁸. The vast majority (96%) of infectious syphilis diagnoses are made in men, most of whom are gay and homosexually active men⁹. Most cases occur in men over the age of 25 years¹⁰. Infectious syphilis in women in NSW has remained stable at less than 1 notification per 100,000 over the last decade¹¹. As STI screening has increased in recent years, it is possible that the increases in syphilis testing explain the increase in notifications.

Around half of the cases of infectious syphilis notified among gay and homosexually active men in inner metropolitan Sydney are HIV-positive men. Re-infections in inner metropolitan Sydney gay and homosexually active men are increasing and occur predominantly in HIV-positive men¹².

Cases of congenital syphilis are now rare in NSW, with only five cases born and notified between 2010 and 2014¹³. Sustaining the virtual elimination of congenital syphilis in NSW will require consolidating and intensifying efforts in antenatal testing and treatment under this Strategy.

Figure 2. Syphilis notifications in NSW, 2005-2014

'Syphilis' includes 'infectious syphilis' and 'syphilis more than 2 years or unknown duration', but excludes 'congenital syphilis'. Data extracted from NCIMS via SAPHaRI on 23 Oct 2015.



1.3 CHLAMYDIA

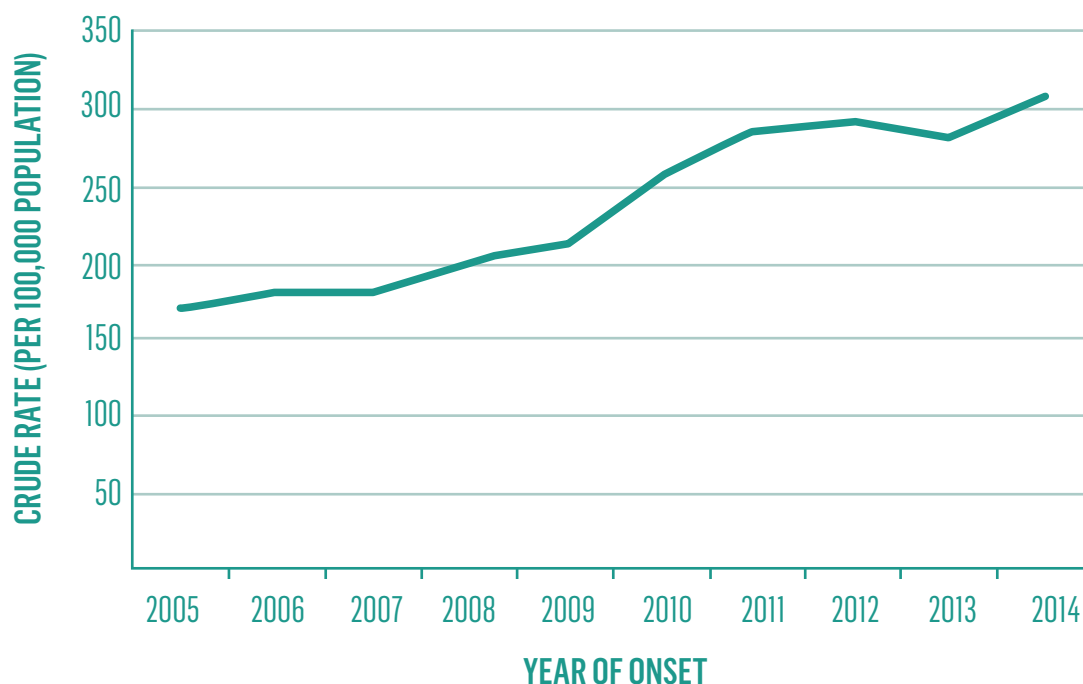
Chlamydia is one of the most frequently diagnosed notifiable infections in NSW. Over 22,000 infections were notified in NSW in 2014 with the majority (74%) occurring among young people aged 15-29 years^{14,15}. Over the last decade, notifications have almost doubled, rising from 167 per 100,000 people in 2005 to 305 per 100,000 in 2014¹⁶.

The number of tests for chlamydia performed in NSW increased between 2012 and 2014, while the overall positivity has declined slightly¹⁷. This suggests that the increase in notifications may be due to increased testing rather than an increase in transmission¹⁸.

Chlamydia may contribute to long term health complications for young women. Evidence suggests that repeated genital chlamydial infections increase the risk of pelvic inflammatory disease (PID) and infertility when compared to initial infection¹⁹, and untreated chlamydia may increase the risk of PID by 6.5 to 25 fold²⁰.

