NSW GOVERNMENT

NSW HIV STRATEGY 2021–2025

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HIV Strategy 2021-2025

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MINISTER'S FOREWORD

New South Wales is recognised as a world leader in responding to HIV. Beginning with our swift response to HIV/AIDS in the 1980s, we have worked with people living with and affected by HIV to innovate, to prevent infections and to care for those living with HIV.

New ways to prevent, test and treat HIV have led to dramatic reductions in transmission, and notifications are now the lowest since surveillance began in 1985. Pre-exposure prophylaxis, or PrEP, has played a pivotal role in preventing new infections since we implemented EPIC-NSW, one of the world's largest implementation trials, for rapid roll-out across the state.

These innovations mean that the virtual elimination of HIV transmission in NSW, once inconceivable, is now a realistic and achievable goal.

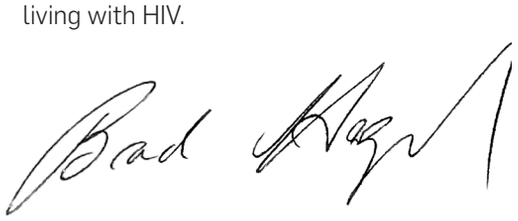
The partnership between the community, government, researchers and clinicians has been critical to our success. Working together, we have:

- met two of the UNAIDS targets, with 95% of people living with diagnosed HIV on treatment, and 95% of those diagnosed on treatment with a suppressed viral load
- seen a 19% reduction in new HIV notifications in NSW residents over the past five years
- sustained the virtual elimination of HIV transmission between mother and child, among people who inject drugs, and among female sex workers.

But not every at-risk population has experienced the same level of success. Stigma and discrimination also continue to create barriers to accessing PrEP, testing and treatment.

The new Strategy builds on the momentum of the previous two strategies, while introducing a renewed focus on working with sub-populations where change has not been as substantial, reducing stigma as a barrier to prevention, testing and treatment, and encouraging ongoing innovation.

I am pleased to present the *NSW HIV Strategy 2021–2025*, which will guide our response to achieving the virtual elimination of HIV transmission in NSW and support everyone living with HIV.



Hon. Brad Hazzard, MP
Minister for Health and Medical Research

NSW HIV STRATEGY 2021 – 2025

Aim

The virtual elimination of HIV transmission in NSW for all

Headline target

90% reduction in the rate of preventable HIV infection

Vision

A NSW where HIV transmission is virtually eliminated. Everyone is free from the risk of contracting HIV. Everyone can access HIV prevention, testing, treatment and care, and can do this without fear of stigma or discrimination. Treatment begins early to improve health and prevent transmission.

	1. Prevent	2. Test	3. Treat	4. Stigma
Goals	Prevent HIV transmission by promoting safe behaviours and by expanding access to condoms, PrEP, PEP, and sterile injecting equipment.	Normalise HIV testing for people at risk.	Start and maintain treatment soon after diagnosis to maximise health outcomes and prevent transmission.	Reduce stigma and discrimination as a barrier to prevention, testing and treatment.
Targets	1.i 90% of men who have sex with male casual partners report at least one form of HIV prevention. 1.ii 90% of HIV-negative men who have sex with male casual partners without a condom take PrEP. 1.iii Reduce sharing of injecting equipment among people who inject drugs.	2.i 95% of people living with HIV in NSW have been diagnosed. 2.ii Reduce the time between arrival in Australia and the first HIV test for all at-risk overseas-born people. 2.iii Reduce the time between arrival in Australia and HIV diagnosis for overseas-born MSM, where infection was probably acquired overseas	3.i 90% of people newly diagnosed with HIV initiate treatment within 2 weeks 3.ii 95% of all people diagnosed with HIV are on treatment and 95% of people on treatment have an undetectable viral load. 3.iii 75% of people living with HIV in NSW report good quality of life.	4.i 75% reduction in reported experience of stigma or discrimination by people at risk of and living with HIV in NSW healthcare settings. 4.ii 75% reduction in discriminatory attitudes held towards people at risk of and living with HIV.
Initiatives	1.1 New models of care for PrEP 1.2 PrEP prescribers expansion 1.3 PrEP Guidelines 1.4 GPs and primary care workforce 1.5 Community mobilisation and health promotion 1.6 Sex worker peer outreach 1.7 Needle and Syringe Program 1.8 Information and referral 1.9 Aboriginal services 1.10 Research and surveillance	2.1 Innovative testing models 2.2 Dried blood spot (DBS) testing 2.3 GPs and primary care workforce 2.4 Community mobilisation and health promotion 2.5 Statewide HIV testing campaign 2.6 International students testing 2.7 People visiting high-prevalence countries campaign 2.8 HIV contact tracing 2.9 Antenatal screening 2.10 Research and surveillance	3.1 HIV Support Program 3.2 Antiretroviral resistance surveillance 3.3 Shared care 3.4 Models of care 3.5 Clinic audits 3.6 Community mobilisation and health promotion	4.1 Media engagement 4.2 Healthcare worker training 4.3 Community primary care 4.4 Health systems 4.5 Peer support 4.6 Stigma-aware campaigns

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HIV IN NSW

Considerable progress has been made towards the elimination of HIV transmission in NSW. HIV diagnoses decreased by 19% in NSW residents over the five years 2015–2019, and by 25% among men who have sex with men (MSM) (**Figure 1, blue line**).

HIV diagnoses decreased by 19% in NSW residents over the last five years

This is the lowest rate of HIV notifications in NSW since surveillance began in 1985 and is the result of investment in a number of effective interventions: access to PrEP, earlier treatment and high uptake among people diagnosed with HIV (preventing onward transmission), promoting condoms, and harm reduction strategies such as the Needle and Syringe Program and the Opioid Treatment Program. This has only been possible through strong partnerships between affected and at-risk communities, government, clinicians, general practice and researchers.

Community-led 'Ending HIV' campaigns and the redesign of public sexual health services to make testing for HIV and sexually transmissible diseases (STIs) more accessible have led to high testing and treatment rates as well as early initiation of treatment. General practice and primary care have played a pivotal role in diagnoses and ongoing care. The HIV Support Program has underpinned rapid initiation of treatment by supporting doctors. A robust data and surveillance system, with a focus on contact tracing and partner notification, has built a foundation for other interventions.

By 2016, NSW had already met the UNAIDS 90–90–90 targets for HIV diagnosis, treatment uptake and viral suppression.[1] That same year, NSW rapidly rolled out PrEP (antiretroviral medication taken by HIV-negative individuals to prevent HIV infection). PrEP is now the most common HIV prevention method used by HIV-negative MSM.[2]

The proportion of at-risk MSM on PrEP increased between 2013 and 2019 (**Figure 1, orange line**). PrEP roll-out initially occurred through EPIC-NSW, one of the world's largest PrEP implementation trials, between 2016 and 2018. The expansion of PrEP availability has only been possible through clinical service redesign and the responsiveness of the NSW health system, nurse-led models, and the partnership between general practitioners (GPs), the Kirby Institute and ACON peer support workers. Since its listing on the Pharmaceutical Benefits Scheme in April 2018, PrEP has been dispensed to over 15,000 NSW residents.[3]

HIV prevention coverage or safe sex is high in NSW, with 79% of men who have sex with male casual partners in 2020 reporting at least one form of effective prevention (such as PrEP, condom use or treatment resulting in undetectable viral load).[2]

There has been a dramatic reduction in the time from diagnosis to treatment initiation between 2013 and 2019 (**Figure 1, teal line**). In 2019, 88% of people diagnosed with HIV had started treatment within six weeks, including 44% who started within two weeks of diagnosis.[3]

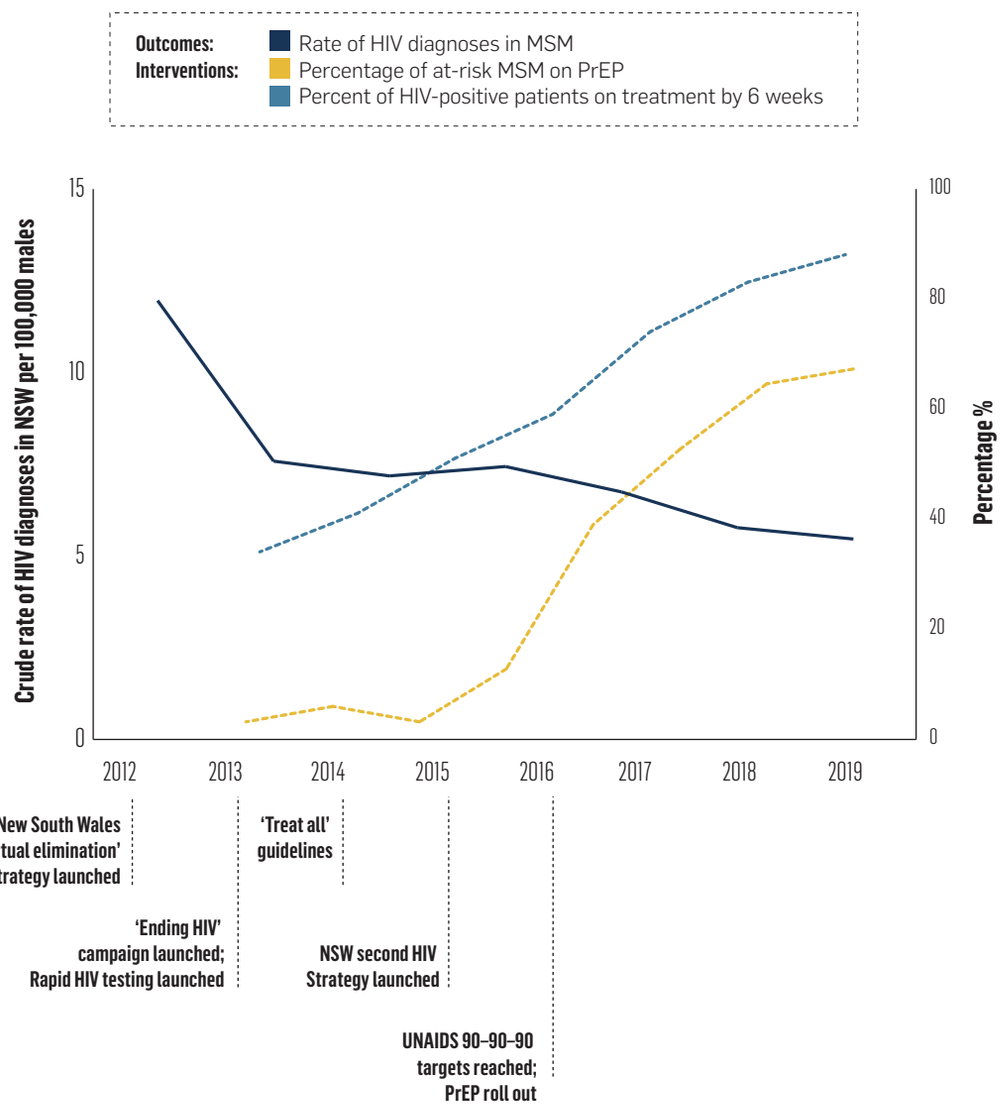
The virtual elimination of HIV transmission between mother and child, among people who inject drugs, and among female sex workers, has been sustained

The virtual elimination of HIV transmission between mother and child,[3,27] among people who inject drugs, and among female sex workers, has been sustained.[4] The incidence of HIV (new cases) among women in sex work in NSW is among the lowest in the world due to highly successful HIV prevention initiatives. Among gay and bisexual men who attend sexual health clinics, HIV prevalence among male sex workers is no different to HIV prevalence among gay and bisexual men who report no recent history of sex work.[5]

The Needle and Syringe Program (NSP) remains a highly cost-effective public health program[6] to prevent the transmission of HIV among people who inject drugs and the wider community. The expansion of the NSW Opioid Treatment Program into the primary care sector, and the increased involvement of GPs, non-government organisations and community pharmacies, have also played a substantial role in harm minimisation and HIV prevention among people who inject drugs.

