# **NSW HIV Strategy 2012 – 2015**

# Quarter 3 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 <u>NSW HIV Snapshot</u>. 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 <u>NSW HIV 2013 Epidemiological Report</u>.

#### In quarter 3 2015:

- 88 people were newly diagnosed with HIV in NSW, similar to quarter 3 average 2009-2014 and 22% less than quarter 3 2012.
- 2015 has the lowest number of new diagnoses January to September since 2010 (n=242).
- HIV testing continued to increase both overall in NSW, and among high risk populations. However, there remains more scope for increasing HIV testing rates.
- 134,595 HIV serology tests were performed in NSW. This is 15% greater than same period in 2014 (117,257), and 30% greater than same period in 2012 (103,737).
- 11,701 HIV tests were performed across public sexual health clinics in NSW. This represents a 26% increase compared with quarter 3 2014 (8,305). Of the tests done in public sexual health clinics, 62% 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 782 NSW residents notified with newly diagnosed HIV infection from 1 January 2013 to 31 March 2015, 67% were reported to have commenced ART within six months of diagnosis. This comprises 72 (84%) of the 86 new diagnoses from January to March 2015, 239 (70%) of the 343 new diagnoses 2014 and 211 (60%) of the 353 new diagnoses 2013.

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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

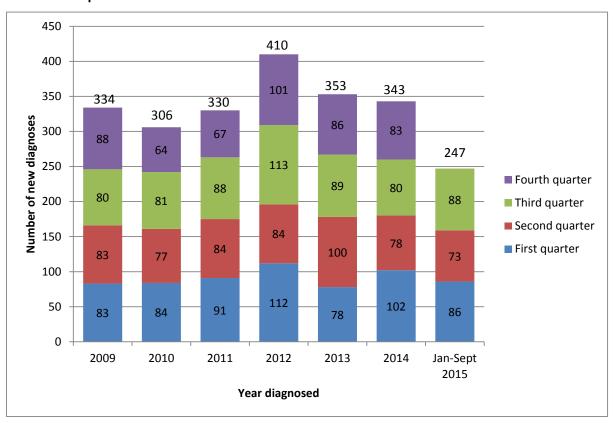
PFSHC Publicly Funded Sexual Health Clinic

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 September 2015



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 6 November 2015

#### Comment

In quarter 3 2015, 88 NSW residents were notified with newly diagnosed HIV infection; similar to quarter 3 average 2009-2014 (n=89) and 22 per cent (%) less than quarter 3 2012.

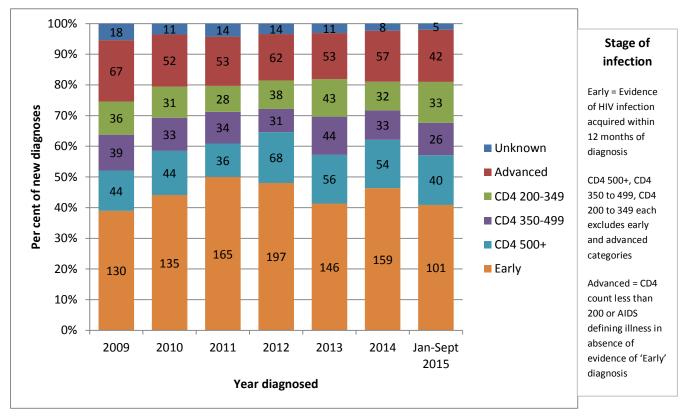
From 1 January to 30 September 2015, there were 247 new diagnoses; 7% less than the January to September 2009-2014 average new diagnoses count (n=265) and 20% less than the count for the same period 2012 (n=309). 2015 has the lowest number of new diagnoses January to September since 2010 (n=242).

From 1 January to 30 September 2015, the number of new diagnoses reporting to be MSM was 203; 4% less than the 2009-2014 average for the same period (n=211) and 18% less compared with January to September 2012 (n=249). 2015 has the lowest number of new diagnoses in MSM January to September since 2010 (n=186).

### 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: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 September 2015 by stage of infection at diagnosis<sup>1</sup>



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 6 November 2015

<sup>1</sup>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.

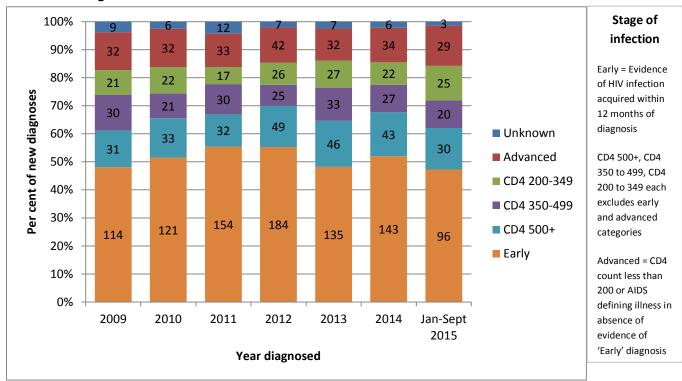
#### Comment

In quarter 3 2015, 39 of 88 (44%) NSW residents notified with newly diagnosed HIV infection had evidence of early infection and 10 (11%) had evidence of advanced infection.

Of 247 NSW residents notified with newly diagnosed HIV infection between January and September 2015, 101 (41%) had evidence of early stage infection; less than January to September 2009-2014 average of 46% and less than 48% for 2012.

Of 247 NSW residents notified with newly diagnosed HIV infection between January and September 2015, 42 (17%) had evidence of advanced stage infection; similar to the January to September 2009-2014 average of 16% and 15% for 2012.

Figure 3: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 September 2015 reporting to be men who have sex with men (MSM) by stage of infection at diagnosis<sup>1</sup>



<sup>1</sup>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 3 2015, 76 of 88 (86%) of NSW residents notified with newly diagnosed HIV infection were reported to be MSM; of these 38 (50%) had evidence of early stage infection and 6 (8%) had evidence of advanced infection.

Of 203 NSW residents notified with newly diagnosed HIV infection between January and September 2015 reporting to be MSM, 96 (47%) had evidence of early stage infection; less than January to September 2009-2014 average of 53% and less than 55% for 2012. Of 203 NSW residents notified with newly diagnosed HIV infection between January and September 2015 reporting to be MSM, 29 (14%) had evidence of advanced stage infection; similar to the January to September 2009-2014 average of 12% and same for 2012.

