NSW HIV Strategy 2012 – 2015

Quarter 2 2015
Data Report

Executive Summary

The *NSW HIV strategy 2012–2015: A New Era* was launched in December 2012 and includes major changes in the way that HIV is detected, treated and prevented in NSW, as well as improved support for people at the time of their HIV diagnosis and throughout their life.

Evidence suggests that antiretroviral therapy (ART) offers improved health benefits for people living with HIV and the potential to dramatically reduce the risk of passing on HIV. This makes treatment a critical part of HIV prevention. Gaining the optimal benefit in NSW relies on early detection of HIV through increased HIV testing, early provision of ART treatment for people diagnosed with HIV, and support for treatment adherence to achieve undetectable viral load.

In brief, the 2015 targets of the NSW HIV Strategy are to:

- Reduce HIV transmission by 60% among men who have sex with men.
- Reduce heterosexual transmission of HIV and transmission of HIV among Aboriginal populations by 50%
- Sustain the virtual elimination of mother to child transmission of HIV
- Sustain the virtual elimination of HIV transmission in the sex industry
- Sustain the virtual elimination of HIV among people who inject drugs
- Reduce the average time between HIV infection and diagnosis
- Increase to 90% the proportion of people living with HIV on ART
- Sustain the virtual elimination of HIV related deaths

The range of activities NSW Health is engaged in to meet these targets is summarised in the NSW HIV Snapshot. To monitor progress against the Strategy targets, a range of data sources have been identified, analysed and reported via this quarterly data report. More detailed information on NSW residents newly diagnosed with HIV up to 31 December 2013 is available in the NSW HIV 2013 Epidemiological Report.

In quarter 2 2015:

- 74 people were newly diagnosed with HIV in NSW, the lowest quarter 2 new diagnosis count since 2006 and 12 per cent (%) less than the same period in 2012. Among the newly diagnosed in this quarter, a greater proportion had evidence of late diagnosis compared with previous years.
- HIV testing continued to increase both overall in NSW, and among high risk populations. However, there remains more scope for increasing HIV testing rates.
- 117,627 serology tests were performed in NSW. This is a four % increase compared with both quarter 2 2014 (113,560) and quarter 2 2013 (113,174) and a 13% increase compared with quarter 2 2012 (103,737).
- 11,263 HIV tests were performed across public sexual health clinics in NSW. This represents a 36% increase compared with quarter 2 2014 (8,305). Of the tests done in public sexual health clinics, 87% were among men who have sex with men.
- Data from public sexual health and HIV clinics indicate 91% of people living with HIV who attended these services were on antiretroviral therapy (ART).
- Progress is being made in reducing the gap between HIV diagnosis and commencement of ART, but continuing efforts are required to support early ART for individual and public health benefits.
- Of the cohort of 698 NSW residents notified with newly diagnosed HIV infection from 1 January 2013 to 31 December 2014, 64% were reported to have commenced ART within six months of diagnosis.

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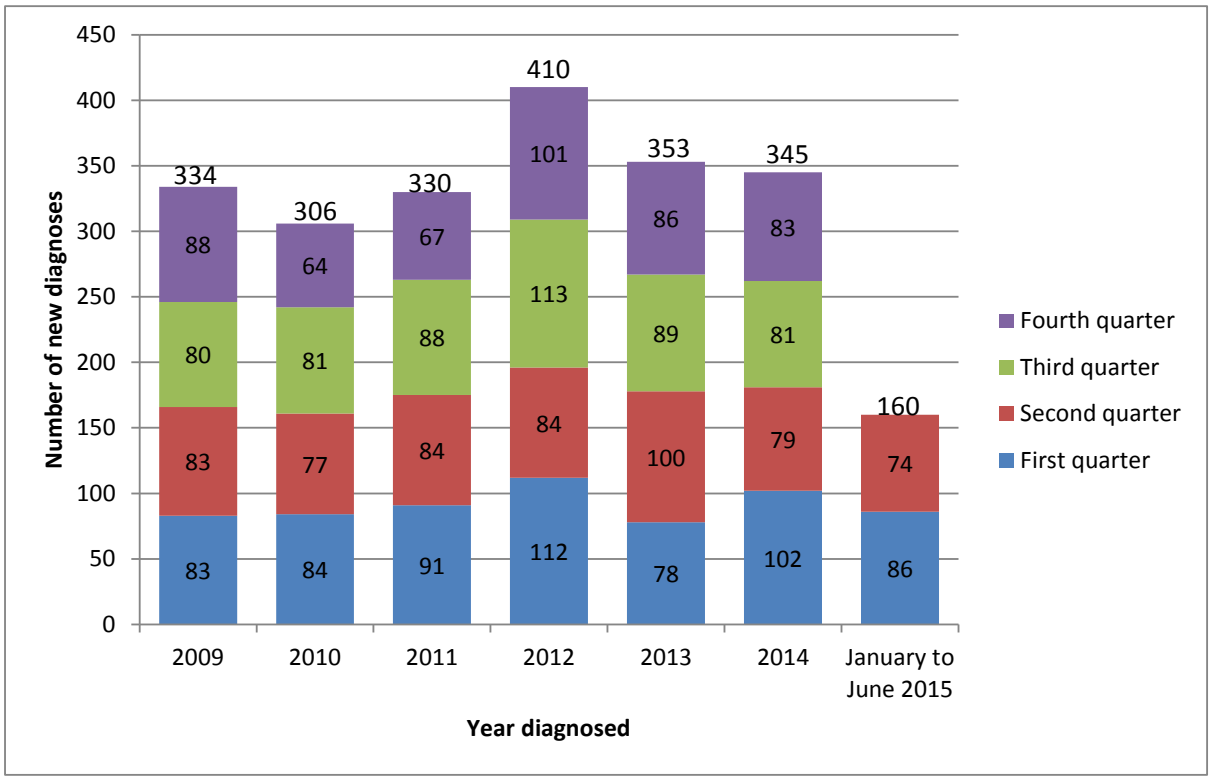
Glossary of Terms

ART	Antiretroviral therapy
HIV	Human Immunodeficiency Virus
LHD	Local Health District
MSM	Men who have sex with men
NSP	Needle and syringe program
NSW	New South Wales
NSWPHS	New South Wales Population Health Survey
PWID	People who inject drugs
PFSHC	Publicly Funded Sexual Health Clinic
SGCPS	Sydney Gay Community Periodic Survey

1. Reduce HIV transmission

1.1 How many cases are notified?

Figure 1: Number of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Comment

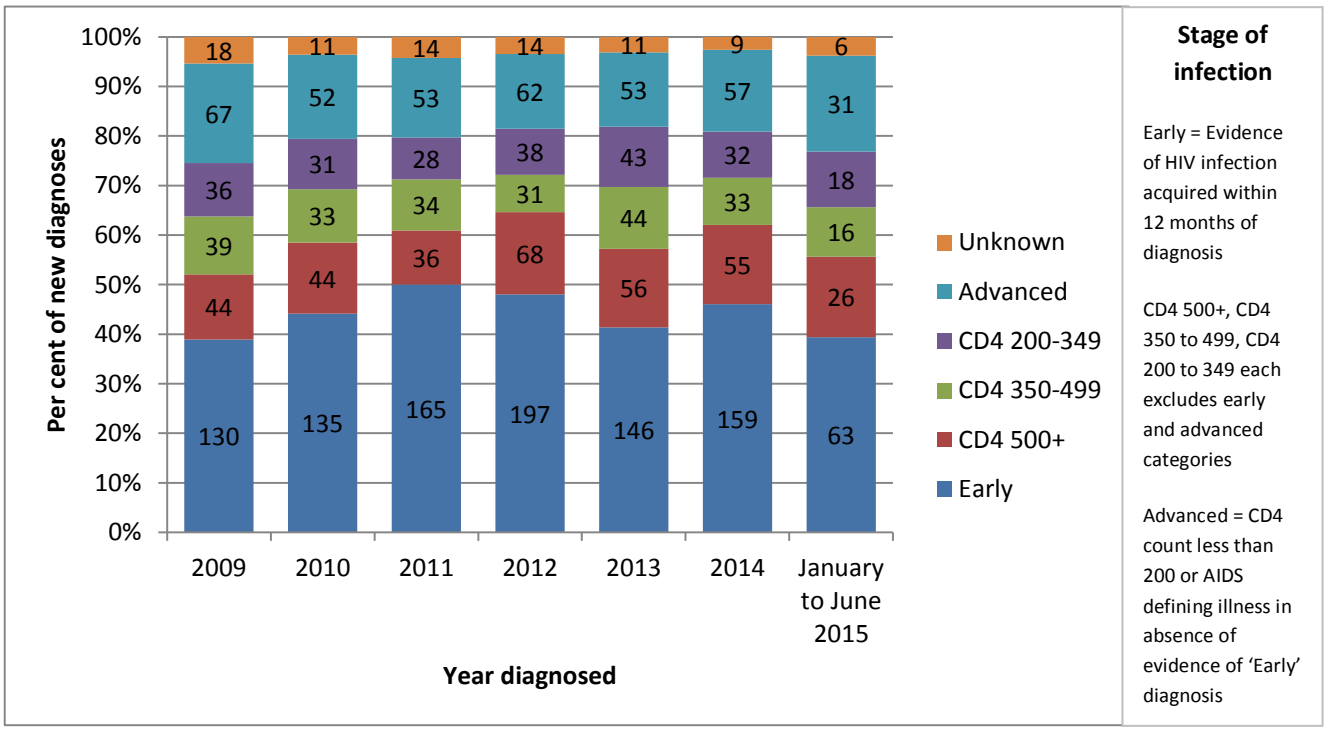
In the period 1 April to 30 June (quarter 2) 2015, 74 NSW residents were notified with newly diagnosed HIV infection, the lowest second quarter new diagnosis count since 2006 and 12 per cent (%) less than the same period in 2012, despite a 13% increase in HIV testing in NSW in the same period (Figures 1 and 16). From 1 January to 30 June 2015, 160 NSW residents were notified with newly diagnosed HIV infection (Figure 1); this is 10% less than the average January to June 2009 to 2014 new diagnoses count and 18% less than the same period in 2012.

From 1 January to 30 June 2015, the number of NSW residents notified with newly diagnosed HIV infection reporting to be men who have sex with men (MSM) was 126, which is 20% less compared with MSM notifications for the same period in 2012 (n=158) and 11% less than the average for the same period in 2009 to 2014 (n=142). It is also the lowest number of MSM notifications in January to June since 2010 (n=126).

1.2 What proportion of HIV notifications are newly acquired infections?

Trends in the stage of infection at which people present when newly diagnosed with HIV provide an indication as to the timeliness of diagnosis over time.

Figure 2: Number and per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 by stage of infection at diagnosis[1]



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

[1]Evidence of early stage infection was defined as notification of a sero-conversion like illness or negative or indeterminate HIV test within 12 months of diagnosis, irrespective of CD4 or presentation with an AIDS defining illness at diagnosis.

Comment

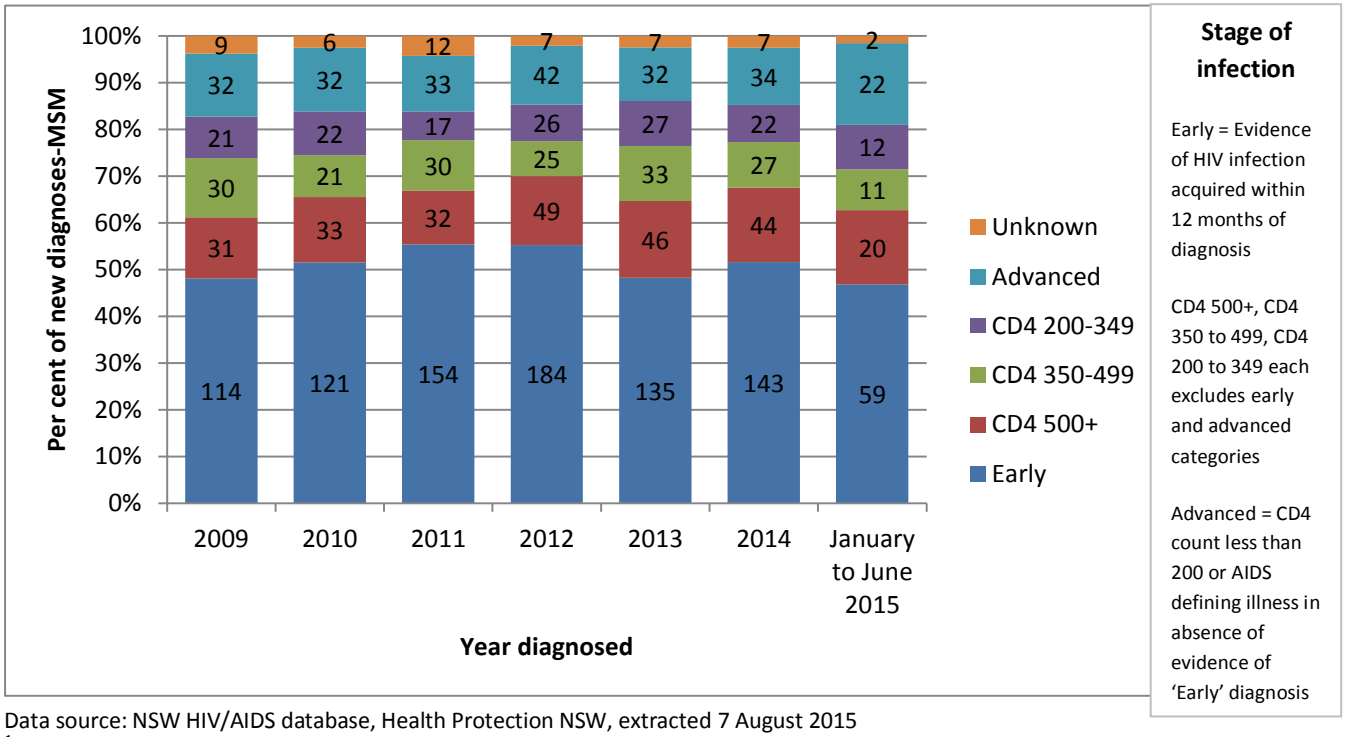
In quarter 2 2015, 29 of 74 (39%) NSW residents notified with newly diagnosed HIV infection had evidence of early stage infection and 12 (16%) had evidence of advanced infection at diagnosis.

Of 160 NSW residents notified with newly diagnosed HIV infection between January and June 2015, 63 (39%) had evidence of early stage infection; this is less compared with 47% of new diagnoses both for the period January to June 2012 and the average for January to June 2009 to 2014.

Of 160 NSW residents notified with newly diagnosed HIV infection between January and June 2015, 31 (19%) had evidence of advanced stage infection, compared with 14% of new diagnoses for both the period January to June 2012 and the average for January to June 2009 to 2014.

While HIV testing has continued to increase, the number of NSW residents notified with newly diagnosed HIV infection appears to be declining and, among those notified in the first half of 2015, a lesser proportion had evidence of early stage infection at diagnosis compared with previous years; this pattern suggests that there may be less transmission of HIV occurring.