Figure 1: HIV in NSW, 2012 to 2019

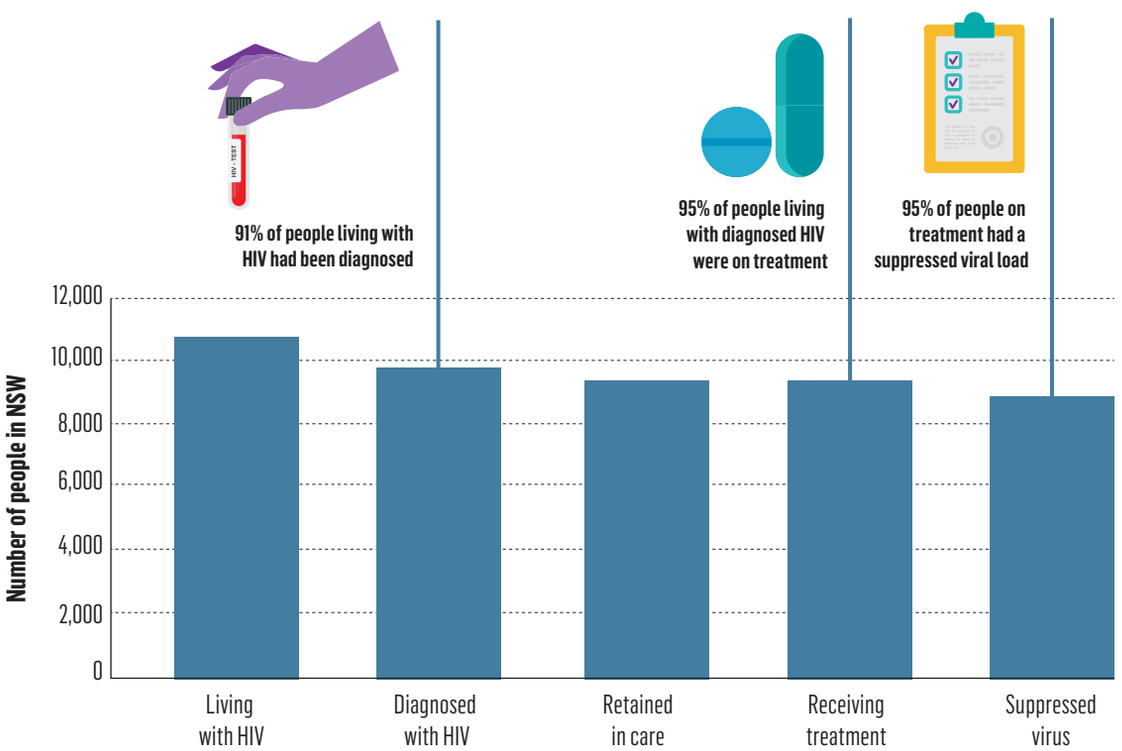
Source: Adapted from a figure produced for AVAC Global Advocacy for HIV Prevention and the Friends of the Global Fight against AIDS, Tuberculosis and Malaria for the 10th IAS Conference on HIV Science, 2019, Mexico City.



In 2019, NSW achieved two of the UNAIDS Fast-track 95–95–95 targets for HIV diagnosis, treatment and viral suppression.[1, 7] However, data modelling by the Kirby Institute estimates that only 91% of people living with HIV in NSW have been diagnosed; in other words, 9% of people with HIV do not know they have it (**Figure 2**).

Figure 2: The NSW HIV diagnosis and care cascade, 2019

Source: Unpublished analysis using data to December 2019 by the Kirby Institute, UNSW



A RENEWED FOCUS

Substantial improvements have been made in HIV prevention, testing and treatment in NSW. Unfortunately not all groups have benefited equally from these successes. To make new gains the Strategy must:

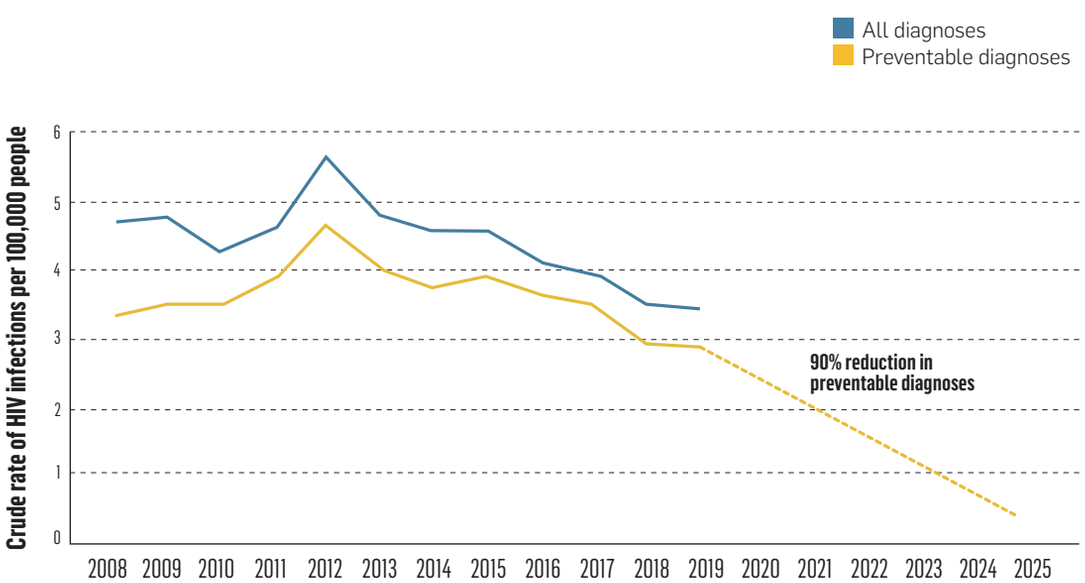
- address the barriers created by stigma
- adapt, pilot and implement new technologies
- engage sub-populations who have not experienced the same level of recent success, including a renewed focus on:
  - preventable infections acquired in NSW and by residents travelling overseas
  - connecting overseas-born people who acquired HIV abroad with testing and care soon after their arrival in Australia.

This Strategy builds on the momentum of the previous two by adding to current activities, with new initiatives focusing on:

- stigma and discrimination
- MSM living in areas of outer Sydney and regional NSW with low concentrations of gay-identified men
- culturally and linguistically diverse (CALD) and recently arrived overseas-born MSM
- heterosexuals at risk, including CALD people, MSM and women who are sexual partners of MSM
- young MSM aged under 25 years
- Aboriginal people.

The Strategy also introduces a new headline target, to achieve a 90% reduction in the rate of preventable HIV infection as an ambitious target of 'virtual elimination' (**Figure 3**).

Figure 3: Rate of new HIV diagnoses per 100,000 people, 2008 to 2019



Stigma and discrimination

Stigma and discrimination are barriers to prevention, testing, treatment initiation and adherence, and retention in healthcare settings.[8, 9] Healthcare workers who bring stigmatising assumptions to their work miss opportunities to offer testing for HIV or suggest prevention options including PrEP. Negative perceptions and experiences of stigma and discrimination may result in reductions in testing, treatment engagement and retention in treatment.

This Strategy introduces a new group of initiatives targeting stigma, sitting alongside the goals for prevention, testing and treatment. Reducing the incidence and impact of stigma will have a multiplying effect across the strategy, making other initiatives more effective.

MSM living in areas of outer Sydney and regional NSW with low concentrations of gay-identified men

Declines in HIV notifications among MSM have been greater in inner Sydney, which has a larger gay-identified male population than other parts of NSW. Outer suburban MSM living in areas with low concentrations of gay-identified men have not experienced the same level of declines in HIV diagnoses as MSM in inner Sydney suburbs. At the same time, PrEP use among MSM in inner Sydney suburbs with high concentrations of gay men is higher than in outer suburban regions. MSM in these areas are less socially connected to gay community, and this may mean that they are less well connected to innovations in prevention.[10]

Declines in HIV notifications among MSM have been greater in inner Sydney, which has a larger gay-identified male population

CALD and recently arrived overseas-born MSM

An emerging priority population identified in this Strategy is overseas-born MSM, particularly CALD residents and MSM who have lived in Australia for four years or less. When people are diagnosed with HIV, test results can indicate roughly how long they have been living with HIV.

Between 2015 and 2019, there was a substantial 47% decline in late diagnoses (having a CD4+ cell count of <350 cells/μL at diagnosis, suggesting they have been living with HIV for some time) among Australian-born MSM, but in complete contrast there was a 32% increase among overseas-born MSM. The proportion of late diagnoses was even higher among those who had lived in Australia for four years or less, with an increase of 57% between 2015 and 2019. Once connected to health services, overseas-born MSM have high rates of testing and treatment uptake.[10] This Strategy introduces initiatives to connect overseas-born MSM earlier with testing and care.

Heterosexuals at risk, including CALD people, MSM and women who are sexual partners of MSM

In NSW, the estimated proportion of HIV-positive people who have not been diagnosed is higher among heterosexual people than among gay and bisexual men,[1] although the actual number of people is smaller.[12] Special consideration should be taken for men who have sex with men who do not identify as gay or bisexual, such as using discrete testing campaigns or accessible health services. Between 2015 and 2019, HIV notifications among people reporting heterosexual exposure as their source of infection remained stable, both among Australian-born and overseas-born people.[4] This contrasts with the significant decline in new HIV notifications among Australian-born MSM. There was a 15% increase in late diagnoses among overseas-born heterosexuals in 2019.[27] This Strategy will focus on connecting this group early with testing and care.

Young MSM aged under 25 years

Over the last five years, young MSM aged under 25 years have not benefited from the same reduction in HIV notifications as older MSM. Young MSM are less likely to live in inner Sydney suburbs, which have high concentrations of gay-identified men; they are also less likely to be highly socially engaged with gay community.[10] This is likely to mean that they are less connected to innovations in prevention. Young MSM have lower PrEP use than older MSM, particularly those living in suburbs with low concentrations of gay-identified men. This Strategy renews a focus on campaigns with messaging about condom use, PrEP and testing for HIV and STIs that resonates with young MSM. The Strategy also extends targeting to those living in outer suburbs and other regions of NSW.

