

# Victorian Primary Care Network for Sentinel Surveillance on BBVs and STIs\*

## HIV Network Report 3

July - December 2007

We are pleased to present the third report in this series.

This six monthly report presents information on trends and patterns in HIV in Victoria, with a particular focus on the findings from a sentinel surveillance network established with the collaboration of a number of primary health and sexual health clinics. Each issue includes standard tabulations from the sentinel surveillance network and features updates from other surveillance systems of relevance to HIV. The surveillance network facilitates further insight into trends in annual HIV diagnoses in Victoria, particularly in men who have sex with men (MSM). The sentinel surveillance network provides information about HIV testing and prevalence among those tested, complementing other data sources.

### Sentinel Surveillance for HIV

**Methods:** Since 2006 a sentinel surveillance system has been operational in Victoria. Five clinics (listed on page 2) participate in the system (2 sexual health clinics and 3 gay men's health clinics); all have a high case load of MSM and diagnose a high number of HIV infections per year. The system involves linking two data sets (i) demographic and HIV testing data from the clinic's pathology provider, and (ii) demographic and behavioural information collected using a brief questionnaire. Doctors complete the section which serves as a HIV request form, in all individuals tested (demographics, testing history and risk group) and MSM patients voluntarily complete the section on risk behaviour. Two sites did not use the form; one had a computer-assisted medical record system which collected briefer patient behavioural information, the other provides laboratory testing data only, however as not all tests were captured in the data extraction, tests from this site are not included in this report. This report provides HIV sentinel surveillance results for July to December 2007 and focuses on MSM. Individuals who had previously tested positive for HIV and were recorded as being tested for confirmatory reasons were excluded.

**Results – Tests in males:** Between July and December 2007, a total of 5333 HIV tests were conducted in individuals at the four participating sites; 3548 (67%) among males. At sexual health clinics, 3967 tests were conducted, 57% in males, compared to gay men's health clinics where 1366 tests were undertaken and 93% were in males (Table 1). The overall questionnaire response rate in males was 90%, and ranged by site from 75% to 92% (Table 1).

**Results – MSM (sex workers excluded):** A total of 2042 questionnaires were completed among MSM; with a mean of 340 (range: 278-395) per month (Figure 1). Among MSM surveyed, around two thirds (68%) were aged 20 to 39 years and around half (49%) reported a negative HIV test in the 12 months prior to the current test, an increase

from 31% in the previous report. Of MSM with casual anal sex partners, 36 per cent reported not always using condoms in the past six months, consistent with the previous report (Tables 2 and 3).

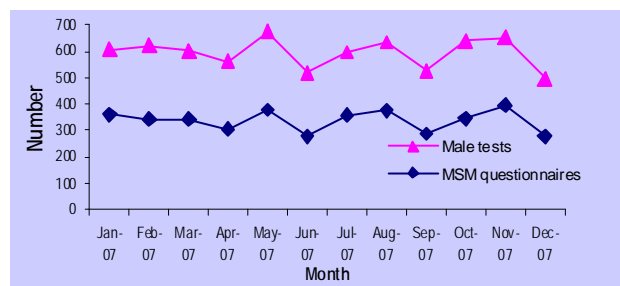
The overall HIV prevalence among MSM surveyed and tested was 1.8% (95% CI 1.3-2.5) (Table 2). The highest prevalence was observed in those reporting they did not always use condoms with casual anal sex partner/s and reporting six or more anal sex partners in the last six months (Table 2 and 3).

Table 1: HIV tests and questionnaires, by sex and HIV result, Jul-Dec 2007

Clinic type Site Number	Sexual Health		Gay Men's Clinic		All
	6*	18*	10	5	
<b>All tests</b>					
HIV tests (n)	63	3904	1061	305	5333
<b>Males</b>					
HIV tests (n)	16	2256	990	286	3548
Positive tests (n)	0	19	18	3	40
Positive tests (%)	0.0	0.8	1.8	1.1	1.1 (0.8-1.5)
Questionnaires (n)	12	2038	913	223	3186
Response rate (%)**	75.0	90.3	92.2	78.0	90.0
<b>MSM (sex workers excluded)</b>					
Questionnaires (n)+	4	1010	818	210	2042
Positive tests (n)	0	18	16	3	37
Positive tests (%)***	0.0	1.8	2.0	1.4	1.8 (1.3-2.5)