Figure 3: Number and per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 reporting to be men who have sex with men (MSM) by stage of infection at diagnosis[1]



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

[1]Evidence of early stage infection was defined as notification of a sero-conversion illness or negative or indeterminate HIV test within 12 months of diagnosis, irrespective of CD4 or presentation with an AIDS defining illness at diagnosis

Comment

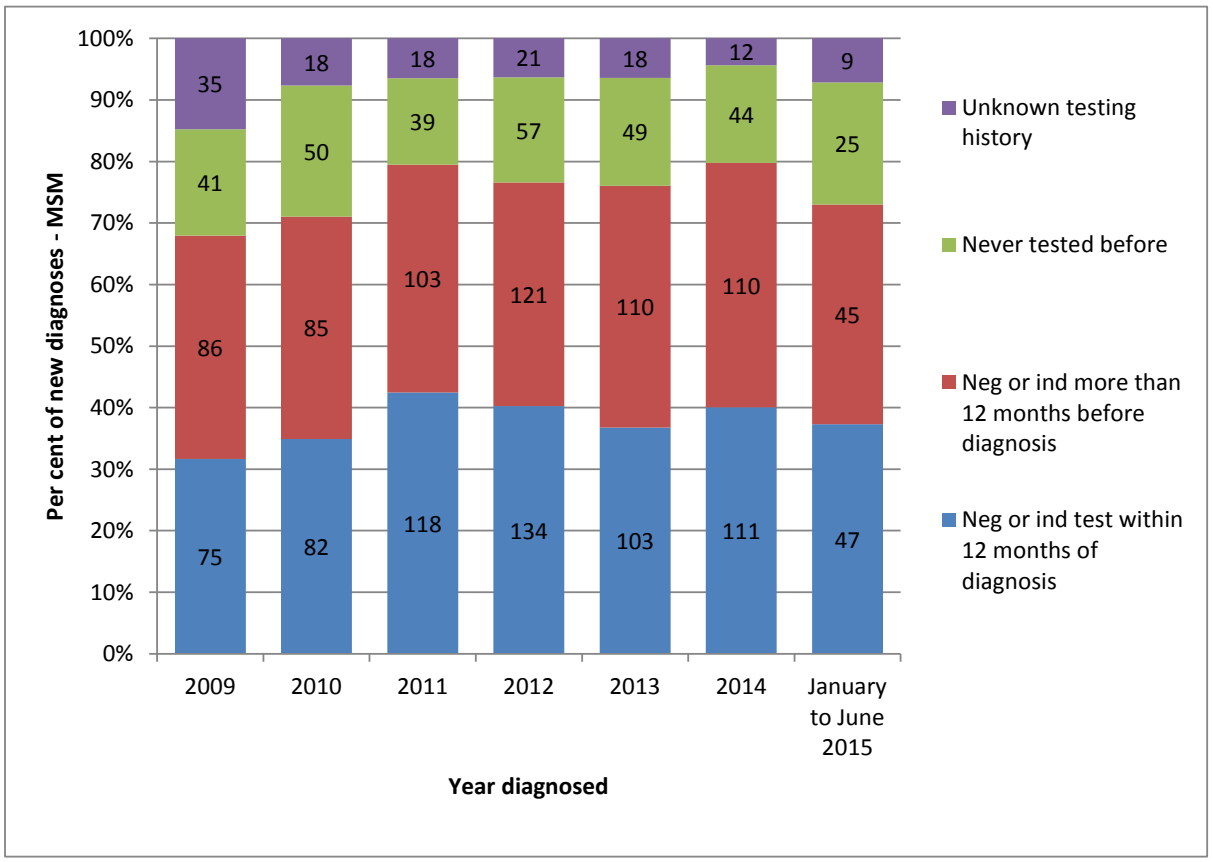
In quarter 2 2015, 26 of 62 (42%) NSW residents notified with newly diagnosed HIV infection reporting to be men who have sex with men (MSM) had evidence of early stage infection and 10 (16%) had evidence of advanced infection at diagnosis.

Of 126 NSW residents notified with newly diagnosed HIV infection between January and June 2015 and reporting to be MSM, 59 (47%) had evidence of early stage infection; this is less compared with 54% of new diagnoses for the period January to June 2012 and 53% for the average for January to June 2009 to 2014.

Of 126 NSW residents notified with newly diagnosed HIV infection between January and June 2015 and reporting to be MSM, 22 (17%) had evidence of advanced stage infection, compared with 11% of new diagnoses for the period January to June 2012 and 12% for the average for January to June 2009 to 2014.

While HIV testing among MSM has continued to increase, the number of MSM notified with newly diagnosed HIV infection appears to be declining (page 5) and, among MSM notified in the first half of 2015, a lesser proportion had evidence of early stage infection at diagnosis compared with previous years; this pattern suggests that there may be less transmission of HIV occurring among MSM.

Figure 4: Number and per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 reporting to be MSM by HIV testing history



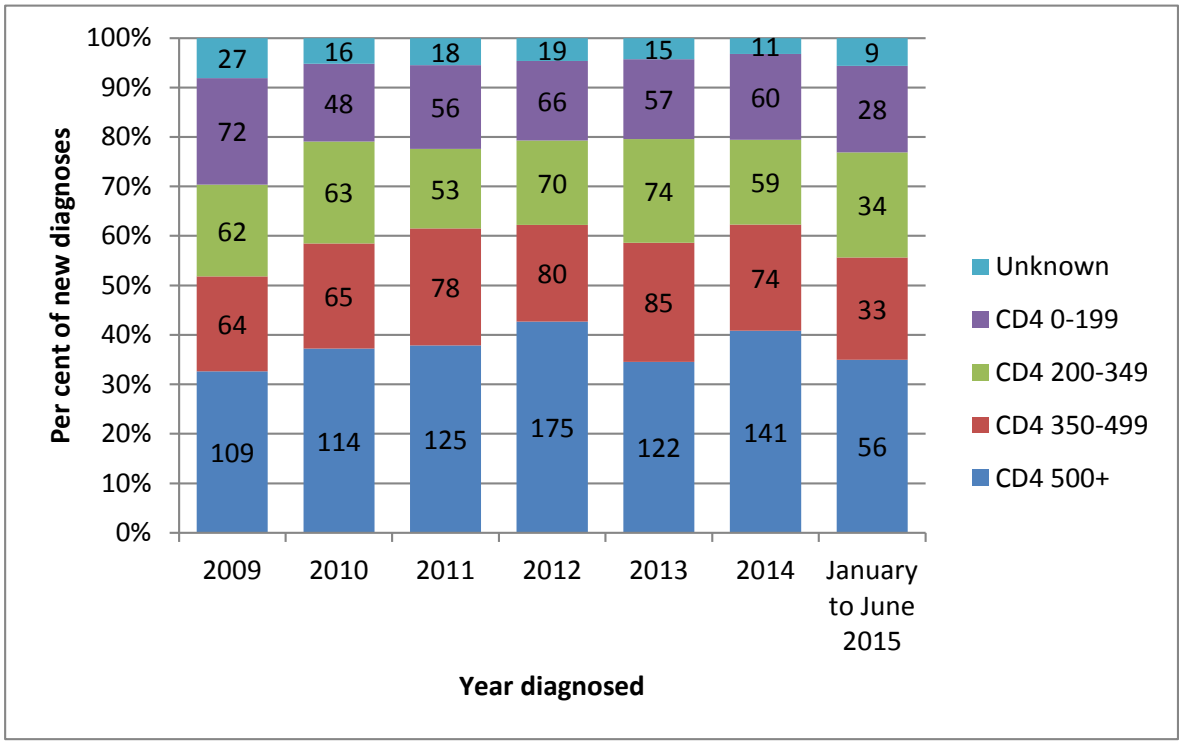
Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Comment

Of 126 NSW residents notified with newly diagnosed HIV infection between January and June 2015 and reporting to be MSM, 47 (37%) were reported as having had a negative or indeterminate HIV test within 12 months of their diagnosis, compared with 39%, the average for the period January to June 2009 to 2014 (Figure 4).

Of 126 NSW residents notified with newly diagnosed HIV infection between January and June 2015 and reporting to be MSM 25 (20%) were reported as not ever having had an HIV test before diagnosis, compared with 18%, the average for the period January to June 2009 to 2014.

Figure 5: Number and per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 by CD4 count at diagnosis

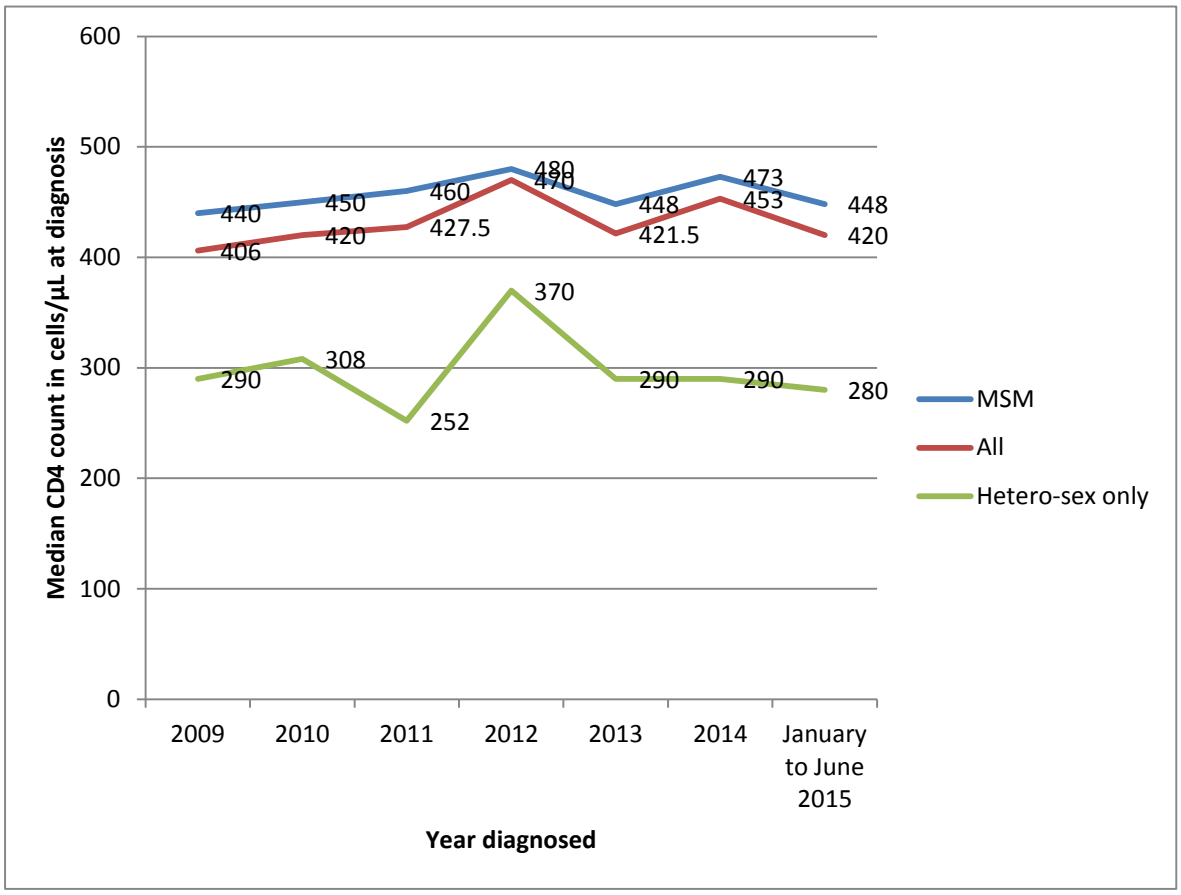


Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Comment

Of 160 NSW residents notified with newly diagnosed HIV infection from 1 January to 30 June 2015, 56 (35%) had a CD4 count (in cells/µL) within three months of diagnosis 500 or over, 33 (21%) had a CD4 count 350 to 499, 34 (21%) a CD4 count 200 to 349, 28 (18%) a CD4 of 0 to 199 and 9 (6%) were unknown (Figure 5). Overall 62 (39%) had a CD4 count at diagnosis less than 350, slightly greater than compared with 33% of new diagnoses in the period January to June 2012 and 36% for the average of January to June 2009 to 2014.

Figure 6: Median CD4 count at diagnosis of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 for all, for those reporting to be MSM and for those reporting heterosexual acquisition of HIV[1]

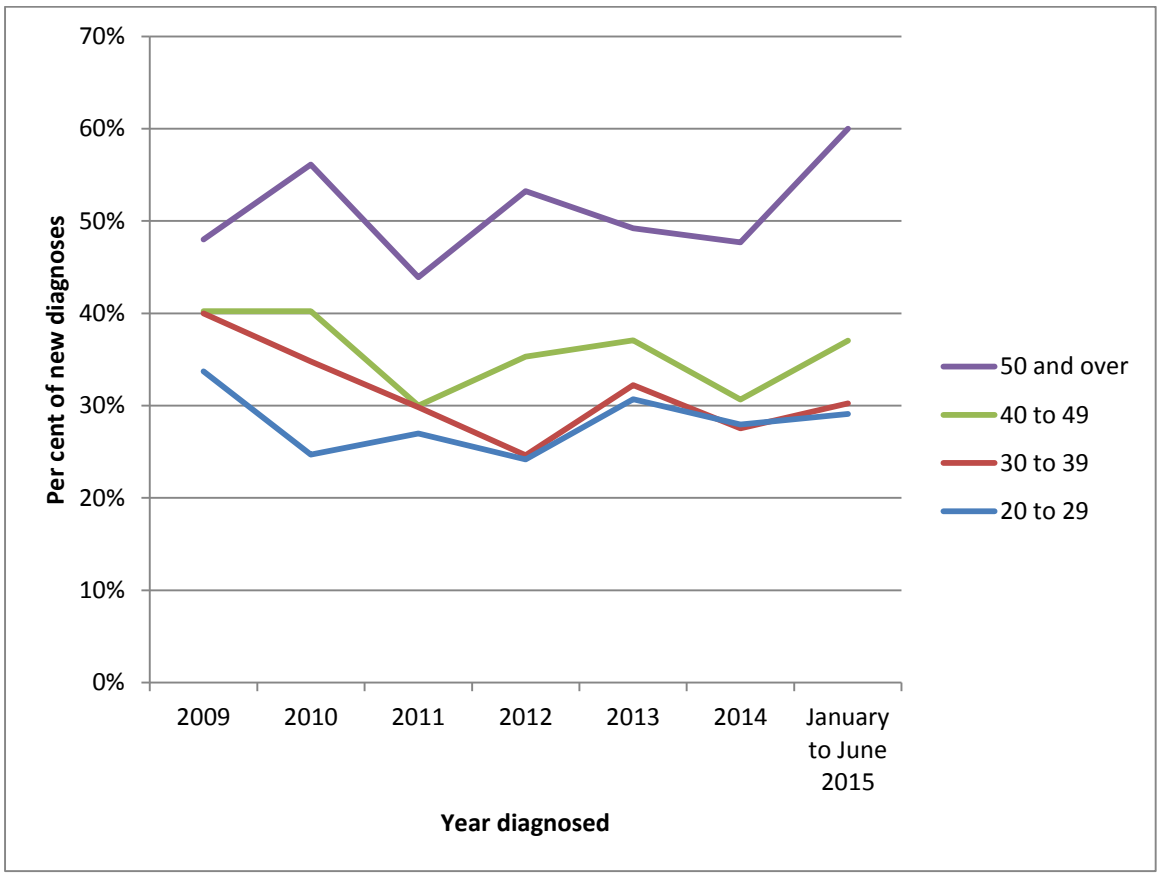


Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015.
[1]The median CD4 count at diagnosis for other HIV risk exposure groups such as being a person who injected drugs (PWID) are not reported separately due to very low number of cases.