Aboriginal people

HIV diagnoses among Aboriginal people remained low in NSW between 2015 and 2019,[4] but greater recognition of diverse social and cultural factors which can influence the health and wellness of Aboriginal people is required to maintain these low rates.[11] While HIV diagnoses are low in NSW, the rates of gonorrhoea and chlamydia infections are higher in Aboriginal people (compared to non-Aboriginal people),[7] highlighting the need for increased HIV and STI prevention efforts.

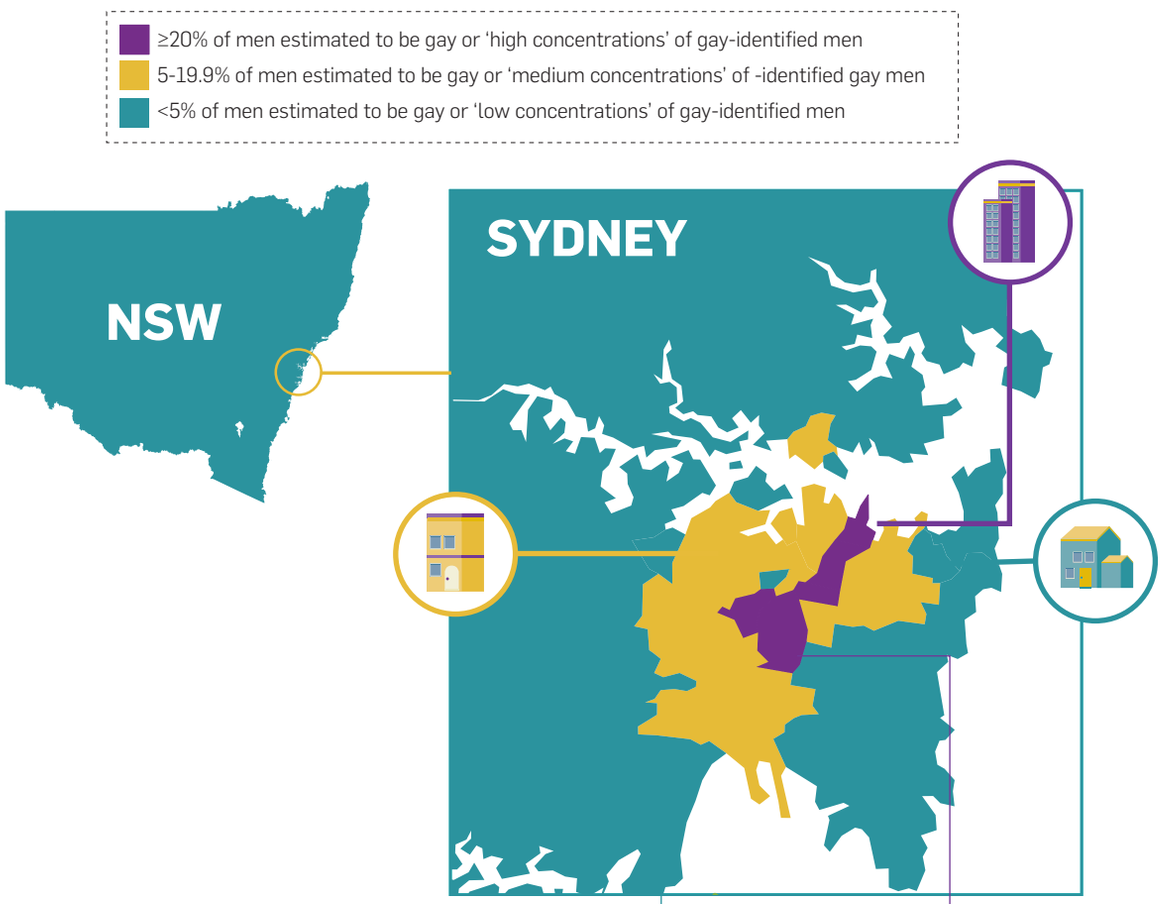
Aboriginal people who inject drugs, including those who are incarcerated, are at greater risk for acquiring blood-borne viruses. In 2020, one in five attendees at NSPs identified as Aboriginal.[13] This Strategy aims to improve the availability of sterile injecting equipment in areas where a high number of Aboriginal people who inject drugs live, and to increase the uptake of PrEP among Aboriginal people at risk.

In 2020, the new National Agreement on Closing the Gap to reduce disparities in health and social outcomes was released. This Strategy will ensure that all NSW health services, including sexual health clinics and general practice, are focused on improving the health outcomes of Aboriginal people by providing culturally appropriate services.

THE PROPORTION OF GAY IDENTIFIED MEN LIVING IN NSW

Figure 4: Outer suburban MSM

Note: In 2019 a method for estimating the number and proportion of adult males who are gay in each postcode was developed.[14] Postcodes were categorised into three groups (<5%, 5-19.9%, and ≥20% of adult males who identify as gay).

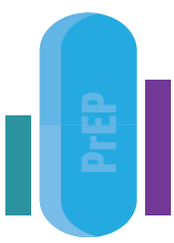


HIV diagnoses in MSM between 2015 and 2019

HIV diagnoses among MSM declined most in inner Sydney suburbs where ≥20% of men are estimated to be gay.

Outer suburban MSM living in areas with lower concentrations of gay-identified men **have not experienced the same level of declines.**

54% of MSM who had casual sex without a condom **used PrEP in 2019**



74% of MSM who had casual sex without a condom **used PrEP in 2019**

PrEP use was lower among men from outer suburban regions with low concentrations of gay-identified men than those living in **suburbs with high concentrations of gay identified men** (54% compared to 74%).[10]

IMPACT OF COVID-19 IN 2020

The COVID-19 pandemic has had significant impacts on how people interact with the healthcare system. It has also amplified issues like mental health, drug-use, isolation and homelessness.

The number of HIV tests conducted was 24% lower in April–June 2020 than during the same period in 2019. This was due to reduced service capacity, restricted movement and resulting changes to sexual behaviour, and altered healthcare-seeking behaviour due to COVID-19. As restrictions eased throughout late May and June, overall testing numbers began to increase and return to the five-year average.[3]

The number of community-based rapid HIV tests and HIV dried blood spot (DBS) self-sampling tests also fell during 2020 but remained targeted to MSM, people from CALD backgrounds and people who inject drugs who test infrequently or have never tested previously.[3]

PrEP use declined by 21% in April–June 2020 compared to the previous quarter.[3] This was probably due to lower levels of casual sex activity. Sexual activity changed significantly among gay and bisexual men in response to COVID-19 as reported by self-assessment in the Flux cohort study. Among gay and bisexual men in Flux, the proportion reporting any sex with casual partners dropped dramatically from 79% in 2019, to 9% in early 2020 during the initial period of lockdown in NSW.[15]

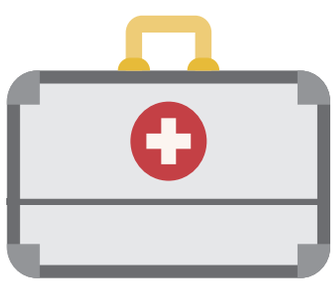
The number of units of injecting equipment distributed in April–June 2020 remained stable compared to the same period the year before. NSP services remained open and outreach was enhanced to ensure people could access sterile injecting equipment during the pandemic. The NSW Users and AIDS Association (NUAA) expanded their NSP postal service, which included the addition of online ordering.

COVID-19 did not have an effect on HIV treatment coverage, with 99% of HIV-positive patients seen in public sexual health clinics on treatment in the April–June quarter.[3]

The NSW Government and community partners rapidly re-oriented services and programs in response to COVID-19, to ensure the ongoing availability of HIV prevention, testing and treatment with a focus on innovative online services and telehealth. Communication messaging promotes HIV testing and recommencement of PrEP to priority populations.

This Strategy will explore opportunities to increase HIV awareness, testing, treatment and care among international travellers, particularly students who are in mandatory hotel quarantine after arrival in Australia.

During the COVID-19 pandemic, the number of HIV tests conducted was 24% lower in April-June 2020 compared to the same period in 2019

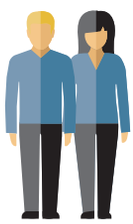


PRIORITY POPULATIONS

This Strategy prioritises meaningful participation of people living with HIV along with other priority populations as essential to its development, implementation, monitoring and evaluation.

People including those with diverse cultural, sexual and gender identities may belong to more than one priority population.

People living with HIV



Men who have sex with men (MSM), including:

- culturally and linguistically diverse (CALD)
- recently arrived (four years or less) overseas-born
- under 25 years old

People from or who travel to countries with high HIV prevalence

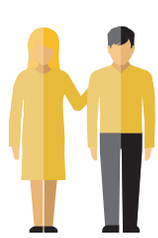
Aboriginal people

People who inject drugs

Sex workers and their clients

People who are in or have recently been in custodial settings

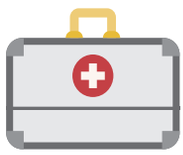
Sexual partners of members of priority populations



PRIORITY SETTINGS

Publicly funded HIV and sexual health services

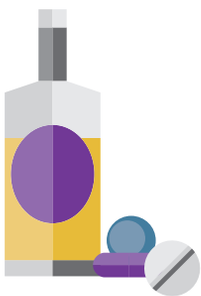
Community and online services



General practices and other primary care services including Aboriginal Community Controlled Health Services

Needle and Syringe Program outlets

Antenatal care



Drug and alcohol services

Mental health services

Emergency departments

Custodial settings

Tertiary education institutions including Technical and Further Education (TAFE), universities and language schools

OUR VALUES

1. PREVENT

Prevent HIV transmission by promoting safe behaviours and by expanding access to condoms, PrEP, PEP and sterile injecting equipment

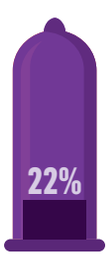
The availability of new prevention strategies means that virtual elimination of HIV transmission is now feasible. The elimination of HIV transmission can be achieved through a combination of evidence-based prevention options, which include:

- using condoms
- if HIV-negative, using HIV pre-exposure prophylaxis (PrEP)
- if HIV-positive, taking HIV treatment effectively to achieve undetectable viral load
- using sterile injecting equipment every time and never sharing
- if exposed to HIV, using post-exposure prophylaxis (PEP) within 72 hours of exposure

This Strategy will include a focus on ensuring there are high levels of prevention and extending it to emerging populations at risk of HIV transmission.