\*Site 6 and 18 collect electronic data on all patients as part of routine sexual history taking and provide HIV risk behaviour information for MSM only for the purposes of sentinel surveillance  
 \*\*Response rate = total questionnaires completed / (total number of males tested for HIV at sites 5 and 10 + total number of MSM tested at sites 6 and 18) x 100  
 \*\*\*Positive tests (%) = number of positive tests in MSM completing a questionnaire / total questionnaires completed in MSM x 100  
 +sex workers excluded

Figure 1: Monthly HIV tests in males and questionnaires among MSM, all clinics, Jan-Dec 2007



**Conclusion:** The HIV prevalence of 1.8% among MSM tested and surveyed between July and December 2007 was similar to the estimates of 2.0% reported in January to June 2007 and 1.9% in 2006 (Apr-Dec). These findings appear consistent with the pattern of new diagnoses in Victoria (see HIV Passive Surveillance update, page 2). In addition, the increased proportion of MSM reporting regular HIV testing (i.e. in the last 12 months) appears consistent with findings from other behavioural surveillance mechanisms (see Periodic Survey update, page 2).

**Limitations:** (i) the sentinel system only includes MSM seeking health services and thus the results cannot be assumed to apply to all MSM, (ii) the results describe HIV prevalence in those tested rather than incidence - HIV incidence is a more direct consequence of changes in transmission risk and will be described in other analyses, (iii) to ensure diagnoses due to confirmatory testing are not

\*In regards to sentinel surveillance, BBVs (blood borne viruses) refers to hepatitis C and STIs (sexually transmissible infections) refers to HIV, chlamydia and syphilis.

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included in the system, positive results are followed up more actively than negative results, as additional data are available from HIV passive surveillance.

**Table 2: Characteristics of MSM surveyed and tested for HIV, all clinics (sex workers and unknowns excluded), Jul-Dec 2007**

		Jul-Dec 2007			
		Tested		Positive	
		n	%	n	%
<b>All individuals</b>		2042	100	37	1.8
<b>Age group (years)</b>	16-19	48	2.4	1	2.1
	20-29	707	34.6	14	2.0
	30-39	691	33.8	12	1.7
	40-49	393	19.3	8	2.0
	50+	203	9.9	2	1.0
<b>Country of birth</b>	Australia	1426	73.7	22	1.5
	Other	508	26.3	10	2.0
<b>Aboriginal and/or Torres Strait Islander</b>	No	1875	99.1	32	1.7
	Yes	17	0.9	1	5.9
<b>Reason for test</b>	Asymptomatic screen	1539	76.8	19	1.2
	Seroconversion illness	8	0.4	1	12.5
	Other	458	22.8	14	3.1
<b>History of Injecting drug use</b>	No	1886	95.7	31	1.6
	Yes	84	4.3	2	2.4
<b>Timing of last negative HIV test</b>	Within the last 12 months	935	49.3	13	1.4
	Greater than 12 months ago	808	42.6	15	1.9
	No history of a previous test	153	8.1	4	2.6

**Table 3: Characteristics of MSM surveyed and tested for HIV, excluding site 18\* (sex workers and unknowns excluded), Jul-Dec 2007**

		Jul-Dec 2007			
		Tested		Positive	
		n	%	n	%
<b>All individuals</b>		1032	100	19	1.8
<b>Male anal sex partners, last six months</b>	None	110	11.2	1	0.9
	1-5	629	63.9	5	0.8
	6+	246	25.0	10	4.1
<b>Regular anal sex partners, last six months</b>	No	367	38.4	6	1.6
	Yes	590	61.6	10	1.7
<b>HIV status of current regular partner</b>	Positive	64	12.5	1	1.6
	Negative	358	69.9	4	1.1
	Don't know/he hasn't had a test	90	17.6	0	0.0
<b>Condom use when having anal sex with regular partner/s, last six months</b>	Did not always use condoms	338	57.3	7	2.1
	Always used condoms	252	42.7	3	1.2
<b>Casual anal sex partners, last six months</b>	No	262	26.9	2	0.8
	Yes	713	73.1	14	2.0
<b>Condom use when having anal sex with casual partner/s, last six months</b>	Did not always use condoms	256	35.9	6	2.3
	Always used condoms	457	64.1	8	1.8