Comment

The median CD4 count at diagnosis for NSW residents notified with newly diagnosed HIV infection January to June 2015 was 420. For those reporting to be MSM it was 448 and for those reporting heterosexual exposure only to HIV it was 280 (Figure 6), a slight drop for all three groups compared with previous years. The median CD4 count at diagnosis among those reporting heterosexual exposure to HIV remains low (Figure 6).

Figure 7: Within each age group at diagnosis of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 the per cent with evidence of late diagnosis[1]



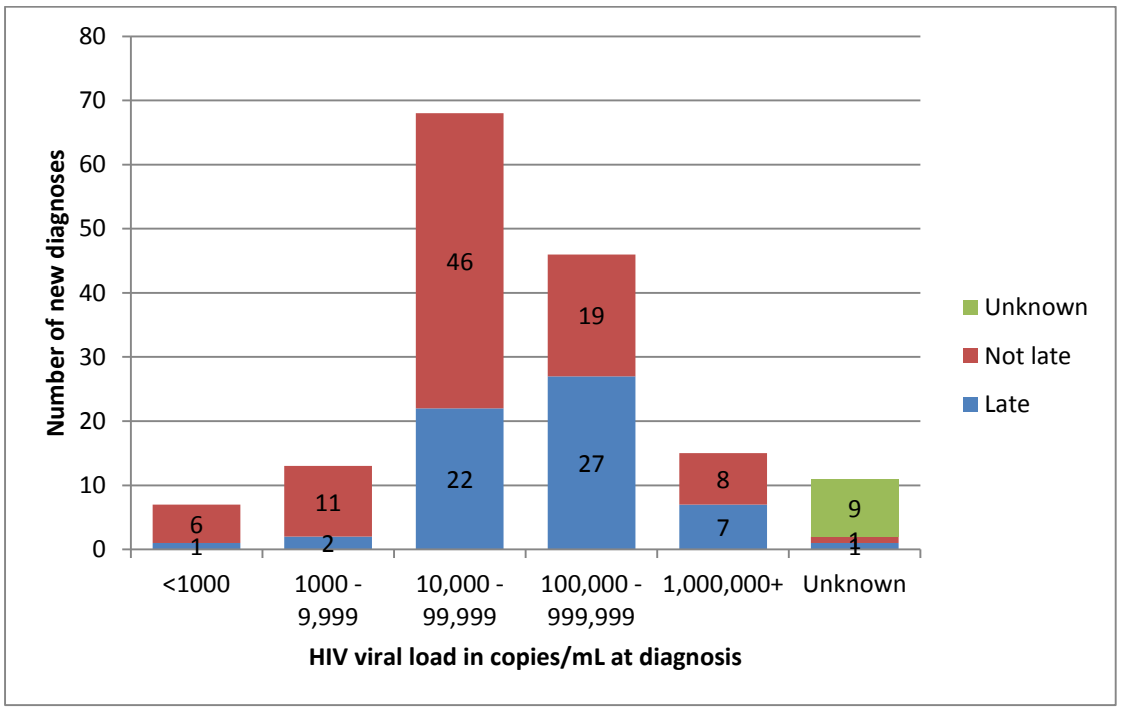
Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015.
[1]Clinical or immunological evidence of a late diagnosis included a CD4 count less than 350 or an AIDS defining illness within three months of diagnosis, in the absence of a laboratory confirmed negative HIV test in the 12 months prior to diagnosis. Please note: this definition of "late" has changed and tightened since the 2013 fourth quarter and annual report.

Comment

The "50 years and over" age group has a distinctly higher proportion of people with evidence of late diagnosis compared with younger age groups. The age category "less than 20 years" was excluded from Figure 7 due to very low numbers; from January to June 2015 there was zero new diagnoses less than 20 years of age.

Among NSW residents notified with newly diagnosed HIV infection in January to June 2015, the proportion within each age group with evidence of late diagnosis compared with earlier periods was similar, though increased in those 50 and over at diagnosis (Figure 7).

Figure 8: Number of NSW residents notified with newly diagnosed HIV infection from January to June 2015 by HIV viral load at diagnosis and evidence of late diagnosis[1]



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

[1]Clinical or immunological evidence of a late diagnosis included a CD4 count less than 350 or an AIDS defining illness within three months of diagnosis, in the absence of a laboratory confirmed negative HIV test in the 12 months prior to diagnosis. Please note: this definition of "late" has changed and tightened since the 2013 fourth quarter and annual report.

Comment

Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, 20 (13%) had HIV viral load (HIV VL) less than 10,000 copies/mL at diagnosis, 68 (43%) had a HIV VL between 10,000 and 99,999, 46 (29%) had a HIV VL between 100,000 and 999,999, 15 (9%) had a HIV VL of 1,000,000 or more and 11 (7%) were missing an HIV VL (Figure 8).

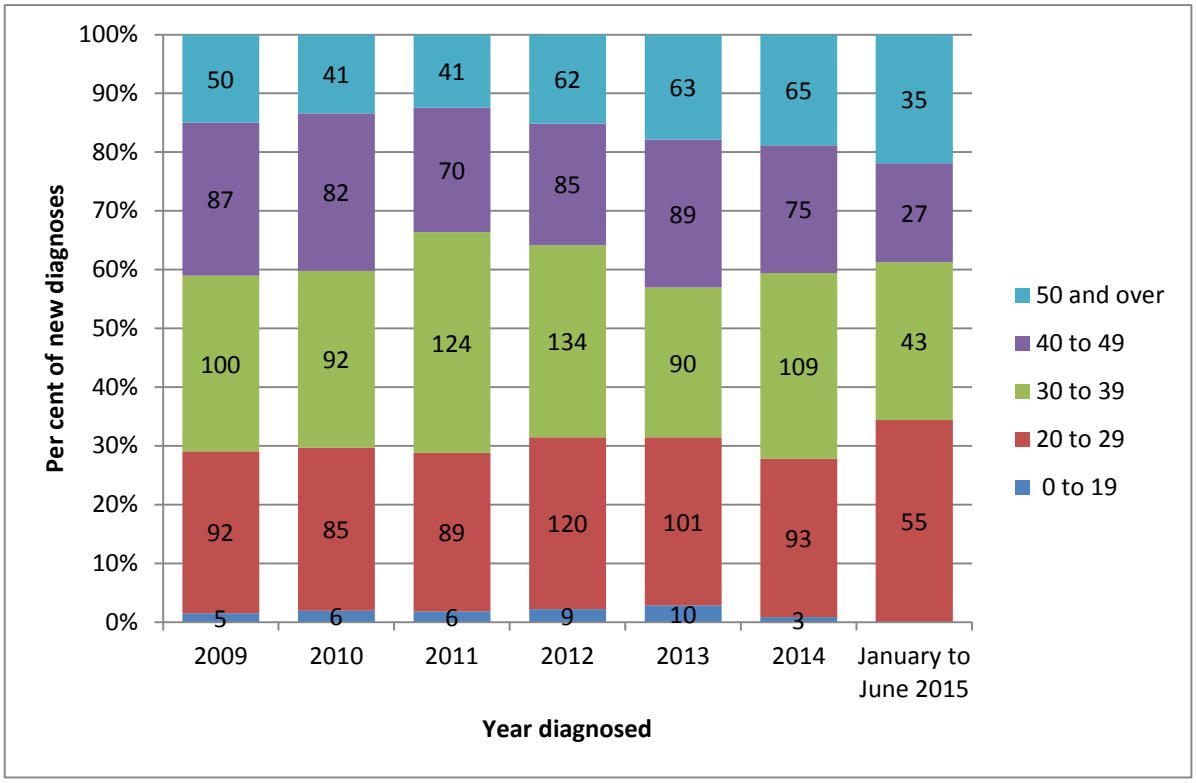
Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, 60 (38%) had evidence of late diagnosis and of these 34 (57%) had an HIV VL 100,000 copies/mL or more at diagnosis.

For the HIV-infected individual, unchecked viral replication is associated with negative clinical outcomes and is a factor in disease progression and death, independent of CD4 count. Higher viral loads are associated with a higher risk of transmission of HIV and lower viral loads are associated with a lower risk of transmission of HIV.

1.3 Which groups are being notified?

Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, 147 (92%) were male, 12 (8%) were female and 1 (1%) was transgender; a very similar gender distribution to that of new diagnoses January to June 2009 to 2014.

Figure 9: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 by age in years at diagnosis

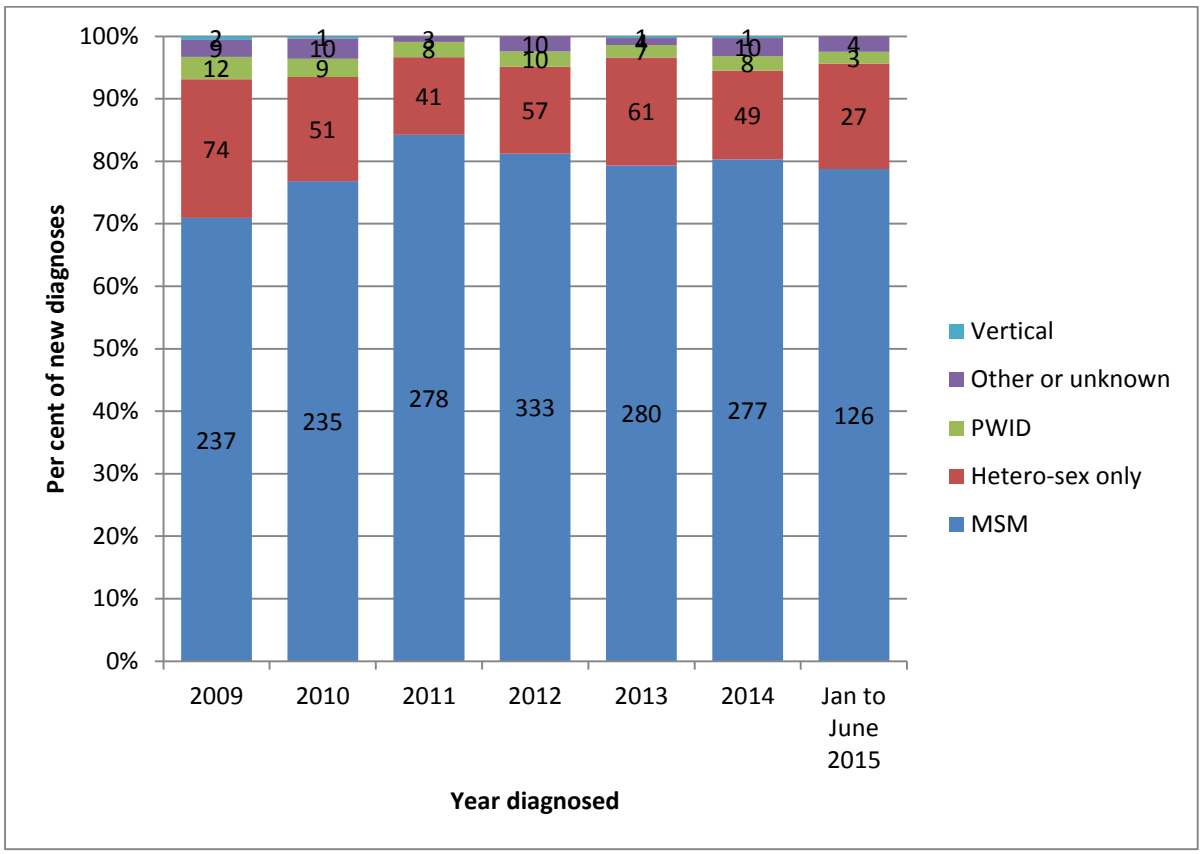


Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Comment

Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, none were less than 20 years of age, 55 (34%) were 20 to 29 years, 43 (27%) were 30 to 39 years, 27 (17%) were 40 to 49 years and 35 (22%) were 50 years or over (Figure 9). This is a slightly different age at diagnosis distribution compared with the average for the period January to June 2009 to 2014, where 2% were 0 to 19 years, 28% were 20 to 29 years, 32% were 30 to 39 years, 24% were 40 to 49 years and 15% were 50 years and over.

Figure 10: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 by reported HIV risk exposure



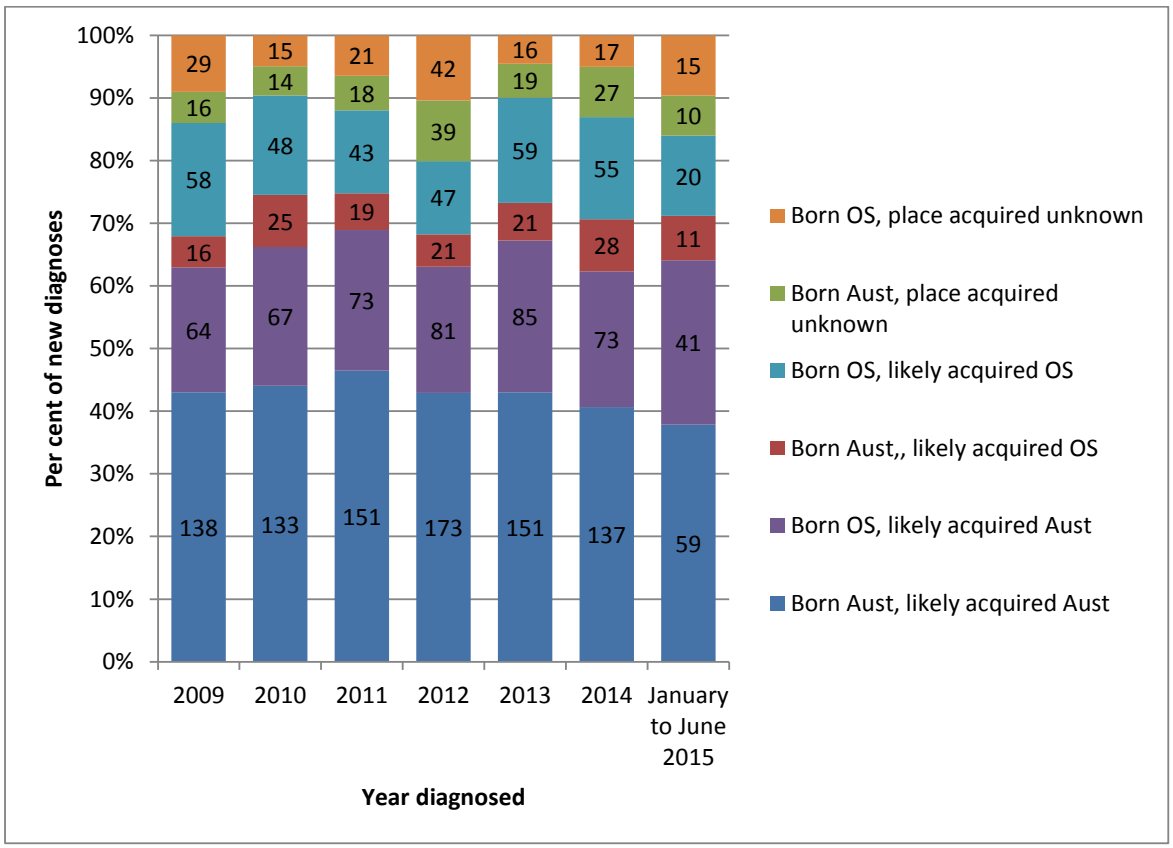
Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Comment

Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, 126 (79%) reported being MSM, 27 (17%) people newly diagnosed self-reported acquiring HIV through heterosexual sex, 3 (2%) reported being a person who injected drugs (PWID) and 4 (3%) were of unknown risk factor for HIV acquisition (Figure 10). This is similar breakdown of HIV risk exposures as for the average of the period January to June 2009 to 2014; 81% MSM, 15% heterosexual sex only, 2% were PWID and 2% were of unknown risk factor for HIV acquisition.