In 2015 the combination of increase in HIV testing, decrease in new diagnoses count and decrease in early stage diagnoses suggests a reduction in HIV transmission.

100% 17 21 18 18 35 ■ Unknown testing history 90% 45 40 40 57 49 50 80% 41 Per cent of new diagnoses 70% ■ Never tested before 60% 103 110 121 75 110 85 50% 86 ■ Negative or indeterminate 40% test more than 12 months prior to diagnosis 30% 118 20% 134 111 80 103 82 ■ Negative or indeterminate 75 test within 12 months of 10% diagnosis 0%

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

2012

Year diagnosed

2011

#### Comment

2009

2010

Of 203 NSW residents notified with newly diagnosed HIV infection between January and September 2015 reporting to be MSM, 80 (39%) were reported as having had a negative or indeterminate HIV test within 12 months of diagnosis; similar to the January to September 2009-2014 average of 38% and 40% for 2012.

2013

2014 Jan-Sept 2015

Of 203 NSW residents notified with newly diagnosed HIV infection between January and September 2015 reporting to be MSM, 40 (20%) as not ever having had an HIV test before diagnosis; similar to the January to September 2009-2014 average of 18% and 19% for 2012.

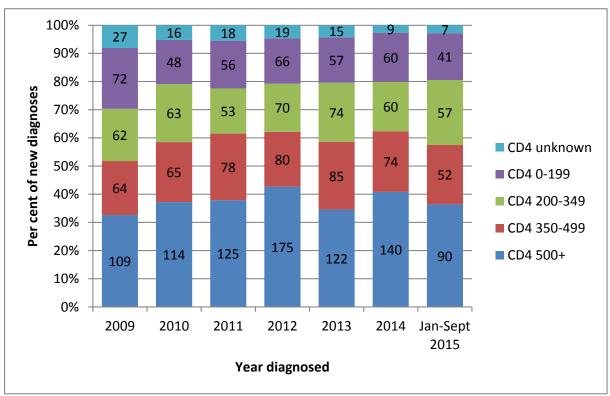


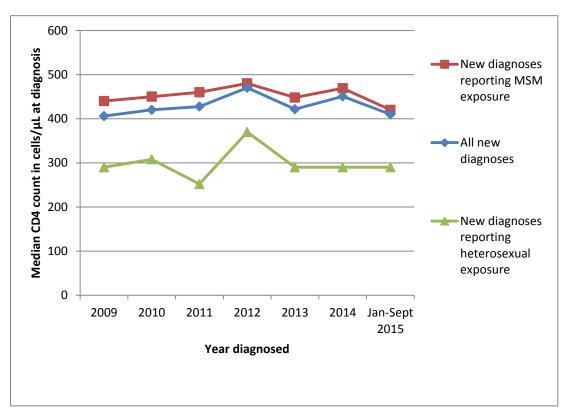
Figure 5: Per cent of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 September 2015 by CD4 count at diagnosis

#### <u>Comment</u>

Of 247 NSW residents notified with newly diagnosed HIV infection between January and June 2015, 90 (36%) had a CD4 count (in cells/ $\mu$ L) 500 or over, 52 (21%) had a CD4 count 350 to 499, 57 (23%) a CD4 count 200 to 349, 41 (17%) a CD4 of 0 to 199 and 7 (3%) were unknown.

Overall 98 (40%) had a CD4 count at diagnosis less than 350, greater than compared with an average of 35% for the period January to September 2009-2014 and 34% for the same period in 2012.

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



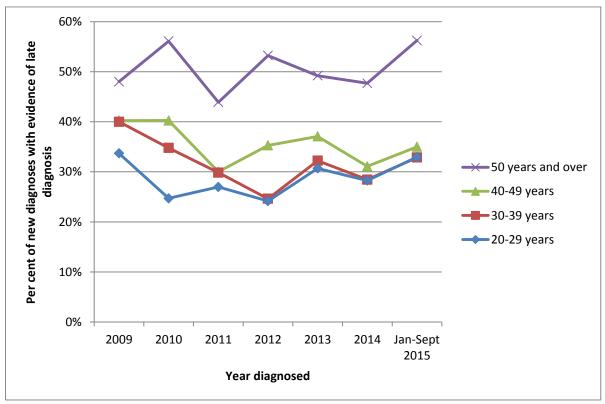
<sup>1</sup>The median CD4 count at diagnosis for other HIV risk exposure groups such as being a person who injected drugs (PWID) are not reported separately due to very low number of cases.

#### Comment

The median CD4 count at diagnosis for NSW residents notified with newly diagnosed HIV infection January to September 2015 was 410. For those reporting to be MSM it was 420 and for those reporting heterosexual exposure only to HIV it was 290.

The median CD4 count at diagnosis among those reporting heterosexual exposure to HIV remains consistently low.

Figure 7: Within each age group at diagnosis of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 September 2015 the per cent with evidence of late diagnosis<sup>1</sup>



<sup>1</sup>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.

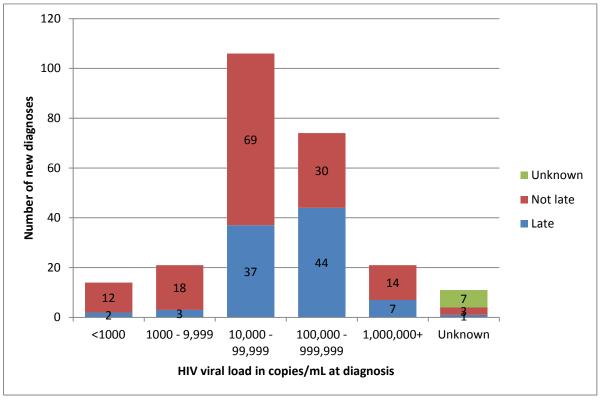
#### Comment

Of new diagnoses January to September 2015 aged 50 years or over at diagnosis, 56% had evidence of late diagnosis. Late diagnosis is more common in those diagnosed at 50 years of age or over compared with younger age groups.