\*Site 18 uses electronic data collection which collects briefer behavioural information than the sentinel surveillance form used at other sites

Sites: Melbourne Sexual Health Centre, Prahran Market Clinic, The Centre Clinic, Carlton Clinic, Geelong Sexual Health Clinic

The data in this report were collated and analysed by the Burnet Institute in collaboration with the Victorian Infectious Diseases Reference Laboratory, Melbourne Sexual Health Centre and the Victoria Department of Human Services (DHS). This project is funded by the DHS.

All data in this report are provisional and subject to revision as further information becomes available.

## Updates from other surveillance systems

### Passive Surveillance

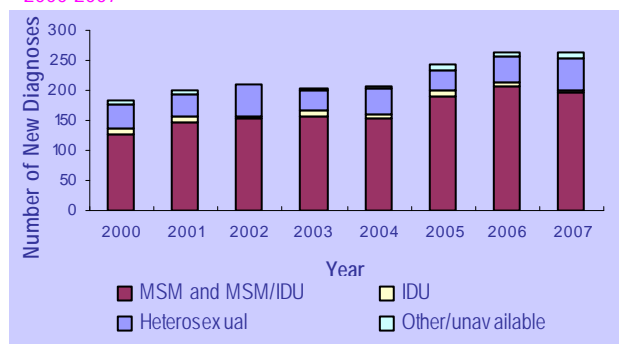
Between 2000 and 2007, there was a 43% increase in new HIV diagnoses in Victoria, from 184 in 2000 to 262 in 2007. In 2007, the 262 new diagnoses of HIV was consistent with the 263 diagnoses in 2006 (Figure 2).

The major risk group for HIV in Victoria was MSM and the proportion of diagnoses from this subgroup, has increased from 66 per cent in 2000 to 75 per cent in 2007. Among

MSM, between 2003 and 2007, the largest proportion of HIV diagnoses were among those aged 30-39 years (40%), followed by 40-49 years (26%) then 20-29 years (21%). Although there have been increases in the number of diagnoses in all these age groups, the increase has been more marked in those aged 30-39 years and 40-49 years, leading to a shift in the median age at HIV diagnosis from 36 years in 1998-2002 to 38 in 2003-2007.

Over the same time period, approximately 80 per cent of diagnoses arose from Australian born MSM and greater than 90 per cent from those residing in metropolitan Melbourne. The proportion of MSM reporting that they acquired their infection in Victoria was over 80%, highlighting that transmission has remained localised.

**Figure 2: New HIV diagnoses, by exposure category, Victoria, 2000-2007**



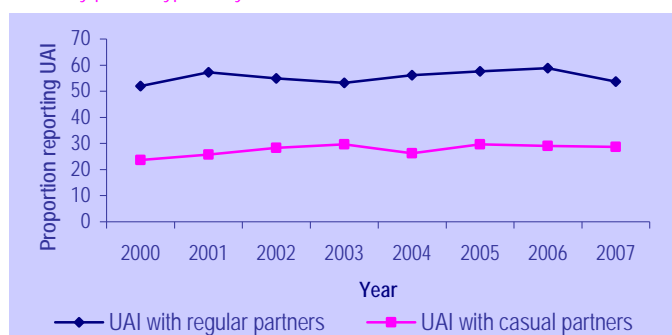
IDU = injecting drug user

### Periodic Survey

Sexual risk behaviour among MSM is monitored through the annual Melbourne Gay Community Periodic Survey. The 2007 survey found that among MSM reporting casual sexual partners, the proportion reporting unprotected anal intercourse (UAI) has increased from 24% in 2000 to 29% in 2007 (Figure 3).

The Periodic Survey also showed a significant increase in the proportion of HIV negative MSM who reported a HIV test within 12 months of being surveyed, from 62% in 2000 to 69% in 2007.

**Figure 3: Frequency of reported unprotected anal intercourse (UAI) in the past six months, by partner type and year, Victoria, 2000-2007**



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