As mentioned earlier, from 1 January to 30 June 2015, the number of NSW residents notified with newly diagnosed HIV infection reporting to be MSM was 126, which was 20% less compared with MSM notifications for same period in 2012 (n=158) and 11% less than the MSM average for the same period in 2009 to 2014 (n=142). It is also the lowest number of MSM notifications in January to June since 2010 (n=126).

Figure 11: Number of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 by place of birth and place most likely acquired HIV*



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015.
* Excluded were 43 new diagnoses January 2009 to June 2015 with unknown country of birth.
OS=overseas, Aust=Australia

Comment

Australian born NSW residents newly diagnosed

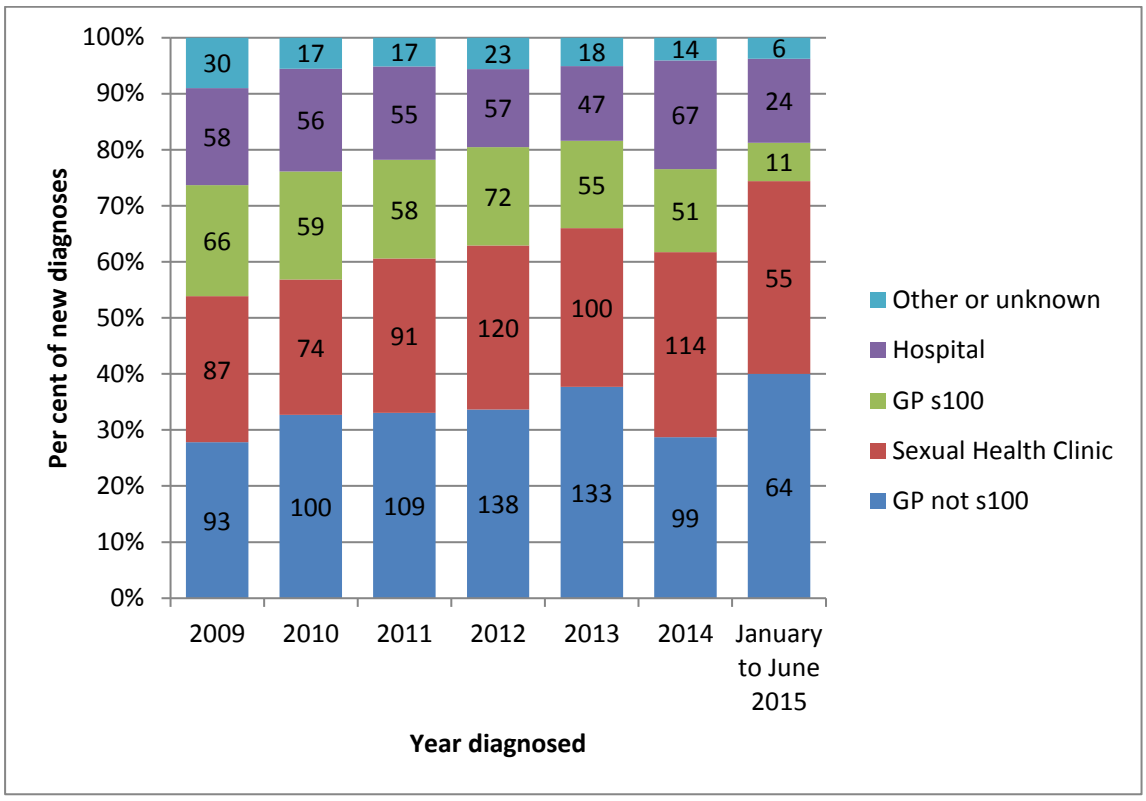
Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, 80 (50%) were born in Australia. Of these, 59 (37%) likely acquired their infection in Australia, compared with 42% for the average of the period January to June 2009 to 2014. A further 11 (7%) likely acquired their infection overseas and 10 (6%) place of acquisition was unknown, both similar to previous comparable periods (Figure 11).

Overseas born NSW residents newly diagnosed

Of 160 NSW residents notified with newly diagnosed HIV infection January to June 2015, 76 (48%) were born overseas. Of these, 41 (26%) likely acquired their infection in Australia, compared with 23% for the average of the period January to June 2009 to 2014. A further 20 (13%) likely acquired their infection overseas and 15 (9%) place of acquisition was unknown, both similar to previous comparable periods.

At the time of reporting place of birth was unknown for 4 (2%) of 160 new diagnoses January to June 2015.

Figure 12: Number of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 June 2015 by type of diagnosing doctor



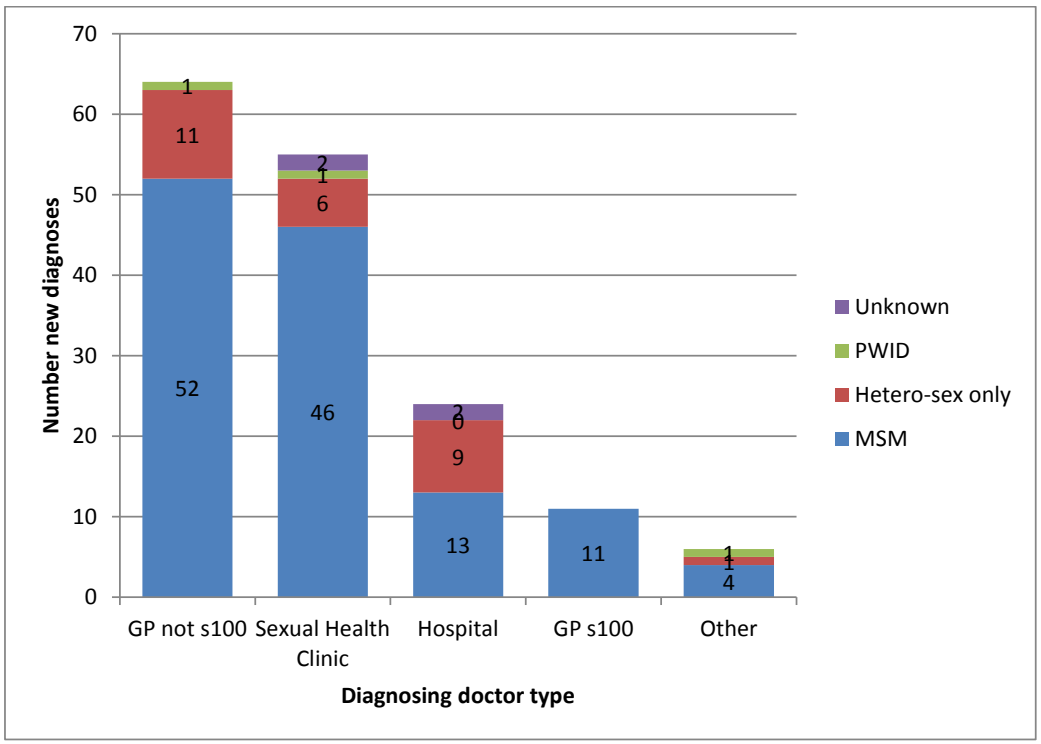
Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Comment

Of 160 NSW residents notified with newly diagnosed HIV infection in January to June 2015, 64 (40%) were diagnosed by general medical practitioners not accredited to prescribe antiretroviral therapy (ART) nor specialised in HIV (GP non-s100), 55 (34%) were diagnosed by sexual health clinics (SHC) (which also includes linked community testing sites), 24 (15%) by hospital located doctors, 11 (7%) by GP s100 doctors (GP HIV specialist-accredited to prescribe ART) and 6 (4%) by other doctor types such as immigration services (Figure 12). Of note, GP non-s100s made a greater proportion of the new diagnoses in January to June 2015 compared with 31% for the average of the period January to June 2009 to 2014 and GP s100 doctors (GP HIV specialist-accredited to prescribe ART) made a lesser proportion of diagnoses (7%) compared with 18% for the average of the period January to June 2009 to 2014.

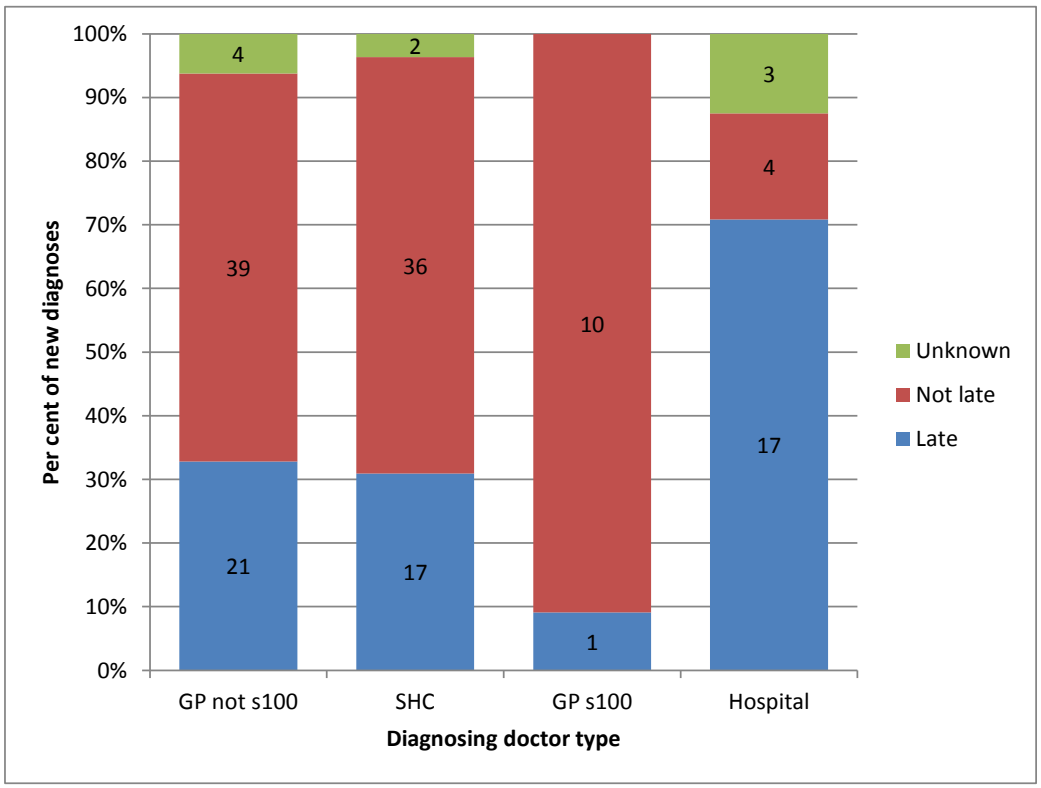
GP non-s100, SHC and hospital based doctors diagnose HIV in a mix of at risk groups whereas GP s100s almost exclusively diagnose MSM (Figure 13). Evidence of late diagnosis in people newly diagnosed by hospital located doctors is double that among those diagnosed by GP non-s100 and SHC (Figure 14).

Figure 13: Number of NSW residents notified with newly diagnosed HIV infection from January to June 2015 (n=160) by type of diagnosing doctor and self-reported HIV risk exposure



Data source both figures: NSW HIV/AIDS database, Health Protection NSW, extracted 7 August 2015

Figure 14: NSW residents notified with newly diagnosed HIV infection from January to June 2015 by type of diagnosing doctor (6 'other' excluded) and evidence of late diagnosis

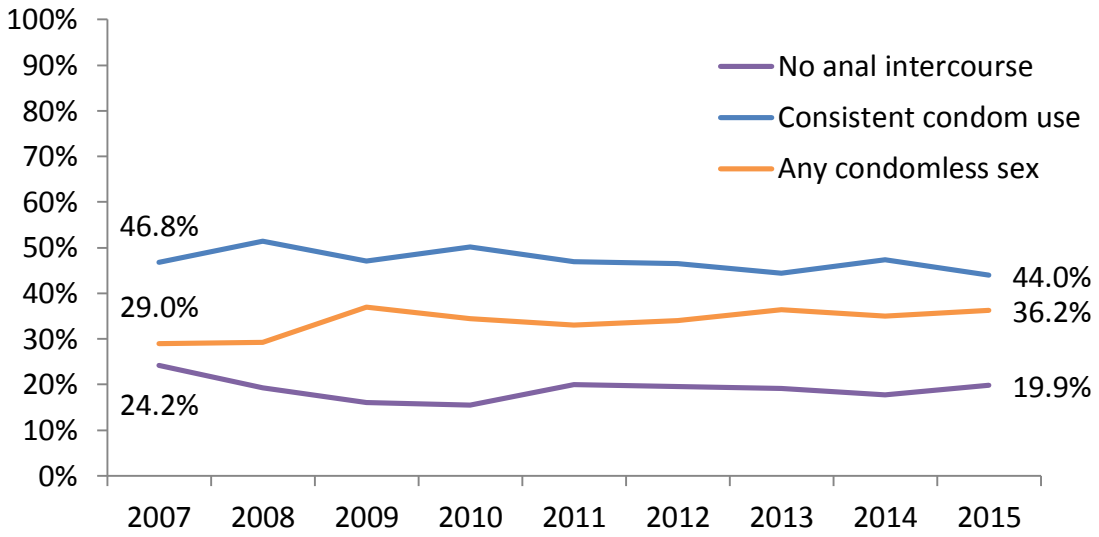


2. Maintain safe behaviour

2.1 How many men who have sex with men use condoms with casual sexual partners?

Condom use among men who have sex with men with casual sexual partners is measured through the Sydney Gay Community Periodic Survey (SGCPS). This represents behaviour in the 6 months prior to February 2015 and is therefore reflective of behaviours in the latter part of 2014.

Figure 15: Condom use reported by MSM with casual sexual partners in NSW, 2007-2015



Data source: Sydney Gay Community Periodic Survey (February 2015)

Comment

Among gay men with casual sexual partners surveyed, 64% reported "always using a condom for anal sex" or "avoided anal sex". This has remained stable since 2009. Updated data from the February 2016 SGCPS will be presented in the Quarter 1 2016 report.

2.2 Community mobilisation "Ending HIV"

Since 2013, ACON has monitored the knowledge and attitudes of gay men in regards to key messages relating to the NSW 'Ending HIV' campaign. Key findings and a description of the evaluation is provided in Appendix B.

2.3 How accessible are NSP services in NSW?

In the year ending 30 June 2015, a total of 12,668,704 units of injecting equipment were distributed in NSW. This figure includes injecting equipment distributed by pharmacies participating in the Pharmacy NSP Fitpack® scheme and by the Public NSP. This represents an increase of 391,807 additional units (3.2%) compared with the previous 12 months (NSW Health NSP Minimum Data Set).

As of 30 June 2015, there were 1,076 NSP outlets located across NSW. This represents an increase of 27 additional outlets (2.6%) compared with same period in 2014 (NSW NSP Data Collection).

