

Evaluation of the 'Check It Out' campaign

The Victorian AIDS council's HIV and STI testing campaign targeting men who have sex with men

LET'S TALK MAN TO MAN



No matter where you're from, and what you're into, if you're having sex, you should have a regular sexual health check. Some STb bevoally transmitted indectional don't show symptoms – so you could have one and not know it.

To find cut more, whit a distinction a prevate and confidential check up.
For information and inferral about unusal health checks call
ACCUME up 8109-831-392 or go to warms, becall out antime.



November 2005

Prepared by:

Centre for Epidemiology and Population Health Research Burnet Institute 85 Commercial Rd Prahran, 3181

Burnet Institute Contact Details:

Web-site: www.burnet.edu.au

Prepared by:

3

Centre for Epidemiology and Population Health Research

Burnet Institute 85 Commercial Rd, Prahran, 3181

Prepared for:

The Victorian AIDS Council and The Department of Human Services, Victoria.

Authors:

3

3

3

9

Û

1

1

3

3

Ms Rebecca Guy, BAppSc, MAppEpId, Epidemiologist, Centre for Epidemiology and Population Health Research (CEPHR), Burnet Institute

Ms Jane Goller, BAppSc (Nurs), Public Health Fellow, Victorian Public Health Training Scheme, Department of Human Services

Dr Julie Wang, MBBS, FRACGP, MAppEpid, Epidemiologist, CEPHR, Burnet Institute

Ms Megan Lim, BBiomedSci (Hons), Research Assistant, CEPHR, Burnet Institute

Dr Margaret Hellard, MBBS, PhD, FRACP, FAFPHM, Director, CEPHR, Burnet Institute

Acknowledgements

Victorian Department of Human Services
Victorian AIDS Council

Laboratory data analysis:

Dr David Leslie, VIDRL

Participating sentinel sites and site contacts:

Dr Nick Medland, the Centre Clinic, St Kilda, Victoria
Dr Norm Roth, the Prahran Market Clinic, Victoria
Dr Jonathan Anderson, Carlton Clinic, Carlton, Victoria
Dr Ric Milner and Ms Mary Randall, Geelong Sexual Health Clinic, Geelong, Victoria
Dr Richard Wright, Richmond Hill Medical Centre, Richmond, Victoria

Other support:

Dr Tim Read, Carlton Clinic

Dr Caroline Reed, Dorevitch Pathology

Professor Christopher Fairley, Melbourne Sexual Health Centre, Melbourne

Dr Garrett Prestage, National Centre in HIV Epidemiology and Clinical Research, Sydney

Dr Alan Breschkin, VIDRL

Glossary

3

9

AIDS – Acquired Immunodeficiency Syndrome

ART – antiretroviral therapies

GCA – gay community attached

GUD – Genital Ulcer Disease

HIV - Human Immunodeficiency Virus

MSM - men who have sex with men

NGCA - non gay community attached

SOPV – sex on premises venue

STI – sexually transmitted infections

UAI – unprotected anal intercourse

VAC - Victorian AIDS Council

VIDRL - Victorian Infectious Diseases Reference Laboratory

Abbreviations for clinics

CC – Carlton Clinic

MSHC - Melbourne Sexual Health Centre

PMC - Prahran Market Clinic

TCC - The Centre Clinic

GEE – Geelong Sexual Health Clinic

RICH - Richmond Hill Medical Centre

Contents

| Acknowledgements | 3 |
|-------------------|----|
| Glossary | 4 |
| Contents | 5 |
| Executive summary | |
| ntroduction | 8 |
| 1ethodology | 16 |
| Results | 22 |
| Discussion | 38 |
| References | 42 |
| Annendix | 11 |

Executive summary

Background

2

Notifications of HIV and Sexually Transmissible Infections (STIs) have increased markedly among men who have sex with men (MSM) in Victoria in recent years. Testing is an important prevention strategy. Between March 2004 and October 2004 the Victorian AIDS Council (VAC) implemented a testing campaign called 'Check it Out'. The objectives of the campaign were to 1) promote sexual health among MSM; 2) increase the proportion of MSM who test at least annually for HIV; 3) improve regular testing of other STIs in MSM and 4) reduce the levels of STIs, including HIV, among MSM. The 'Check It Out'' campaign targeted a broad range of MSM including: young and non gay community attached MSM; culturally and Linguistically Diverse (CALD); and MSM and Gay community attached MSM

Methods

To evaluate the impact of the campaign on HIV and STI testing, we conducted two individual studies. The first was a retrospective laboratory data analysis among males undergoing HIV and STI testing from four Melbourne medical clinics that have a high case load of MSM – to determine whether there was a change in HIV and STI (syphilis, chlamydia and gonorrhoea) testing before, during and following the campaign. The second was the implementation of prospective Sentinel surveillance – to obtain an understanding of testing behaviour during and after the campaign and determine testing patterns specifically for MSM (rather than just males). In addition the sentinel surveillance enabled the collection of risk factors among MSM. The sentinel surveillance involved collection of demographic data, HIV testing history and sexual risk behaviour information of clients not known to be HIV positive that were undergoing a HIV test as part of normal clinical practice. Participation was voluntary and collected data was later merged with HIV laboratory results.

Results: A summary of the results are shown in Table 1.

Table 1: Campaign Objectives and Results

| Objective | Results |
|--|--|
| 1. To increase the proportion of | Laboratory extraction data showed HIV tests among males did not increase significantly between July 2002 and December 2004 or during or following the campaign. |
| MSM who test at least annually for | Sentinel surveillance data showed the average number of HIV tests conducted among MSM during the campaign was 200, compared to 204 following the campaign |
| HIV | Sentinel surveillance data showed |
| | 38% of HIV tests were conducted among MSM aged 30 to 39 years, 25% among MSM aged 20 to 29 years and 25% among MSM aged 40 to 49 years |
| | The majority (77%) of MSM undergoing HIV testing were born in Australia, 8% were from CALD backgrounds. The majority (91%) resided in metropolitan Melbourne. |
| | There was no difference in the proportion of HIV tests conducted according to age group and Region of Birth during the campaign compared to following the campaign (April to Dec 2004 compared to April to Aug 2005) |
| | Sentinel surveillance data showed |
| | 59% reported UAI. Of the MSM reporting UAI: |
| | 12% reported UAI with HIV pos partners and 43% reported UAI with partners of unknown status |

| | There was no difference in the proportion of HIV tests conducted according to the proportion reporting UAI and HIV status of UAI partners during the campaign compared to following the campaign (April to Dec 2004 compared to April to Aug 2005) |
|---|--|
| | Sentinel surveillance data showed |
| | 42% of MSM reported a HIV test in the past 12 months. |
| | 41% of MSM aged 30 to 29 years reported a HIV test in the past year compared to 48% of MSM aged 20 to 29 years. |
| | There was no difference in the proportion of HIV tests conducted according to HIV testing history during the campaign compared to following the campaign (April to Dec 2004 compared to April to Aug 2005) |
| 2. To improve regular testing of | Monthly number of syphilis tests increased by 5% between July 2002 and December 2004 (p=0.006), chlamydia tests increased by 5% between July 2002 and December 2004 (p=0.001) and gonorrhoea tests increased by 9%. However during the campaign there was no further increase beyond what had already been observed, |
| other STIs in MSM ** | In 2002, 16.2% of syphilis tests for the two clinics were conducted in HIV positive men, increasing to 21.3% in 2004. |
| 3. To reduce the levels of STIs, and HIV, | HIV diagnoses decreased in 2004 from 225 in 2003 to 217 in 2004, however to the end of September 2005 there were 197 diagnoses (78% among MSM) compared to 160 diagnoses in 2004. |
| in MSM. | The HIV diagnosis rate increased from 1.4 in 2004 to 2.2 diagnoses per 100 tests in 2005 |
| | During 2004 (the year of the campaign) there were 85 infectious syphilis cases reported, 63 (74%) were MSM. In 2005 (to the end of September) there were 83 infectious syphilis cases reported (67 were MSM), compared to 56 total cases reported in the same time period 2004. |
| | During 2004 (the year of the campaign) there were 7634 chlamydia cases reported, 3154 (41%) were male. In 2005 (to the end of September) there have been 6725 cases reported (2694. 40% were males) compared to a total of 5683 cases reported in the same time period 2004. |
| | During 2004 (the year of the campaign) there were 1112 gonorrhoeae cases reported, 1010 (91%) were males. In 2005 (to the end of September) there have been 834 cases reported, of which 718 (86%) are among males. There were 848 cases reported in the same time period 2004. |

The results of the evaluation suggest the campaign did not result in an increase in HIV or STI testing among MSM at the sentinel clinics, the campaign did not appear to result in increased annual HIV testing at the clinics and did not appear to reduce the levels of HIV, infectious syphilis, chlamydia or gonorrhoeae among MSM in Victoria. These results should be interpreted in combination with the other components of the evaluation. It is possible that small increases in testing may have occurred in certain smaller target groups, but the sensitivity of the evaluation could not detect it. Testing is an important prevention strategy and should still be considered as part of future campaigns.

Introduction

120

3

3

2

3

HIV in Australia and Victoria

Two decades after the first cases of Acquired Immunodeficiency Syndrome (AIDS) were identified; infection with the Human Immunodeficiency Virus (HIV) remains a leading cause of morbidity and mortality around the world. Australia responded promptly to the HIV/AIDS epidemic introducing harm reduction measures, such as safe sex education campaigns and needle and syringe programs to reduce the transmission of HIV. Recently, the number of new HIV diagnoses in Victoria and other Australian states has increased. In Victoria, annual HIV diagnoses increased by 68% between 1999 and 2002 (139 in 1999 to 234 in 2002) and the annual number has not returned to the 1999 low with 217 new HIV diagnoses reported in 2004 (Figure 1)[1]. In 2003, the median age at diagnosis for both males and females was 35 years, while the most common risk factor is male-to-male sexual contact, accounting for approximately 70% of all diagnoses since 2001[1].