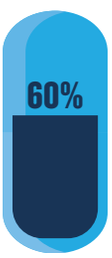
Condoms

While PrEP is the most common HIV prevention method, condoms are the preferred choice for a significant number of MSM. Condoms are very effective at preventing HIV and sexually transmissible infections (STIs). In 2020, 22% of gay and bisexual men who had sex with a casual male partner reported consistent condom use, down from 44% in 2016; this is likely attributed to the rapid uptake of PrEP.[2]



of gay and bisexual men use condoms every time they have sex with a casual partner

This Strategy prioritises the availability of condoms and supports this choice for priority populations and communities, including young MSM and heterosexuals.



of HIV negative gay and bisexual men who had condomless sex with a male casual partner **take PrEP**

HIV pre-exposure prophylaxis (PrEP)

PrEP is now the most commonly used HIV risk reduction strategy among gay and bisexual men with their casual male partners in Sydney. In 2020, 60% of HIV-negative gay and bisexual men who had condomless sex with a casual male partner take PrEP.[2] PrEP does not protect against other STIs, meaning that condom promotion, behavioural prevention, testing and treatment strategies are still required.

Barriers to PrEP use are associated with individual and social factors including not being willing to take medication to prevent HIV, fear of side effects, having a lower education or income, lack of perceived risk, not being engaged with the gay community, low health literacy, difficulties with navigating online ordering, and difficulties finding non-judgemental clinical care.[16–18] Asian-born men without Medicare access are over-represented among men who are willing to use PrEP but are not doing so.[19, 20] People from minority populations and marginalised groups are also less likely to initiate PrEP.[21] Peer-based and community-led services can be more attractive to some than traditional clinic-based services to members of marginalised groups such as gay and bisexual men, Asian-born MSM, and transgender and gender-diverse people.[22–24]

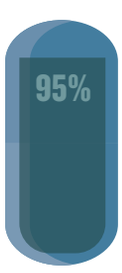
There are opportunities to expand access and encourage use of prevention methods including PrEP. Tailored marketing, promotion and peer-led initiatives have resulted in high uptake of PrEP among gay men and other MSM in inner Sydney,[25] which is a focus in this Strategy. PrEP use can be expanded to emerging sub-populations including at-risk heterosexuals, young MSM, CALD and overseas-born MSM, and MSM living in areas with lower concentrations of gay-identified men.

Updated PrEP Guidelines remove barriers to PrEP access by simplifying the risk criteria and enabling on-demand PrEP use. On-demand or event-driven PrEP use means taking PrEP pills only around the time of sex according to the prescribed dosing schedule. Additionally, people may choose to use PrEP during times when their risk behaviour changes, such as during festivals or while travelling to a country with high HIV prevalence.

This Strategy will ensure that all priority populations attending public sexual health services and general practices are assessed for PrEP eligibility. PrEP prescriber availability will be expanded for greater geographical coverage to ensure equitable access for at-risk populations. There is an opportunity to extend PrEP prescribing in drug and alcohol services, by strengthening links between local health district sexual health services and alcohol and other drug services, specialist stimulant treatment services and non-government alcohol and other drug services.

Viral load suppression: 'undetectable viral load'

Taking HIV treatment effectively to achieve an undetectable viral load (U=U, or undetectable = untransmissible) means that when HIV viral load is below 200 copies/ml of blood measured by a viral load test, an HIV-positive person cannot pass on the virus to someone else (referred to as 'treatment as prevention'; or 'TasP'). In 2020, 95% of people living with HIV are on treatment, of whom 95% have an undetectable viral load.[1] This Strategy promotes undetectable viral load as an effective risk reduction strategy.



of people living with diagnosed HIV are on treatment, and 95% have an undetectable viral load

Sterile injecting equipment

The NSW NSP provides people who inject drugs with sterile injecting equipment. The NSP is an evidence-based, cost-effective public health program to prevent the transmission of HIV and hepatitis C virus among people who inject drugs and the wider community.[6] This Strategy will prioritise continuous improvement in the delivery of NSPs to increase access to sterile needles and syringes and to monitor reach and coverage. The number of units of injecting equipment distributed in NSW increased by 17% between 2015 and 2019, while the number of NSP outlets increased by 6%, including primary and secondary outlets, dispensing machines and pharmacies.

This Strategy aims to reduce sharing of injecting equipment in NSW. In 2020, 16% of people who accessed NSPs reported at least one episode of receptive syringe sharing (i.e. using a syringe that has been used by another person) in the month prior to data collection, down from 20% in 2016. People attending NSPs who reported being prescribed opioid substitution therapy were also significantly less likely to report recent receptive syringe sharing.[13]

This Strategy will strengthen links between primary and secondary NSPs including sexual health services and alcohol and other drug services. The next NSW Hepatitis C Strategy 2021 will focus on developing the NSW response and priorities for the NSP over the next five years.

Post-exposure prophylaxis (PEP)

If a person is or suspects they might have been exposed to HIV (such as after having unprotected sex with someone whose HIV status was not known, or having a needle-stick injury), post-exposure prophylaxis (PEP) within 72 hours of exposure can be prescribed in sexual health clinics and emergency departments, and in general practices by s100 prescribers. This Strategy will ensure that PEP is available to those who require it, and that clients are assessed for transition to PrEP for ongoing HIV prevention.

Targets

- 90% of men who have sex with male casual partners report at least one form of HIV prevention including:
  - condom use
  - PrEP use
  - undetectable viral load.
- 90% of HIV-negative men who have sex with male casual partners without a condom take PrEP.
- Reduce sharing of injecting equipment among people who inject drugs.

Initiatives	Description	Partners
1.1 New models of care for PrEP	Pilot innovative models of care for PrEP to increase access, including telehealth, online assessment and access and peer-led models. Ensure regular comprehensive screening for sexually transmissible infections for people on PrEP. Trial local initiatives and new technologies, such as injectable PrEP, that have the potential to scale-up. Deliver culturally tailored models for CALD and overseas-born MSM. Increase access for young MSM <25 years, at risk heterosexuals, and in areas with lower concentrations of gay-identified men.	Ministry of Health, STIPU, ASHM, local health districts, Multicultural HIV and Hepatitis Service, ACON, Pozhet, Pharmacy Guild, Kirby Institute (UNSW) and Centre for Social Research in Health (UNSW)
1.2 PrEP prescribers expansion	Deliver a range of coordinated activities to increase the number and availability of PrEP prescribers including targeted and ongoing GP engagement, workforce development and communications, and enhanced shared care between publicly funded sexual health services and GPs. Activities will be targeted at areas of geographical need or priority settings, with specific focus on increasing access for CALD and overseas-born gay and other MSM, young gay men and other young MSM, Aboriginal people and other emerging sub-populations.	STIPU, Ministry of Health, ASHM, local health districts, Aboriginal Community Controlled Health Services, AH&MRC, Multicultural HIV and Hepatitis Service, RACGP, GP organisations, primary health networks
1.3 PrEP Guidelines	Implement and promote the updated PrEP Guidelines[26] and resources including culturally appropriate communication about on-demand and daily PrEP and guidance on the requirement for regular comprehensive STI screening for clinicians, general practice, priority populations and emerging sub-populations.	STIPU, Ministry of Health, NSW Sexual Health Infolink, local health districts, RACGP, ASHM, ACON, Multicultural HIV and Hepatitis Service
1.4 GPs and primary care workforce	Invest in a diverse range of GP and nursing workforce development activities for PrEP prescribing and on-going STI/HIV screening, as part of routine care in general practice and other primary care settings. Undertake a training needs assessment across prevention, HIV/STI testing, treatment, stigma and discrimination to inform workforce development. Investigate co-delivery of HIV content with STI and blood-borne virus content.	STIPU, Ministry of Health, local health districts, RACGP, ASHM, Aboriginal Community Controlled Health Services, primary health networks, AH&MRC

Initiatives	Description	Partners
1.5 Community mobilisation and health promotion	Deliver education, targeted health promotion, community mobilisation and behavioural prevention interventions, including peer-led initiatives for priority populations and emerging sub-populations, to promote and support the uptake of condoms, PEP, PrEP, screening for STIs and other prevention and risk reduction strategies. Deliver a community education campaign promoting different options to take PrEP (daily, on-demand, seasonal). Utilise new and innovative online technologies to deliver prevention education messages to priority populations, including micro-targeting identified groups and geo-location services. Tailor campaigns to better resonate with people with diverse sexual and gender identities. Build on existing community-led programs to develop online peer education, increasing the accessibility of prevention programs for regional and remote priority populations. Promote condom use through the Play Safe website, *Take Blaktion* and social media channels.	Ministry of Health, STIPU, local health districts, ACON, Positive Life, Pozhet, Multicultural HIV and Hepatitis Service, NUAA, Aboriginal Community Controlled Health Services, AH&MRC, tertiary education institutes, RACGP, Sex Workers Outreach Project (SWOP)
1.6 Sex worker peer outreach	Partner with non-government organisations to provide health education information, peer education and outreach to reduce barriers to engagement with healthcare services for NSW sex workers. Support HIV prevention among gay and bisexual men and support HIV prevention among male sex workers.	Ministry of Health, SWOP, ACON, Positive Life NSW, local health districts
1.7 Needle and Syringe Program	Invest in harm minimisation strategies to limit HIV transmission via injecting drug use (NSPs, Opioid Treatment Program) which have resulted in the virtual elimination of HIV among people who inject drugs. Continuous improvement in the delivery of the NSP to increase access to sterile needles and syringes and monitor reach and coverage. Strengthen links between primary and secondary NSP providers, including alcohol and other drug services, opioid treatment program clinics and peer support services such as NUAA. Support programs and strategies to address stigma and discrimination in healthcare settings and support strategies for the education of health workers, including HETI e-learning modules. Ensure supportive laws and regulations, which are integral to enabling safe practices, protecting people from discrimination and supporting public health.	Ministry of Health, NUAA, ACON, local health districts, Pharmacy Guild, non-government alcohol and other drug services, private opioid treatment clinics
1.8 Information and referral	Fund services, including the NSW Sexual Health Infolink (SHIL), which provide culturally specific HIV and sexual health information, referral and support to the NSW general public and clinicians. SHIL is a specialised, anonymous, confidential nurse-led service using telephone and internet-based technologies. The service works with diverse people and communities at risk and healthcare providers to support testing, contact tracing, PrEP, PEP and treatment in line with current evidence and guidelines.	NSW Ministry of Health, NSW Sexual Health Infolink, local health districts, Multicultural HIV and Hepatitis Service