2.4 How many people are using new injecting equipment in NSW?

Among respondents to the NSW NSP Enhanced Data Collection survey 2013[1] who reported injection, 22% reported receptive sharing (RSS) of needles and syringes in the previous month. In 2014, the proportion who reported receptive sharing of needles and syringes declined to 14%.[2]
These results are broadly comparable to the Australian NSP survey. In the Australian NSP survey, which surveys only primary NSW sites, the proportion of NSW respondents who reported receptive sharing of needles and syringes in the previous month was 13% in 2013 and 16% in 2014.[3]

Findings from the upcoming 2015 NSW NSP Enhanced Data Collection will indicate whether the reduction between 2013 and 2014 identified in that survey is a continuing trend or an expected fluctuation.

[1] In 2013, the first annual NSW NSP Enhanced Data Collection survey was conducted. The purpose of the survey is to collect NSP client demographic, behavioural and drug use data on an annual basis to strengthen the state-wide prevention approach, and also inform LHDs in planning for NSP service delivery at the local level.
[2] Currie B, Iversen J, Maher L NSW Needle and Syringe Program Enhanced Data Collection 2013 A report for the Ministry of Health by the Kirby Institute, UNSW Australia, 2014.
[3] Iversen J, Chow S and Maher L. Australian Needle and Syringe Program Survey National Data Report 2009-2013. The Kirby Institute, UNSW Australia, 2014. In 2013, 686 people in NSW were surveyed in 20 primary NSPs. Refer to Appendix 1, Table 2

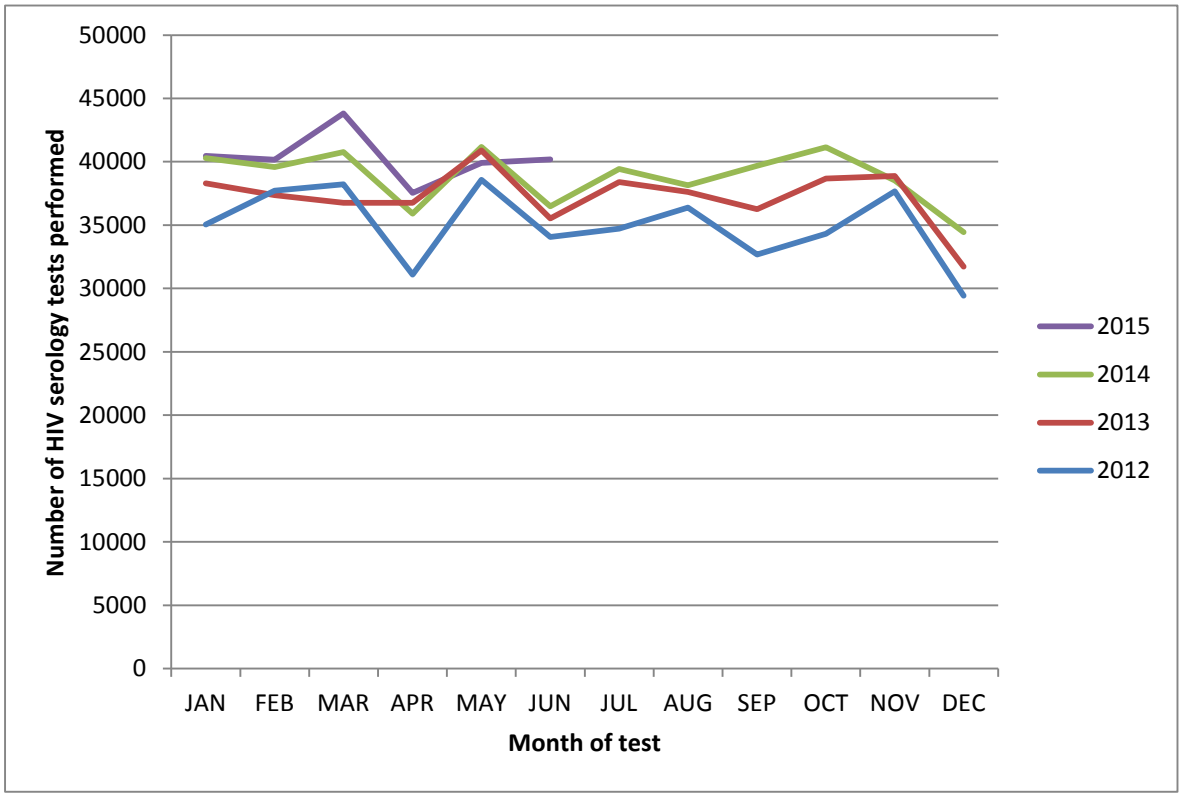
3. Increase HIV testing

3.1 Is HIV testing increasing in NSW?

3.1.1 NSW overall

In 2012, NSW Health commenced collection of testing data for selected notifiable conditions, including HIV, from 15 NSW laboratories. These laboratories represent about 95% of the laboratory testing for HIV in NSW residents. Information from laboratories does not provide any indication on the purpose of testing (screening of high risk individuals, routine antenatal, post-exposure testing), nor whether there are repeat tests on the same individual.

Figure 16: Number of HIV serology tests performed at 15 NSW laboratories per month from 1 January 2012 to 30 June 2015



Data source: NSW Health denominator data project

Comment

In quarter 2 2015, there were 117,627 HIV serology tests performed in 15 laboratories in NSW (Figure 16). This is a 4% increase compared with quarter 2 2014 (113,560), a 4% increase compared with quarter 2 2013 (113,174) and a 13% increase compared with quarter 2 2012 (103,737).

In January to June 2015, there were 242,074 HIV serology tests performed in 15 laboratories in NSW (Figure 16). This is a 3% increase compared with January to June 2014 (234,218), a 7% increase compared with January to June 2013 (225,615) and a 13% increase compared with January to June 2012 (214,731). These data do not include data on point of care (rapid) HIV testing offered at a range of community sites.

3.1.2 Local Health Districts

Data on HIV testing is available from Publicly Funded Sexual Health Clinics (PFSHCs) in all LHDs however the time periods and the type of data is not uniform due to different data management systems. Key differences in the availability of data are summarised in Table 1.

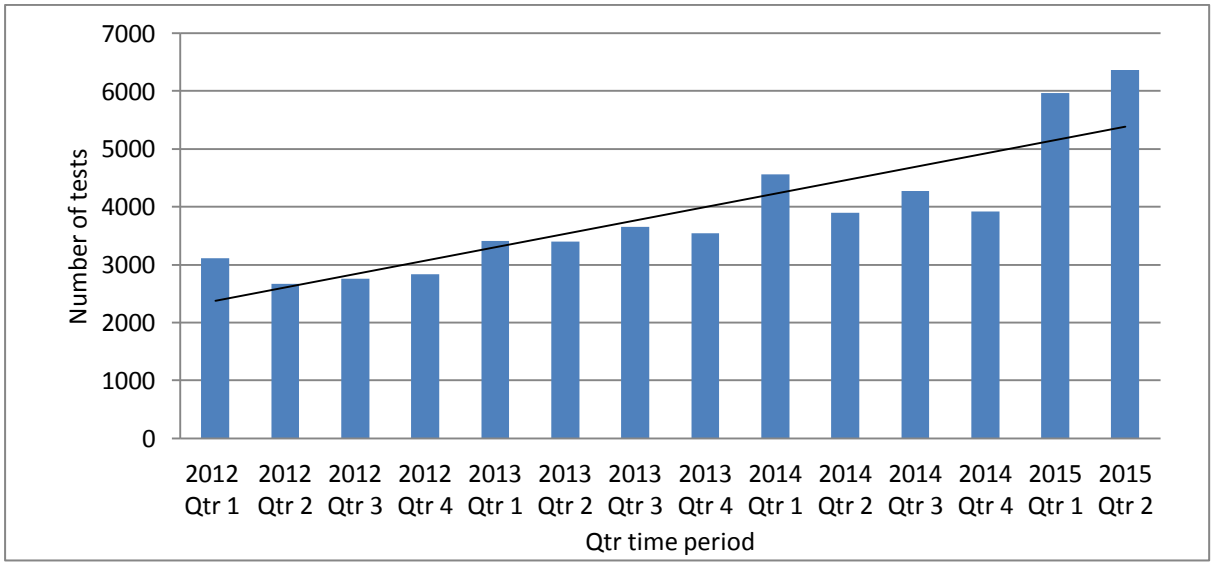
Table 1: Summary of testing data availability from Publicly Funded Sexual Health Clinics in NSW

	Total number of HIV tests and positivity per quarter *Available from*	Number of HIV tests and positivity per quarter by priority population *Available from*
South Eastern Sydney LHD	January 2011	July 2013
Western Sydney LHD Nepean Blue Mountains LHD Northern Sydney LHD Northern NSW LHD Illawarra Shoalhaven LHD	January 2011	January 2011
All other LHDs	July 2013	July 2013

As trend data for PFSHCs have become available, the proportional increase/decrease for HIV testing has varied considerable, in particular for high risk groups that have low numbers.

Figure 17 displays the number of HIV tests done in PFSHC between 1 January 2012 and 30 June 2015 in South Eastern Sydney LHD. Both rapid HIV testing and HIV serology are included.

Figure 17: Number of HIV serology tests performed in South Eastern Sydney Local Health District Publicly Funded Sexual Health Clinics from 1 January 2012 to 30 June 2015



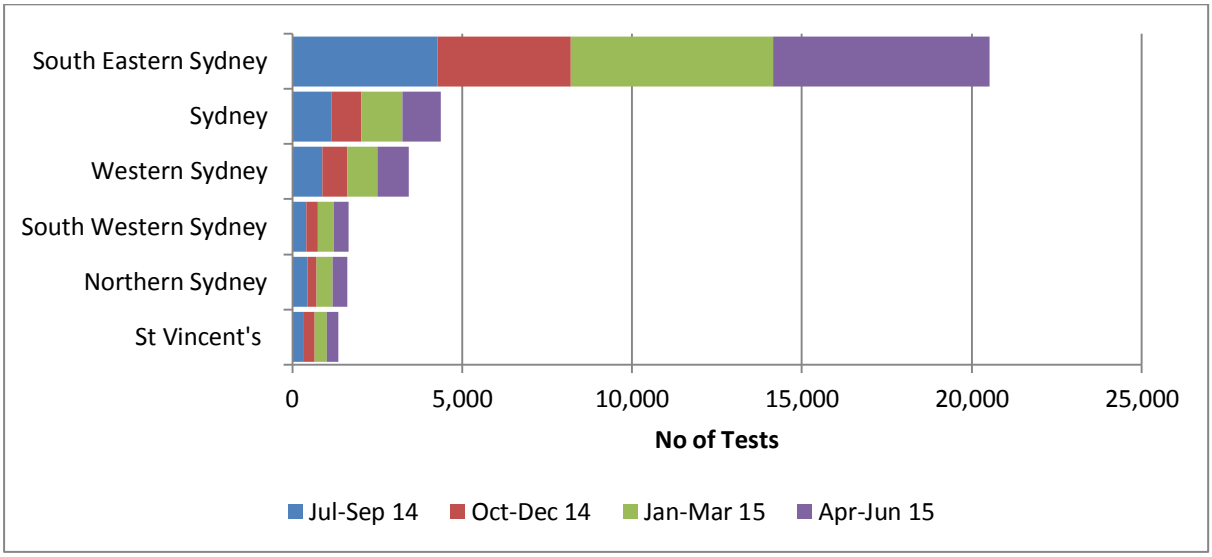
Data source: South Eastern Sydney Local Health District

Comment

In quarter 2 2015, testing in South Eastern Sydney LHD (Figures 17) increased by 63% (6,364) compared with the same period in 2014 (3,897), and by 87% compared to same period in 2012 (3,403).

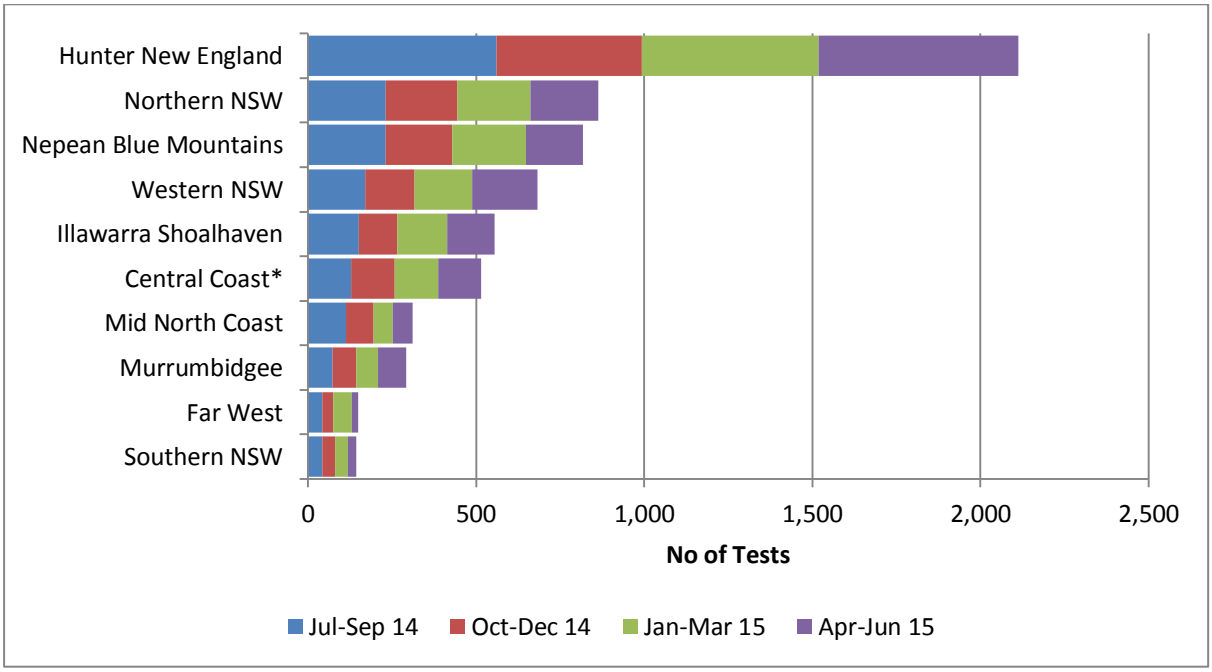
A comparison in the number of HIV tests done between 1 July 2014 and 30 June 2015 for metropolitan PFSHCs is displayed in Figure 18 and for regional and rural PFSHCs in Figure 19. Both rapid HIV testing and HIV serology are included.

Figure 18: Number of HIV tests performed in Sydney metropolitan Local Health District Publicly Funded Sexual Health Clinics from 1 July 2014 and 30 June 2015



Data source: NSW Health HIV Strategy Monitoring Database

Figure 19: Number of HIV tests performed in regional and rural Local Health District Publicly Funded Sexual Health Clinics from 1 July 2014 and 30 June 2015



*Central Coast figures are an underestimate as actual activity data is not available from Dec 2013

Data source: NSW Health HIV Strategy Monitoring Database

Comment

In quarter 2 2015, 11,263 HIV tests were done in all PFSHCs in NSW. This represents a 36% increase on the number of tests performed in the same quarter in 2014 (8,305).

In quarter 2 2015, testing increased particularly in key Sydney metropolitan areas; overall HIV testing in Sydney LHD increased by 26% (1,138) compared with the same period in 2014, and testing in Western Sydney LHD increased by 15% (933) compared to the same period in 2014.

HIV testing increased both overall in NSW and among high risk populations. To reduce the number of undiagnosed HIV infections in the community, populations with ongoing risk of HIV infection need to continue to test frequently.

3.2 Where is HIV testing being done?

Apart from PFSHCs, HIV testing takes place in a range of other clinical and community settings. A large proportion of testing occurs in the private sector, especially in general practice. Efforts to better understand HIV testing practices in different clinical settings including drug and alcohol services and emergency departments are ongoing.