The proportion of new diagnoses January to September 2015 with evidence of late diagnosis was 33% for those 20 to 29 and 30 to 39 and 35% for those 40 to 49 years of age at diagnosis.

New diagnoses aged less than 20 years at diagnosis are few and excluded.

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



<sup>1</sup>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 247 NSW residents notified with newly diagnosed HIV infection January to September 2015, 35 (14%) had an HIV viral load less than 10,000 copies/mL (HIV VL), 106 (43%) had an HIV VL 10,000 to 99,999, 74 (30%) had an HIV VL 100,000 to 999,999, 21 (9%) had an HIV VL 1,000,000 or over and 11 (4%) had an unknown HIV VL at diagnosis.

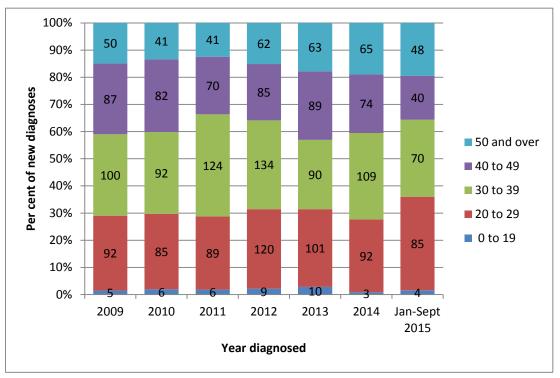
Of 247 NSW residents notified with newly diagnosed HIV infection January to September 2015, 94 (38%) had evidence of late diagnosis and of these 51 (55%) had an HIV VL 100,000 copies/mL or more at diagnosis.

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 247 NSW residents notified with newly diagnosed HIV infection January to September 2015, 228 (92%) were male, 18 (7%) were female and 1 (<1%) was transgender; a very similar gender breakdown to that for new diagnoses January to September 2009 to 2014. Of these 247 people newly diagnosed, 4 (<2%) were reported to be Aboriginal people, 235 (95%) were reported to be non-Aboriginal people and for 8 (3%) Aboriginal person status was not reported.

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



Data source: NSW HIV/AIDS database, Health Protection NSW, extracted 6 November 2015

#### Comment

Of 247 NSW residents notified with newly diagnosed HIV infection January to September 2015, four (2%) were less than 20 years of age, 85 (34%) were 20 to 29 years, 70 (28%) were 30 to 39 years, 40 (16%) were 40 to 49 years and 48 (19%) were 50 years or over.

New diagnoses January to September 2015 were slightly older and younger compared with the average for the period January to September 2009-2014, where 2% were 0 to 19 years, 28% were 20 to 29 years, 32% were 30 to 39 years, 23% were 40 to 49 years and 16% were 50 years and over.

100% 10 18 41 90% 36 57 61 49 51 74 80% cent of new diagnoses 70% 60% ■ Mother to child 50% Other or unknown 278 203 PWID 333 40% 275 280 235 237 ■ Hetero-sex only Per ( 30% MSM 20% 10%

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

2011

2012

Year diagnosed

2013

2014

Jan-Sept 2015

#### Comment

0%

2009

2010

HIV risk exposure among 247 NSW residents notified with newly diagnosed HIV infection January to September 2015 was self-reported to be: 203 (82%) MSM, 36 (15%) heterosexual sex, 3 (1%) injecting drugs (PWID) and 5 (2%) were unknown. This is similar breakdown of HIV risk exposures as for the average of the period January to September 2009 to 2014.

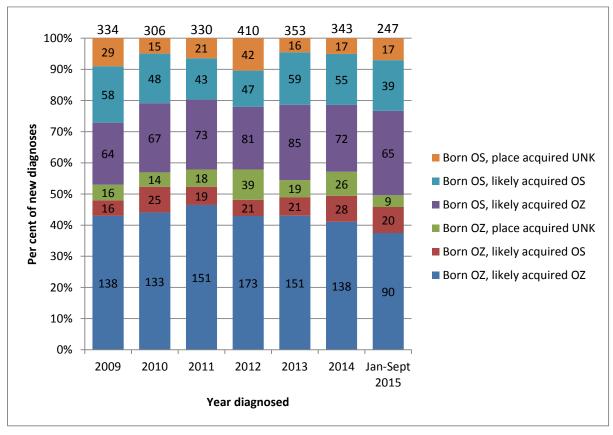


Figure 11: Number of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 September 2015 by place of birth and place most likely acquired HIV\*

\* Excluded were 45 new diagnoses January 2009 to September 2015 with unknown country of birth. OZ=Australia, OS=overseas, UNK=unknown.

#### Comment

Of 247 new diagnoses January to September 2015, 90 (36%) were born in and likely acquired HIV in Australia; less than 111 of 265 (42%), the average January to September 2009-2014.

Of 247 new diagnoses January to September 2015, 65 (26%) were born overseas and likely acquired in Australia; greater than 58 of 265 (22%), the average January to September 2009-2014.

Of 247 new diagnoses January to September 2015, 119 (48%) were born in Australia. Of these 119 Australian born new diagnoses, 90 (76%) likely acquired their infection in Australia, 20 (17%) overseas and for 9 (8%) place of acquisition was unknown.

Of 247 new diagnoses January to September 2015, 121 (49%) were born overseas. Of these 121 overseas born new diagnoses, 65 (54%) likely acquired their infection in Australia, 39 (32%) overseas and for 17 (14%) place of acquisition was unknown.

For seven new diagnoses January to September 2015 place of birth was unknown.