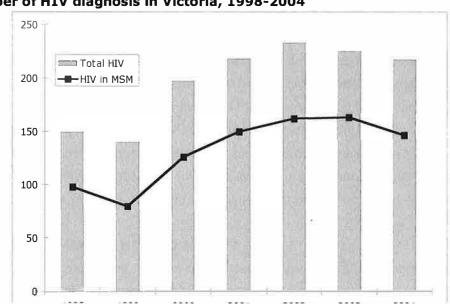


Figure 1: Number of HIV diagnosis in Victoria, 1998-2004

STIs among MSM in Australia and Victoria

As with HIV notifications there has recently been an increase in notifications for many STIs in Australia, including Victoria. The National Notifiable Diseases Surveillance System (NNDSS) reported an increase in national chlamydia notifications from 14088 infections in 1999 to 36335 infections in 2004, representing a five year increase of 157%[2]. During this period, notifications for gonorrhea increased by 22% from 5604 in 1999 to 6808 in 2004[3]. Infectious syphilis notifications have also increased with a five fold increase reported in Victoria since 1995 [4] and over 10 fold in NSW from 1999 to 2003[5]. Excluding chlamydia, these increases have been concentrated among MSM with for example, MSM representing 1 (6.3%) of 16 infectious syphilis cases in Victoria in 1995 compared with 63 (74%) of 85 cases in 2004[4]. In both NSW and Victoria, approximately half of these infectious syphilis cases were coinfected with HIV. Similar findings have been reported in the United Kingdom and the United States [6] [7].

Sexual Behaviour among MSM in Victoria

15

1

3

3

3

These increase in HIV and STIs follow changes in the sexual behaviours of men who have sex with men. Unprotected anal intercourse (UAI) among Australian MSM is more commonly reported than a decade ago and like HIV and other STIs has been shown to be a risk factor for incident syphilis.[5] The Melbourne Gay Community Periodic Survey found that the proportion of men within regular relationships reporting 'sometimes not using a condom' in the previous six months had increased from 45 to 56% between 1998 and 2004 with a corresponding decrease in the proportion of men who always used a condom from 41 to 32%[8]. While most UAI occurred between HIV seroconcordant (positive-positive or negative-negative) couples, almost 22% occurred where seroconcordance was unknown. Between 2000 and 2004, there has also been a significant upward trend in the proportion of men having UAI with casual male partners, with a significantly higher proportion of HIV positive men engaging in UAI.[8] Whilst believed to be relatively safe in terms of HIV transmission, oral sex has been reported as risk factor for syphilis infection in Australia and overseas[5, 6]. Homosexually active men in Sydney having insertive oral sex with casual partners to ejaculation had 4.5 times the risk of syphilis infection than homosexually active men who did not report the same behaviours.[5]

The disease progression of HIV / AIDS in Australia and other developed nations altered dramatically following the introduction of effective antiretroviral therapies (ART). HIV became a chronic illness that if treated appropriately could allow affected individuals the potential for a longer and improved quality of life (including sexual activity) which in turn has led to an increase in the prevalent pool of HIV infected individuals, and increased possibility of transmission to non infected persons. Concurrent, with increasing prevalence of HIV, ART has been followed by treatment optimism and increases in unsafe sexual behaviours amongst MSM[6], resulting in enhanced conditions for HIV transmission.

The interrelationships between HIV and STIs

Although chlamydia, gonorrhoea and syphilis can be easily treated with antibiotics, the significance of these infections among MSM cannot be underestimated. The interrelationships between HIV and STIs are an important aspect of HIV transmission.

- Firstly, the presence of ulcerative and non ulcerative STIs increases the risk of acquiring HIV. In a comprehensive review of the impact of STIs on HIV transmission and progression, Wasserheit reported a 3 to 5 fold increase in the risk of HIV transmission in the presence of ulcerative and non ulcerative STIs, after adjustment for sexual behaviour. [9] Specific groups such as circumcised men with genital ulcer disease (GUD) are at greater risk of HIV infection with the risk as high as 18.2 compared with the risk for men without GUD. [10]
- Secondly, the coexistence of HIV with untreated STIs can result in increased levels of HIV shedding from genital secretions, consequently increasing the risk of HIV transmission. In one study of HIV-1 positive men in Malawi, seminal HIV-1 load was eight times higher in seropositive men with urethritis than in positive men without urethritis and gonorrhoea was associated with the greatest concentration of HIV in semen[11]. In this and another study of seminal HIV load in HIV infected patients with an STI, antibiotic therapy was followed by significant decreases in the seminal HIV-1 load[11, 12].
- Thirdly, there is evidence that STI control can reduce the incidence of HIV. Statistical modeling of STIs treatment in Tanzania found that a single round of mass treatment reduced the

two year incidence of HIV by 36% compared with 30% following sustained syndromic treatment; while over a 10 year period, sustained syndromic treatment had a greater impact with a 62% reduction in HIV incidence compared with 24% for mass treatment [13]. The potential for STI control to reduce HIV incidence is dependent on the stage of the HIV epidemic. A Cochrane review examining this issue, concluded that STI interventions have little effect on HIV incidence if the HIV epidemic is stablised, whereas in an emerging epidemic in a community with high STI prevalence and poor STI services, there is potential for strategies such as strengthening STI services to decrease the incidence of HIV.[14]

The complex interrelationships between STIs and HIV are further compounded by the potential for asymptomatic infection of many STIs. As many as 85% of men and women with chlamydia infection can report no symptoms[15] and asymptomatic infection has been reported in up to 68% of people with infectious syphilis attending a sexual health clinic.[16] In Australia, 32% of a case series of homosexually active men with early syphilis (n=57) did not report syphilis symptoms[5]. Except during seroconversion or AIDS, absence of symptoms is also a common feature of HIV infection. This potential for asymptomatic infection of HIV and STIs presents an additional challenge for timely detection and treatment of STIs and the need for health promotion to encourage regular testing of high risk groups such as MSM.

Prevention of HIV and STIs

Prevention of STI and HIV transmission is therefore essential to reducing the burden of these infectious diseases and the fifth National HIV/AIDS Strategy2005-2008 emphasizes the need for targeted preventive education that focuses on MSM (as the group at greatest risk) [17]. The strategy acknowledges the impact of rising levels of STIs and the interdependent relationship of HIV and STIs. Accordingly, it recommends targeted safe sex messages appropriate to high risk groups such as gay and other homosexually active men with the objective of preventing the spread of STIs and HIV.

Testing for HIV/STIs as a Prevention Strategy

Testing for the presence of HIV infection, in association with appropriate counseling is a key component of many HIV prevention strategies including Australia. The objective being to provide counseling so that clients may change their behaviour to avoid infection or if diagnosed with HIV to avoid infecting others in the future [18, 19]. A meta-analysis of studies that assessed sexual behaviour before and after HIV counseling and testing concluded that HIV counseling and testing provides an effective means of secondary prevention but is not an effective primary prevention strategy for people who test HIV negative[19]. Among individuals diagnosed with HIV and serodiscordant couples, both were shown to reduce risk behaviours such as unprotected intercourse and to increase safe sex behaviours such as condom use more than patients who tested HIV negative or were untested. The meta-analysis also found that older subjects and subjects who sought testing rather than those who were recruited to a research project were more likely to reduce risk behaviours following HIV testing and counseling, suggesting that those self referring may have been more ready for behaviour change. Improving access to HIV testing and the uptake of HIV testing also facilitates earlier diagnosis of HIV infection and timely intervention with antiretroviral treatments. This in turn facilitates prevention of transmission through a

reduction in viral load and provides an opportunity for other preventive measures such as contact tracing.

Improved detection and timely treatment of symptomatic and asymptomatic STIs is also important to the prevention of HIV transmission. The National Sexually Transmissible Infections Strategy 2005-2008 has close links with the National HIV/AIDS strategy and identifies screening and testing, contact tracing and treatment as three of the seven elements of a comprehensive approach to STI control[20]. The Australasian College of Sexual Health Physicians recommends HIV & STI testing annually for MSM[21]. Specifically the testing schedule indicates pharyngeal swab for gonorrhoea, anal swab for gonorrhoea and chlamydia, first catch urine for chlamydia and serology for HIV, syphilis, hepatitis A and B and testing at 3-6 monthly intervals for men who have multiple partners. As gonorrhoea, syphilis and chlamydia can be an asymptomatic infection in men, irrespective of the anatomical site, the guidelines recommend selective testing based on behavioural risk assessment rather than solely on symptoms.

HIV and STIs patterns among MSM in Victoria

9

3

3

-

2

Despite recommendations for annual testing, data from the Melbourne Gay Community Periodic Survey shows that from 2001 to 2004, approximately 50% of HIV negative MSM had a HIV test within the previous 12 months and approximately 75% of HIV negative MSM reported ever being tested for HIV (Figure 2) [8].

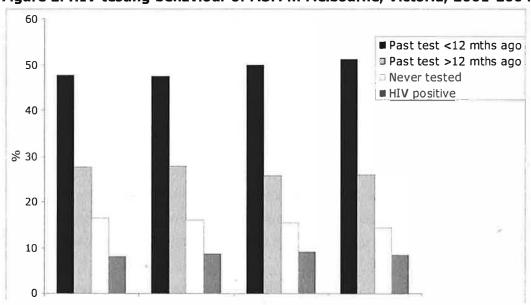


Figure 2: HIV testing behaviour of MSM in Melbourne, Victoria, 2001-2004

Rates of annual STI testing in MSM are also lower than would be hoped for. Further data from this survey shows that between 25 and 55% of MSM were tested for STIs in the previous 12 months. HIV and STI testing patterns vary among the different groups of MSM in Australia and provide an insight as to where testing campaigns should be targeted. Using data drawn from the Melbourne Gay Community Periodic Survey and similar Australian surveys, the National Centre in HIV Social Research found that around 85% of homosexually active men who are socially attached to gay community (GCA) have ever been tested for HIV.[22] This figure is less among men who have sex with men who are not attached

to the gay community (NGCA). In 2000 only 67% of NGCA men had been ever been tested for HIV, an increase from 58% in 1996.

HIV and STIs testing campaigns in Australia

3

3

3

-

2

4

4

In Australia there have been a number of interventions targeted specifically at MSM to increase HIV and STI testing. In response to an increase in HIV notifications in Queensland, the Queensland AIDS Council developed an education and prevention schedule targeting at risk groups through a range of activities including Sex on Premises Venues (SOPV) liaison, indigenous gay men and sister girl project, men's health line, media and internet[23]. NSW Health developed a similar action plan in 2003 with the aim of reducing new HIV infections among gay and homosexually active men[24]. However no published data are available to date to show the impact of such interventions.