Figure 3. Chlamydia notifications in NSW, 2005-2014

Excludes chlamydial conjunctivitis in infants. Data extracted from NCIMS via SAPHaRI on 23 Oct 2015



1.4 HUMAN PAPILLOMAVIRUS (HPV)

HPV causes cervical cancer and genital warts, and can cause cancers in other parts of the body including the vagina, vulva, penis, anus, mouth and throat. Although an estimated 79% of people will be infected with a genital strain of HPV during their lifetime, the majority of infections are asymptomatic and the virus will be spontaneously cleared without progression to cancer²¹.

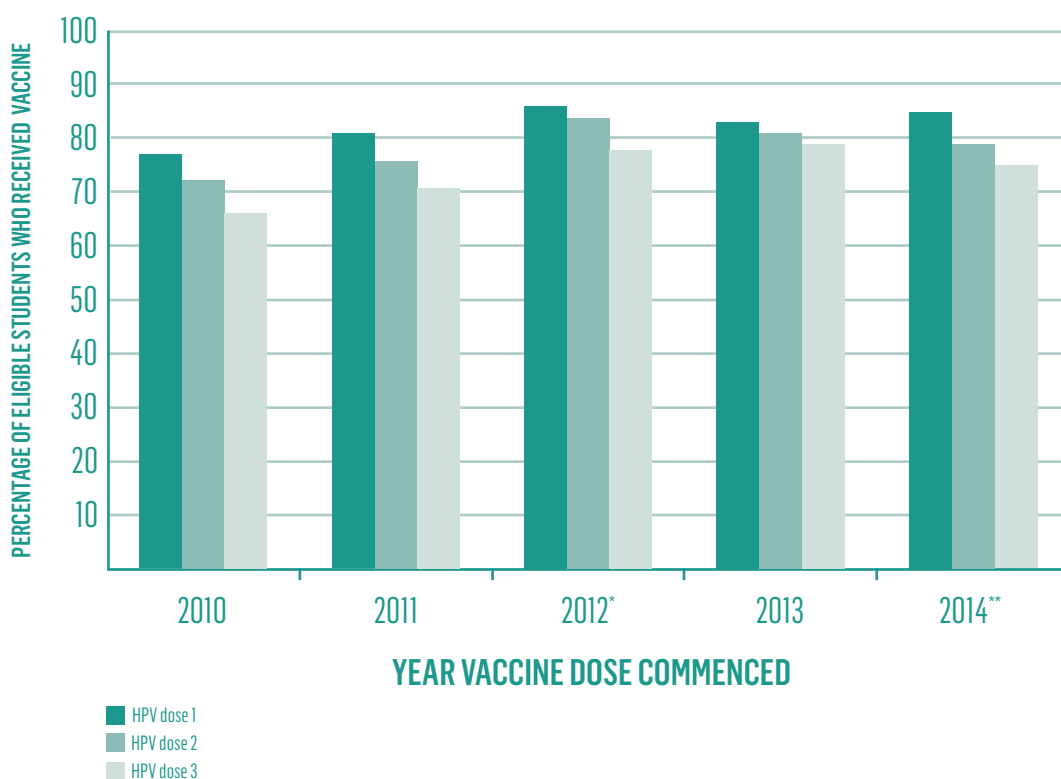
HPV vaccination for girls was introduced in NSW in 2007 with a school catch-up program in Years 10-12 in 2007, Years 7-10 in 2008, and a catch-up program for women aged 18-26 years delivered through general practice from 2007-2009. High vaccination coverage has been achieved since the routine program commenced in 2009 for girls in

Year 7. HPV vaccination was extended to boys in 2013 with a catch-up program in Year 9 in 2013 and 2014, and similarly high coverage has been achieved since the routine program started in Year 7 from 2013 onwards. Importantly, participation rates in the program among Aboriginal students are similar to non-Aboriginal students.

Clinic data shows a rapid and significant decline in genital warts in young men and women and a reduction in pre-cancerous cervical lesions in young women since the program began²². The program is expected to result in a decrease in the rates of HPV-related cancer in the coming years²³.

Figure 4. Percentage of Year 7 students who received HPV vaccination at school, NSW, 2010-2012 (girls only) and 2013-2014 (girls and boys)

* Year that extended catch-up into Year 8 was first offered
 **2014 data includes catch-up doses to end Term 3, 2015 only



2. PRIORITY AREAS OF ACTION

2.1 PREVENT

What does the evidence tell us?