Initiatives	Description	Partners
1.9 Aboriginal services	Strengthen systems, service integration and community engagement for HIV prevention, testing, treatment and care for Aboriginal people at risk. Ensure all NSW healthcare services including sexual health clinics and general practice are focused on improving the health outcomes of Aboriginal people by providing culturally appropriate services. To ensure adequate coverage, conduct an audit of the number of GP services in areas where there is a significant population of Aboriginal people. Improve the uptake of PrEP among Aboriginal people. Improve the availability of sterile injecting equipment in areas where a high number of Aboriginal people who inject drugs live. Establish formal relationships between publicly funded sexual health clinics and Aboriginal Community Controlled Health Services (ACCHS) to develop programs and support blood-borne virus and STI capacity development in the ACCHS sector. Increase the number of Aboriginal sexual health professionals across NSW. Create a NSW governance group to drive and monitor Aboriginal HIV responses. Improve educational pathways with a sexual health promotion focus and provide opportunities for Aboriginal health workers to develop new skills, including a sexual health specialisation.	Ministry of Health, Centre for Aboriginal Health, Aboriginal Community Controlled Health Services, local health districts, RACGP, Justice Health and Mental Health Network, AH&MRC, STIPU
1.10 Research and surveillance	Fund the BBV and STI Research, Intervention and Strategic Evaluation Program (BRISE) 2020–2024 at the University of NSW to undertake policy-relevant research to provide evidence and strategic advice that focuses on the prevention and diagnosis of infections and on the treatment and care of people living with infection. Enhance data and behavioural surveillance systems to improve monitoring of the Strategy for priority populations including people with diverse sexual identities and gender identities. Implement enhancements to the NSW Minimum Data Set for publicly funded sexual health clinics and the Notification form for new HIV diagnoses. These changes will enable better monitoring of the needs of people attending health services. Strengthen systems for timely collection and reporting of data to monitor progress, report outcomes and refine or scale focus.	Ministry of Health, Kirby Institute (UNSW), Centre for Social Research in Health (UNSW), local health districts and Multicultural HIV and Hepatitis Service

2. TEST

Normalise HIV testing for people at risk

Rates of HIV testing have increased each year since 2012. However, additional focus is required. Despite increases in testing, it is estimated that only 91% of people living with HIV in Australia have been diagnosed.[7] In 2019, 56% of Australian-born MSM diagnosed with HIV had not been tested in the 12-months prior to diagnosis, and 20% had evidence of late diagnoses (i.e., they have had HIV for some time before being diagnosed). Among overseas-born MSM, 65% had not had a recent test and 42% had late diagnoses.[27]

Late HIV diagnosis leads to increased mortality and morbidity, reduced life expectancy,[28,29] and higher costs to the health system.[30] Early diagnosis linked to treatment improves health outcomes and prevents transmission to others.

No recent test for 56% of Australian-born MSM diagnosed in 2019

Availability

Testing services that are easily accessible encourage more frequent testing among people at risk. Innovative testing modes, rapid testing and express testing clinics in community-based settings have been successful in engaging MSM, particularly young MSM with high-risk behaviour and a history of infrequent testing.[27,31] During HIV testing, clients should learn about HIV prevention strategies such as condoms, PrEP and PEP, and how often to test. Services must be convenient and confidential for everyone in NSW, including people with diverse sexual and gender identities, and people living in regional and remote areas.

No recent test for 65% of overseas-born MSM diagnosed in 2019

Normalisation

Interventions that normalise testing include campaigns with messages that resonate with sub-populations, comprehensive clinic-based testing, peer-led testing models, community-based testing models, GP education, and clinical workforce development. Opportunistic testing across the healthcare system ensures that testing is available regardless of where the patient presents. The rate of testing in MSM has not increased at the same rate as PrEP uptake, even among men who engage in higher risk activities.[32] This Strategy aims to increase HIV testing frequency among people at risk who are not taking PrEP, and to monitor testing in people on PrEP. Everyone should be offered an HIV test in conjunction with STI testing and diagnoses.

HIV prevention messages, HIV education programs, and direct offers of HIV testing increase the uptake of testing among recent immigrants.[33] The expansion of peer-led tailored programs beyond inner metropolitan areas may reduce barriers to testing for Asian MSM who do not have established connections with gay networks by facilitating access to culturally acceptable local services.[34] This Strategy aims to increase HIV testing and PrEP uptake among at-risk international students who attend general practices by addressing the cost and confidentiality concerns of services.[35] Peer-led services have been successfully developed and attract younger and Asian-born MSM.[24]

Comprehensive sexual health screening

HIV testing should be part of comprehensive sexual health screening in all public health services, general practices and other primary care settings. Comprehensive STI screening should also be offered to people prescribed PrEP. Rapid HIV testing can increase HIV testing frequency among MSM.[36] Rapid HIV testing should be more available and online booking expanded to more sites.

Innovative testing models

Innovations in service design and delivery have made testing more available. HIV self-testing supplements clinic-based testing and increases the frequency of testing among MSM and stigmatised populations including people who inject drugs.[37,38] The Atomo HIV Self Test was approved by the Therapeutic Goods Administration in 2018. The NSW HIV dried blood spot (DBS) self-sampling test also provides an alternative for at-risk people who experience barriers to testing through conventional services, with 46% of people who register having never previously tested for HIV or tested more than two years ago.[27]

Testing barriers

Barriers to testing include low perceived risk of infection, lack of symptoms, fear of an HIV diagnosis, fear of stigma, and not wanting to tell others of a positive diagnosis.[39–41] Opportunities are missed for HIV diagnoses at medical services despite clients having symptoms that are indicators for HIV testing.[40–42]

Barriers to testing for clinicians can be reduced through training that addresses consent in line with guidelines and through awareness of the NSW HIV Support Program, which connects them to local specialists who support them in delivering a positive diagnosis and quickly linking the patient to care. Increased attention to HIV indicator conditions in primary healthcare and specialist medical settings enables earlier HIV diagnosis.[38] HIV testing should be undertaken according to the Emergency Care Institute's clinical indicators, irrespective of HIV risk factors. Testing is now simpler and previous barriers such as concerns about managing HIV results and obtaining written informed consent have been removed.

Phylogenetics

Phylogenetics uses genome sequencing to track how a virus evolves and spreads over time and can link, or map related mutations of a virus making it easier to trace routes of transmission.

This Strategy will explore the use of HIV phylogenetics to improve understanding in transmission patterns and the impact of HIV infection acquired overseas. The detection and characterisation of active transmission clusters will be used to guide interventions such as focused education campaigns, targeted testing, partner notification, and promoting engagement with treatment and care.

Targets

- 95% of people living with HIV in NSW are diagnosed.
- Reduce the time between arrival in Australia and the first HIV test for all at-risk overseas-born people with the aim of increasing early detection of HIV infection and linking people with care.
- Reduce the time between arrival in Australia and HIV diagnosis for overseas-born MSM, in cases where infection was probably acquired overseas.

Initiatives	Description	Partners
2.1 Innovative testing models	Deliver a mix of options to make testing easy and accessible, including encouraging self-testing at community-based rapid testing and comprehensive clinic-based testing. Expand and adapt innovative models including person-centred care, culturally tailored, peer-led services to selected new sites with low concentrations of gay-identified men and sites with CALD communities. Pilot new technologies and online models, in collaboration with partners and the community. Ensure that HIV and STI testing models are widely available for Aboriginal people across NSW in a range of Aboriginal Community Controlled Health Services and culturally competent settings. Ensure services meet the needs of people with diverse sexual and gender identities.	NSW Ministry of Health, STIPU, NSW Sexual Health Infolink, local health districts, ACON, RACGP, primary health networks, AH&MRC, Aboriginal Community Controlled Health Services, Kirby Institute (UNSW), Centre for Social Research in Health (UNSW), Positive Life NSW, Multicultural HIV and Hepatitis Service
2.2 Dried blood spot (DBS) testing	DBS testing has created a confidential, convenient alternative to conventional testing. Extend the NSW HIV DBS testing pilot to ensure the self-sampling home test kit is available free to people at risk until the transition to Therapeutic Goods Administration listing. Expand the number of settings in which DBS is available, including NSPs, drug and alcohol services, mental health services and CALD services and events.	Ministry of Health, Sydney Sexual Health Centre, NSW State Reference Laboratory for HIV, St Vincent's Hospital Sydney, NSW Sexual Health Infolink, Multicultural HIV and Hepatitis Service, Health Protection NSW, Kirby Institute (UNSW), Centre for Social Research in Health (UNSW), local health districts
2.3 GPs and primary care workforce	Deliver workforce development, training and resources to normalise HIV testing in a range of settings, including public healthcare services and primary care. Develop a range of GP engagement models, with behaviour change focus, covering both testing and PrEP prescribing. Deliver more education in a range of clinical settings around consent and indications for HIV testing as set out in the National Testing Guidelines and ensure links are in place for clinicians to provide test results via the HIV Support Program. Deliver targeted communications and education for GPs to normalise HIV testing in a diverse range of patients; support concurrent testing for HIV and STIs as part of routine care; and deliver culturally appropriate services to CALD and Aboriginal people. Use new education models to train and upskill GPs in using innovative service delivery for patients, including telehealth. Refine and implement testing guidelines, tools and resources to: normalise testing in a range of settings; support concurrent HIV and STI testing; increase testing frequency among people at risk; monitor testing frequency in people on PrEP; and ensure comprehensive STI screening when PrEP is prescribed.	Local health districts, RACGP, STIPU, Ministry of Health, AH&MRC, Aboriginal Community Controlled Health Services, ASHM, RACGP, primary health networks, Positive Life NSW, Multicultural HIV and Hepatitis Service, NSW Sexual Health Infolink

Initiatives	Description	Partners
2.4 Community mobilisation and health promotion	Fund non-government organisations and partners to deliver community-led culturally appropriate HIV testing campaign messages targeting priority populations and emerging sub-populations.	Ministry of Health, STIPU, ACON, local health districts, Positive Life NSW, Pozhet, Multicultural HIV and Hepatitis Service, SWOP
2.5 Statewide HIV testing campaign	Discreet Life is an innovative HIV testing campaign to increase testing among MSM who do not identify as gay. Expand the campaign to target CALD and non-gay-identifying MSM in outer Sydney and in other regions of NSW with lower concentrations of gay-identified men. Develop and deliver innovative campaigns over the life of the Strategy.	NSW Ministry of Health, STIPU, local health districts, Pozhet, Multicultural HIV and Hepatitis Service
2.6 International students testing	A range of initiatives are needed to facilitate earlier HIV diagnosis among overseas-born people who have recently arrived in Australia. Promote the international students website 'hub' with HIV testing and prevention information. Adapt the NSW Play Safe program peer education toolkit for international students and roll it out to tertiary education institutions including universities, TAFE and language schools. Work with universities to deliver HIV/STI testing, prevention and educational resources on campus that are culturally appropriate, accessible and tailored to meet the needs of overseas-born students. Promote testing through a range of channels including peer education and social media to reduce barriers. Explore opportunities to promote testing and provide HIV awareness information for international students in COVID-19 quarantine settings.	STIPU, local health districts, tertiary education institutions, English Australia, ACON, Multicultural HIV and Hepatitis Service, overseas student health insurance providers, Study NSW, ISANA International Education Association, international student agents, Ministry of Health
2.7 People visiting high-prevalence countries campaign	Maintain investment in campaigns and community education to target heterosexuals and gay men including CALD people travelling to countries with high HIV prevalence. Educate GPs to ensure PrEP is included in travel advice for at-risk individuals.	Ministry of Health, STIPU, Pozhet, RACGP, Multicultural HIV and Hepatitis Service, SWOP, local health districts
2.8 HIV contact tracing	Release a new policy directive for HIV contact tracing to provide guidance to medical practitioners on notifying partners of patients who have been diagnosed with HIV and information on support services. Facilitate testing and support for all recent sexual and injecting partners of people newly diagnosed with HIV. Ensure s100 GPs and other services are aware that contact tracing support services are available.	Ministry of Health, Health Protection NSW, STIPU, NSW Sexual Health Infolink, Positive Life, Pozhet, NUAA, RACGP, local health districts