Internationally, HIV testing campaigns aimed at MSM have had mixed success in increasing testing in the target group. The 'Try this HIV test' campaign was launched through the British gay press in 1998 and whilst there was high recall of the campaign pictures amongst MSM attending two London clinics, less than 10% of MSM said the campaign influenced their decision to have a HIV test[25]. Also in London, an intervention titled 'gimme 5 minutes' campaign, which was targeted at gay and bisexual men less than 25 years old and of black and south European origin, was more successful. [26] The campaign provided details of a specific clinic and the number of MSM seeking HIV testing at this clinic was compared to two other central London clinics. For the campaign clinic, there was a 4.5 fold increase in the total number of MSM receiving HIV tests. The campaign successfully reached its target group with increases in tests being 14-fold in MSM of South European origin, 6.5-fold in MSM of black origin and 9.5-fold in MSM under 25 years.

The Victorian AIDS Council 'Check It Out' campaign

In Victoria, in response to the increase in notifications of STIs and HIV and reported increases in unprotected anal intercourse, the Victorian AIDS Council (VAC) conducted a health promotion and testing intervention entitled the 'Check It Out' campaign. The campaign was funded by the Department of Human Services and occurred between March 2004 and October 2004. The campaign aimed to decrease the transmission of STIs among MSM, in particular the transmission of HIV, gonorrhoea and chlamydia infection. Using a broad range of media including the internet, the VAC campaign consisted of safe sex messages and information about relevant sites for counselling and testing.

The objectives of the campaign were as follows

- 1. To promote sexual health among MSM
- 2. To increase the proportion of MSM who test at least annually for HIV
- 3. To improve regular testing of other STIs in MSM and
- 4. To reduce the levels of STIs in MSM.

The 'Check It Out' campaign targeted a broad range of MSM with a specific focus on:

- 1. Young and non gay community attached MSM
- 2. Culturally and Linguistically Diverse (CALD) MSM
- 3. Gay community attached MSM

Announced at the Midsumma Carnival in February 2004, the 'Check It Out' campaign was officially launched at the Market Hotel in May 2004. An ongoing website developed specifically for the campaign (www.checkitout.net.au) provided information about HIV and a range of STIs, risks for HIV and STIs, indications for testing, the consequences of coinfection with STIs and HIV and the address and contact details of metropolitan and rural locations for a sexual health check up. A link to the 'Check It Out' website was posted on a chat room (gaydar.com) (Appendix 1), resulting in 3131 click throughs to the 'Check It Out' website for the period of March, April and May 2004. Postcards and campaign posters were placed in a range of locations such as hotels, clubs, gyms, cafes and SOPV that are regularly conducted by the gay community (Appendix 1). The campaign was advertised specifically to the gay and lesbian community through Gay and Lesbian publications and radio, while NGCA MSM were targeted through a tram interior campaign, advertisements in the Leader newspapers and a regional radio campaign. Young MSM were targeted through advertising in 21 educational venues across Victoria and MSM from CALD backgrounds were targeted through additional advertisements on radio and in Chinese, Arabic, Greek and Italian publications. Key time points in the campaign are shown in Table 2.

Table 2: Key Campaign Events

3

3

3

-

2

-

| Key ca | ampaign events | Time Period |
|--------|--|--------------------------------|
| • | Campaign announcement | February 15 th 2004 |
| • | Postcards / campaign posters & gay press advertising | March – July 2004 |
| • | 'Check it Out' Website | Ongoing |
| • | Gaydar web banners | March - May and July 2004 |
| | Campaign Launch | May 29 th 2004 |
| • | CALD Press and radio campaign | June-August 2004 (6 weeks) |
| * | Young MSM campaign in educational venues | July-October 2004 |
| Ř | Tram interior campaign | July-August 2004 (7 weeks) |
| • | Newspaper advertising targeting NGCA | One week in Aug & Sept |

Evaluation of the 'Check It Out' campaign was to consist of evaluation of both the processes and impacts of the campaign. The impact evaluation consisted of focus groups in MSM to determine whether there were changes in knowledge and attitudes (to be reported elsewhere) and a pre and post impact evaluation undertaken by the Burnet Institute to examine the impact of the campaign on testing. Evaluation by the Burnet Institute consisted of three components:

- Before and after lab data analysis to determine whether there was a change in HIV and STI (syphilis, chlamydia and gonorrhoea) testing during and after the campaign. This was achieved through collection of HIV and STI testing data from the laboratories that perform the tests for four Melbourne medical clinics that have a high case load of MSM. Data for males only was collected from before and after the campaign. The laboratory testing data only contains information on gender rather than sexual orientation.
- Sentinel surveillance to obtain an understanding of testing behaviour during and after the campaign and determine testing patterns specifically for MSM (rather than just males. In addition the sentinel surveillance enables the collection of risk factors contributing to observed trends in HIV. This was achieved through collection of demographic data, HIV testing history and sexual risk behaviour information of clients not known to be HIV positive that were

undergoing a HIV test as part of normal clinical practice at five medical clinics with a high case load of MSM. Participation was voluntary and collected data was later merged with HIV laboratory results. Because most laboratories or clinics do not have information regarding sexual orientation of clients, sentinel surveillance was a method to link sexual risk behaviour information with laboratory data.

• Extraction of STI and HIV passive surveillance data from DHS and Burnet Institute, respectively – to determine the number of diagnoses reported before, during and after the campaign.

The three components described above provided indicators to help address the objectives of the campaign as shown in Table 3.

Methodology

1. Lab data analysis

We gained permission from four Melbourne clinics to access laboratory reports of HIV and STI (syphilis, chlamydia, and gonorrhoea) testing for their patients and to the release of clinic attendance data from the Health Insurance Commission (HIC)¹. The Carlton Clinic (CC), Melbourne Sexual Health Clinic (MSHC), the Prahran Market Clinic (PMC) and the Centre Clinic (TCC) were chosen on the basis that they were recommended clinics for patients to attend as part of the 'Check It Out' campaign and also on the basis of either having a high caseload of gay and homosexually active men or being a STI clinic. The Victorian Infectious Diseases Reference Laboratory (VIDRL) performs HIV and syphilis testing for the MSHC and all laboratory testing for the PMC and TCC. Laboratory testing for the Carlton Clinic is performed by Dorevitch Pathology.

Inclusion criteria

Age, gender, test date and data relevant to diagnosis and/or monitoring of infections with HIV, Treponema pallidum (syphilis), Chlamydia trachomatis (Chlamydia) and Neisseria gonorrhoea (Ng) for the calendar years 2002 to 2004 was obtained for patients of the four clinics from VIDRL and Dorevitch as shown in Table 4. Clinic attendance data for the same period was obtained from the HIC or directly from the clinic and where possible included the number of consultations, by month and sex (Table 4). All data was de-identified.

Table 4: Source and data period of HIV and STI testing and consultation data

| Data source | Dates | Clinic | Data type | Data details |
|--------------|---------|-------------|--------------------------------------|--------------------|
| VIDRL | 2002-04 | MSHC | HIV, Syphilis | Age, gender, date, |
| | | PMC | HIV, Syphilis, Chlamydia, Gonorrhoea | test result, |
| | | TCC | HIV, Syphilis, Chlamydia, Gonorrhoea | anatomical site |
| MSHC | 2002-04 | MSHC | Chlamydia, Gonorrhoea | (chlamydia and |
| Dorevitch | 2002-04 | CC | HIV, Syphilis, Chlamydia, Gonorrhoea | gonorrhoea only) |
| HIC / clinic | 2002-04 | All clinics | Clinic attendance | Age, gender, date |

For chlamydia and gonorrhoea testing data the anatomical site of the specimen was grouped into anorectal, oropharyngeal, urethral or urine and specimens taken from other sites were grouped into an 'other' category.

Case Definitions

HIV diagnosis was confirmed by the Western Blot test. Existing HIV infection in clients from two clinics undergoing syphilis, chlamydia and gonorrhoea tests was inferred by a history of HIV genotyping, viral load testing, CD4 T cell counts and or clinical notes indicating HIV infection or receipt of HIV antiretroviral therapy.

Syphilis exposure was defined as the presence of antibodies to Treponema pallidum using TPPA or a recombinant total antibody EIA. Potential active syphilis infection was defined by a positive RPR antibody test in the presence of positive TPPA and/or EIA. This included results that were consistent with a treponemal infection at an indeterminate time and results consistent with recently treated or active syphilis.

Chlamydia infection was identified through positive results by direct immunofluorescence or Polymerase Chain Reaction (PCR) from specimens taken from anorectal, oropharyngeal, urethral or urinary sites.

Gonorrhoea infection was identified through positive results by PCR or the isolation of Neisseria gonorrhoea though bacterial culture from specimens collected from any of the following sites (anorectal, oropharyngeal, urethral or urinary).

Negative and positive test results were allocated according to case definitions. Laboratory codes of specimens and patients were used to identify where there was a series of HIV and STI tests from the one person. Where a positive test result was obtained more than once from the one person, the repeated positive test was deleted from the data set.

Statistical analysis

The 'Check It Out' campaign was targeted at men who have sex with men, thus testing data for males only was analysed. Whilst these data does not contain detail regarding sexual orientation it does contain gender and thus enables reasonable comparisons over time. Data was stored in an Access database and analyses were conducted in STATA version 7. [27] Results are presented as the number and rate of HIV and STI tests conducted over the evaluation period rather than the number of males undergoing tests.

The monthly number of HIV, syphilis, chlamydia and gonorrhoea tests from July 2002 to December 2004 was calculated from testing data from the four clinics. Linear regression was used to estimate whether there was an increase or decrease in the number of HIV and STI tests conducted over time and whether there was an increase or decrease in HIV or STI testing during or following the 'Check It Out' campaign. A categorical variable defining the campaign period and months following the campaign was included in the linear regression models. The validity of the models was assessed by testing the residuals for structure, dependence, outliers, normality and independence.[28]

The anatomical site of chlamydia and gonorrhoea tests (anorectal, oropharyngeal, urethral, urine or other) were compared by year of test using Chi square.