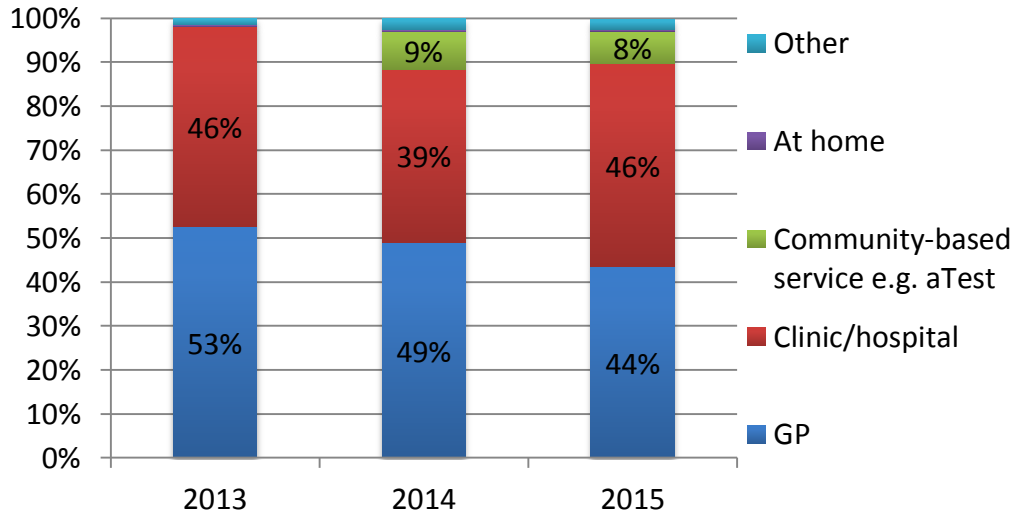
3.2.1 General practice

Number of HIV tests done and positivity for 3 General Practice clinics with high caseloads of MSM clients located in South Eastern Sydney LHD was presented in the Quarter 2 2014 report and are included here in Appendix C. Obtaining a further understand of HIV testing practices in General Practice is a high priority for NSW.

3.2.2 Survey data

HIV testing in MSM – including location and testing history - is measured regularly through the SGCPS, with most recent data presented in the Quarter 1 2015 report and included in (Figures 20, 21 and 22). Updated data from the 2016 SGCPS will be presented in the Quarter 1 2016 report.

Figure 20: Location of last HIV test reported by non-HIV-positive men.



Data source: Sydney Gay Community Periodic Survey (February 2015)

Comment

The majority of gay men reported that their last HIV test took place in general practice or a public hospital service, 44% and 46% respectively.[4]

3.3 Who is being tested for HIV?

3.3.1 LHD data

To reduce the pool of undiagnosed HIV infection, testing should be targeted to high risk populations. Table 2 summarises the available data from PFSHCs on HIV testing in priority population groups. The number of HIV tests among priority populations in quarter 2, 2015 was higher compared to the same period in 2014.

Table 2: HIV testing in priority populations, Publicly Funded Sexual Health Clinics, NSW

Priority Population	% of HIV tests in all PFSHCs, Q2 2015*	Number of HIV tests in all PFSHCs, Q2 2015**	*% increase in HIV tests compared with Q2 2014 in all PFSHCs#*
Men who have sex with men (MSM)	59%	6,621	*87%*
Sex workers^	12%	1,337	*44%*
People who inject drugs (PWID)^	6%	720	*73%*
Aboriginal people	3%	291	*15%*

*Excludes Central Coast LHD who was unable to provide testing data by priority population. Also excludes Sydney Children's Hospital Network.

#Excludes LHDs without testing data by priority population in Q2 2014 (St Vincent's Hospital Network, select Southern Eastern Sydney LHD services and Central Coast LHD.

^Includes people who *ever* were sex workers or who *ever* injected drugs.

Data source: NSW Health HIV Strategy Monitoring Database[5]

Sydney Sexual Health Centre in South Eastern Sydney LHD performed the highest number of HIV tests in MSM amongst PFSHCs in NSW. Of the 5,208 tests done by this clinic in quarter 2 2015, 3,809 (73%) were for MSM. 14 were positive, yielding a 0.4% positivity rate among MSM clients.

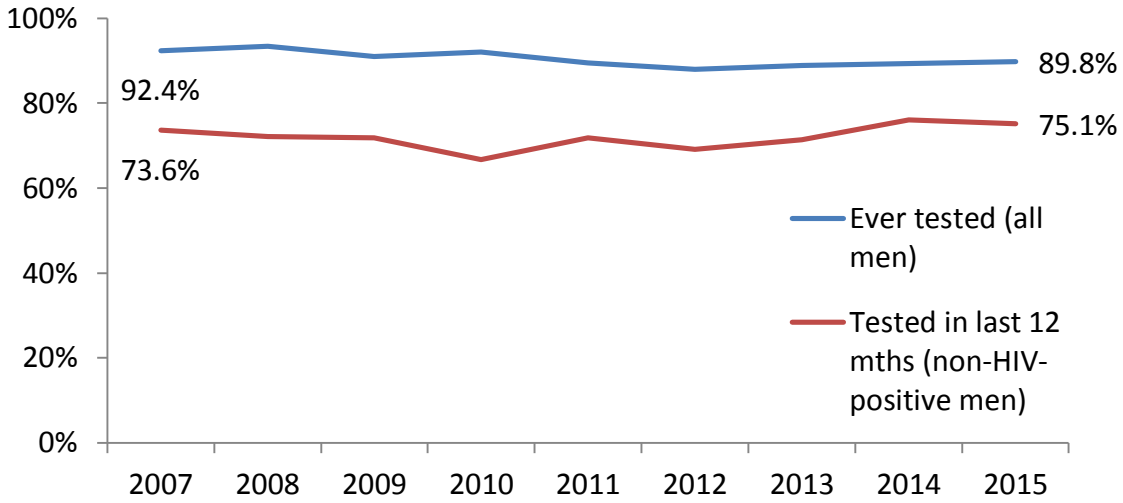
In summary, data from PFSHCs indicates that priority populations are being reached by public services. Achieving further increases in testing and retesting, particularly in high risk MSM, are important to identify and link HIV infected individuals to care; and to reduce the number of people living with HIV in NSW who are undiagnosed.

[4] excludes HIV-positive men and men who said they hadn't been tested for HIV

[5] Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

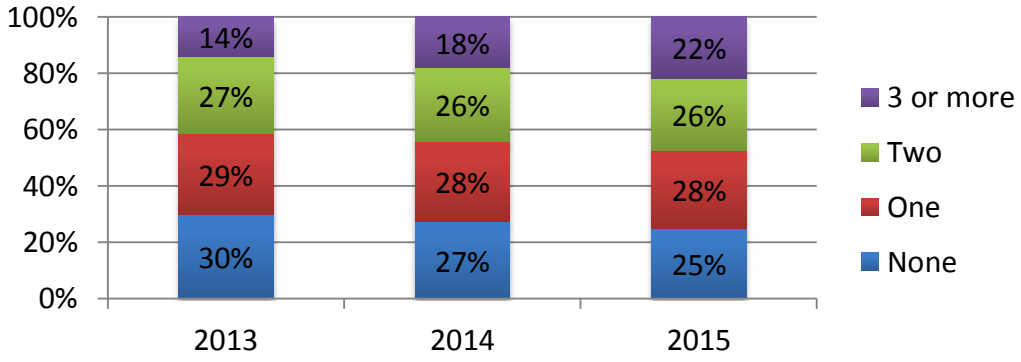
4.3.2 Survey data

Figure 21: HIV test in the previous 12 months reported by non-HIV-positive men



Data source: Sydney Gay Community Periodic Survey (February 2015)

Figure 22: Number of HIV tests in the previous 12 months reported by non-HIV-positive men



Data source: Sydney Gay Community Periodic Survey (February 2015)

Comment

The high proportion of gay men reporting to have had an HIV test in the last 12 months recorded in 2014 (76%) has been sustained in 2015 (75%); these figures are the highest since the survey began in 1996 and represent a modest but statistically significant increase compared with 2013 (71%).

Among non-HIV-positive men, there has been a gradual decline in the proportion reporting no HIV tests in the previous year and an increase in the proportion who had “three or more” HIV tests in the previous 12 months (Figure 22). This suggests that while annual HIV testing appears stable overall, the proportion of men having multiple HIV tests within a year is gradually increasing.

In the context of increased testing and retesting among high risk groups, declines in positive rates are to be expected. Saturation of testing is likely to have occurred when testing numbers are high, high risk populations are well targeted and positivity is low. Aiming for and maintaining this triad is important for ensuring a negligible pool of undiagnosed HIV infection.

3.4 How is testing being made more accessible?

3.4.1 Rapid testing

Rapid HIV testing is part of a mix of high quality, safe and innovative HIV testing services being offered across NSW, to encourage gay men and other men who have sex with men to have a test annually, with more frequent testing up to 4 times a year for men who report higher risk behaviours including sex without a condom and multiple sexual partners. Rapid testing offers choice and convenience to people who do not routinely access conventional testing.

Rapid HIV testing has been made available to high risk groups in a range of settings across NSW, with a focus on community based testing services. Since June 2013, five 'fixed' community sites and six 'pop up' sites have been operational.

Table 3 displays the number of rapid HIV tests done and the percentage of clients with high risk behaviours and infrequent testing history in Community-based and other non-traditional clinical testing sites in NSW.

Table 3: Number of rapid HIV tests in non-traditional testing sites and percentage of clients with high risk behaviour and infrequent testing history from 1 April to 30 June 2015

Non-traditional Settings	Number of RHT, Q2 2015	% Positive	% never previously tested	% tested more than 12 months ago	*% with > 5 sexual partners in last 3 months*
Community-based					
aTEST Surry Hills (7 hours/week)	*220*	*0.0%*	*13.2%*	*16%*	*24%*
aTEST Oxford St (40 hours/week)	*968*	*1%*	*11%*	*19%*	*30.5%*
aTEST Kings Cross (3 hours/week)	*49*	*4.1%*	*18%*	*34%*	*16%*
aTEST Newtown (6 hours/week)	*191*	*1.6%*	-	*34%*	*26%*
Other					
Ankali House (14 hours/week)	33	*0.0%*	*9%*	*12%*	*24%*

-data is unavailable
Data sources: NSW Health HIV Strategy Monitoring Database[6]

Comment

In quarter 2 2015, 1,531 HIV rapid tests were performed in NSW, approximately 1,461 of which were at community sites. 15 of 1,531 rapid tests (1%) were confirmed as positive.

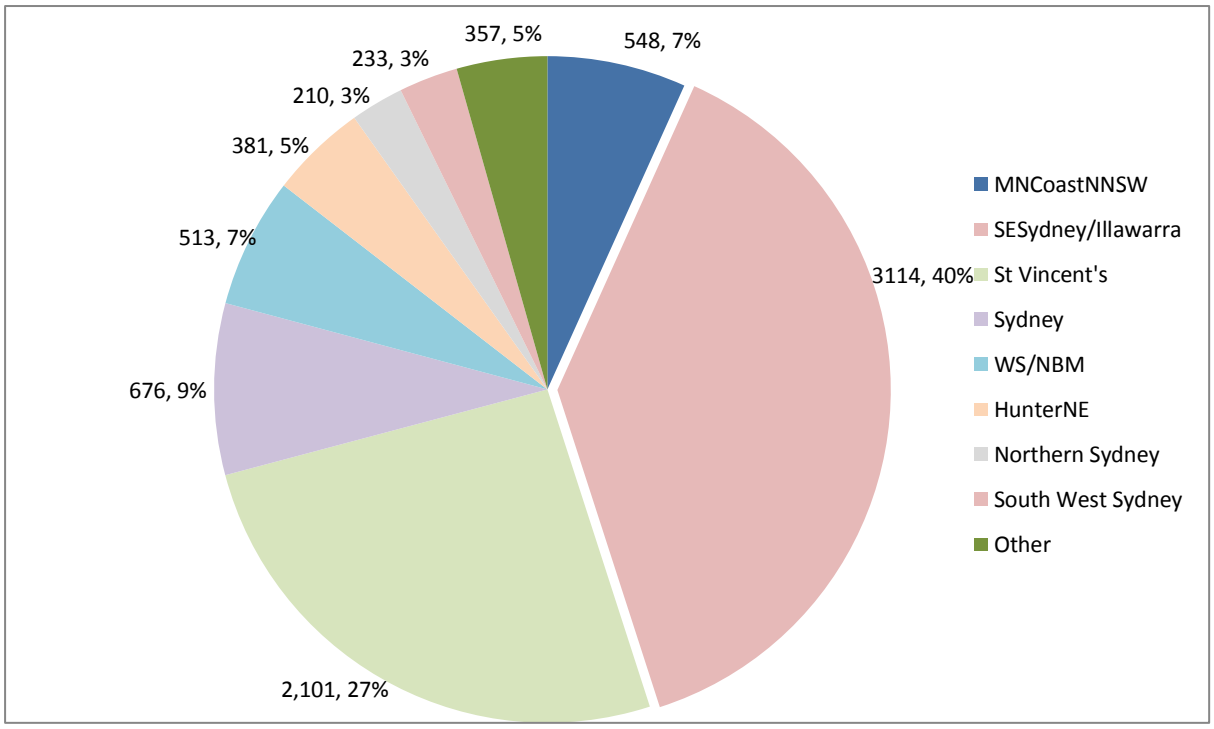
Though the number of clients tested in community sites is relatively small, NSW data suggests it is an effective testing model for engaging MSM, a high proportion of whom reported high risk behaviours, or infrequent testing for HIV.

[6] Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

4 Increase HIV treatment

4.1 How many people in NSW are on antiretroviral treatment?

Figure 23: Number of patients dispensed ART in NSW by LHD of dispensing pharmacy from 1 July 2014 to 30 June 2015[7][8][9][10][11]



Data source: Health Share NSW ipharmacy data and data submitted by Western Sydney, Nepean Blue Mountains and Hunter New England LHDs

Comment

NSW public hospital pharmacy dispensing data indicates that in the 12 months between 1 July 2014 to 30 June 2015, 7,758 people diagnosed with HIV in NSW and in care were dispensed antiretroviral therapy (ART) at least once. This includes all people accessing subsidised HIV treatment under the Pharmaceutical Benefits Scheme through public hospital pharmacies. It does not include people who may be accessing treatment through other sources, including those who purchase HIV treatment from overseas, receive ART through clinical trials or are dispensed ART for post-exposure prophylaxis.

[7] HIV treatment data was updated on 17/5/16 to correct for a duplication error identified in the iPharmacy data.

[8] In December 2013, Heath Share NSW completed the NSW rollout of a standardised ipharmacy system, which enables the collection of data from LHDs about pharmacy dispensing activities including dispensing of ART for HIV. 2013 was the first year for which actual treatment numbers can be ascertained. Past estimates were based on modelled data and therefore comparisons should be made with caution.

[9] Northern NSW, Mid North Coast, South Western Sydney, Justice Health, Murrumbidgee and Southern NSW LHDs came online with the ipharmacy system late in 2013. The 2014 calendar year ART dispensing data was the first complete data available of the public pharmacies from which ipharmacy data is extracted.