- There is strong evidence that behavioural interventions can increase condom use and reduce condomless sex, numbers of partners and STIs among various groups including young people, gay and homosexually active men, and people with HIV²⁴.
- Social marketing and health promotion campaigns have begun reducing some of the perceived barriers to more consistent condom use and regular STI testing, increased knowledge and skills, and contributed to behaviour changes among young people^{25,26}.
- Although condoms are not 100% effective, consistent and correct condom use reduces acquisition of many STIs, including HIV, chlamydia and gonorrhoea²⁷.
- School sexual health programs are a major source of information for school-aged young people, and provide the background information that may influence community attitudes to sexual risk²⁸.
- Health promotion activities in the sex industry in NSW have been very successful to date. Condom use in commercial sex work approaches 100% in Sydney brothels and the prevalence of STIs in sex workers is at least as low as the general population²⁹.
- In NSW, the proportion of gay men with casual sexual partners who report consistently using condoms or who avoid anal sex has declined slightly since 2009 from 67% to 64%³⁰. Inversely, condomless anal intercourse has been increasing gradually over time³¹.
- Although most men engaging in condomless anal intercourse use another form of risk reduction to minimise their risk of HIV infection³², these strategies do not necessarily reduce their risk of other STIs.
- PrEP is highly effective for the prevention of HIV infection^{33,34}. However, it does not protect against other sexually transmissible infections (STIs) meaning that behavioural prevention, testing and treatment strategies are still required.

Promoting consistent and effective condom use, in the context of a broader safe sex culture, is central to the prevention of STIs in NSW. The persistence of structural and social barriers to condom use and STI and HIV testing means that an integrated, population-based approach to prevention efforts across priority settings and targeted to priority populations is needed. Improving STI and safe sex knowledge within the general community, increasing self-efficacy for condom use, combating stigma associated with STIs and sex generally, reducing sexual risk taking associated with drug and alcohol use, and addressing cost barriers to condom use are important issues amenable to social marketing campaigns and health promotion programs.

While social marketing campaigns in NSW have been successful in helping to reduce some of the perceived barriers to condom use and HIV and STI testing, these efforts need to be enhanced. A challenge under this Strategy will be to find more effective ways to engage with priority populations such as young people and gay and homosexually

active men, particularly around sensitive issues such as stigma and drug and alcohol-related sexual risk taking. It is also important to provide information and programs in the most appropriate settings. For example, schools and youth services are important settings in which to provide young people with the developmentally appropriate knowledge and skills from a young age, and before they become sexually active. Among other priority settings, community is a key setting to continue to provide education and behavioural interventions for gay and homosexually active men in order to increase awareness and uptake of STI prevention.

Identifying other opportunities to normalise condom use and HIV and STI testing, increasing access to condoms and services among priority populations, and developing partnerships with government and non-government partners, including Aboriginal Community Controlled Health Service (ACCHS), drug and alcohol services, mental health services and youth services, are priorities under this Strategy.

What we will do	Lead	Partners
Deliver primary prevention programs to normalise safe sex and health-seeking behaviours, raise awareness of STIs, increase access to sexual health services, increase condom use and decrease the stigma associated with STIs, under the NSW Sexual Health Promotion Framework (see Appendix A).	NSW MoH, LHDs, NSW STIPU, BRISE and NSW Department of Education	Yfoundations, FPNSW, AH&MRC, ACCHS and NSW Office of Communities
Provide accessible and culturally specific sexual health information via the NSW Sexual Health Infolink (SHIL) and the Play Safe websites.	NSW STIPU and SHIL	NSW MoH and AH&MRC
Support teachers and pre-service teachers to deliver comprehensive and developmentally appropriate school-based sexual health education.	NSW Department of Education	NSW MoH, FPNSW and LHDs
Support the skills of the Aboriginal health, HARP and ACCHS workforces to deliver a mix of culturally appropriate STI prevention initiatives targeted at Aboriginal communities across NSW, including rural and remote regions, with a focus on young people.	NSW MoH and AH&MRC	LHDs and ACCHS
Deliver targeted and innovative education, community mobilisation and behavioural prevention interventions to strengthen the safe sex culture among gay and homosexually active men.	STIGMA, ACON, Positive Life NSW, NSW STIPU	LHDs and NSW MoH
Maintain peer education and outreach efforts for sex workers and support access to non-discriminatory testing and sexual health services.	SWOP	LHDs and Multicultural HIV and Hepatitis Service
Provide primary prevention programs and education around sexual activity to young people in contact with the criminal justice system.	Justice Health and Forensic Mental Health Network	
Maintain high coverage of HPV vaccination for year 7 school students in accordance with the <i>Australian Immunisation Handbook</i> .	LHDs	Health Protection NSW and NSW education authorities

2.2 TEST

What does the evidence tell us?