Age of males undergoing HIV and STI testing was grouped into age groups of <13, 13-19, 20-29, 30-39, 40-49, 50-59 and \geq 60 years of age and the frequencies of HIV and STI testing according to age group was calculated. To determine whether there was any change in the age of males undergoing

HIV or STI tests, the proportion of HIV, syphilis, chlamydia and gonorrhoea tests according to age group were compared by year of test using Chi square.

The number of consultations at the four clinics among males, the number of HIV or STI tests among males and date of consultation or test were used to calculate a quarterly test rate from the quarter ending September 2002 to December 2004 for HIV, syphilis, chlamydia and gonorrhoea among men attending the four clinics. Linear regression was used to estimate whether there was a change in the rate of HIV and STI tests conducted over time and whether there was a change in the rate of HIV or STI testing during or following the 'Check It Out' campaign. A categorical variable defining the campaign period and quarters following the campaign was included in the linear regression models. The validity of the models was assessed by testing the residuals for structure, dependence, outliers, normality and independence.[28]

HIV status was assigned to male clients undergoing syphilis, chlamydia and gonorrhoea testing from two clinics. STI testing patterns in HIV positive males were compared to STI testing patterns in HIV negative males using Chi square.

2. Sentinel Surveillance

3

The study commenced on 1 April 2004 at five sentinel sites (four metropolitan and one regional) as shown in Table 5. The sites selected for the pilot study were based on the following criteria:

- served individuals from the populations of interest for HIV/AIDS, specifically MSM;
- 2. Provided sufficient number of HIV/AIDS related consultations; and
- 3. Expressed a willingness to participate.

Table 5: Sentinel Sites and Populations Served

| Clinic | Clinic Type | Populations of Interest |
|-------------|--------------------------------------|--|
| PMC,TCC, CC | GP, specializing in gay men's health | MSM |
| GEE | Sexual health clinic | MSM living in a non-metropolitan region |
| RICH | GP | MSM from culturally and linguistic diverse |
| | | backgrounds |

The campaign ran between February and September 2004 to promote sexual health and improve HIV and STI testing among MSM through a broad range of media. For logistical reasons, the pilot could only commence in April 2004, after the start of the campaign.

Inclusion and exclusion criteria

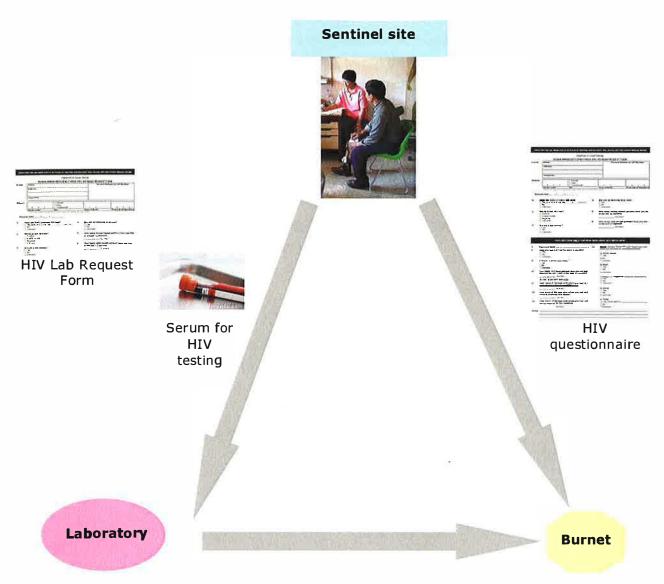
The inclusion criteria were patients who visited the sentinel sites and requested or were deemed by their clinician to require HIV testing. Patients who previously tested positive for HIV, such as those diagnosed overseas, and were undergoing retesting to confirm and assess their status were excluded from the system. Therefore, all participants were considered HIV-negative at the time of HIV testing in the sentinel surveillance.

Questionnaire

A standard paper-based questionnaire (see Appendix i) was developed for the clinician to administer with HIV testing. The questionnaire was designed in consultation with the sentinel sites based on the recommended sexual history obtained in primary care for completion by the doctors during consultation with the patients (Figure 3).[29] The questionnaire also acted as a HIV serology request form and was preceded by an information sheet (see Appendix ii), which stated that completion of the questionnaire was not compulsory and, therefore, completion of the questionnaire implied consent. A unique identifier number was printed on each questionnaire. The top section of the form consisted of demographic and HIV testing and risk information based on the existing HIV laboratory request form. The bottom section of the questionnaire included specific risk behaviour questions related to the sentinel surveillance. The questionnaire obtained information about risk behaviours that may lead to HIV/AIDS. The clinics were able to retain a copy of the entire questionnaire in the patients' medical files. Depending on the structure of the clinic, doctors at some sites completed the entire questionnaire, at other sites the risk factor questionnaire was self completed by the patient. As incentives to participate, the sites were paid \$1.25 per participant surveyed in the system.

Figure 3: Sentinel Surveillance Methodology

2)



Positive HIV results

Laboratory results, data analysis, and information dissemination

Completed questionnaires were placed in a designated box at the sites and collected monthly by the Burnet. All data received by the Burnet were stored in a password protected Access database. No names or name-codes were kept on the database.

The laboratories received only the top section of the questionnaire with the unique identifier number as per standard laboratory practice. In Victoria, all confirmatory HIV testing are performed at the Victorian Infectious Diseases Reference Laboratory (VIDRL). Two of the larger sentinel sites referred all laboratory tests directly to VIDRL, but the remaining three sites referred serum samples for preliminary testing at primary laboratories. Consequently, all eligible participants were initially assumed to be HIV-negative and each month the list of eligible participants was cross matched with the list of newly diagnosed HIV-positive people at VIDRL using the unique identifier number, request

date, date of birth, and postcode on the questionnaire. Patients were defined as MSM if they reported having had one or more male sexual partners in the year before current testing. Sex workers were excluded from the MSM category as they often report a large number of sexual partners.

We obtained information regarding unprotected anal intercourse (UAI) among MSM, including the HIV status of their UAI partners. For MSM who reported UAI with partners of unknown or positive HIV status, we also obtained information regarding the venues where the intercourse occurred. We did not obtain venue information from MSM who did not report UAI or from those who reported UAI only with HIV-negative partners.

The results were primarily descriptive summaries of the demographic and risk behaviour information. P values less than 0.5 were considered significant. Odds ratios (OR) and 95% confidence intervals (CI) were used to assess differences in demographics and risk behaviours between the comparison groups. The analyses were conducted using Stata[30].

Results

1. To increase the proportion of MSM who test at least annually for HIV

a. HIV tests among males

4 medical clinics, lab data, 1 January 2002 to 31 December 2004

A total of 19751 HIV tests, were conducted for the four clinics from 2002 to 2004.

The total number of HIV tests conducted on males attending the four clinics in 2004 was 6793, representing a 3.8% increase in the number of HIV tests from 2002 to 2003 and a 2.8% increase from 2003 to 2004.

Tests over time

Between July 2002 and December 2004, the mean number of HIV tests conducted per month was 555 (median 559, range 480 to 642) (Figure 4). Using linear regression, we found that the number of HIV tests conducted per month did not increase or decrease significantly between July 2002 and December 2004 or during or following the campaign (p>0.05).

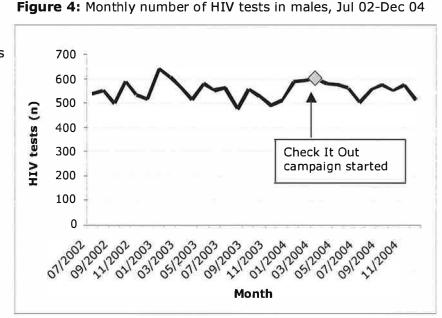
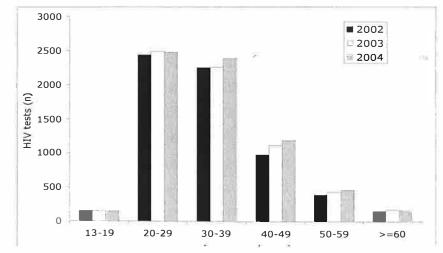


Figure 5: HIV tests (n) in males according to age group, 2002-04 (n=19747)*



HIV tests were most frequently conducted in males aged 20 to 29 years and 30 to 39 years (Figure 5). There was no difference between years in the proportion of HIV tests conducted according to age group.



 \ast excludes 2 tests in males (<13 years) and 2 tests in males age unknown

b. HIV tests conducted among MSM

5 clinics, Sentinel Surveillance, 1 April 2004 to 30 August 2005

Tests over time

3)

Between April 2004 and August 2005 there sentinel sites, April 2004-August 2005 (n=3435)

was an average of 202 HIV tests conducted per month among MSM (range 173 to 238). The average monthly HIV tests conducted for 2004 was 200 and for 2005 was 204(Figure 6).

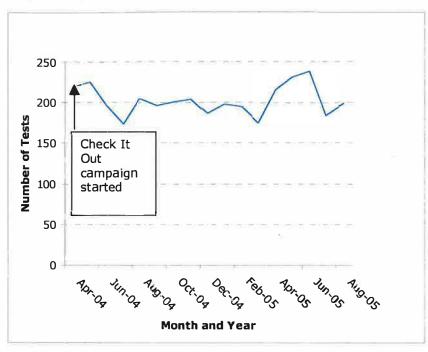


Figure 6: Monthly HIV questionnaires completed MSM at by

c. Demographics of MSM undergoing HIV testing

5 clinics, Sentinel Surveillance, 1 April to 31 Aug 2005

Demographics of MSM

Our analysis focused on the 3435 participants who were classified as MSM, including MSM who reported injecting drug use, but excluded sex workers. The median age of MSM was 36 years (range: 16-80); 38% of tests were conducted among MSM aged 30 to 39 years and 25% among MSM aged 20 to 29 years and 40 to 49 years (Table 6).

There was no statistical difference between time periods in the proportion of HIV tests conducted according to age group.

