Key trends for 2016

- The number of gay and bisexual men (GBM) tested has been increasing in high GBM caseload clinics in Melbourne since 2012. The annual increase in 2016 was 22% compared to an average of 7% in previous years.
- Rate of infection in Aboriginal and Torres Strait Islander population is twice that of non-Aboriginal and Torres Strait Islander population.
- The increase in the number of HIV cases in 2016 could be driven by increased testing.
- Number of cases increased in 2016 by 13%.

Table 1: Notified cases of HIV by year for the period 2009 to 2016

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In Victoria over the last decade the rate of HIV diagnoses has remained stable, ranging between 4 to 5.5 cases per 100,000 population. In 2016 there were 319 new HIV diagnoses notified in Victoria, a rate of 4.8 per 100,000 population (Figure 1). It is now estimated that there are 7,800 people living with HIV (PLHIV) in Victoria as at 31 December 2016.

Figure 1: Notified cases of new HIV diagnoses, by year, Victoria, 2006-2015

In 2016, 91 per cent of HIV diagnoses were in males (n=292) similar to the 89 per cent in 2015 (n=251). Twenty-seven women (8 per cent) were diagnosed in 2016, compared to 32 (11 per cent) women in 2015.
In 2016, 60 per cent of the total new HIV diagnoses were in those aged 30 years or older similar to the 61 per cent in 2014 and 2015. The median age of male and female in 2016 was 32 years and 34 years respectively.

Aboriginal and Torres Strait Islander status was reported for 99 per cent of the cases in 2016 with five cases reported as being of Aboriginal and/or Torres Strait Islander origin, giving an overall population rate of 10.6 cases per 100,000 Aboriginal and Torres Strait Islander people in Victoria.

Transmission of HIV in Victoria continued to occur primarily among GBM. In 2016, 76 per cent of HIV diagnoses occurred among GBM (n=243) with a median age of 31 years. This included 10 GBM who also reported injecting drug use (IDU) compared to 11 in 2015 and 15 in 2014. The number of GBM tested has been increasing in high GBM caseload clinics in Melbourne since 2012. The annual increase in 2016 was 22% compared to an average of 7% in previous years.

**Figure 2: Number of GBM tested at Victorian sites in ACCESS, \(^1\) by year, 2012-2016**

Twenty-one per cent of cases in 2016 were attributed to heterosexual sex (n=67), one per cent of total cases reported IDU as their only exposure and exposure was unknown for two per cent of cases. The most commonly reported exposure among both males and females reporting heterosexual sex was sex with someone from a high prevalence country\(^2\).

Approximately half (53%) of new HIV diagnoses in 2016 were Australian born (n=169), similar to the 54 percent in 2015. Fifteen per cent were born in South East Asia and four per cent in Sub-Saharan Africa. In 2016, 64 percent of cases reported acquiring HIV in Victoria (n=186), and 17 percent reported acquiring HIV overseas (n=51).

It is important to recognise that there are several factors that can impact the number of HIV notifications. These include but are not limited to: rate of HIV testing; risk practices; other STIs; and community viral load. These are discussed briefly below.

- Increased testing: There have been a number of interventions introduced over recent years aimed at increasing HIV testing including, statewide health promotion campaigns, opt-out contact tracing, GP prompts and SMS reminders for sexually transmissible infections (STI) testing at clinics. As the number of people testing has increased, the number of tests conducted has increased at a greater rate, indicating that more people are testing more often.

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\(^1\) The Australian Collaboration for Coordinated Enhanced Sentinel Surveillance of Blood Borne Viruses and Sexually Transmitted Infections (ACCESS) is a health sentinel surveillance network. This graph includes data from three metropolitan GP clinics that see a high proportion of men who have sex with men and HIV positive men.

\(^2\) High prevalence country: where the adult HIV prevalence is greater than one per cent and HIV is transmitted predominantly by heterosexual contact
• Risk practices: In Australia GBM is the population most affected by HIV and there are several known risk behaviors that influence HIV transmission in this population. Condomless anal intercourse (CLAI) with casual or anonymous partners is the most commonly reported exposure.

• Increased STIs: The number of diagnoses of all notifiable STIs has increased over recent years, particularly among GBM. It is well documented that these and other bacterial and/or ulcerative infections can facilitate HIV transmission.