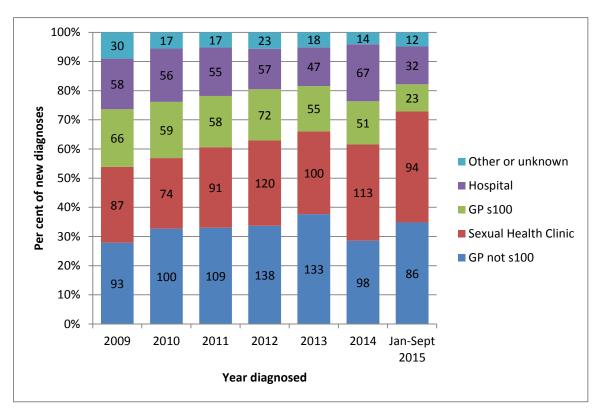


Figure 12: Number of NSW residents notified with newly diagnosed HIV infection from 1 January 2009 to 30 September 2015 by type of diagnosing doctor

#### Comment

Of 247 NSW residents notified with newly diagnosed HIV January to September 2015:

- 86 (35%) were diagnosed by general medical practitioners not accredited to prescribe antiretroviral therapy (ART) (GP non-s100); greater than 32%, the average January to September 2009-2014;
- 94 (38%) were diagnosed by sexual health clinics (SHC) (includes linked community testing sites); greater than 28%, the average January to September 2009-2014;
- 32 (13%) by hospital located doctors; less than 16%, the average January to September 2009-2014;
- 23 (9%) by GP s100 doctors (GP HIV specialist-accredited to prescribe ART); less than 18%, the average January to September 2009-2014, and
- o 12 (5%) by other doctor types such as immigration services.

Figure 13: Number of NSW residents notified with newly diagnosed HIV infection from January to September 2015 (n=247) by type of diagnosing doctor and self-reported HIV risk exposure

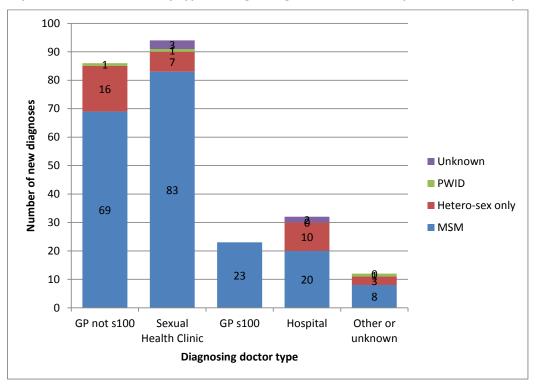
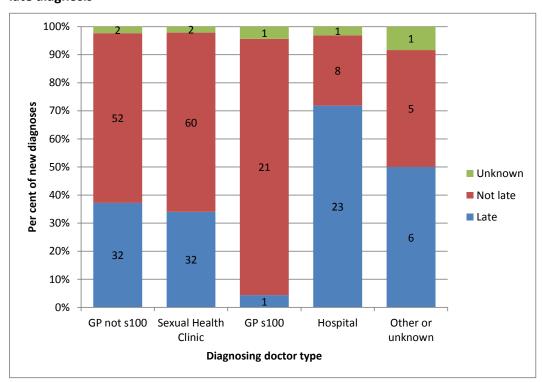


Figure 14: NSW residents notified with newly diagnosed HIV infection from January to September 2015 by type of diagnosing doctor (12 with other or unknown doctor excluded) and evidence of late diagnosis



#### 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.

100% 90% No anal intercourse 80% Consistent condom use 70% Any condomless sex 60% 46.8% 50% 44.0% 40% 29.0% 36.2% 30% 20% 19.9% 24.2% 10% 0% 2007 2008 2009 2010 2011 2012 2013 2014 2015

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<sup>1</sup> 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%.<sup>2</sup>

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.<sup>3</sup>

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.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> 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

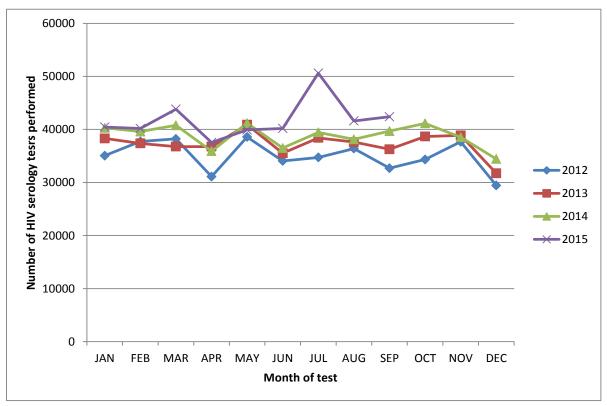
## 3. Increase HIV testing

#### 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 September 2015



Data source: NSW Health denominator data project

#### Comment

From July to September 2015, there were 134,595 HIV serology tests performed in 15 laboratories in NSW; 15% greater than same period in 2014 (117,257), 20% greater than same period in 2013 (112,292) and 30% greater than same period in 2012 (103,737). The spike in HIV serology test count in July 2015 coincides with **a**) an HIV testing awareness initiative, "NSW HIV Testing Week" and **b**) a public health intervention, a letter sent to select dental patients in early July recommending testing for HIV and hepatitis B and C.

From January to September 2015, there were 376,669 HIV serology tests performed in 15 laboratories in NSW; 7% greater than same period in 2014 (351,475), 11% greater than same period in 2013 (337,907) and 18% greater than same period in 2012 (318,534).

#### 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.

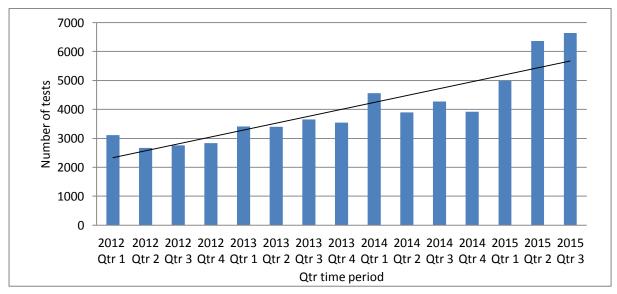
Table 1: Summary of testing data availability from Publicly Funded Sexual Health Clinics in NSW

	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 September 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 September 2015



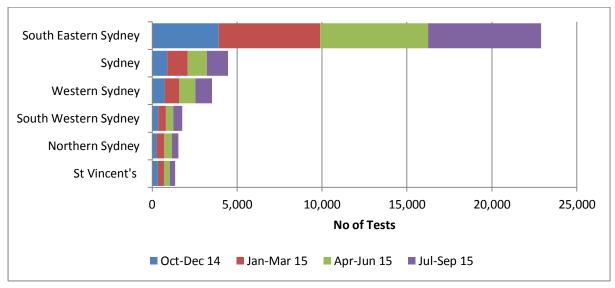
Data source: South Eastern Sydney Local Health District

#### Comment

In quarter 3 2015, testing in South Eastern Sydney LHD (Figures 17) increased by 55% (6,638) compared with the same period in 2014 (4,272), and by 85% compared to same period in 2013 (3,652).