Initiatives	Description	Partners
2.9 Antenatal screening	Ensure HIV testing for all women is part of routine antenatal screening in accordance with Royal Australian and New Zealand College of Obstetricians and Gynaecologists guidelines and National Clinical Practice Guidelines for Pregnancy Care. Screening at the first antenatal visit provides an opportunity for timely detection and treatment of undiagnosed HIV, and significantly reduces the risk of perinatal transmission.	NSW Ministry of Health, Health Protection NSW, local health districts
2.10 Research and surveillance	New data and surveillance systems are required to better understand the changing HIV epidemic. Implement a new HIV and STI minimum data set to enhance surveillance of priority populations and sub-populations in publicly funded sexual health services, including data on gender and sexual identity. This will be used to understand prevention, testing, treatment needs, and service gaps. Monitor testing stratified by PrEP use to identify changes in testing rates among those susceptible to HIV. Work with NSW Health Pathology to extend the depth of testing data available. Support policy-relevant research in priority settings including the NSP. Improve understanding in transmission patterns and the impact of HIV infection acquired overseas using technologies including phylogenetics.	NSW Ministry of Health, Health Protection NSW, local health districts, NSW Health Pathology, Health Protection NSW, eHealth, Kirby Institute (UNSW), Centre for Social Research in Health (UNSW), community

3. TREAT

Start and maintain treatment soon after diagnosis to maximise health outcomes and prevent transmission.

Treatment for HIV is effective, and rapid access to treatment after a diagnosis improves health outcomes, improves quality of life and prevents further transmission.[43,44]

Person-centred care

Person-centred treatment strategies include early referral to treatment and peer-led services supporting people who are newly diagnosed. It also includes retaining people living with HIV in care and maintaining a connection to support and services throughout their life, including in aged care.

Approaches must be culturally acceptable and address specific barriers experienced by priority populations, including those in regional, rural and remote communities and with gender and cultural diversity, and take into account the range of settings commonly used by priority populations to maximise their engagement.

Medicare eligibility

For people not eligible for Medicare, barriers to testing and treatment should be reduced or mitigated. Overseas student health insurance cover provides a rebate of only a small proportion of the cost of antiretroviral therapy.[45] Compassionate access for treatment is provided to Medicare-ineligible patients for notifiable conditions under the Medicare Ineligible and Reciprocal Health Agreement Policy Directive.

The Ministry of Health will work with the Australian Government to reduce the impact of Medicare ineligibility. NSW local health districts work with Medicare-ineligible patients to access HIV treatments free of charge. Other strategies include seeking compassionate access through a pharmaceutical company, taking part in a clinical trial or purchasing generic medications through individual import at lower cost from overseas.

Rapid uptake

Rapid uptake of HIV treatment among people newly diagnosed with HIV is associated with improved health outcomes and reduced transmissions.[43] A focus of this Strategy is to ensure that rapid uptake of HIV treatment continues to increase, by working with community, s100 HIV treatment prescribers, GPs and primary healthcare providers to strengthen HIV systems and models of care and increase acceptability to patients.

Care and support

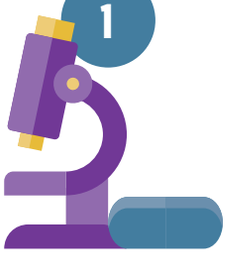
Primary care support can be strengthened for people living with HIV, particularly older people, to manage their health in general practice. In 2019, there were over 5,000 people aged 50 years and over in NSW living with HIV, representing 54% of the total number of people diagnosed with HIV in NSW, and the number is growing as populations age.*

Linking and retaining people living with HIV in care and support throughout their life is critical for achieving the goals of this Strategy. Addressing all aspects of health and wellbeing of people living with HIV is also critical to maximise their health outcomes.

*Unpublished analysis using data to December 2019 by the Kirby Institute, UNSW

The NSW HIV Support Program facilitates the provision of expert advice to clinicians at the critical time a new HIV diagnosis is made. The Program streamlines linkage to care and support for people with newly diagnosed HIV, negotiating health pathways and rapidly improving access to five key support services:

1



Effective clinical management, including access to treatment

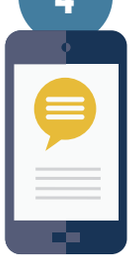
2

Psychosocial support

3

Counselling about prevention of transmission of HIV to others, including the role of treatment in reducing the risk of transmission

4



Support to ensure that all at-risk contacts are identified and tested for HIV

5

Linkage to relevant specialist, community and peer support services with a lived experience of HIV.

While the five key services should be offered to every person diagnosed with HIV infection at the time of diagnosis, they also have a role across the continuum of care, supporting sustained engagement with care providers. Ongoing training and capacity building of the entire workforce involved in HIV, including primary care and other non-specialists, ensure the key services are incorporated into everyday clinical practice. Other practical measures may be required by individual specialist services and clinicians to bolster retention in care such as automatic recall systems, systems that identify loss to care, and more intensive support for clients with specific needs.

Targets

- 90% of people newly diagnosed with HIV initiate treatment within two weeks of diagnosis.
- 95% of all people with diagnosed HIV are on treatment and 95% of people on treatment have an undetectable viral load.
- 75% of people living with HIV in NSW report good quality of life.

Initiatives	Description	Partners
3.1 HIV Support Program	Strengthen the HIV Support Program and provide systems for linkage to and retention in care, psychosocial support, partner notification and rapid initiation of treatment. The NSW HIV Support Program facilitates the provision of expert advice to clinicians at the critical time a new HIV diagnosis is made.	Health Protection NSW, local health districts, HIV reference laboratories, Positive Life NSW, Pozhet, ACON, ASHM, RACGP, STIPU, NSW Sexual Health Infolink, AIDS Dementia and HIV Psychiatry Service (Adahps), Bobby Goldsmith Foundation, Multicultural HIV and Hepatitis Service
3.2 Antiretroviral resistance surveillance	Support rapid treatment initiation by undertaking antiretroviral drug resistance surveillance in NSW, and routinely reporting results.	Health Protection NSW, HIV reference laboratories, Kirby Institute (UNSW)
3.3 Shared care	Improve shared care arrangements between general practice, non-HIV specialist providers and HIV specialist providers to meet the evolving needs of people living with HIV. Develop a statewide shared care model that defines the roles and responsibilities of general practices, non-HIV specialist providers and HIV specialist providers. Strengthen referral and communication pathways; strengthen links with the HIV Support Program; develop electronic information sharing mechanisms; and provide workforce development and training.	STIPU, Ministry of Health, ASHM, RACGP, Health Protection NSW, local health districts, primary health networks, Sexual Health Counsellors' Association of NSW, HIV social workers, HIV reference laboratories, Positive Life NSW, ACON, Pozhet, AIDS Dementia and HIV Psychiatry Service (Adahps), Bobby Goldsmith Foundation, Multicultural HIV and Hepatitis Service
3.4 Models of care	Strengthen models of care, including telehealth models. Models will deliver access to psychosocial and peer support, and build the capacity of the HIV workforce to support rapid treatment initiation, treatment adherence and retention in care over the long term for all people with HIV. Ensure everyone diagnosed with HIV is offered the opportunity to speak to a trained peer living with HIV. Ensure supports are in place for people who want to commence treatment immediately after diagnosis. Extend the geographical distribution of specialist psychosocial and peer-led resources. Ensure people living with HIV receive person-centred care for comorbidities including mental health, by developing strong partnerships and links with multidisciplinary specialist disciplines. Ensure everyone living with HIV has a chronic disease management plan in primary care. Promote interventions that enhance all aspects of health and wellbeing of people living with HIV such as diet, exercise, smoking cessation, and reducing harmful substance use (including alcohol).	Local health districts, HIV reference laboratories, STIPU, ASHM, RACGP, Positive Life NSW, ACON, Pozhet, Social Workers in HIV, AIDS Dementia and HIV Psychiatry Service (Adahps), Sexual Health Counsellors Association of NSW, HIV social workers, Bobby Goldsmith Foundation, Multicultural HIV and Hepatitis Service

Initiatives	Description	Partners
3.5 Clinic audits	Improve treatment adherence and outcomes for people living with HIV. Conduct regular clinical audits to identify patients with poor HIV treatment outcomes and implement a tailored person-centred support program.	Local health districts, high-caseload GPs, primary health networks
3.6 Community mobilisation and health promotion	Deliver community mobilisation and health promotion activities that support self-efficacy and autonomy in HIV treatment and management for people living with HIV, while promoting the benefits of rapid treatment initiation, adherence and retention to care.	Positive Life NSW, ACON, Bobby Goldsmith Foundation, NSW Ministry of Health, local health districts, general practice and primary care, Multicultural HIV and Hepatitis Service, Pozhet, AH&MRC

4. STIGMA

Reduce stigma and discrimination as a barrier to prevention, testing and treatment.

The people most affected by HIV can also face stigma and discrimination. Stigma may come with an HIV infection. It can be connected with sexual behaviours, gender identity, sex work and drug use.[46] It can also change between contexts, such as location, community or cultural identity. Stigma and discrimination can discourage people at risk of HIV from seeking prevention, testing and treatment.[8,47] It also affects the wellbeing and daily lives of people living with HIV.

More than half the participants living with HIV (57%) in the HIV Futures 9 study reported at least one experience of HIV-related stigma or discrimination in the previous 12 months, while 38% felt that they had been treated differently by a healthcare worker because of their HIV status.[48]

Reducing stigma is a new priority because of its pervasive impact across this Strategy. Effective initiatives to reduce the impact of stigma will have a multiplying effect, making other initiatives more effective.

In the community

Stigmatising beliefs in the community can be due to poor information about HIV. A coordinated strategy by the Ministry of Health and its partners to make high-quality information more available can affect the way HIV is discussed in the media and the community. This can include utilising events such as World AIDS Day to discuss stigmatising beliefs.

57% of people living with HIV experienced HIV-related stigma and discrimination

In clinical environments

In clinical environments, stigma also creates barriers to prevention, testing and treatment. Clinicians can bring stigmatising beliefs and assumptions to their work, potentially missing chances to test for HIV or suggest prevention options, such as PrEP. Perceptions and experiences of stigma lead to less testing and treatment. At-risk patients who are judged and ignored become less likely to have regular HIV testing or seek access to PrEP.[8]

The impacts of stigma in clinical environments can be lessened through three groups of initiatives: addressing social stigma, systemic stigma and perceived stigma.