• Community viral load: Treatment of HIV positive individuals as early as possible can reduce their viral load to an undetectable level and reduce the risk of onward transmission of HIV to their partners.

• Increased population: Victoria has experienced significant and rapid population growth over the past several years. This includes overseas immigration, international students, and interstate migration. This may contribute to increases in notifications.

Prevention Response

The Victorian Government supports a comprehensive approach to HIV that addresses four key areas: prevention, testing, treatment, and stigma and discrimination. These are framed around targets set by UNAIDS and the Fast-Track Cities Initiative, and adopted by the Victorian Government. By 2020,

• 90 per cent of all people with HIV will be diagnosed;
• 90 per cent of people who are diagnosed with HIV will be on treatment;
• 90 per cent of people on treatment will reach undetectable viral load;
• HIV-related stigma and discrimination will be eliminated in Victoria; and
• New HIV transmissions will be virtually eliminated in Victoria.

The Victorian Government has developed the Victorian HIV strategy 2017-2020 to guide the HIV response in Victoria. It outlines specific objectives and priority actions to help achieve those targets. These include:

• Increasing the frequency and regularity of HIV testing and sexual health screening
• among priority populations
• Reducing the proportion of undiagnosed HIV infections
• Reducing the time between infection and diagnosis
• Streamlining referrals and linkage to care to improve rates of treatment uptake and adherence
• Identifying baseline measures for stigma and discrimination, then developing effective responses.

The Victorian Government continues to work with affected individuals and communities, in partnership with clinicians, researchers, and community organisations, to improve its HIV response. This includes:

• establishing the Departmental Advisory Committee on Blood Borne Viruses and Sexually Transmissible Infections
• the PrEPX Study, in partnership with Alfred Health and the Victorian AIDS Council, to provide PrEP to 3,800 Victorians at risk of HIV
• development of clinical guidelines for PrEP prescribers
• PRONTO!, a peer-led community-based rapid HIV testings service that also offers screening for STIs, and is co-located with general practice dedicated to trans and gender diverse people
• Social marketing campaigns that encourage uptake of prevention strategies, including condoms and PrEP; frequent and regular HIV and STI testing; and early treatment of HIV
• peer support programs for people recently diagnosed with HIV
• peer support programs to develop and promote resilience among all people living with HIV

The Department directly funds a range of community agencies to provide health promotion and community-based care and support, including peer education, for HIV. These include:

• Living Positive Victoria
• Straight Arrows
• Positive Women Victoria
Protection Response³

Victorian statutory requirement: both HIV infection and AIDS are Group D notifications. A separate notification form is required for HIV and AIDS diagnoses. Written notification is required within five days of the initial diagnosis.

Careful history and physical examination looking for risk factors and clinical manifestations of immunodeficiency are necessary.

Diagnostic testing includes:

- detection of HIV antibody by the ELISA screening test and confirmation by Western blot analysis
- detection of the viral p24 antigen in serum
- PCR tests to detect pro-viral DNA sequences
- HIV culture, although this is only performed in certain special clinical situations.

Control of case

- Additional transmission-based precautions apply for specific infections that occur in AIDS patients such as tuberculosis. Equipment contaminated with blood or body fluids should be cleaned and then disinfected or sterilised as appropriate.
- Patients and their sexual partners should not donate blood, organs or other human tissue.
- All HIV positive persons should be evaluated for the presence of tuberculosis.
- Standard precautions apply to all patients.

Treatment

- Anti-retroviral drug therapy is used to treat established HIV infection. As such treatment is specialised and constantly changing, only those doctors experienced in HIV management should prescribe antiretroviral therapy. For further information, see the current edition of the Therapeutic guidelines: antibiotic (Therapeutic Guidelines Limited). Other treatment includes specific treatment or prophylaxis for the opportunistic infectious diseases that result from HIV infection.

Control of contacts

- If a person is diagnosed as having HIV infection, the diagnosing practitioner has a responsibility to ensure that sexual and needle-sharing contacts are followed up where possible.
- Assistance with partner notification may be provided by Department of Health and Human Services through its partner notification officers.
- Pre and post-test counselling must be provided for all contacts seeking HIV testing.