- Although consistent and correct condom use reduces acquisition of many STIs, condoms offer less protection for some STIs including HPV, genital herpes and syphilis³⁵.
- A number of barriers to STI testing have been identified including confidentiality concerns, perceptions that STI testing is expensive and fear of staff attitudes^{36,37}.
- Interventions such as electronic prompts for STI screening during routine clinic visits, quality improvement programs, opt-out strategies and adoption of guidelines at the clinic level have been shown to increase STI screening in public sexual health clinics and primary care including ACCHSs^{38,39,40,41}.
- Partner notification approaches to facilitate testing of recent sexual partners of people newly diagnosed with an STI have been shown to be efficient and acceptable strategies for identifying and treating new STIs^{42,43}.
- Evidence for the cost-effectiveness of using point of care tests in sexual health clinics is emerging in settings similar to Australia⁴⁴.
- Strategies including mail, telephone and SMS reminders and home-based self-sampling kits have been shown to be effective and efficient means to increase STI testing and retesting after diagnosis among priority populations^{45,46,47}.
- Nurse-led models and greater involvement of practice nurses in STI screening have been shown to be efficient and effective means to increase screening in general practice and primary care^{48,49}.
- ACCHSs are reported as the most common setting for young Aboriginal people to have their STI tests done in Australia, followed by general practices⁵⁰.
- Regular syphilis screening in gay and homosexually active men (up to 4 times per year for those at highest risk) is crucial for syphilis control⁵¹. Regular syphilis screening in HIV positive gay and homosexually active men as part of their routine HIV care is also an effective strategy for syphilis control⁵².
- Overall there is limited evidence for a control policy for chlamydia. The Australian Chlamydia Control Effectiveness Pilot (ACCEPt) will provide evidence during the period of this Strategy to inform programs and services for chlamydia control.

While the bulk of sexual health care in NSW is delivered in general practice, the proportion of STI screening conducted as part of routine care is relatively low⁵³. Integrating STI screening as part of routine care within general practice and primary care is a priority of this Strategy and provides an important opportunity for timely diagnoses and treatment among priority populations. Nurse-led models and greater involvement of practice nurses in STI screening will be important to increase screening in general practice and primary care. Screening for chlamydia should be focused on young women aged 15-29 years as they are at highest risk of long term complications such as PID and infertility. Screening and treatment in recent sexual partners of young women newly diagnosed with chlamydia will also be important to prevent re-infection and ongoing transmission. Strengthening linkages between public sexual health services and primary care, including general practices and ACCHS, will be important to improve screening and management of STIs.

Strengthening service integration and models of care to deliver comprehensive STI screening in our priority settings, including drug and alcohol and mental health services, will provide an opportunity for diagnosis, treatment and management among people who may not attend public sexual health services or other health services. While in other priority settings where people are in care, including pregnant women and HIV positive gay and homosexually active men, appropriate models of care should be in place to deliver comprehensive STI screening in accordance with guidelines.

Screening of recent sexual partners of people newly diagnosed with STIs will be vital to ensuring people at highest risk of STIs have access to screening and treatment, and in reducing transmission of STIs. During the period of this Strategy, NSW Health will strengthen partner notification practice and support for STIs and HIV.

Further efforts and contemporary strategies such as computer-assisted self-interview, X-press clinics, SMS reminders, self-sampling and the use of point of care testing devices are needed to make STI screening easier and to increase screening in accordance with the *Australian STI Management Guidelines*, in particular screening for gonorrhoea and syphilis in gay and homosexually active men. Models of care should integrate screening for HIV and STIs where possible, including in community testing sites such as a[TEST] peer-led testing services for gay and homosexually active men.

Expanding PrEP access to people at a high risk for HIV infection is a priority of the *NSW HIV Strategy 2016-2020*. In order for NSW to harness the public health benefits of PrEP and to ensure people taking PrEP receive clinical care and support, high levels of HIV and STI screening in accordance with NSW guidelines will be prioritised.

While the successful promotion of safe sex practices and frequent screening of STIs among sex workers means that rates of STIs remain at least as low as the general population, continued vigilance is required to support timely diagnoses and management of STIs.

