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Prepared by: The Burnet Institute on behalf of the Department of Human Services

HIV Testing Surveillance—2006 Annual Report

The report is intended to present information on trends in HIV testing patterns in Victoria from the Victorian Laboratory Network for Surveillance of HIV Testing which is based on the collaboration of 28 laboratories in Victoria who conduct diagnostic HIV testing.

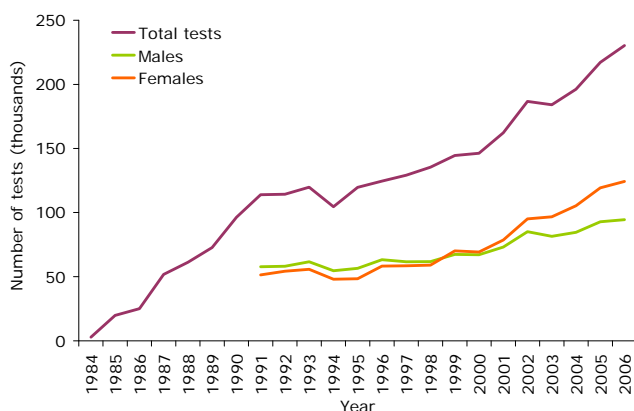
HIV testing trends, 1984–2006

Number of tests, by sex

Between 1984 and 2006 2,758,381 HIV antibody tests were conducted at diagnostic laboratories in Victoria. The number of tests increased from 2,879 in 1984 to 230,199 in 2006 (Figure 1).

The sex of individuals tested for HIV has been available since 1991. Among the 95% where sex was reported, about half were male (n=1,121,138 48, females numbered 1,192,285, 52%). A greater proportion of tests were conducted in males between 1991 and 1998 (52%) compared to 1999 to 2006 (46%) (Figure 1).

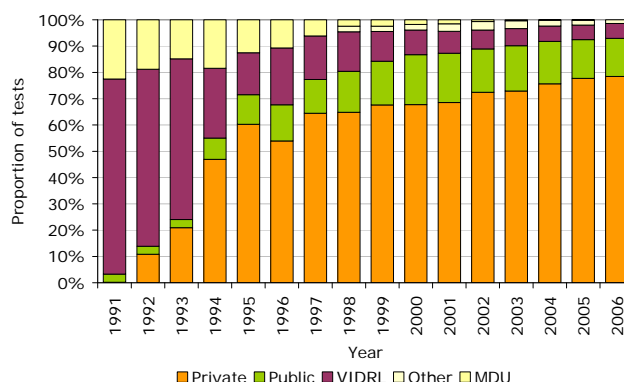
Figure 1. Number of annual HIV tests, by sex, Victoria



Number of tests by laboratory

In the 1980's all HIV serological tests were performed by the state reference laboratory, Microbiological Diagnostic Unit, the Royal Melbourne, and the Alfred Hospital. Since 1991 the proportion of testing done by private laboratories has increased substantially, with these labs conducting 78% of all HIV tests in Victoria in 2006 (Figure 2).

Figure 2. Proportion of tests performed by different categories of laboratories*, Victoria, 1991–2006



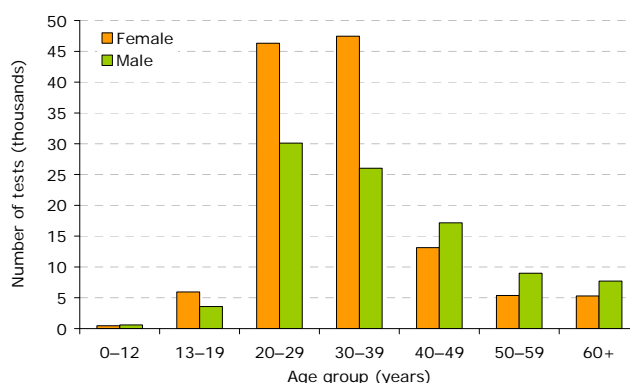
*VIDRL—State Reference Laboratory; PUBLIC—Public Pathology Laboratories; PRIVATE—Private Pathology Laboratories; OTHER—includes military and IVF laboratories; MDU—Microbiological Diagnostic Unit

HIV testing characteristics, 2006

Number of tests, by age group and sex

In 2006, 230,199 HIV tests were conducted by the 28 diagnostic laboratories, the highest annual number for Victoria since the implementation of testing report in 1984. Among the 95% where sex was reported, 124,295 (57%) were among females, and 94,403 (43%) were among males. Among the 95% where date of birth was reported, 35% of tests were in people aged 20 to 29 years, and a further 34% were in people 30 to 39 years (Figure 3). The mean age of females tested for HIV in 2006 was 33 years compared to 36 years for males.