Table 6: Age Groups of MSM undergoing HIV testing

| | | | n (| %) | | | |
|-----------|--------------------------------|-------|------|-------------------|-------|-------|--|
| Age Group | 1 April 2004 to 31 Dec 2005 | | | 2005 to g 2005 | Total | | |
| | n | % | n | % | n | % | |
| 13 - 19 | 15 | 0.8 | 5 | 0.3 | 20 | 0.6 | |
| 20-29 | 448 | 24.8 | 407 | 24.9 | 855 | 24.9 | |
| 30-39 | 702 | 38.9 | 604 | 37.0 | 1306 | 38.0 | |
| 40-49 | 434 | 24.1 | 417 | 25.6 | 851 | 24.8 | |
| 50-59 | 138 | 7.7 | 131 | 8.0 | 269 | 7.8 | |
| 60+ | 55 | 3.1 | 50 | 3.1 | 105 | 3.1 | |
| Unknown | 11 | 0.6 | 18 | 1.1 | 29 | 0.8 | |
| Total | 1803 | 100.0 | 1632 | 100.0 | 3435 | 100.0 | |

The majority of MSM (77%) were born in Australia (Table 7), followed by the United Kingdom, (3%), New Zealand (3%), Malaysia(2%) and The United States of America (USA) (1%). Overall 8% of MSM testing at

the 5 sentinel clinics were from culturally and linguistic diverse backgrounds (born in Asia or Africa) (Table 8). There was no statistical difference between time periods in the proportion of HIV tests conducted with a Region of Birth of Africa or Asia.

Table7: Country of birth by HIV status among men who have sex with men

3

| | | n (%) | | | | | | | | | |
|------------------|------|-------------------|------------------|-------|------|------|--|--|--|--|--|
| Country of birth | | 4 to 31 Dec 05 | 1 Jan 2005 20 | Total | | | | | | | |
| | n | % | n | % | n | % | | | | | |
| Australia | 1405 | 77.9 | 1255 | 76.9 | 2660 | 77.4 | | | | | |
| United Kingdom | 53 | 2.9 | 62 | 3.8 | 115 | 3.3 | | | | | |
| New Zealand | 57 | 3.2 | 51 | 3.1 | 108 | 3.1 | | | | | |
| Malaysia | 27 | 1.5 | 24 | 1.5 | 51 | 1.5 | | | | | |
| USA | 15 | 0.8 | 19 | 1.2 | 34 | 1.0 | | | | | |
| Vietnam | 19 | 1.1 | 10 | 0.6 | 29 | 0.8 | | | | | |
| South Africa | 14 | 0.8 | 13 | 0.8 | 27 | 0.8 | | | | | |
| Indonesia | 11 | 0.6 | 10 | 0.6 | 21 | 0.6 | | | | | |
| Italy | 8 | 0.4 | 8 | 0.5 | 16 | 0.5 | | | | | |
| Philippines | 8 | 0.4 | 8 | 0.5 | 16 | 0.5 | | | | | |
| Singapore | 9 | 0.5 | 5 | 0.3 | 14 | 0.4 | | | | | |
| Other | 127 | 7.0 | 130 | 8.0 | 257 | 7.5 | | | | | |
| Unknown | 50 | 2.8 | 37 | 2.3 | 87 | 2.5 | | | | | |
| Total | 1803 | 100 | 1632 | 100 | 3435 | 100 | | | | | |

Table8: Region of birth by HIV status among men who have sex with men

| | n (%) | | | | | | | | |
|--------------------------------|-------|--------------------|------|-----------------|-------|-------|--|--|--|
| Country of birth | | 4 to 31 Dec 005 | | to 31 Aug 05 | Total | | | | |
| | n | % | n | % | n | % | | | |
| Africa | 25 | 1.4 | 28 | 1.7 | 53 | 1.5 | | | |
| Asia | 122 | 6.8 | 104 | 6.4 | 226 | 6.6 | | | |
| Australia | 1405 | 77.9 | 1255 | 76.9 | 2660 | 77.4 | | | |
| America Other | 11 | 0.6 | 9 | 0.6 | 20 | 0.6 | | | |
| America North (USA and Canada) | 21 | 1.2 | 25 | 1.5 | 46 | 1.3 | | | |
| Europe | 46 | 2.6 | 46 | 2.8 | 92 | 2.7 | | | |
| Oceania (Mainly NZ) | 61 | 3.4 | 57 | 3.5 | 118 | 3.4 | | | |
| UK/Ireland | 62 | 3.4 | 71 | 4.4 | 133 | 3.9 | | | |
| Unknown | 50 | 2.8 | 37 | 2.3 | 87 | 2.5 | | | |
| Grand Total | 1803 | 100.0 | 1632 | 100.0 | 3435 | 100.0 | | | |

The majority of MSM (91%) resided in Metropolitan Melbourne (Southern Metropolitan – 48%, North-West Metropolitan - 34%, Eastern Metropolitan - 10%) followed by Barwon South-west - 1% (Table 9).

Table 9: Place of residence by HIV status among men who have sex with men

| | | | | n (%) | | |
|------------------|---------------------------------------|------------------------|------|-------------------|---------|-----------|
| Victorian region | · · · · · · · · · · · · · · · · · · · | 2004 to c 2005 % | | 005 to 31 2005 | To n | otal % |
| Southern Metro | 839 | 46.5 | 791 | 48.5 | 1630 | 47.5 |
| North-West Metro | 606 | 33.6 | 556 | 34.1 | 1162 | 33.8 |
| Eastern Metro | 177 | 9.8 | 162 | 9.9 | 339 | 9.9 |
| Barwon S/W | 23 | 1.3 | 16 | 1.0 | 39 | 1.1 |
| Grampians | 9 | 0.5 | 10 | 0.6 | 19 | 0.6 |
| Gippsland | 8 | 0.4 | 8 | 0.5 | 16 | 0.5 |
| Loddon-Mallee | 13 | 0.7 | 9 | 0.6 | 22 | 0.6 |
| Hume | 7 | 0.4 | 4 | 0.2 | 11 | 0.3 |
| Unknown | 121 | 6.7 | 76 | 4.7 | 197 | 5.7 |
| Grand Total | 1803 | 100.0 | 1632 | 100.0 | 3435 | 100.0 |

d. Risk Behaviour of MSM undergoing HIV testing

5 clinics, Sentinel Surveillance, 1 April 2004 to 30 August 2005

Unprotected anal intercourse (UAI)

UAI was reported by 59% of MSM, 59% between and there was no statistical difference in the proportions between time periods (Table 10). The proportion reporting UAI was similar across age groups (except for those aged above 60 years) (Table 10).

Table 10: Proportion reporting unprotected anal intercourse (UAI) by age group among MSM

| Ago Croup | 1 April 20 | 1 April 2004 to 31 Dec 2004 | | | 1 Jan 2005 to 31 Aug 2005 | | | Total | | |
|-----------|------------|-----------------------------|-------|---------|---------------------------|-------|---------|---------|-------|--|
| Age Group | UAI (n) | All (n) | % UAI | UAI (n) | All (n) | % UAI | UAI (n) | All (n) | % UAI | |
| 13 - 19 | 10 | 15 | 66.7 | 1 | 5 | 20.0 | 11 | 20 | 55.0 | |
| 20-29 | 278 | 448 | 62.1 | 240 | 407 | 59.0 | 518 | 855 | 60.6 | |
| 30-39 | 422 | 702 | 60.1 | 365 | 604 | 60.4 | 787 | 1306 | 60.3 | |
| 40-49 | 250 | 434 | 57.6 | 239 | 417 | 57.3 | 489 | 851 | 57.5 | |
| 50-59 | 76 | 138 | 55.1 | 76 | 131 | 58.0 | 152 | 269 | 56.5 | |
| 60+ | 27 | 55 | 49.1 | 20 | 50 | 40.0 | 47 | 105 | 44.8 | |
| Unknown | 8 | 11 | 72.7 | 13 | 18 | 72.2 | 21 | 29 | 72.4 | |
| Total | 1071 | 1803 | 59.4 | 954 | 1632 | 58.5 | 2025 | 3435 | 59.0 | |

Unprotected anal intercourse (UAI) by partner HIV status

Among MSM who reported having had UAI 12% reported having had UAI with HIV-positive partners and 43% with partners of unknown HIV status (Table 11). There was no statistical difference in the proportions between time periods.

Table 11: Number and HIV status of unprotected anal intercourse (UAI) partners among MSM that reported UAI in the previous year

| HIV-positive partners | | 1 April 2004 to 31 Dec 2005 | | 1 Jan 2005 to 31 Aug 2005 | | al |
|---|---------------------|--------------------------------|--------------|---------------------------------|-------|------|
| | n | % | n | % | n | % |
| HIV-positive partners | | | | | | |
| Number of UAI MSM who had UAI with HIV-positive men: | 130 | 12.1 | 118 | 12.4 | 248 | 12.2 |
| HIV-unknown partners | | | | | | |
| Number of UAI MSM who had UAI with men of unknown HIV status: | 459 | 42.9 | 409 | 42.9 | 868 | 42.9 |
| HIV-negative partners | | | | | | |
| Number of UAI MSM who had UAI with HIV-negative men: | 575 | 53.7 | 476 | 49.9 | 1051 | 51.9 |
| Total MSM reporting UAI * Data are not mutually exclusive; individuals may report UAI with o | 1071* ne or more | e partner t | 954* ypes | | 2025* | |

e. Proportion of MSM who test at least annually for HIV

5 clinics, Sentinel Surveillance, 1 April 2004 to 30 August 2005

Previous HIV testing

3

Overall 43% of MSM in 2004 and 42% of MSM in 2005 reported having had HIV testing in the year prior to current testing (Table 12). There was no statistical difference between time periods.

Table 12: HIV testing history by HIV status among MSM

| | | | | (0() | | 100 | | |
|--|-----------------------------------|-------|------------------------------|-------|-------|-------|--|--|
| Timing of last negative HIV test | n (%) | | | | | | | |
| | 1 April 2004 to 31 Dec 2005 | | 1 Jan 2005 to 31 Aug 2005 | | Total | | | |
| | n | % | n | % | n | % | | |
| <12 months | 771 | 42.8 | 678 | 41.5 | 1449 | 42.2 | | |
| 1 to 3 years | 573 | 31.8 | 534 | 32.7 | 1107 | 32.2 | | |
| >3 years | 186 | 10.3 | 188 | 11.5 | 374 | 10.9 | | |
| No previous test | 130 | 7.2 | 92 | 5.6 | 222 | 6.5 | | |
| Unknown | 143 | 7.9 | 140 | 8.6 | 283 | 8.2 | | |
| Total | 180 3 | 100.0 | 1632 | 100.0 | 3435 | 100.0 | | |

Previous HIV testing by age group

The proportion of MSM aged between 30 and 39 years (highest risk group for HIV) that reported having had HIV testing within the last year was 40% in 2004 and 42% in 2005 (Table 13). The proportion of MSM aged 20 to 29 having had HIV testing within the last year was slightly higher at 49% in 2004 and 46% in 2005.