What we will do	Lead	Partners
<p>Strengthen systems and deliver contemporary STI education initiatives to increase delivery of comprehensive STI screening as part of routine care in general practice and primary care and public health services, in accordance with the following guidelines:</p> <ul style="list-style-type: none"> • 2015 Australian STI Management Guidelines (http://www.sti.guidelines.org.au); • 2014 Australian STI and HIV Testing Guidelines for Asymptomatic Men Who Have Sex with Men (http://stipu.nsw.gov.au/stigma/sti-testing-guidelines-for-msm/); and • 2013 Clinical Practice Guidelines - Antenatal Care (http://www.health.gov.au/antenatal). 	<p>NSW STIPU, ACCHS, RACGP, ACRRM and Primary Health Networks</p>	<p>NSW MoH, LHDs, STIGMA, ASHM, AH&MRC and RANZCOG</p>
<p>Increase STI screening in young Aboriginal people and Aboriginal people who reside in regional and remote communities in NSW in ACCHS, PFSHS and general practices and primary health care services.</p>	<p>ACCHS, LHDs, RACGP and ACRRM</p>	<p>AH&MRC and NSW STIPU</p>
<p>Increase comprehensive STI and HIV screening in clinical and community settings, including for people taking PrEP for the prevention of HIV infection.</p>	<p>LHDs, ACCHS and NSW MoH</p>	<p>NSW STIPU, AH&MRC, ACON, STIGMA, ASHM, RACGP and ACRRM</p>
<p>Strengthen efforts to notify and support sexual partners of people newly diagnosed with an STI to have an STI screen, including establishing enhanced services to support partner notification.</p>	<p>NSW MoH and NSW Sexual Health Infolink (SHIL)</p>	<p>LHDs, NSW STIPU, Positive Life NSW, ACON, ASHM, ACCHS, AH&MRC, RACGP and ACRRM</p>
<p>Deliver targeted community mobilisation initiatives, including peer support programs, to encourage and support the uptake of comprehensive STI screening in priority populations.</p>	<p>ACON, SWOP, AH&MRC and NSW STIPU</p>	<p>LHDs, STIGMA, ACCHS and FPNSW</p>
<p>Assess the effectiveness and appropriateness of a screening program for chlamydia control through the Australian Chlamydia Control Effectiveness Pilot (ACCEPt).</p>	<p>The Kirby Institute and University of Melbourne</p>	<p>NSW MoH and NSW STIPU</p>

2.3 TREAT AND MANAGE

What does the evidence tell us?

- Although most STIs are diagnosed and treated in general practice, only a small proportion of general practice encounters actually focus on sexual health (1.17 per 100 GP encounters)^{54,55}.
- Interventions that strengthen systems have been shown to be effective in managing priority STIs. Electronic medical record reminders have been shown to be effective in a number of health care settings offering sexual health screening, particularly for the screening of gonorrhoea and chlamydia in gay and homosexually active men, and the recommended 3-monthly screening of syphilis among high-risk gay and homosexually active men, especially in those with HIV during routine consultations⁵⁶.
- Notification and treatment of sexual partners of people newly diagnosed with STIs is effective in reducing the transmission of STIs, particularly for populations with high rates of partner change⁵⁷.
- SMS reminders and postal kits for home-based retesting have been shown to be effective, cost-efficient methods, as well as highly acceptable and highly preferred, for individuals initially diagnosed with chlamydia in sexual health clinics^{58,59,60,61,62}.
- A modelling study in Australia suggests that the approach of screening for chlamydia in all young pregnant women aged less than 25 years in antenatal settings is cost-effective for the Australian health system⁶³.
- There is evidence that repeat chlamydial infection, in comparison with initial infection, increases the risk of chlamydia-related sequelae such as PID and infertility⁶⁴. Repeat chlamydial infection is common due to new sexual partners or sex with previous partners who have not been treated⁶⁵.

The majority of STI diagnoses and management in NSW is conducted within general practice and primary care. A suite of active learning and online training modules and quality assurance tools (<http://www.sti.guidelines.org.au/>) have been developed to strengthen practice in NSW and should continue to be promoted in general practice and primary care. Strategies to support general practitioners and primary health care providers to overcome perceived barriers to the delivery of integrated sexual health services, such as time constraints, access to counselling and inadequate training or expertise, will be important. Expansion of the role of practice nurses will further assist general practice and primary care to provide comprehensive sexual health services.

PFSHS are important sources of support for clinicians in general practice and primary care, particularly given their expert provision of complex STI case management. Strengthening links between PFSHS and general practice and primary care is a priority for this Strategy in order to improve the management of STIs and address the health implications of STIs and HIV.