Figure 3. Total HIV tests, by age and sex, Victoria



HIV testing characteristics, 2006

Number of tests, by 'reason for test'

In 2006, the reason for having an HIV test was recorded in 23% (n=52,023) records (Table 1). The most common reason reported was antenatal screening (23%), followed by insurance screening (16%). Among females, antenatal screening was the main reason (42% of records), while for males insurance screening was the main reason (25%). However, these results may be biased due to the large number of records where 'reason for the test' was missing.

Table 1. HIV tests by reason for test and sex, Victoria, 2006 (cases where reason was unknown are excluded)

Reason for test	Male		Female		Total*	
	n	%	n	%	n	%
Antenatal	—	—	12015	42.1	12017	23.1
Insurance screening	5869	25.4	2544	8.9	8414	16.2
Sex/drugs exposure risk	3672	15.9	3126	10.9	6825	13.1
Occupational screening	3281	14.2	2799	9.8	6094	11.7
Immigration	2943	12.7	2480	8.7	5467	10.5
Blood donation screening	1639	7.1	1502	5.3	3156	6.1
IVF	344	1.5	427	1.5	771	1.5
Prison screening	233	1.0	135	0.5	372	0.7
Dialysis screening	93	0.4	43	0.2	136	0.3
Symptomatic	57	0.2	67	0.2	124	0.2
Surgical screening	65	0.3	57	0.2	123	0.2
Other reasons	4909	21.2	3368	11.8	8524	16.4
Total	23105	100	28563	100	52023	100

*Includes cases where sex was unknown

Conclusion

Testing is an important component of HIV prevention. Earlier diagnosis and treatment facilitates prevention of transmission through increased awareness. The *Victorian Laboratory Network for Surveillance of HIV Testing* showed each year more and more tests are being conducted in males and females in Victoria.

The increased testing observed among females most likely relates to increased incorporation of HIV into the standard antenatal screening in Australia. Discussion related to universal antenatal HIV screening can be found at the following website: http://www.mja.com.au/public/issues/185_04_2108/06/gil10451_fm.html.

The increased testing in males is encouraging considering about 80% of HIV infections diagnosed each year are among men who have sex with men in Victoria. As the sex of the persons sexual partner is not available from laboratories, the *Victorian Laboratory Network* is unable to monitor testing specifically in this group.

A *Victorian Primary Care Network for Sentinel Surveillance of HIV* was therefore implemented in April 2006 to complement the existing *Victorian Laboratory Network*. The *Primary Care Network* provides a testing denominator for men who have sex with men who visit the clinics in the system and is a collaborative project between the Burnet Institute, DHS, VIDRL, Melbourne Sexual Health Centre, numerous primary health care service and laboratories. The latest reports can be found at: http://www.health.vic.gov.au/__data/assets/pdf_file/0012/60204/AprDec06_HIV.pdf.

Acknowledgments

The collation of HIV testing data would have not been possible without the collaboration of private and public laboratories in Victoria. In particular our thanks to the Alfred Hospital, Analytical Reference Laboratory, Austin Health, Bendigo Hospital Pathology Services, Dorevitch Pathology, Eastern Health Pathology, General Diagnostic Laboratory, Goulburn Valley Health, Gribbles Pathology, Melbourne pathology services, Microbiological Diagnostic Unit (Melbourne University), Monash IVF, Monash Medical Centre (Southern Health), Pathcare, Royal Melbourne Hospital, Royal Women's Hospital Pathology Services, Royal Children's Hospital, St John of God Pathology, St Vincent's Public Hospital Department of Pathology, Victorian Infectious Diseases Reference Laboratory, and Victorian Institute of Forensic Medicine.

Further Information

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Reports are available at:

http://www.health.vic.gov.au/ideas/diseases/gr_sti.htm