Table 13: MSM having had HIV testing within the last year, by age group

| Age Group | Test < year (n) | 2004 to 3 2004 All (n) | % Test | Test < | 2005 to 3 2005 | | Took 4 | Total | |
|-----------|-----------------|------------------------------|--------|-------------|-------------------|------------------|-----------------------|---------|------------------|
| Age Group | year | All (n) | % Test | Test < | | | T | | |
| Age Group | | 711 (11) | < year | year (n) | All (n) | % Test < year | Test < year (n) | All (n) | % Test < year |
| 13 - 19 | 8 | 15 | 53.3 | 2 | 5 | 40.0 | 10 | 20 | 50.0 |
| 20-29 | 220 | 448 | 49.1 | 188 | 407 | 46.2 | 408 | 855 | 47.7 |
| 30-39 | 281 | 702 | 40.0 | 253 | 604 | 41.9 | 534 | 1306 | 40.9 |
| 40-49 | 189 | 434 | 43.5 | 170 | 417 | 40.8 | 359 | 851 | 42.2 |
| 50-59 | 50 | 138 | 36.2 | 39 | 131 | 29.8 | 89 | 269 | 33.1 |
| 60+ | 18 | 55 | 32.7 | 17 | 50 | 34.0 | 35 | 105 | 33.3 |
| Unknown | 5 | 11 | 45.5 | 9 | 18 | 50.0 | 14 | 29 | 48.3 |
| Total | 771 | 1803 | 42.8 | 678 | 1632 | 41.5 | 1449 | 3435 | 42.2 |

Concurrent STI testing, history of STIs

In 2004, 72% of MSM were concurrently tested for other STIs on the day of sentinel surveillance HIV testing, compared to 74% in 2005 (Table 14). This difference was not statistically significant.

In 2004, 17% of MSM reported having had a STI in the past year compared to 15% in 2005 (Table 13). This difference was statistically significant (p=0.03)

1

Table 14: MSM Concurrent STI testing, history of STIs

| | | | n (| %) | | |
|----------------------------------|---------------------|-----------------|------------------------------|-------|-------|-------|
| | 1 April : 31 Dec | 2004 to 2005 | 1 Jan 2005 to 31 Aug 2005 | | Total | |
| | n | % | n | % | n | % |
| Concurrent STI STI in past | 1296 | 71.9 | 1203 | 73.7 | 2499 | 72.8 |
| year | 305 | 16.9 | 238 | 14.6 | 543 | 15.8 |
| Total MSM | 1803 | 100.0 | 1632 | 100.0 | 3435 | 100.0 |

2. To improve regular testing of other STIs in MSM

a. Number of syphilis tests conducted among males

4 medical clinics, Lab data, 1 January 2002 to 31 December 2004

Syphilis

9

The total number of syphilis tests conducted on males in 2004 was 7511. There was an increase in the number of syphilis tests between 2002 and 2004, with 14.3% increase in syphilis tests from 2002 to 2003 and a further increase of 11.2% from 2003 to 2004.

Tests over time

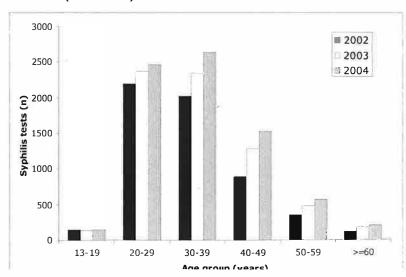
Between July 2002 and December 2004, the mean number of syphilis tests conducted per month was 576 (median 583, range 454 to 684) (Figure 6). Using linear regression, we found that the monthly number of syphilis tests increased by 5% between July 2002 and December 2004 (p=0.006), however during the there was no further increase beyond what had already been observed, suggesting that the increase was due to factors other than the campaign.

Age group

Syphilis tests were most frequently conducted in males in the 20-29 and 30-39 year age groups (Figure 7). There was a significant difference in different years in the proportion of syphilis tests conducted according to age group (Pearson chi2 (10) = 88.4249, Pr<0.001). The proportion of all syphilis tests decreased by 5.6% in the 20-29 year age group and increased by 4.6% in the 40-49 year age group.

Figure 7: Syphilis tests (n) in males according to age group, 2002-04 (n=19997)*

Month

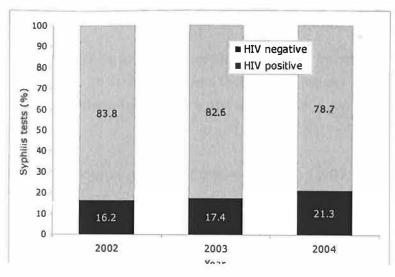


* excludes 2 tests in males aged < 13 years and 2 tests in males age unknown

HIV status

The proportions of syphilis tests from two clinics conducted in HIV positive and HIV negative males from 2002 to 2004 were compared using Chi square. A total of 5693 syphilis tests from males attending the two clinics were conducted from 2002 to 2004 (figure 8). In 2002, 16.2% of all syphilis tests for the two clinics were conducted in HIV positive men. The proportion of syphilis tests in HIV positive men increased significantly to 21.3% in 2004 (Pearson chi2(2) = 19.1425, Pr < 0.001), suggesting that much of the observed increase in syphilis testing may be due to increased testing in HIV positive males.

Figure 8: Proportion of syphilis tests conducted in HIV negative and HIV positive males, 2002-04 (n=5963)



b. Number of chlamydia tests conducted among males

4 medical clinics, Lab data, 1 January 2002 to 31 December 2004

Chlamydia

3

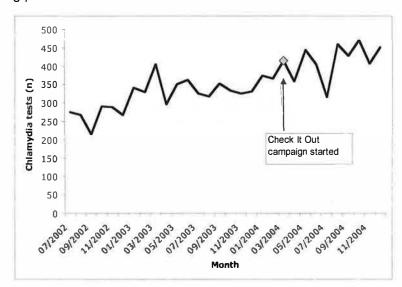
3

The total number of chlamydia tests conducted on males in 2004 was 9986 representing a 10% increase in the number of chlamydia tests conducted on males in 2003. In 2002, chlamydia testing data for one clinic was only available for six months, so it could not be determined whether there was an increase in the annual number of chlamydia tests from 2002 to 2003.

Tests per month

Between July 2002 and December 2004, the mean number of chlamydia tests conducted per month was 353 (median 346, range 216 to 471) (Figure 9). Using linear regression, we found that the monthly number of chlamydia tests increased by 5% between July 2002 and December 2004 (p=0.001), however during the campaign there was no further increase beyond what had already been observed, suggesting that the increase was due to factors other than the campaign.

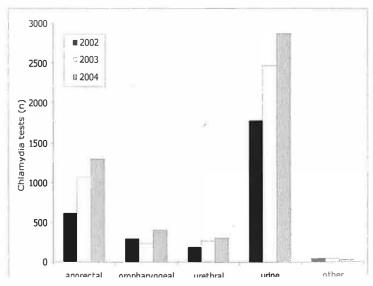
Figure 9: Monthly number of chlamydia tests, Jul 02 - Dec 04



Anatomical site of tests

Chlamydia tests were most frequently conducted on urine samples in tests from the three clinics that anatomical site was available (Figure 10), although the proportion of chlamydia tests conducted on urine decreased from 60.8% in 2002 to 58.5% in 2004. The proportion of chlamydia tests conducted on anorectal specimens significantly increased in the same period from 21.1% to 26.4% (Pearson chi2 (8) = 86.9141, Pr<0.001).

Figure 10: Anatomical site of chlamydia tests, 2002-04*

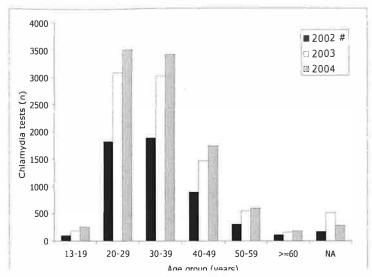


^{*}Anatomical site was not available from one clinic

Age group

Chlamydia tests were most frequently conducted in males in the 20-29 and 30-39 year age groups (Figure 11), although there was no difference between years in the proportion of chlamydia tests according to age group.

Figure 11: Number of chlamydia tests conducted in males in 2002-04 according to age group (n=24259)*

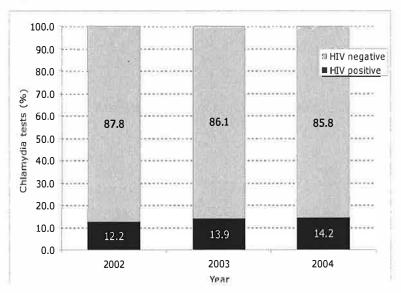


* excludes 1 test in a male aged <13 years # 2002 data contains tests for 12 months (3 clinics) and for 6 months (1 clinic)

HIV status

The proportions of chlamydia tests from two clinics conducted in HIV positive and HIV negative males from 2002 to 2004 were compared using Chi square. A total of 3387 chlamydia tests from males attending the two clinics were conducted from 2002 to 2004 (Figure 12). In 2002, 12.2% of all chlamydia tests for the two clinics were conducted in HIV positive men. The proportion of chlamydia tests in HIV positive men increased slightly in 2003 and 2004 but was not statistically significant Pearson chi2(2) = 4.4737, Pr = 0.107)

Figure 12: Proportion of chlamydia tests conducted in HIV negative and HIV positive males, 2002-04 (n=3387)



c. Number of gonorrhoea tests conducted among males

4 medical clinics, Lab data, 1 January 2002 to 31 December 2004

Gonorrhoea

The total number of gonorrhoea tests conducted on males in 2004 was 10341 representing a 6.3% increase in the number of gonorrhoea tests conducted on males in 2003. In 2002, gonorrhoea testing data for one clinic was only available for six months, so it could not be determined whether there was an increase in the annual number of tests from 2002 to 2003.