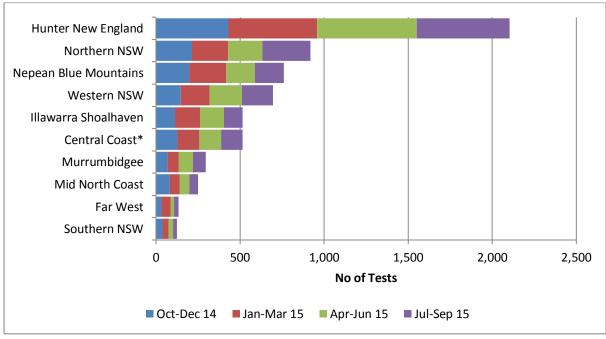
A comparison in the number of HIV tests done in the previous 12 months ending 30 September 2015 for metropolitan PFSHCs is displayed in Figure 18 and for regional and rural PFSHCs in Figure 19. Both rapid HIV testing and HIV serology are included.

Figure 18: Number of HIV tests performed in Sydney metropolitan Local Health District Publicly Funded Sexual Health Clinics in the previous 12 months ending 30 September 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 in the previous 12 months ending 30 September 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 3 2015, 11,701 HIV tests were done in all PFSHCs in NSW. This represents a 26% increase on the number of tests performed in the same quarter in 2014 (9,253).

In quarter 3 2015, testing increased particularly in key Sydney metropolitan areas; overall HIV testing in South Western Sydney LHD increased by 27% (517) compared with the same period in 2014, Western Sydney LHD increased by 10% (986) compared to the same period in 2014, and Sydney LHD increased by 8% (1,236) compared with the same period in 2014.

HIV testing in continues to increase both overall in NSW and among high risk populations. To reduce the number of undiagnosed HIV infections in the community and to support timely diagnosis, 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.

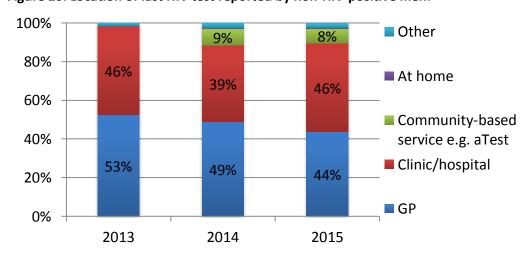


Figure 20: Location of last HIV test reported by non-HIV-positive men.

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.<sup>4</sup>

#### 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 3, 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, Q3 2015*	Number of HIV tests in all PFSHCs, Q3 2015*	% increase in HIV tests compared with Q3 2014 in all PFSHCs <sup>#</sup>
Men who have sex with men (MSM)	62%	6,981	66%
Sex workers^	12%	1,325	4%
People who inject drugs (PWID)^	7%	755	31%
Aboriginal people	2%	279	4%

<sup>\*</sup>Excludes Central Coast LHD who was unable to provide testing data by priority population.

Data source: NSW Health HIV Strategy Monitoring Database<sup>5</sup>

#### Comment

Sydney Sexual Health Centre in South Eastern Sydney LHD performed the highest number of HIV tests in MSM amongst PFSHCs in NSW. Of the 5,553 tests done by this clinic in quarter 3 2015, 4,294 (77%) were for MSM. 20 were positive, yielding a 0.5% positivity rate among MSM clients.

In summary, data from PFSHCs indicates that priority populations are being reached by public sexual health services. Achieving further increases in testing frequency, particularly in high risk MSM, is 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.

<sup>&</sup>lt;sup>#</sup>Excludes LHDs without testing data by priority population in Q3 2014 (St Vincent's Hospital Network, select Southern Eastern Sydney LHD services and Central Coast LHD).

<sup>^</sup>Includes people who ever were sex workers or who ever injected drugs.

<sup>&</sup>lt;sup>4</sup> excludes HIV-positive men and men who said they hadn't been tested for HIV

<sup>&</sup>lt;sup>5</sup> Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the NSW HIV Strategy.

#### 3.3.2 Survey data

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

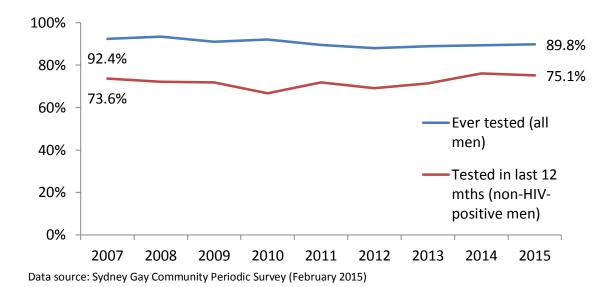
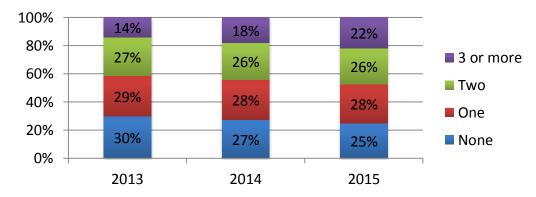


Figure 22: Number of HIV tests in the previous 12 months reported by non-HIV-positive men



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 men who have sex with men to have a test more frequently. Rapid testing offers choice and convenience to people who do not routinely access conventional testing.

Rapid HIV testing has been embedded into the mix of the testing options in NSW, with a focus on community based testing services. Since June 2013, five 'fixed' community sites and seven 'pop up' sites have been operational.

Table 3 displays the number of rapid HIV tests done and the proportion 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 proportion of clients with high risk behaviour and infrequent testing history from 1 July to 30 September 2015

Non-traditional Settings	Number of RHT, Q3 2015	% Unique 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)	224	0.5%	17%	17%	24%
aTEST Oxford St (40 hours/week)	1196	0.4%	12%	17%	30%
aTEST Kings Cross (3 hours/week)	70	1.4%	27%	27%	21%
aTEST Newtown (6 hours/week)	207	0.5%	25%	12%	15%
Other					
Ankali House (14 hours/week)	90	0.0%	9%	14%	44%

data is unavailable

Data sources: NSW Health HIV Strategy Monitoring Database<sup>6</sup>

#### Comment

In quarter 3 2015, 1,852 HIV rapid tests were performed in NSW, approximately 1,787 of which were at community sites. 10 of 1,852 rapid tests (0.5%) were confirmed as positive.