[10] The numbers displayed in the graph add up to a figure greater than the overall total of 7,758 for 1/7/14 -30/6/15. This is because a small number of cross-LHD patient flows are not eliminated

[11] 'Other' includes Central Coast 141 (1.8%); Far West/Western NSW 76 (1.0%); Murrumbidgee/Southern NSW 81 (1%); Childrens Hospital Network 14 (0.2%); Justice Health 50 (0.6%).

Almost three-quarters (74.9%) of all ART dispensing by the NSW public hospital pharmacies in the year ending 30 June 2015 occurred through inner metropolitan pharmacies, with over half of all patients receiving ART from pharmacies at the Albion Centre (29.0%) or the St Vincent's Hospital (27.1%). A further 7.5% received ART from the Royal Prince Alfred Hospital and 7.2% from Sydney Hospital and Sydney Eye Hospital.

The NSW Ministry of Health is working with Health Share NSW towards making more comprehensive ART dispensing data available, including data on ART initiations, the LHD of patient's residence, prescriber location and drug combinations.

4.2 What are the current antiretroviral treatment prescribing patterns?

4.2.1 LHDs

Data on the treatment status of clients who received HIV care in NSW public sexual health and HIV services in the year ending 30 June 2015 is summarised at Table 4[12].

Table 4: Clients who received HIV care in NSW public sexual health and HIV services from 1 July 2014 and 30 June 2015

Total number of patients who received care between July 2014 and June 2015	**5192**
Number (%) of patients for whom treatment information was available	4823 (93%)
Number (%) on ART	4378 (91%)
Number not on ART^	445
Number (%) not on ART with CD4 count < 350	*112 (25%)*
Number (%) not on ART with CD4 count between 350 - 499	*82 (18%)*
Number (%) not on ART with CD4 count > 500	*250 (56%)*
Number who initiated ART	378
Number (%) initiated at a CD4 count <350	*133 (35%)*
Number (%) initiated at a CD4 count between 350 - 500	*66 (17%)*
Number (%) initiated at a CD4 count >500	*179 (47%)*

^Includes ART naïve clients and clients who have stopped ART
Data source: NSW Health HIV Strategy Monitoring Database[13]

In the year ending 30 June 2015, at least 5,192 clients with HIV received care in public HIV and sexual health clinics in NSW. The available data indicates that treatment coverage in public clinics is high at 91%.

In the year ending 30 June 2015, 378 people living with HIV initiated ART at public HIV and sexual health clinics in NSW; this number is greater than the total number of new diagnoses in NSW (324) and does not include any persons initiating ART in the private sector.

[12] Data is representative of all clients who has received HIV care in NSW public HIV and sexual health services in the last 12 months where treatment information is available.
[13] Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

4.2.2 Care outcome, ART initiation and post ART HIV viral load six months post diagnosis of NSW residents notified with newly diagnosed HIV infection 1 January 2013 to 31 December 2014

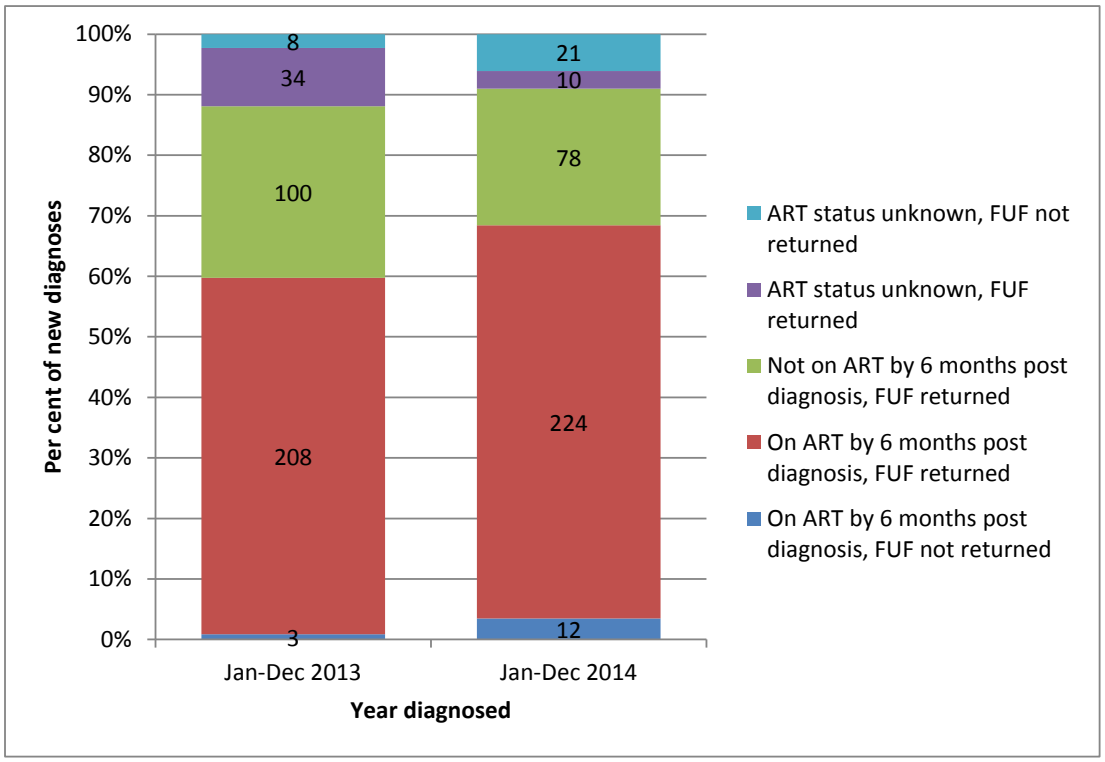
Since 2013, HIV surveillance in NSW was enhanced to:

a) at the time of diagnosis, collect from doctors additional information on the patient's HIV viral load, antiretroviral therapy (ART) commencement or deferral, and;
b) at six months post diagnosis, follow up on the patient via their doctor to collect information on retention in care, ART commencement, pre-ART and latest HIV viral load and CD4 count.

In each quarterly report, the cases reported on with respect to follow up indicators, will have been diagnosed at least six months prior. So in this Quarter 2 2015 report, we report on six month post diagnosis indicators on 698 NSW residents newly diagnosed with HIV infection between 1 January 2013 and up to and including 31 December 2014.

Return rate of six month post diagnosis follow up forms by treating clinicians was very high with 342 of 353 (97%) forms returned for the 2013 new diagnoses cohort and 312 of 345 (90%) forms returned for the 2014 new diagnoses cohort (Figure 24).

Figure 24: Per cent of NSW residents newly diagnosed with HIV infection in 2013 (n=353) and 2014 (n=345) by follow up form (FUF) return and ART status six months post diagnosis

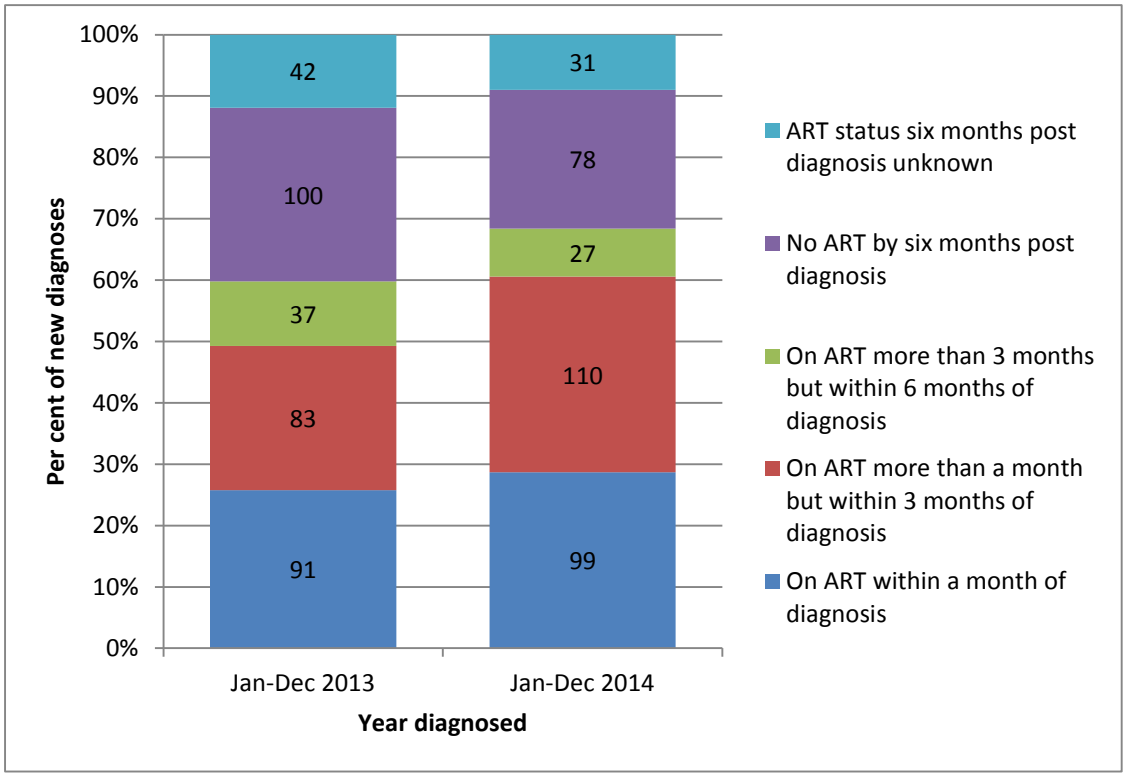


Data source: NSW HIV notification and follow up data, Health Protection NSW, extracted 11 August 2015.

Commencement of ART by six months post diagnosis

Data on commencement of ART by six months post diagnosis was drawn from follow up forms (FUF) and notifications forms and combined for analysis. All new diagnoses were included independent of care outcome by six months post diagnosis.

Figure 25: Per cent of NSW residents notified with newly diagnosed HIV infection in 2013 (n=353) and 2014 (n=345) by ART commencement status at six months post diagnosis, based on notification form and six month post diagnosis data.



Data source: NSW HIV notification and follow up data, Health Protection NSW, extracted 11 August 2015.

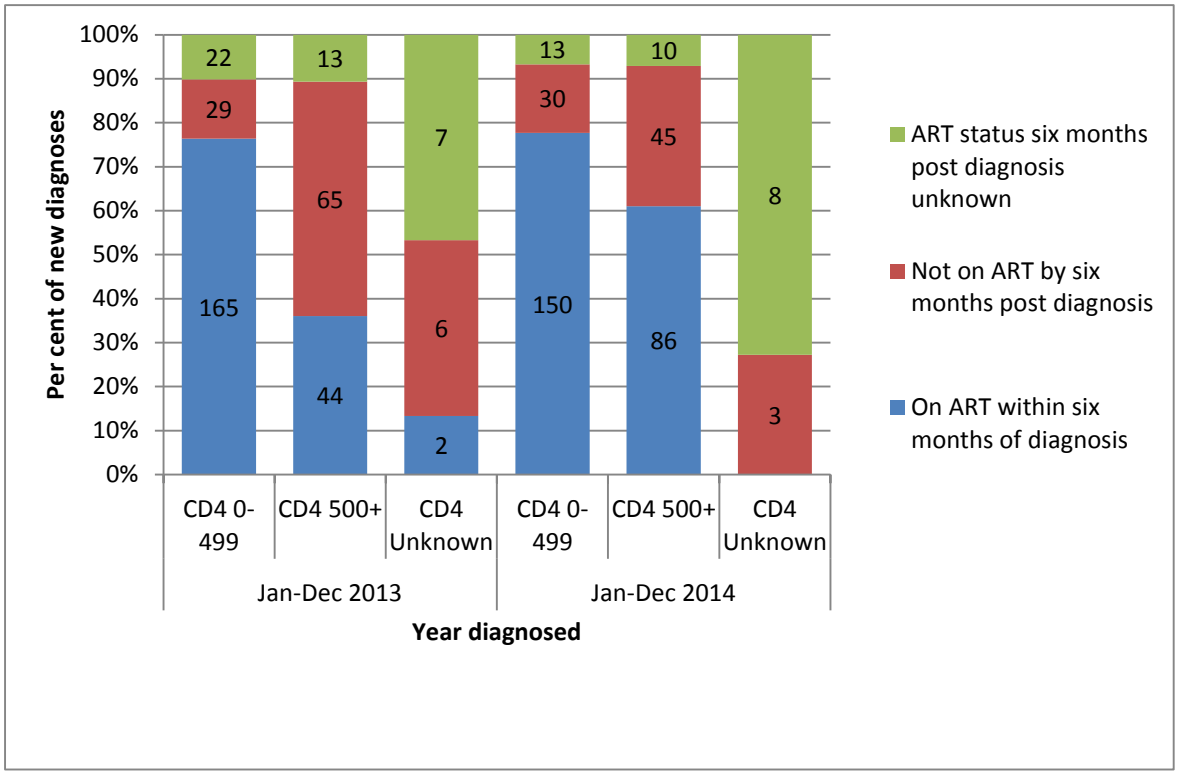
Comment

Among the cohort of 698 NSW residents notified with newly diagnosed HIV infection from 1 January 2013 to 31 December 2014, 447 (64%) were reported to have commenced ART within six months of diagnosis. This comprises 211 (60%) of 353 newly diagnosed in 2013 and 236 (68%) of 345 newly diagnosed in 2014 (Figure 25). In addition, 49% of the 2013 new diagnoses cohort was on ART within three months of diagnosis, compared with 61% of 2014 new diagnoses cohort. It would appear that early commencement of ART is increasing.

Those with ART status unknown at six months post diagnosis were either not retained in care of the reporting doctor (i.e., the patient was reported as lost to follow up, dead or transferred out of NSW) or had non-return of the follow up form.

Among 83 NSW residents notified with newly diagnosed HIV infection in quarter 4 2014 (the most recent quarter of diagnoses with six months post diagnosis data available), 66 (80%) were on ART within six months of diagnosis.

Figure 26: Per cent of NSW residents notified with newly diagnosed HIV infection in 2013 and 2014 by CD4 count at diagnosis and ART commencement status six months post diagnosis.