Social stigma

Initiatives on social stigma address knowledge, attitudes and behaviours of people in primary healthcare, creating a safe and welcoming environment where prevention, testing and treatment are available.

Systemic stigma

Systemic stigma initiatives improve outcomes through health systems reform, with a focus on person-centred care. Using a 'whole service' approach, reform may include clinical, nursing, administrator, allied healthcare, pathology staff and other systems and settings. Systemic stigma initiatives use system change to affect clinician behaviours to ensure high-quality prevention, testing and treatment services are provided to clients regardless of their HIV status, sexual or gender identity, culture, beliefs or attitudes.

Perceived stigma

Initiatives that address perceived stigma encourage people at risk to seek prevention, testing and treatment, provide peer and social support, build resilience, and build confidence that people will be treated with care and respect.[47]

Effective interventions in any one of these areas of stigma can improve outcomes independently of the other two, which is why this Strategy introduces a range of innovative initiatives to address stigma.

Targets

- 75% reduction in reported experience of stigma or discrimination by people at risk of and living with HIV in NSW healthcare settings
- 75% reduction in discriminatory attitudes held towards people at risk of and living with HIV.

Initiatives	Description	Partners
4.1 Media engagement	A coordinated strategy by the Ministry of Health and its partners to engage with the media on stigma. Make high-quality information about HIV available and use events such as World AIDS Day and HIV Awareness week as opportunities to discuss stigmatising beliefs. Media guidelines and engagement will inform the general media about the effectiveness of prevention, testing and treatment.	Ministry of Health, STIPU, local health districts, ACON, Australian media outlets, ASHM, Positive Life NSW
4.2 Healthcare worker training	Develop training for healthcare workers and GPs to reduce stigma and discrimination for people accessing health services with HIV or at risk of HIV. Training will be designed to connect people to high-quality prevention, testing and treatment, regardless of beliefs or attitudes.	Ministry of Health, STIPU, local health districts, RACGP, ASHM, Health Education and Training Institute (HETI), Positive Life NSW, ACON, Pozhet, Multicultural HIV and Hepatitis Service, AH&MRC, NUAA, SWOP, Centre for Social Research in Health (UNSW)
4.3 Community primary care	Education and promotion activities encouraging general practices to provide access to prevention, testing and treatment in outer suburban, rural and remote areas of NSW	STIPU, Ministry of Health, RACGP, ASHM, local health districts, RACGP, primary health networks
4.4 Health systems	Using a person-centred design processes, analyse the client journey through primary healthcare to prevention, testing and treatment. The process will identify systemised stigma and make recommendations to reduce it, with a focus on person-centred care. This could include processes, guidelines, procedures, environments and any other system or interaction that is stigmatising. It will include an audit of existing strategies and interventions that address stigma and discrimination for our priority populations in these healthcare-seeking behaviours. Outcomes of this approach will be shared with police, legal services, Corrective Services NSW and other relevant organisations, encouraging them to undertake a similar process.	Ministry of Health, local health districts, STIPU, Kirby Institute (UNSW), Centre for Social Research in Health (UNSW), Multicultural HIV and Hepatitis Service, Pozhet, ACON, Positive Life NSW, Bobby Goldsmith Foundation, Ministry of Health, RACGP, Positive Life, ACON, ASHM, NUAA, SWOP, Translating and Interpreting Service (TIS National)
4.5 Peer support	Invest in partner organisations to provide peer support and peer-driven services, and represent communities affected by HIV. Peers are partners in testing, prevention, treatment and management of HIV. The meaningful involvement of people living with HIV is critical to an effective response to HIV.	Positive Life, ACON, Bobby Goldsmith Foundation, Multicultural HIV and Hepatitis Service, Ministry of Health, SWOP, NUAA
4.6 Stigma-aware campaigns	Stigma will be considered in the development of all communications and health promotion under the Strategy. Campaigns will consider the potential for stigma as an unintended consequence and, where possible, aim to reduce the impacts of stigma.	Ministry of Health, STIPU, ACON, local health districts, Positive Life NSW, Bobby Goldsmith Foundation, Pozhet, Multicultural HIV and Hepatitis Service, AH&MRC, SWOP, NUAA, Centre for Social Research in Health (UNSW)

MONITORING AND GOVERNANCE

Monitoring

A monitoring and evaluation framework will track the implementation of this Strategy and lead progress towards meeting the targets in prevention, testing, treatment and stigma.

The *NSW HIV Strategy Data Report* will be published quarterly to report on key indicators for priority populations and sub-populations. Real-time data indicators for monitoring and reporting against the Strategy are located on page 35. These reports will be used to adjust our approach if required and respond to new and emerging issues.

An *Endpoint HIV Strategy Report* will be produced in 2025 to evaluate the strategy. It will contain a summary of the data against the targets and will be used to advise future strategies.

Governance

The NSW HIV/STI Implementation Committee will oversee implementation of this Strategy and monitor performance against the targets. The implementation committee is made up of representatives from local health districts, clinicians from HIV specialist and general practice settings, academics, and members from community organisations representing priority populations and other communities affected by blood-borne viruses and STIs.

Strategic Framework

This Strategy aligns with other NSW and federal strategic frameworks, including but not limited to:

National Strategies

- National Hepatitis B Strategy
- National STI Strategy
- National Hepatitis C Strategy
- National Aboriginal and Torres Strait Islander BBV and STI Strategy
- National HIV Strategy
- National Drug Strategy

NSW Health Strategies

- NSW Future Health Strategy (to replace the current NSW State Health Plan, finishing in 2021)
- NSW Aboriginal Blood Borne Viruses and Sexually Transmissible Infections Framework
- NSW Sexually Transmissible Infections Strategy
- NSW Hepatitis C Strategy
- NSW Hepatitis B Strategy
- NSW LGBTI Health Strategy

NSW Future Health Strategy

The NSW Future Health Strategy promotes values-based care. How we deliver care must match patient needs, specifically focusing on the health outcomes that matter to patients, the experience of receiving care, the experience of providing care, and the effectiveness and efficiency of care. These principles are embedded throughout the HIV Strategy and its implementation.

NSW LGBTI Health Strategy

The NSW Ministry of Health is working with NSW Health, non-government organisations and community partners to develop NSW's first health strategy for people of diverse sexualities and gender identities and those with intersex variations. It will provide direction to the NSW Health system to improve health outcomes for lesbian, gay, bisexual, transgender and intersex people, and others in the community, as well as guide important partnership work with primary care and other community-based health services.

Data sources

Targets	Data source	Availability
90% reduction in the rate of preventable HIV infection relative to a baseline of 2008–2012.	Notifiable Conditions Information Management System	Quarterly
90% of men who have sex with male casual partners report at least one form of HIV prevention.	Sydney Gay Community Periodic Survey, Centre for Social Research in Health (UNSW), NSW HIV Minimum Data Set	Annually
90% of HIV-negative men who have sex with male casual partners without a condom take PrEP.	Sydney Gay Community Periodic Survey, Centre for Social Research in Health (UNSW), NSW HIV Minimum Data Set	Annually
Reduce sharing of injecting equipment among people who inject drugs.	NSW Needle and Syringe Program Enhanced Data Collection, Kirby Institute (UNSW)	Annually, November
95% of people living with HIV in NSW are diagnosed.	NSW HIV Diagnosis and Care Cascade, Kirby Institute (UNSW)	Annually
Reduce the time between arrival in Australia and the first HIV test for all at-risk overseas-born people.	NSW HIV Minimum Data Set	Quarterly
Reduce the time between arrival in Australia and HIV diagnosis for overseas-born MSM in cases where infection was probably acquired overseas.	Notifiable Conditions Information Management System	Quarterly
90% of people newly diagnosed with HIV initiate treatment within two weeks of diagnosis.	Notifiable Conditions Information Management System (NCIMS)	Quarterly
95% of all people with diagnosed HIV are on treatment and 95% of people on treatment have an undetectable viral load.	NSW HIV Diagnosis and Care Cascade, Kirby Institute (UNSW), NSW HIV Minimum Data Set	Annually
75% of people living with HIV in NSW report good quality of life.	PozQoL scale, HIV Futures 9[47]	Periodic
75% reduction in reported experience of stigma or discrimination by people at risk of and living with HIV in NSW healthcare settings.	Stigma Indicators Monitoring Project, Centre for Social Research in Health (UNSW)	Periodic
75% reduction in discriminatory attitudes held towards people at risk of and living with HIV.	Stigma Indicators Monitoring Project, Centre for Social Research in Health (UNSW)	Periodic

ABBREVIATIONS

ACCHS	Aboriginal Community Controlled Health Services
ACON	formerly known as the AIDS Council of NSW
Adahps	AIDS Dementia and HIV Psychiatry Service
AH&MRC	Aboriginal Health and Medical Research Council
ASHM	Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine
BBV	blood-borne virus
BRISE	BBV & STI Research, Intervention and Strategic Evaluation Program
CALD	culturally and linguistically diverse
COVID-19	novel coronavirus disease 2019
DBS	dried blood spot
EPIC-NSW	Expanded PrEP Implementation in Communities in NSW
GP	general practitioner
HETI	Health Education and Training Institute
HIV	human immunodeficiency virus
LGBTI	lesbian, gay, bisexual, transgender and intersex
MSM	men who have sex with men
NSP	Needle and Syringe Program
NUAA	NSW Users and AIDS Association
PEP	post-exposure prophylaxis
PrEP	pre-exposure prophylaxis
RACGP	Royal Australian College of General Practitioners
STI	sexually transmissible infection
STIPU	NSW Sexually Transmissible Infections Programs Unit
SWHIV	Social Workers in HIV
SWOP	Sex Workers Outreach Project
U=U	undetectable = untransmissible
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNSW	University of New South Wales