Tests per month

Between July 2002 and December 2004, between the four clinics, the mean number of gonorrhoea tests conducted per month was 530 (median 527, range 309 to 727) (Figure 13). Using linear regression, we found that the monthly number of gonorrhoea tests increased by 9% between July 2002 and December 2004 (p<0.001), however during the campaign there was no further increase beyond what had already been observed, suggesting that the increase was due to factors other than the campaign.

Anatomical site of tests

Gonorrhoea tests were most frequently conducted on urine, anorectal and oropharyngeal samples in tests from the three clinics that anatomical site was available (Figure 14). The proportion of gonorrhoea tests conducted on urine increased from 32.3% in 2002 to 35.2% in 2004, while the proportion of anorectal specimens remained constant at around 29% and the proportion of oropharyngeal specimens decreased in the same period from 29.9% to 26.8% (Pearson chi2(8) = 58.8509 Pr <0.001).

Figure 13: Monthly number of gonorrhoea tests, Jul 02-Dec 04

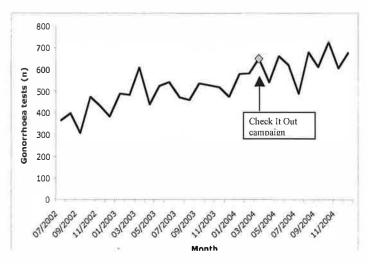
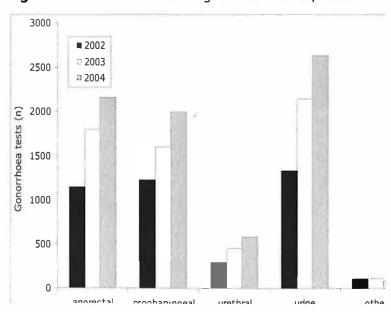


Figure 14: Anatomical site of gonorrhoea tests, 2002-04*



^{*}Anatomical site was not available from one clinic

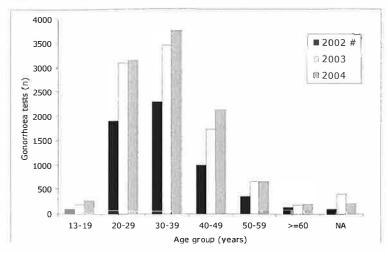
Age group

Gonorrhoea tests were most frequently conducted in males in the 20-29 and 30-39 year age groups in 2002, 2003 and 2004 (Figure 15). There was a significant difference across years in the proportion of gonorrhoea tests conducted according to age group (Pearson chi2(10)=71.5675, Pr = 0.000) with a 3.7% increase in the proportion of tests in the 40-49 year age group and around 2.5% decreases in the proportion of tests in the 20-29 and 30-39 year age groups.

HIV status

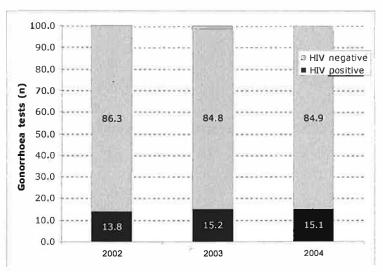
The proportions of gonorrhoea tests from two clinics conducted in HIV positive and HIV negative males from 2002 to 2004 were compared using Chi square. A total of 15439 gonorrhoea tests from males attending the two clinics were conducted from 2002 to 2004 (Figure 16). In 2002, 13.8% of all gonorrhoea tests for the two clinics were conducted in HIV positive men. The proportion of gonorrhoea tests in HIV positive men increased slightly to 15.11% in 2004 but was not statistically significant (Pearson chi2 (2) = 4.3750, Pr = 0.112).

Figure 15: Number of gonorrhoea tests conducted in males in 2002-04 according to age group (n=25912)*



- * excludes 2 tests in males aged <13 years
- # 2002 data contains tests for 12 months (3 clinics) and for 6 months (1 clinic)

Figure 16: Proportion of gonorrhoea tests conducted in HIV negative and HIV positive males, 2002-04 (n=15439)



3. To reduce the levels of STIs, and HIV, in MSM.

a. Number of infectious syphilis cases

DHS passive/enhanced surveillance data, 1995 to 2005

campaign) there were 85 infectious (to 30 September)
syphilis cases reported (63 were

MSM); the highest number for ten
years. In 2005 (to the end of
September) there have already

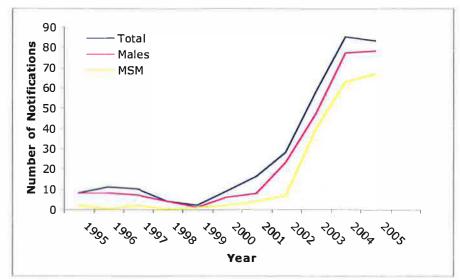
been 83 infectious symbilis cases

During 2004 (the year of the

been 83 infectious syphilis cases reported, of which 67 are among MSM, this compares to a total of 56 during the same time period in

2004.

Figure 17: Number of infectious syphilis notifications, 1995 to 2005 (to 30 September)



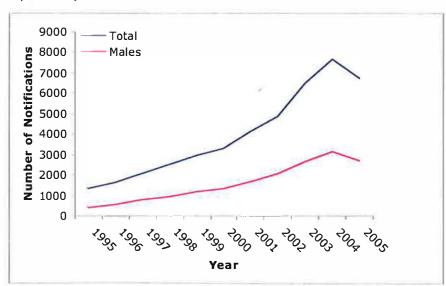
b. Number of chlamydia cases

DHS passive/enhanced surveillance data, 1995 to 2005

During 2004 (the year of the campaign) there were 7634 chlamydia cases reported (3154, 41% were males), compared to a total of 1304 notifications in 1995. In 2005 (to the end of September) there have been 6725 cases reported, of which 2694 (40%) were among males, this compares to a total of 5683 during the same time period in 2004.

As enhanced data are collected on less than 40% of cases, the number of cases classified as MSM has not been reported here.

Figure 18: Number of chlamydia notifications, 1995 to 2005 (to 30 September)



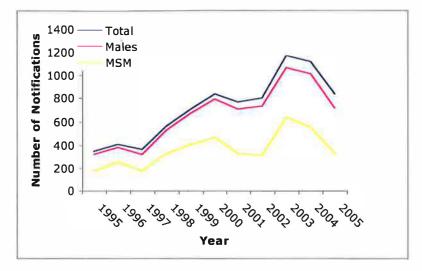
c. Number of gonorrhoea cases

DHS passive/enhanced surveillance data, 1995 to 2005

During 2004 (the year of the campaign) there were 1112 gonorrhoeae cases reported, 1010 (91%) were males, compared to a total of 347 notifications in 2995. In 2005 (to the end of September) there have been 834 cases reported, of which 718 (86%) are among males. This compared to a total of 848 during the same time period in 2004.

As enhanced data are not collected on all cases, the number of cases classified as MSM is likely to be underestimated.

Figure 19: Number of gonorrhoea notifications, 1995 to 2005 (to30 September)

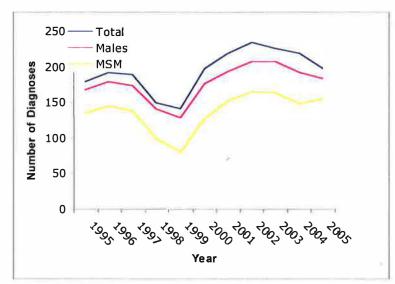


d. Number of HIV Diagnoses in Victoria

Burnet Institute/DHS passive/enhanced surveillance data, 1995 to 2005

During 2004 (the year of the campaign) there were 217 total HIV diagnoses reported, 147 (68%) were among MSM. In 2005 (to the end of September) there were 197 cases reported, 154 (78%) were among MSM. This 197 compares to only 160 during the same time period in 2004.

Figure 20: Number of HIV diagnoses, 1995 to 2005 (to30 September)

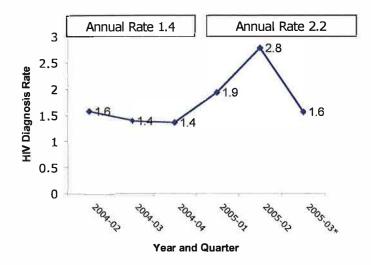


e. HIV Diagnosis Rate per 100 tests among MSM

5 clinics, Sentinel Surveillance, 1 April 2004 to 30 August 2005

The annual diagnosis rate increased from 1.4 per 100 tests in 2004 to 2.2 diagnoses per 100 tests in 2005. The highest rate was observed in the second quarter of 2005.

Figure 21: HIV diagnoses rate, 1 April 2004 to 30 August 2005, by quarter



Discussion

This evaluation was conducted to assess the impact of the Victorian AIDS Council's 'Check it Out Campaign' on HIV and STI testing among MSM in Victoria. The results fro this part of the evaluation should be interpreted in combination with the process evaluation. Due to a lack of existing evaluation mechanisms we implemented two studies (sentinel surveillance and a retrospective laboratory data analysis). Both methods had advantages and limitations but we felt the combination of methods would provide the most valuable results and address the objectives in the campaign. Although the sentinel surveillance system was not implemented until the month of commencement of the campaign, and therefore not able to provide baseline, data the sentinel surveillance did provide data for 2005, enabling comparisons of detailed testing and risk behaviour during and following the campaign. The laboratory data analysis was conducted mainly to provide a baseline in HIV testing numbers, prior to the campaign.

Did the campaign increase HIV testing among MSM?

The evaluation showed that HIV tests among males at four medical clinic who see a high case load of MSM did not increase significantly between July 2002 and December 2004 or during (March 2004 and October 2004) or following the 'Check It Out' campaign. In addition, the average number of HIV tests conducted among MSM was 200 during the campaign compared to 204 tests following the campaign. These results would suggest that the campaign did not result in an increase in HIV testing among MSM that could be observed at clinics who see a high case load of MSM.

Did the campaign increase annual HIV testing among MSM?

At the sentinel clinic, only 42% of MSM reported annual HIV testing. The proportion during the campaign (43%) compared to following the campaign (42%) and the proportions in other categories (past HIV test between 1 and 3 years or greater than 3 years) were not statistically different. If the campaign had resulted in a large impact of individuals seeking HIV testing you would probably expect a change in the testing patterns of MSM following the campaign compared to during, however this was not observed in our evaluation results.