A key focus of this Strategy will be to improve treatment and management for chlamydia in young women aged 15-29 years to reduce the risk of long term complications associated with the infection.

Rates of re-screening for repeat chlamydial infection remain low in many clinical settings despite clinical guidelines recommending re-testing after diagnosis. Initiatives to increase re-testing for repeat chlamydial infection, including electronic medical record reminders, home-based screening kits and access to counselling services, as well as innovative strategies to treat and manage sexual partners of people diagnosed with an STI (including a pilot implementation of patient-delivered partner therapy (PDPT)), will support the strategic goal of reducing the burden of disease associated with chlamydia infection.

Strengthening systems for the monitoring of new and emerging STIs, including the monitoring of antimicrobial resistance, is a key component in the effective control of STIs. In recent years, the emergence of antimicrobial resistant *Neisseria gonorrhoeae* has been of concern given its impact on treatment options and on the effectiveness of gonococcal control programs in Australia⁶⁶. Decreased susceptibility to the cephalosporin antibiotics is associated with increased reports of treatment failures⁶⁷ and multi-drug resistant strains⁶⁸. Continuous monitoring of antimicrobial resistance in clinical isolates of *Neisseria gonorrhoeae* during the period of this Strategy will be important to inform a timely response in NSW.

What we will do	Lead	Partners
Provide STI management training and education, quality assurance tools and support for general practitioners and practice nurses to deliver comprehensive and appropriate STI services, including partner notification.	NSW STIPU, RACGP, ACRRM and ASHM	NSW MoH, LHDs, STIGMA, Australian Primary Health Care Nurses Association, ACCHS and FPNSW
Provide a coordinating and support role to PFSHSs to enable the application of high quality, current patient-centred STI service models.	NSW STIPU and NSW MoH	LHDs and SHIL
Improve the quality, accessibility and appropriateness of STI service provision to Aboriginal people across a range of health care settings.	ACCHS and LHDs	NSW STIPU, AH&MRC, ASHM, FPNSW, RACGP and ACRRM
Ensure Aboriginal people who are diagnosed with chlamydia or gonorrhoea are offered STI screening for HIV and syphilis.	ACCHS, LHDs, RACGP and ACRRM	AH&MRC and NSW STIPU
Strengthen efforts to treat and manage chlamydia infections, including the implementation of patient-delivered partner therapy (PDPT), to reduce the risk of long term complications associated with the infection.	LHDs and ACCHS	NSW MoH, NSW STIPU, the Kirby Institute, RACGP, ACRRM and FPNSW
Strengthen systems to monitor and respond to emerging <i>Neisseria gonorrhoeae</i> antimicrobial resistance.	Health Protection NSW	NSW Health Pathology, National Neisseria Network

3. IMPLEMENTING THIS STRATEGY

Enablers

The implementation enablers that will support our efforts to achieve reductions in gonorrhoea and syphilis infections, and reduce the burden of disease associated with chlamydia infection, by 2020 include:

- Using **data** to drive performance by NSW Health and our partners, to set priorities, to support implementation of this Strategy and evaluate our progress.
- Continuing the effective **partnership** between the NSW Government, clinicians, researchers and affected communities that underpins the response to STIs in NSW and drives implementation of this Strategy through the Implementation Committee for the NSW STI Strategy.
- Working with the Commonwealth Government and other jurisdictions to facilitate access to advances in STI prevention, testing and treatment and management to support **common goals** in the NSW and Australian STI responses.
- Displaying **innovation and adaptability** to ensure the NSW response to STIs remains contemporary and effective.
- Maintaining an **enabling environment** to reduce stigma and discrimination, and inform legislation, policy and practice.
- Ensuring STI-related services have an **equity** focus and work to meet the needs of priority populations.
- Providing **capacity building** opportunities for the NSW Health workforce and our community partners to develop and enhance the skills required to support achievement of the targets of the NSW STI Strategy.
- Creating and using **research** evidence to help prioritise our efforts, and improve and evaluate our response, including through the *Blood Borne Virus Research, Intervention and Strategic Evaluation (BRISE)* program.
- **Coordinating** the implementation of this Strategy with other relevant NSW Health strategies and frameworks aiming to reduce the transmission and burden of disease of STIs and BBVs, including the *NSW HIV Strategy 2016-2020*, the *NSW Hepatitis B Strategy 2014-2020*, the *NSW Hepatitis C Strategy 2014-2020* and the *NSW Aboriginal Blood-Borne Viruses and Sexually Transmissible Infections Framework 2016-2020*.