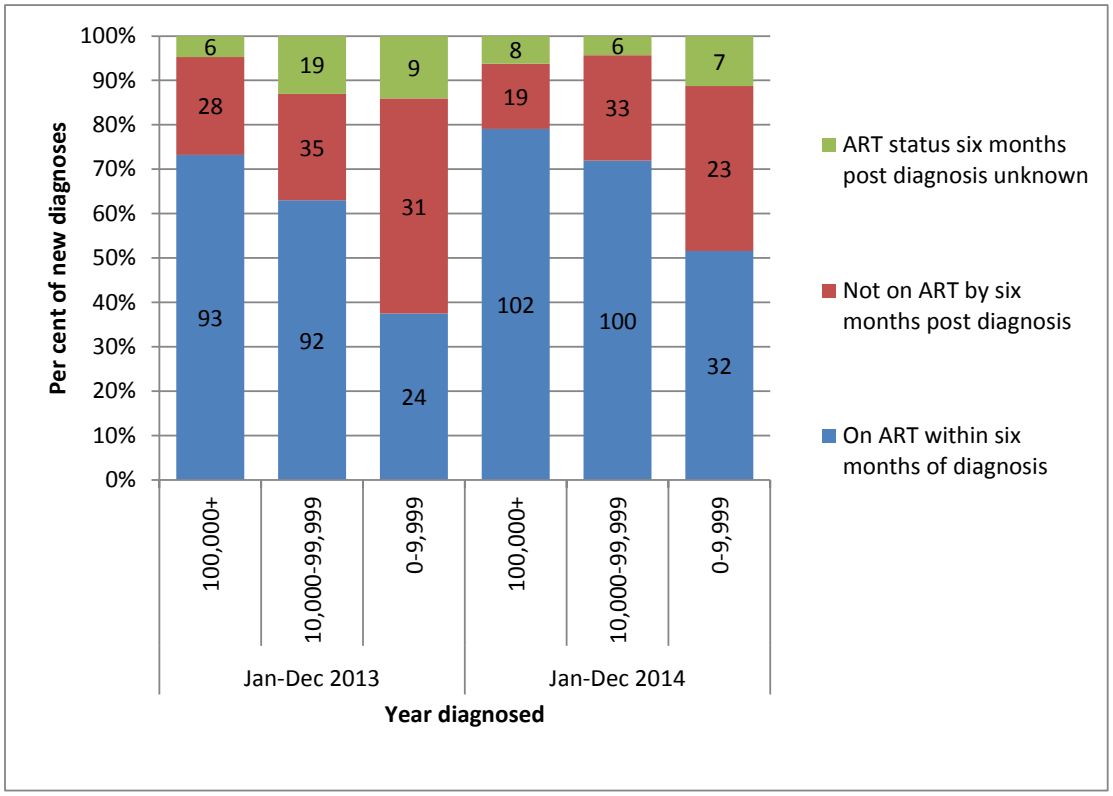


Date source: NSW HIV notification and follow up data, Health Protection NSW, extracted 11 August 2015.

Comment

When comparing follow data on the new diagnoses of 2013 with those of 2014, the proportion commencing ART within six months post diagnosis among those with a CD4 count equal to or greater than 500 cells/µL rose from 36% in the 2013 new diagnoses cohort to 61% in the 2014 new diagnoses cohort (Figure 26). This temporal change may reflect potential impacts of a) lifting of the CD4 count restriction to access subsidised ART, b) the reported changing attitudes and practices among treating clinicians towards earlier ART initiation and c) targeted campaigns to promote early treatment uptake. When comparing new diagnoses in 2013 with 2014, among those with a CD4 count less than 500, there was no change in the proportion commencing ART within six months post diagnosis.

Figure 27: Per cent of NSW residents notified with newly diagnosed HIV infection in 2013 and 2014 by HIV viral load at diagnosis[1] and ART status at six months post diagnosis.



Data source: NSW HIV notification and follow up data, Health Protection NSW, extracted 11 August 2015.
[1]16 in 2013 and 15 in 2013 excluded from figure as HIV VL at diagnosis unknown

Comment

When comparing follow up data on NSW residents notified with newly diagnosed HIV infection in 2013 versus 2014, in 2014 the proportion commencing ART within six months of diagnosis rose across all HIV VL categories; among those with a HIV VL at diagnosis of 100,000 copies/mL or over the proportion commencing ART within six months of diagnosis rose from 73% of 2013 new diagnoses to 79% of 2014 new diagnoses; among those with a HIV VL 10,000 to 99,999 it rose from 63% of 2013 new diagnoses to 72% of 2014 new diagnoses; and among those with a HIV VL at diagnosis of less than 10,000 copies/mL it rose from 38% of 2013 new diagnoses to 52% of 2014 new diagnoses (Figure 27).

HIV viral load after ART initiation within six months of diagnosis

The goal of ART is to reduce the HIV viral load to both minimise the effects of the virus and reduce the risk of HIV transmission. Of the 447 of 698 NSW residents notified with newly diagnosed HIV infection from 1 January 2013 to 31 December 2014 who were reported to have commenced ART within six months of diagnosis, 414 (93%) had a post ART HIV viral load available and reported at the time of follow up. Of these 345 (83%) had a post ART undetectable viral load at six months follow up and 400 (97%) had a viral load less than 1000 copies/mL post ART at six months follow up.

5. Sustain the virtual elimination of HIV related deaths

5.1 What is the number of deaths for which HIV/AIDS was reported as underlying cause?

Ascertaining the number of deaths due to HIV is complex in an era when people with HIV have access to effective treatment giving them a long life expectancy. People with HIV are subject to the same causes of morbidity and mortality as are people without HIV. Methods to better estimate deaths attributable to HIV are being investigated.

Appendix A: Characteristics of NSW residents notified with newly diagnosed HIV infection 1981 to 30/6/2015

Case characteristics	2008		2009		2010		2011		2012		2013		2014		2015		1981-30/6/15	
Gender	**325**	**%**	**334**	**%**	**306**	**%**	**330**	**%**	**410**	**%**	**353**	**%**	**345**	**%**	**160**	**%**	**17432**	**%**
Male	293	90.2%	293	87.7%	281	91.8%	309	93.6%	373	91.0%	323	91.5%	320	92.8%	147	91.9%	16031	92.0%
Female	32	9.8%	39	11.7%	23	7.5%	21	6.4%	36	8.8%	27	7.6%	24	7.0%	12	7.5%	1114	6.4%
Transgender	0	0.0%	2	0.6%	2	0.7%	0	0.0%	1	0.2%	3	0.8%	1	0.3%	1	0.6%	40	0.2%
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	247	1.4%
Aboriginal person status																		
Aboriginal person	8	2.5%	9	2.7%	7	2.3%	5	1.5%	12	2.9%	8	2.3%	7	2.0%	3	1.9%	166	1.0%
Non-Aboriginal person	301	92.6%	314	94.0%	294	96.1%	323	97.9%	392	95.6%	343	97.2%	329	95.4%	150	93.8%	10329	59.3%
Not stated	16	4.9%	11	3.3%	5	1.6%	2	0.6%	6	1.5%	2	0.6%	9	2.6%	7	4.4%	6937	39.8%
Years of age at diagnosis																		
0 to 4	0	0.0%	1	0.3%	1	0.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	39	0.2%
5 to 9	0	0.0%	1	0.3%	0	0.0%	0	0.0%	0	0.0%	1	0.3%	0	0.0%	0	0.0%	23	0.1%
10 to 14	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.3%	0	0.0%	36	0.2%
15 to 19	3	0.9%	3	0.9%	5	1.6%	6	1.8%	9	2.2%	9	2.5%	2	0.6%	0	0.0%	304	1.7%
20 to 24	39	12.0%	34	10.2%	29	9.5%	34	10.3%	44	10.7%	37	10.5%	41	11.9%	20	12.5%	2116	12.1%
25 to 29	58	17.8%	58	17.4%	56	18.3%	55	16.7%	76	18.5%	64	18.1%	52	15.1%	35	21.9%	3445	19.8%
30 to 34	44	13.5%	42	12.6%	49	16.0%	65	19.7%	70	17.1%	48	13.6%	64	18.6%	22	13.8%	3473	19.9%
35 to 39	63	19.4%	58	17.4%	43	14.1%	59	17.9%	64	15.6%	42	11.9%	45	13.0%	21	13.1%	2901	16.6%
40 to 44	52	16.0%	57	17.1%	52	17.0%	44	13.3%	47	11.5%	44	12.5%	45	13.0%	13	8.1%	2128	12.2%
45 to 49	32	9.8%	30	9.0%	30	9.8%	26	7.9%	38	9.3%	45	12.7%	30	8.7%	14	8.8%	1253	7.2%
50 to 54	14	4.3%	28	8.4%	7	2.3%	25	7.6%	28	6.8%	24	6.8%	26	7.5%	16	10.0%	764	4.4%
55 to 59	10	3.1%	12	3.6%	22	7.2%	10	3.0%	14	3.4%	22	6.2%	15	4.3%	6	3.8%	430	2.5%
60 to 64	6	1.8%	1	0.3%	5	1.6%	2	0.6%	13	3.2%	6	1.7%	14	4.1%	7	4.4%	230	1.3%
65 to 69	0	0.0%	4	1.2%	6	2.0%	2	0.6%	4	1.0%	9	2.5%	7	2.0%	3	1.9%	127	0.7%
70 or over	4	1.2%	5	1.5%	1	0.3%	2	0.6%	3	0.7%	2	0.6%	3	0.9%	3	1.9%	77	0.4%
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	86	0.5%

Stated HIV risk exposure	2008		2009		2010		2011		2012		2013		2014		2015		1981-30/6/15	
Men who have sex with men (MSM)	236	72.6%	220	65.9%	227	74.2%	267	80.9%	319	77.8%	264	74.8%	258	74.8%	118	73.8%	10947	62.8%
MSM who inject drugs	11	3.4%	17	5.1%	8	2.6%	11	3.3%	14	3.4%	16	4.5%	19	5.5%	8	5.0%	506	2.9%
Hetero-sex - other	47	14.5%	54	16.2%	39	12.7%	29	8.8%	46	11.2%	55	15.6%	34	9.9%	23	14.4%	1193	6.8%
Hetero-sex – high prev.	17	5.2%	20	6.0%	12	3.9%	12	3.6%	11	2.7%	6	1.7%	15	4.3%	4	2.5%	412	2.4%
Person who injects drugs	12	3.7%	12	3.6%	9	2.9%	8	2.4%	10	2.4%	7	2.0%	8	2.3%	3	1.9%	560	3.2%
Blood disorder, blood or tissue recipient	0	0.0%	1	0.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	276	1.6%
Vertical transmission	0	0.0%	2	0.6%	1	0.3%	0	0.0%	0	0.0%	1	0.3%	1	0.3%	0	0.0%	46	0.3%
Other	0	0.0%	2	0.6%	1	0.3%	1	0.3%	2	0.5%	1	0.3%	4	1.2%	0	0.0%	45	0.3%
Unknown	2	0.6%	6	1.8%	9	2.9%	2	0.6%	8	2.0%	3	0.8%	6	1.7%	4	2.5%	3447	19.8%
LHD of residence																		
South Eastern Sydney	117	36.0%	108	32.3%	110	35.9%	128	38.8%	150	36.6%	124	35.1%	118	34.2%	56	35.0%	5458	31.3%
Sydney	78	24.0%	90	26.9%	77	25.2%	83	25.2%	112	27.3%	91	25.8%	79	22.9%	42	26.3%	2874	16.5%
Northern Sydney	25	7.7%	39	11.7%	19	6.2%	24	7.3%	23	5.6%	26	7.4%	19	5.5%	7	4.4%	962	5.5%
Western Sydney	26	8.0%	21	6.3%	20	6.5%	31	9.4%	25	6.1%	26	7.4%	26	7.5%	7	4.4%	700	4.0%
South Western Sydney	16	4.9%	21	6.3%	23	7.5%	18	5.5%	31	7.6%	29	8.2%	27	7.8%	16	10.0%	637	3.7%
Hunter New England	14	4.3%	16	4.8%	16	5.2%	10	3.0%	14	3.4%	17	4.8%	27	7.8%	8	5.0%	470	2.7%
Nepean Blue Mountains	7	2.2%	3	0.9%	3	1.0%	4	1.2%	5	1.2%	3	0.8%	6	1.7%	2	1.3%	256	1.5%
Illawarra Shoalhaven	3	0.9%	5	1.5%	8	2.6%	5	1.5%	9	2.2%	7	2.0%	6	1.7%	5	3.1%	222	1.3%
Central Coast	6	1.8%	5	1.5%	5	1.6%	4	1.2%	10	2.4%	5	1.4%	8	2.3%	3	1.9%	194	1.1%
Mid North Coast	8	2.5%	6	1.8%	3	1.0%	4	1.2%	3	0.7%	6	1.7%	7	2.0%	3	1.9%	142	0.8%
Northern NSW	4	1.2%	4	1.2%	9	2.9%	11	3.3%	5	1.2%	5	1.4%	7	2.0%	4	2.5%	191	1.1%
Western NSW	3	0.9%	3	0.9%	4	1.3%	3	0.9%	7	1.7%	5	1.4%	2	0.6%	2	1.3%	120	0.7%
Murrumbidgee-Albury	3	0.9%	2	0.6%	7	2.3%	2	0.6%	5	1.2%	3	0.8%	3	0.9%	0	0.0%	85	0.5%
Southern NSW	3	0.9%	6	1.8%	1	0.3%	2	0.6%	7	1.7%	4	1.1%	4	1.2%	1	0.6%	55	0.3%
Far West	0	0.0%	2	0.6%	0	0.0%	0	0.0%	2	0.5%	0	0.0%	0	0.0%	0	0.0%	8	0.0%
Unknown or other	12	3.7%	3	0.9%	1	0.3%	1	0.3%	2	0.5%	2	0.6%	6	1.7%	4	2.5%	5058	29.0%
Total	**325**	**100%**	**334**	**100%**	**306**	**100%**	**330**	**100%**	**410**	**100%**	**353**	**100%**	**345**	**100%**	**160**	100%	**17432**	100%

Appendix B: Ending HIV Seven Statements Evaluation, ACON 2015

The table below shows the figures over the five separate surveys.

Percentage of respondents who strongly agree or agree with the statements below.							
Answer Options	**FEB 2013 (n=233)**	**MAY 2013 (n=517)**	**NOV 2013 (n=553)**	**APRIL 2014 (n=530)**	**DEC 2014 (n=549)**	**APR 2015 (n=602)**	**+/-**
Everything has changed, we can now dramatically reduce HIV transmission	48%	59%	59%	67%	61%	71%	**+23**
Now more than ever, gay men need to know their HIV status	81%	85%	86%	90%	89%	91%	+10
Sexually active gay men should take an HIV test at least twice a year	88%	87%	92%	93%	89%	92%	+4
HIV treatments now offer increased health benefits and fewer side effects	65%	66%	67%	73%	69%	75%	+10
HIV treatments significantly reduce the risk of passing on HIV	33%	42%	50%	64%	59%	69%	**+36**
Early HIV treatment is better for your health and can help protect your sex partners	74%	80%	89%	91%	92%	93%	**+19**
Condoms continue to be the most effective way of preventing HIV transmission	95%	92%	92%	91%	91%	85%	-10

Survey methodology:
Each of the five online evaluation surveys was developed and analysed by an independent consultant using the Survey Monkey online tool. Each survey was run over a one to three week period. In addition to 30 to 40 mainly multiple choice questions, with a few opportunities for respondents to provide comments, respondents were provided with a set of seven statements and asked to indicate whether they agree or disagree with the statements (using a five point scale)

Recruitment methodology:
Respondents were mainly recruited through the placement of survey advertisements on Facebook undertaken by ACON.

Survey objectives:
The online evaluation survey focussed on measuring a) advertisement awareness, b) engagement with campaign components, and c) self-reported impact and getting answers to seven statements.

Appendix C: eTEST study, 2014

3.2.1 General practice

Table 2 displays the number of HIV tests done and positivity for 3 clinics with high caseloads of MSM clients located in South Eastern Sydney LHD between 1 January 2012 and 30 June 2014.

Table 5: HIV testing and positivity among general practice clinics with high caseloads of MSM

Year	Q	Total tests	Positives*	Positivity
2012	Total	6611	122	1.8%
2013	1	1732	32	1.8%
	2	1656	26	1.6%
	3	1847	26	1.4%
	4	1775	16	0.9%
	Total	7010 (+6%)	100 (-18%)	1.4% (-0.4%)
2014	1	1943	18	0.9%
	2	1798	17	1.2%

*not all new diagnoses

Data source: eTEST study (2014)

Comment

In three general practice clinics with high caseloads of MSM located in South East Sydney LHD, HIV testing increased by 10% in the first half of 2014 compared with the first half of 2013.