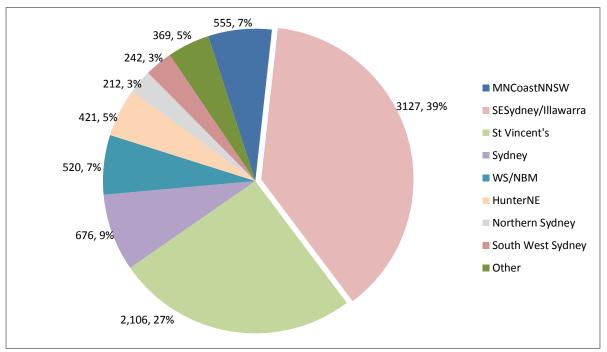
Though the number of clients tested in community sites is relatively small, NSW data suggests it is an effective testing model for engaging MSM, a high proportion of whom reported high risk behaviours, or infrequent testing for HIV.

<sup>&</sup>lt;sup>6</sup> 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 October 2014 to 30 September 2015 7891011



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

#### Comment

Public hospital pharmacy dispensing data indicates that in the 12 months between 1 October 2014 to 30 September 2015, 7,864 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 from NSW public hospital pharmacies through the Pharmaceutical Benefits Scheme (PBS). It does not include people who may be accessing ART through other sources, including from a community pharmacy<sup>12</sup> only under the PBS and those who purchase HIV treatment from overseas, receive ART through clinical trials or are dispensed ART for post-exposure prophylaxis. It is of note

<sup>&</sup>lt;sup>7</sup>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.

<sup>&</sup>lt;sup>8</sup>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.  $^9$  The numbers displayed in the graph add up to a figure greater than the overall total of 7,864 for 1/10/14 - 30/9/15. This is

because a small number of cross-LHD patient flows are not eliminated

<sup>&#</sup>x27;Other' includes Central Coast 144 (1.8%); Far West/Western NSW 79 (1.0%); Murrumbidgee/Southern NSW 81 (1%); Childrens Hospital Network 15 (0.2%); Justice Health 57 (0.7%).

<sup>&</sup>lt;sup>11</sup> HIV treatment data was updated on 17/5/16 to correct for a duplication error identified in the iPharmacy data.

 $<sup>^{12}</sup>$  Community pharmacy dispensing of ART commenced from 1 July 2015. Prior to this the dispensing of ART was restricted to Public Hospital pharmacies.

that public hospital dispensing data no longer captures all HIV treatment dispensing in NSW as community dispensing of HIV treatments became available from 1 July 2015.

Almost three-quarters (74%) of all ART dispensing through NSW public hospital pharmacies in the year ending 30 September 2015 occurred through inner metropolitan pharmacies, with over half of all patients receiving ART from pharmacies at the Albion Centre (28.7%) or the St Vincent's Hospital (26.8%). A further 7.4% 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 the Commonwealth Pharmaceutical Benefits Scheme towards making more comprehensive public hospital and community pharmacy 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 September 2015 is summarised at Table 4<sup>13</sup>.

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

Total number of patients who received care between July 2014 and September 2015	5180
Number (%) of patients for whom treatment information was available	4658 (90%)
Number (%) on ART	4218 (91%)
Number not on ART <sup>^</sup> *	440 (9%)
Number (%) not on ART with CD4 count < 350	72 (19%)
Number (%) not on ART with CD4 count between 350 - 499	697 (18%)
Number (%) not on ART with CD4 count > 500	237 (63%)
Number who initiated ART*	342
Number (%) initiated at a CD4 count <350	92 (27%)
Number (%) initiated at a CD4 count between 350 - 500	71 (21%)
Number (%) initiated at a CD4 count >500	179 (52%)

<sup>^</sup>Includes ART naïve clients and clients who have stopped ART Data source: NSW Health HIV Strategy Monitoring Database<sup>14</sup>

-

<sup>\*</sup>CD4 count data was not submitted by all services.

<sup>&</sup>lt;sup>13</sup> 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.

<sup>&</sup>lt;sup>14</sup> Public sexual health and HIV services data provided by Local Health Districts for the purpose of monitoring the implementation of the *NSW HIV Strategy*.

In the year ending 30 September 2015, at least 5,180 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 September 2015, 342 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 in the same period (n=330) and does not include any persons initiating ART in the private sector.

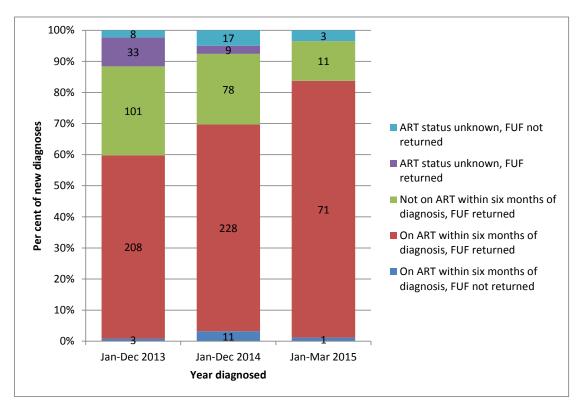
# 4.2.2 ART commencement six months post diagnosis among NSW residents notified with newly diagnosed HIV infection 1 January 2013 to 31 March 2015

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 of these quarterly reports, the cases reported on with respect to ART commencement six months post diagnosis, will have been diagnosed at least six months prior. In this Quarter 3 2015 report, we report on six month post diagnosis indicators on 782 NSW residents newly diagnosed with HIV infection from 1 January 2013 to 31 March 2015. Managing services had returned 739 (95%) of the six month post diagnosis follow up forms on these 782 new diagnoses (Figure 24).