REFERENCES

1. Keen P, Gray R, Telfer B, Guy R, Schmidt H, Whittaker B, … Grulich A; NSW HIV Prevention Partnership Project. The 2016 HIV diagnosis and care cascade in New South Wales, Australia: meeting the UNAIDS 90–90–90 targets. *Journal of the International AIDS Society.* 2018;21(4):e25109.
2. Chan C, Broady T, Bavinton B, Mao L, Bear B, Mackie B, … Holt, M. *Gay Community Periodic Survey: Sydney 2020*. Sydney: Centre for Social Research in Health, UNSW; 2020.
3. NSW Ministry of Health. *NSW HIV Strategy 2016–2020 Quarter 2 2020 Data Report 2020*. Available from: https://www.health.nsw.gov.au/endinghiv/Pages/tools-and-data.aspx
4. Keen P, Nigro S, Grulich A, on behalf of the NSW HIV Prevention Partnership Project. H*IV notifications in heterosexuals, Aboriginal and Torres Strait Islander people, female sex workers and people who inject drugs in NSW, 2015–2019*. Sydney: Kirby Institute, UNSW; 2020.
5. Callander D, Read P, Prestage G, Minichiello V, Chow E, Lewis D, … Donovan B. A cross-sectional study of HIV and STIs among male sex workers attending Australian sexual health clinics. *Sexually Transmitted Infections*. 2017;93(4):299–302.
6. Kwon J, Anderson J, Kerr C, Thein H, Zhang L, Iversen J, … Wilson D. Estimating the cost-effectiveness of needle-syringe programs in Australia. *AIDS*. 2012;26(17):2201–10.
7. Kirby Institute. *HIV, viral hepatitis and sexually transmissible infections in Australia: annual surveillance report 2019*. Sydney: Kirby Institute, UNSW; 2019.
8. *Recent diagnosis and the impact of support on experiences of HIV: RISE Study.* Second annual report for the RISE Study Partnership. Sydney: Kirby Institute; 2020.
9. 10.9. Phillips T, Medland N, Chow EPF, Maddaford K, Wigan R, Fairley CK, Ong JJ, Bilardi J. 'Moving from one environment to another, it doesn't automatically change everything.' Exploring the transnational experience of Asian-born gay and bisexual men who have sex with men newly arrived in Australia. *Plos One* 2020
10. Grulich A, Nigro S, Chan C, Patel P, Bavinton B, Holt M, … Keen P. *Trends in HIV and HIV prevention indicators in gay, bisexual and other men who have sex with men in NSW, 2015–2019: implications for new interventions and for monitoring and evaluation in a new NSW HIV strategy.* Sydney: Kirby Institute, UNSW; 2020.
11. Ward J, Hawke K, Guy R. Priorities for preventing a concentrated HIV epidemic among Aboriginal and Torres Strait Islander Australians. *Medical Journal of Australia.* 2018;209(1):56.
12. Wand H, Yan P, Wilson D, McDonald A, Middleton M, … Kaldor J. Increasing HIV transmission through male homosexual and heterosexual contact in Australia: results from an extended back-projection approach. *HIV Med* 2010; 11(6):395-403.
13. Geddes L, Iversen J, Maher L. *New South Wales Needle and Syringe Program Enhanced Data Collection Report* 2016–2020. Sydney: Kirby Institute, UNSW; 2020.
14. Callander D, Mooney-Somers J, Keen P, Guy R, Duck T, Bavinton B, Grulich A, Holt A & Garrett Prestage (2020). Australian 'gayborhoods' and 'lesborhoods': a new method for estimating the number and prevalence of adult gay men and lesbian women living in each Australian postcode, *International Journal of Geographical Information Science*, DOI: 10.1080/13658816.2019.1709973
15. Hammoud M, Maher L, Holt M, Degenhardt L, Jin F, Murphy D, … Prestage G. Physical distancing due to COVID-19 disrupts sexual behaviors among gay and bisexual men in Australia: implications for trends in HIV and other sexually transmissible infections. *AIDS*. 2020;85(3):309–15.
16. Bavinton B, Fraser D, Chan C. *Evidence brief on HIV pre-exposure prophylaxis (PrEP).* Sydney: Kirby Institute, UNSW; 2020.
17. Holt M, Lee E, Lea T, Bavinton B, Broady T, Mao L, … de Wit J. HIV preexposure prophylaxis cascades to assess implementation in Australia: results from repeated, national behavioral surveillance of gay and bisexual men, 2014–2018. *AIDS*. 2020;83(3):e16–e22.
18. Holt M, Lea T, Bear B, Halliday D, Ellard J, Murphy D, … de Wit, J. Trends in attitudes to and the use of HIV pre-exposure prophylaxis by Australian gay and bisexual men, 2011–2017: implications for further implementation from a diffusion of innovations perspective. *AIDS and Behavior.* 2019;23(7):1939–50.
19. MacGibbon J. Unpublished analysis of PrEPARE Project data. Sydney: Centre for Social Research in Health, UNSW; 2020.
20. MacGibbon J, Lea T, Ellard J, Murphy D, Bear B, Kolstee J, … Holt M. *Attitudes to biomedical HIV prevention among Australian gay and bisexual men: key findings from the PrEPARE Project 2019*. Sydney: Centre for Social Research in Health, UNSW; 2019. Available from: https://www.unsworks.unsw.edu.au/permalink/f/a5fmj0/unsworks_modsunsworks_61623
21. Mayer K, Agwu A, Malebranche D. Barriers to the wider use of pre-exposure prophylaxis in the United States: a narrative review. *Advances in Therapy*. 2020;37(5):1778–811.
22. Campbell C, Lippman S, Moss N, Lightfoot M. Strategies to increase HIV testing among MSM: a synthesis of the literature. *AIDS and Behavior*. 2018;22(8):2387–412.
23. Thornton A, Delpech V, Kall M, Nardone A. HIV testing in community settings in resource-rich countries: a systematic review of the evidence. *HIV Medicine*. 2012;13(7):416–26.
24. Lee E, Mao L, Bavinton B, Prestage G, Holt M. Which gay and bisexual men attend community-based HIV testing services in Australia? An analysis of cross-sectional national behavioural surveillance data. *AIDS and Behavior*. 2020;24(2):387–94.

25. Grulich A, Guy R, Amin J, Jin F, Selvey C, Holden J,... Cooper D. Population-level effectiveness of rapid, targeted, high-coverage roll-out of HIV pre-exposure prophylaxis in men who have sex with men: the EPIC-NSW prospective cohort study. *Lancet HIV*.

26. Australasian Society of HIV, Viral Hepatitis and Sexual Health Medicine. *PrEP guidelines update: prevent HIV by prescribing PrEP.* Sydney: ASHM; 2019.

27. NSW Ministry of Health. *NSW HIV Strategy 2016–2020 Quarter 4 2019 Data Report 2020*. Available from: https://www.health.nsw.gov.au/endinghiv/Pages/tools-and-data.aspx.

28. Mocroft A, Lundgren J, Sabin M, Monforte A, Brockmeyer N, Casabona J, … Kirk O. Risk factors and outcomes for late presentation for HIV-positive persons in Europe: results from the Collaboration of Observational HIV Epidemiological Research Europe Study (COHERE). *PLoS Medicine*. 2013;10(9):e1001510.

29. Sabin C, Smith C, Gumley H, Murphy G, Lampe F, Phillips A, … Johnson M. Late presenters in the era of highly active antiretroviral therapy: uptake of and responses to antiretroviral therapy. *AIDS*. 2004;18(16):2145–51.

30. National AIDS Trust. *Commissioning HIV Testing Services In England: a practical guide for commissioners.* London: NAT; 2014. Available from: https://www.nat.org.uk/sites/default/files/publications/Nov_2013_Toolkit.pdf

31. Knight V, Wand H, Gray J, Keen P, McNulty A, Guy R. Implementation and operational research: convenient HIV testing service models are attracting previously untested gay and bisexual men: a cross-sectional study. *Journal of Acquired Immune Deficiency Syndromes*. 2015;69(5):e147–e155.

32. Bavinton B, Grulich A, Broady T, Keen P, Mao L, Patel P, … Holt M. Increases in HIV testing frequency in Australian gay and bisexual men are concentrated among PrEP users: an analysis of Australian behavioural surveillance data, 2013–2018. *AIDS and Behavior*. 2020;24:2691–2702.

33. Aung E, Blondell S, Durham J. Interventions for increasing HIV testing uptake in migrants: a systematic review of evidence. *AIDS and Behavior*. 2017;21(10):2844–59.

34. Murray D, Mao L, Wong T, Chen T, Mackie B, Kao S. … Lewis D. High levels of engagement with testing for HIV and sexually transmissible infection among gay Asian men in Sydney and Melbourne: an observational study. *Sexual Health*. 2020;17(2):121–8.

35. Kang M, Demant D. *Sexual health among male international students who have sex with men: final research report.* Sydney: Australian Centre for Public and Population Health Research, University of Technology Sydney; 2019.

36. Keen P, Jamil M, Callander D, Conway D, McNulty A, Davies S, … Guy R on behalf of the NSW Rapid HIV Testing Evaluation Framework. *NSW rapid HIV testing evaluation framework final report*. Sydney: Kirby Institute, UNSW; 2016.

37. Jamil M, Prestage G, Fairley C, Grulich A, Smith K, Chen M, … Guy R. Effect of availability of HIV self-testing on HIV testing frequency in gay and bisexual men at high risk of infection (FORTH): a waiting-list randomised controlled trial. *Lancet HIV*. 2017;4(6):e241–e250.

38. Keen P, Power C; *NSW HIV Prevention Project. Development of the NSW HIV Strategy 2021–2025: evidence brief on HIV testing*. July 2020. Available from pkeen@kirby.unsw.edu.au.

39. Prestage G, Brown G, Keen P. Barriers to HIV testing among Australian gay men. *Sexual Health*. 2012;9:453–8.

40. van Opstal S, van der Zwan J, Wagener M, Been S, Miedema H, Roelofs P, van Gorp E. Late presentation of HIV infection in the Netherlands: reasons for late diagnoses and impact on vocational functioning. *AIDS and Behavior.* 2018;22(8):2593–603.

41. de Wit J, Adam P. To test or not to test: psychosocial barriers to HIV testing in high-income countries. *HIV Medicine.* 2008;9 Suppl 2:20–2.

42. Mallitt K, Wilson D, Jansson J, McDonald A, Wand H, Post J. Identifying missed clinical opportunities for the earlier diagnosis of HIV in Australia, a retrospective cohort data linkage study. *PLoS One*. 2018;13(12):e0208323.

43. Lundgren J, Babiker A. The INSIGHT START study group: initiation of antiretroviral Therapy in early asymptomatic HIV infection. *New England Journal of Medicine.* 2015;373(9):795–807.

44. Cohen M, Chen Y, McCauley M, Gamble T, Hosseinipour M, Kumarasamy N, … Fleming T. Antiretroviral therapy for the prevention of HIV-1 transmission. *New England Journal of Medicine*. 2016;375(9):830–9.

45. Wong HTH, Prankumar SK, Prihaswan P, Kao S-C, Chen T, Wark T … Mao L on behalf of the Culturally and Linguistically Diverse (CALD) Gay Men's Action Group. *Notes from the field: challenges, concerns and opportunities in relationship building and health promotion among gay Asian international students in Australia.* Sydney: AFAO; 2020. Available from: www.afao.org.au

46. Broady T, Cama E, Brener L, Hopwood M, Wit J, Treloar C. Responding to a national policy need: development of a stigma indicator for bloodborne viruses and sexually transmissible infections. *Australian and New Zealand Journal of Public Health.* 2018;42(6):513–15.

47. Brener L, Broady T, Cama E, Hopwood M, de Wit J, Treloar C. The role of social support in moderating the relationship between HIV centrality, internalised stigma and psychological distress for people living with HIV. *AIDS Care*. 2020;32(7):850–7.

48. Power J, Amir S, Brown G, Rule J, Johnson J, Lyons A, … Carman M. *HIV Futures 9: quality of life among people living with HIV in Australia*. Melbourne: Australian Research Centre in Sex, Health and Society, La Trobe University, 2019.