Governance

The membership and role of the current NSW HIV Strategy Implementation Committee will be expanded to oversee and drive implementation of this Strategy and monitor performance against the NSW STI Strategy targets. The Implementation Committee includes senior representatives from Local Health Districts, senior clinicians from publically funded sexual health services and general practice settings, and senior community leaders that have the ability to influence practice on the ground.

Local Health Districts and non-government organisations deliver services to the community that are aligned with this Strategy. The NSW Ministry of Health provides funding for these services. Service Agreements and contracts with the relevant organisations will continue to state clear program directions and performance expectations informed by this Strategy, including for STI testing, treatment and management.

Using data to drive performance and monitor outcomes

A monitoring and evaluation (M&E) framework for STIs will be developed to monitor the implementation of this Strategy, to adjust our approach if required and to determine areas for additional focus in the key areas of STI prevention, testing and treatment and management with a focus on our priority populations. Supporting indicators within the M&E framework will be developed pragmatically to ensure that work is targeted towards achieving the overall goals of this Strategy. Initial indicators for monitoring and reporting against the Strategy are located in Appendix B. Further indicators to improve STI monitoring and evaluation will be established during the period of the Strategy.

The *NSW STI Strategy Data Report* will be the primary mechanism for reporting progress outcomes against this Strategy's targets. 'Real time' data collection and regular reporting have been effective in stimulating discussion and improving performance within the HIV sector, and this approach will be adopted in the implementation of the *NSW STI Strategy 2016-2020* to drive innovative strategies and new service models, and improve health service quality, clinical safety and performance. Disseminating robust data among key stakeholders supports a policy development and implementation process that is transparent, participative and responsive to emerging trends.

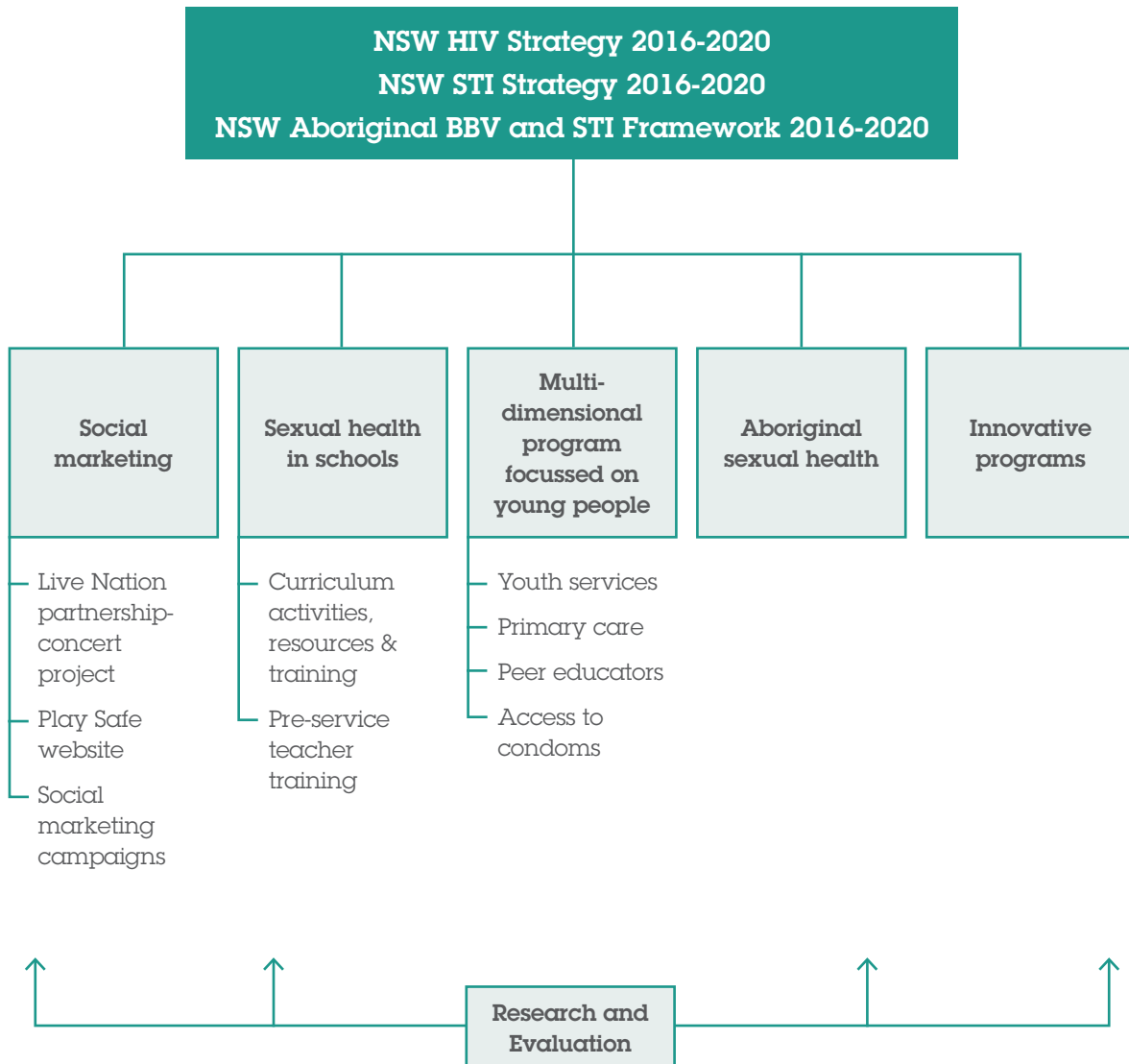
The NSW Ministry of Health has invested in the *Blood Borne Virus Research, Intervention and Strategic Evaluation (BRISE)* program, based at the University of New South Wales, to produce policy relevant research and strategic advice to strengthen our response to STI prevention, testing and treatment and management in NSW in priority populations and settings.