Figure 24: Per cent of 782 NSW residents newly diagnosed with HIV infection 2013, 2014 and January to March 2015 by follow up form (FUF) return and ART status six months post diagnosis

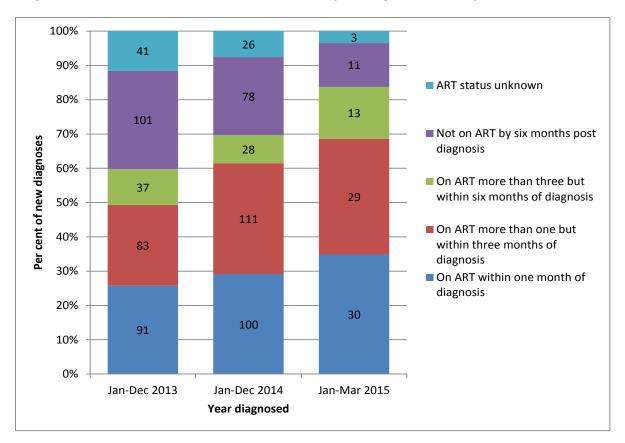


Data source: NSW HIV notification and follow up data, Health Protection NSW, extracted 6 November 2015.

#### Commencement of ART by six months post diagnosis

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

Figure 25: Per cent of 782 NSW residents notified with newly diagnosed HIV infection 2013 (353), 2014 (343) and January to March 2015 (86) by ART commencement status at six months post diagnosis, based on notification form and six month post diagnosis follow up form data



Data source: NSW HIV notification and follow up data, Health Protection NSW, extracted 6 November 2015. Comment

Among the most recent quarter of new diagnoses followed up six months post diagnosis, which was the 86 NSW residents newly diagnosed from 1 January to 31 March 2015, 72 (84%) were reported to have commenced ART within six months of diagnosis.

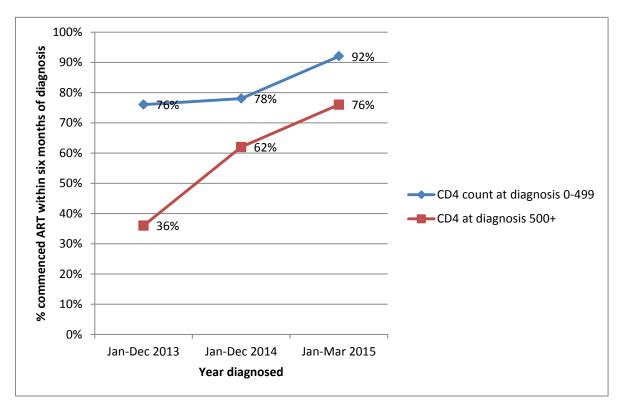
Of all 782 NSW residents newly diagnosed with HIV infection from 1 January 2013 to 31 March 2015, 522 (67%) were reported to have commenced ART within six months of diagnosis. This comprises 72 (84%) of the 86 new diagnoses from January to March 2015, 239 (70%) of the 343 new diagnoses 2014 and 211 (60%) of the 353 new diagnoses 2013.

35% of the January to March 2015 new diagnoses commenced ART within one month of diagnosis, an increase from 29% of the 2014 cohort and 26% of the 2013 cohort.

69% of the January to March 2015 new diagnoses commenced ART within three months of diagnosis, an increase from 62% of the 2014 cohort and 49% of the 2013 cohort.

Among the 739 of 782 NSW residents notified with newly diagnosed HIV infection 1 January 2013 to 31 March 2015 with a six month post diagnosis follow up form returned by the managing service, 620 (84%) were reported to be retained in care in NSW at the time of follow up. Among these 620 new diagnoses retained in care, 466 (75%) were reported to have commenced ART within six months of diagnosis; this was 90% of the retained January to March 2015 new diagnoses cohort (64/71), 77% of the retained 2014 new diagnoses cohort (212/274) and 69% of the retained 2013 new diagnoses cohort (190/275).

Figure 26: Per cent of NSW residents notified with newly diagnosed HIV infection in 2013, 2014 and January to March 2015 who had commenced ART within six months by CD4 at diagnosis.



Data source: NSW HIV notification and follow up data, Health Protection NSW, extracted 6 November 2015. 26 cases with no CD4 at diagnosis were excluded.

#### Comment

The proportion of new diagnoses with a CD4 count 0-499 cells/ $\mu$ L at diagnosis that commenced ART within six months of diagnosis was 76% for the 2013 new diagnoses, 78% for the 2014 new diagnoses and 92% for the January to March 2015 new diagnoses.

The proportion of new diagnoses with a CD4 count of 500 or over at diagnosis that commenced ART within six months of diagnosis was 36% for the 2013 new diagnoses, 62% for the 2014 new diagnoses and 76% for the January to March 2015 new diagnoses.

100% commenced ART within six months of diagnosis 92% 90% 86% 81% 80% **73%** 70% 71% 63% 63% 60% 50% -0-9,999 copies/mL 10,000-99,999 copies/mL 40% 38% <u>→</u> 100,000+ copies/mL 30% 20% 10% 0% Jan-Dec 2013 Jan-Dec 2014 Jan-Mar 2015 Year diagnosed

Figure 27: Per cent of NSW residents notified with newly diagnosed HIV infection in 2013, 2014 and January to March 2015 who had commenced ART within six months by HIV VL at diagnosis

Data source: NSW HIV notification and follow up data, Health Protection NSW, extracted 6 November 2015. 16 in 2013, 13 in 2013 and 3 in Quarter 1 2015 were excluded from figure as HIV VL at diagnosis unknown.

#### Comment

The proportion of new diagnoses with a HIV VL 0 to 9,999 copies/mL at diagnosis that commenced ART within six months of diagnosis was 38% for the 2013 new diagnoses, 52% for the 2014 new diagnoses and 63% for the January to March 2015 new diagnoses.

The proportion of new diagnoses with a HIV VL 10,000 to 99,999 at diagnosis that commenced ART within six months of diagnosis was 63% for the 2013 new diagnoses, 71% for the 2014 new diagnoses and 86% for the January to March 2015 new diagnoses.

The proportion of new diagnoses with a HIV VL 100,000 or over at diagnosis that commenced ART within six months of diagnosis was 73% for the 2013 new diagnoses, 81% for the 2014 new diagnoses and 92% for the January to March 2015 new diagnoses.

#### HIV viral load after ART commencement 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 522 of 782 NSW residents newly diagnosed with HIV infection from 1 January 2013 to 31 March 2015 reported to have commenced ART within six months of diagnosis, 481 (92%) had a post ART HIV viral load available and reported at the time of follow up. Of these 393 (82%) had a post ART undetectable viral load at six months follow up and 462 (96%) 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 30/9/2015

Case characteristics	2008		2009		2010		2011		2012		2013		2014			o Sept 015	Total	
Gender	325	%	334	%	306	%	330	%	410	%	353	%	343	%	247	%	17516	%
Male	293	90.2%	293	87.7%	281	91.8%	309	93.6%	373	91.0%	323	91.5%	318	92.7%	228	92.3%	16109	92.0%
Female	32	9.8%	39	11.7%	23	7.5%	21	6.4%	36	8.8%	27	7.6%	24	7.0%	18	7.3%	1120	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	0.4%	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%	4	1.6%	167	1.0%
Non-Aboriginal person	301	92.6%	314	94.0%	294	96.1%	323	97.9%	392	95.6%	343	97.2%	328	95.6%	235	95.1%	10414	59.5%
Not stated	16	4.9%	11	3.3%	5	1.6%	2	0.6%	6	1.5%	2	0.6%	8	2.3%	8	3.2%	6935	39.6%
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%	4	1.6%	307	1.8%
20 to 24	39	12.0%	34	10.2%	29	9.5%	34	10.3%	44	10.7%	37	10.5%	41	12.0%	33	13.4%	2129	12.2%
25 to 29	58	17.8%	58	17.4%	56	18.3%	55	16.7%	76	18.5%	64	18.1%	51	14.9%	52	21.1%	3462	19.8%
30 to 34	44	13.5%	42	12.6%	49	16.0%	65	19.7%	70	17.1%	48	13.6%	64	18.7%	40	16.2%	3492	19.9%
35 to 39	63	19.4%	58	17.4%	43	14.1%	59	17.9%	64	15.6%	42	11.9%	45	13.1%	30	12.1%	2910	16.6%
40 to 44	52	16.0%	57	17.1%	52	17.0%	44	13.3%	47	11.5%	44	12.5%	45	13.1%	22	8.9%	2136	12.2%
45 to 49	32	9.8%	30	9.0%	30	9.8%	26	7.9%	38	9.3%	45	12.7%	29	8.5%	18	7.3%	1255	7.2%
50 to 54	14	4.3%	28	8.4%	7	2.3%	25	7.6%	28	6.8%	24	6.8%	26	7.6%	20	8.1%	768	4.4%
55 to 59	10	3.1%	12	3.6%	22	7.2%	10	3.0%	14	3.4%	22	6.2%	15	4.4%	7	2.8%	431	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%	11	4.5%	234	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%	5	2.0%	129	0.7%
70 and over	4	1.2%	5	1.5%	1	0.3%	2	0.6%	3	0.7%	2	0.6%	3	0.9%	5	2.0%	79	0.5%
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%
Total	325	100.0%	334	100.0%	306	100.0%	330	100.0%	410	100.0%	353	100.0%	343	100.0%	247	100.0%	17516	100.0%

a	2222				2212				2212		2212		2211		2215		•	
Stated HIV risk exposure	2008		2009		2010		2011		2012		2013		2014		2015 to 30/9		Total	
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%	256	74.6%	190	76.9%	11018	62.9%
MSM and person who injects drugs (PWID)	11	3.4%	17	5.1%	8	2.6%	11	3.3%	14	3.4%	16	4.5%	19	5.5%	13	5.3%	511	2.9%
Heterosex - Other	47	14.5%	54	16.2%	39	12.7%	29	8.8%	46	11.2%	55	15.6%	34	9.9%	28	11.3%	1197	6.8%
Heterosex - High_prev	17	5.2%	20	6.0%	12	3.9%	12	3.6%	11	2.7%	6	1.7%	15	4.4%	8	3.2%	416	2.4%
PWID	12	3.7%	12	3.6%	9	2.9%	8	2.4%	10	2.4%	7	2.0%	8	2.3%	3	1.2%	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%	51	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%	5	2.0%	3442	19.7%
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	34.4%	91	36.8%	5492	31.4%
Sydney	78	24.0%	90	26.9%	77	25.2%	83	25.2%	112	27.3%	91	25.8%	78	22.7%	61	24.7%	2891	16.5%
Northern Sydney	25	7.7%	39	11.7%	19	6.2%	24	7.3%	23	5.6%	26	7.4%	18	5.2%	17	6.9%	971	5.5%
Western Sydney	26	8.0%	21	6.3%	20	6.5%	31	9.4%	25	6.1%	26	7.4%	26	7.6%	12	4.9%	705	4.0%
South Western Sydney	16	4.9%	21	6.3%	23	7.5%	18	5.5%	31	7.6%	29	8.2%	28	8.2%	23	9.3%	647	3.7%
Hunter New England	14	4.3%	16	4.8%	16	5.2%	10	3.0%	14	3.4%	17	4.8%	27	7.9%	12	4.9%	474	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%	4	1.6%	257	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%	6	2.4%	223	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%	4	1.6%	195	1.1%
Northern NSW	4	1.2%	4	1.2%	9	2.9%	11	3.3%	5	1.2%	5	1.4%	7	2.0%	4	1.6%	191	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%	4	1.6%	143	0.8%
Western NSW	3	0.9%	3	0.9%	4	1.3%	3	0.9%	7	1.7%	5	1.4%	2	0.6%	2	0.8%	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%	2	0.8%	87	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	0.4%	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%	5	1.5%	4	1.6%	5057	28.9%
Total	325	100.0%	334	100.0%	306	100.0%	330	100.0%	410	100.0%	353	100.0%	343	100.0%	247	100.0%	17516	100.0%

# **Appendix B: Ending HIV Seven Statements Evaluation, ACON 2015**

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

Percentage of	t respondents wi	no strongly agree o	or agree with the stat	tements 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%

<sup>\*</sup>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.