What we will do	Lead	Partners
Develop a monitoring and evaluation framework for this Strategy with input from stakeholders to develop performance indicators, including indicators for monitoring chlamydia burden of disease.	NSW MoH	Health Protection NSW, LHDs, AH&MRC, ACON, Positive Life NSW, the Kirby Institute and the Centre for Social Research in Health
Produce and disseminate the NSW STI Strategy Data Report to monitor and report on progress against the targets and goals of this Strategy, and identify priorities to strengthen the NSW response to STIs.	NSW MoH	Health Protection NSW, LHDs, the Kirby Institute and the Centre for Social Research in Health
Continue to provide an STI surveillance system in NSW that informs preventive policies and outbreak responses.	Health Protection NSW	NSW MoH, LHDs, STIGMA, Public Health Units, the Kirby Institute and the Centre for Social Research in Health
Improve the completeness and accuracy of Aboriginality data of STI notifications using strategies such as data linkage, enhanced surveillance, and contributing to national initiatives around inclusion of Aboriginality on all relevant forms.	Health Protection NSW	
Invest in STI-related research and evaluation, including the <i>Blood Borne Virus Research, Intervention and Strategic Evaluation (BRISE)</i> , to provide evidence to monitor and strengthen the policy and programmatic response to STIs in NSW, and ensure the dissemination of relevant evidence.	NSW MoH	Health Protection NSW, LHDs, the Kirby Institute and the Centre for Social Research in Health
Strengthen the capacity of the STI workforce to participate in evaluations of programs and services and to use the outcomes to improve program and service design and delivery.	NSW MoH	Health Protection NSW, LHDs, the Kirby Institute and the Centre for Social Research in Health

APPENDIX A

NSW SEXUAL HEALTH PROMOTION FRAMEWORK



APPENDIX B

INDICATORS FOR MONITORING AND REPORTING

NSW STI Strategy 2016-2020 Indicators	Monitoring Tool
Reduce gonorrhoea infections	NSW Notifiable Conditions Information Management System
Reduce infectious syphilis infections	NSW Notifiable Conditions Information Management System
Reduce PID associated with chlamydia	NSW Health data collection systems
Maintain high coverage of HPV vaccination for Year 7 school students	HealthStats NSW
Maintain levels of condom use for preventing the transmission of STIs	Sexual health survey of young people in NSW aged 15-29 years Sexual health survey of gay and homosexually active men in NSW
Increase comprehensive STI testing in priority populations in accordance with risk	NSW Health data collection systems Sexual health survey of gay and homosexually active men in NSW
Increase the proportion of people diagnosed with chlamydia and gonorrhoea who get re-tested within 1-4 months after diagnosis	NSW Health data collection systems
Increase the proportion of people diagnosed with syphilis who get re-tested within 1-6 months after diagnosis	NSW Health data collection systems
Increase the proportion of Aboriginal people diagnosed with chlamydia or gonorrhoea who get tested for HIV and syphilis	NSW Health data collection systems

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