At the sentinel clinics 41% of MSM aged 30 to 39 years reported a previous HIV test in the past year, compared to 48% of MSM aged 20 to 29 years. Considering that greater than 43% of new HIV diagnoses in 2004 in Victoria were among MSM aged 30 to 39 years our results suggest ongoing public health strategies may be required to encourage MSM, especially those aged 30 to 39 years, to adopt more regular HIV/STI screening. HIV counselling and testing have been found to reduce high risk sexual behaviour among HIV-positive people.[31] The guidelines released by the Sexually Transmitted Infections in Gay Men Action Group in Sydney encourage sexually active MSM to seek at least annual STI testing for HIV, syphilis, gonorrhoea, chlamydia, and hepatitis A and B.[32]

What were the characteristics of MSM undergoing HIV testing relative to the target groups?

The target groups of the campaign were; young and non gay community attached MSM; culturally and linguistically diverse (CALD) MSM and gay community attached MSM. At the sentinel clinics included in the evaluation, 38% of tests were conducted among MSM aged 30 to 39 years and 25% among MSM aged 20 to 29 years and 40 to 49 years, highlighting a reasonable number of MSM in the target age groups were captured in the evaluation.

The majority of MSM (77%) tested at the sentinel surveillance clinics were born in Australia and 23% born in other countries (8% were CALD); with no statistical difference in these proportions during and following the campaign. The analysis fort CALD groups may have been more robust with a larger sample size; however Melbourne Sexual Health Centre (who sees CALD MSM) could not be part of the pilot study.

The campaign targeted non gay community attached MSM, however we did not capture this information as part of sentinel surveillance and thus could not specifically evaluate the impact of testing on this group. However it is likely this target group would be small and may not attend the sentinel clinics and even if captured it is likely we would not be able to see any impact on the overall number of tests.

What were the risk behaviours of MSM undergoing HIV testing?

Through sentinel surveillance we found 59% of all MSM reported having had UAI in the last year with no statistical difference in this proportion during and following the campaign. The proportion reporting UAI was similar across the age groups, confirming that health prevention strategies should encompass all MSM, irrespective of age.

Twelve percent of MSM reported UAI with HIV-positive MSM and 43% of MSM who had UAI reported that this occurred with male partners of unknown HIV status. It is likely that partners of unknown HIV status were casual partners as the Melbourne Gay Periodic Survey showed 55% of participants with casual partners did not disclose their HIV serostatus to any casual partners.[33] Studies in both Melbourne and Sydney have shown that UAI with casual partners is a significant risk factor for HIV.[33, 34] Subsequently, education should not only focus on reducing the occurrence of acquiring HIV from a regular partner but also include strategies aimed at decreasing UAI with casual partners and improving disclosure of HIV status with casual partners.

Did the campaign increase STI testing among MSM?

The lab data extraction showed that there was a general increase in STI testing, but it appeared unrelated to the campaign i.e. testing had begun to increase prior to the campaign. Much of the increase, especially for syphilis related to increased testing among HIV positive MSM. Anectodotal reports from clinicians suggest in 2003/2004 quarterly testing for syphilis commenced among HIV positive MSM in response to an outbreak of syphilis in Victoria (40% among HIV positive men).[35]

Did the campaign reduce STI, including HIV, levels among MSM?

During the campaign HIV diagnoses among MSM decreased compared to 2003, however in 2005 diagnoses have increased with a total of 1997 to the end of September (compared to 160 in 2004). The diagnoses rate per 100 tests captured through sentinel surveillance in 2005 was higher than 2004, suggesting the increase in diagnose in 2005 is unrelated to testing. These data would suggest that the campaign had not had an impact on reducing HIV levels among MSM.

Passive surveillance data have also shown the number of notifications of STIs (infectious syphilis, gonorrhoea and chlamydia) reported between Jan and Sept 2005 was higher than the number reported in the same time period 2004. Enhanced surveillance data for infectious syphilis showed the increase was predominantly among MSM. For gonorrhoea and chlamydia, there was much lower completion rate of enhanced surveillance forms and thus the sexual orientation of the cases are not available for all male cases; however the observed increase in cases among males is likely to reflect increases among MSM.

Limitations of Sentinel Surveillance

The sentinel surveillance pilot system relied on clinicians to complete the questionnaire that asked some highly sensitive sexual history, such as the number of UAI partners and the HIV status of these partners. In the pilot study, some doctors asked the patients to self complete the questionnaire rather than obtain the responses themselves. This was due to the a combination of two reason 1) The clinicians felt it was a more efficient use of busy consultation time and (2) the clinicians felt it was more appropriate to allow the patients to directly answer the sexual behaviour questions themselves. As the surveillance system expand to other sentinel sites, especially in non-sexual health specific clinics, the format and wording of the questionnaire will be modified to allow patients to complete the risk factor section of the questionnaire themselves. In addition implementation of sentinel surveillance at clinics that see a high case load of MSM only focuses on MSM who attend sexual health clinics. Thus the results of the sentinel surveillance cannot be generalized to the general MSM community.

Limitations of the laboratory data extraction

The extraction and analysis of data from the laboratory was a very extensive and time consuming process and although it provided use with some baseline testing data, these data only related to males. Like sentinel surveillance, data was extracted from the laboratories serving clinics that see a high case load of MSM, however the results cannot be generalized to the general MSM community.

We found the sentinel surveillance provided us with data specifically about MSM (rather than just males in the lab extraction), it was a more timely and efficient tool to evaluate campaigns and captured both testing & sexual behaviour. The Burnet Institute in collaboration with the Department of Human Services, The Victorian Infectious Diseases Reference Laboratory and the Melbourne Sexual Health Centre will expand sentinel surveillance to include not only HIV/AIDS, but also genital chlamydia and hepatitis C at additional primary care sites in Victoria by the end of 2005.

Conclusion

The results of the evaluation suggest the campaign did not result in more HIV or STI testing among MSM at the clinics selected, did not result in increased annual HIV testing among MSM at the clinics and did not reduce the levels of HIV, infectious syphilis or chlamydia in Victoria in 2005. These results should be interpreted in combination with the other components of the evaluation. It is possible that small increase in testing may be been observed in certain groups, but the sensitivity of the evaluation could not detect it. Testing is an important prevention strategy and should still be considered as part of future campaigns. The results from this and the other parts of the evaluation need to be considered when designing future campaigns.

References

- 1. Burnet Institute, *Surveillance of Human Immunodeficiency Virus in Victoria*. 2005: p. Department of Human Services, Victoria.
- 2. National Notifiable Diseases Surveillance System, Number of notifications of Chlamydial Infection, Australia, in the period of 1991 to 2004 and year-to-date notifications for 2005. Australian government, Department of Health and Ageing, [report online], 2005: p. Available at: http://www1.health.gov.au/cda/Source/Rpt_3.cfm Accessed October 10, 2005.
- 3. National Notifiable Diseases Surveillance System, *Number of notifications of Gonoccocal Infection, Australia, in the period of 1991 to 2004 and year-to-date notifications for 2005.*Australian government, Department of Health and Ageing, [report online], 2005: p. Available at: http://www1.health.gov.au/cda/Source/Rpt 3.cfm. Accessed October 10, 2005.
- 4. Guy, R., et al., Sustained increase in infectious syphilis notifications in Victoria. MJA, 2005. **183**(4): p. 218-9.
- 5. Jin, F., et al., *Epidemic syphilis among homeosexually active men in Sydney.* MJA, 2005. **183**(4): p. 179-83.
- 6. Fenton, K., A. Nicoll, and G. Kinghorn, *Resurgence of syphilis in England: Time for more radical and nationally coordinated approaches.* Sexually Transmitted Infections, 2001. **77**(5): p. 309-10.
- 7. Centers for Disease Control and Prevention, *Primary and secondary syphilis among men who have sex with men New York City, 2001.* MMWR Morb Mortality Wekly Rep, 2002. **51**: p. 853-856.
- 8. Hull, P., et al., *Gay community periodic survey: Melbourne 2004 [monograph online]*. National Centre in HIV Social Research, 2004: p. Available at: http://nchsr.arts.unsw.edu.au/pdf%20reports/Melbourne2004.pdf, Accessed Oct 10, 2005.
- 9. Wasserheit, J., Epidemiological Synergy: Interrelationships between human immunodeficiency virus infection and other sexually transmitted diseases. Sexually Transmitted Diseases, 1992. **19**(2): p. 61-77.
- 10. Simonsen, J., et al., *Human immunodefociency virus infection among men with sexually transmitted diseases. Experience from a center in Africa.* New England Journal of Medicine, 1988. **319**(5): p. 274-278 in {Wasserheit, 1992}.
- 11. Cohen, M., et al., Reduction of concentration of HIV-1 in semen after treatment of urethritis: implications for prevention of sexual transmission of HIV-1. The Lancet, 1997. **349**(9069): p. 1868-1873.
- 12. Atkins, M., et al., Fluctuations of HIV load in semen of HIV positive patients with newly acquired sexually transmitted diseases. British Medical Journal, 1996. **313**: p. 342-3.
- 13. Korenromp, E., et al., Model-based evaluation of single round mass treatment of sexually transmitted diseases for HIV control in a rural African population. AIDS, 2000. **14**(5): p. 573-93.
- 14. Sangani, P., G. Rutherford, and D. Wilkinson, *Population-based interventions for reducing sexually transmitted infections, including HIV infection*. The Cochrane Database of Systematic Reviews, 2004(3): p. Art. No: CD001220. DOI: 10.1002/14651858.CD001220.pub2.
- Piepert, J.F., *Genital chlamydia infections*. New England Journal of Medicine, 2003. **349**: p. 2424-2430.
- 16. Stratigos, J., et al., An epidemiological study of syphilis incognito, an emerging public health problem in Greece. Archives of Dermatology., 2001. **137**(2): p. 157-60.
- 17. Commonwealth of Australia, *National HIV/AIDS strategy: revitalising Australia's response* 2005-2008. 2005: p. Available at:

 http://www.health.gov.au/internet/wcms/publishing.nsf/Content/F4F093E1E22A7478CA256F1900050FC7/\$File/hivaids strategy.pdf. Accessed October 3, 2005.

- 18. Commonwealth Department of Health and Aged Care, *HIV testing policy*. 1998: p. Available at: http://www.ancahrd.org/pubs/pdfs/hivtest.pdf, Accessed September 20, 2005.
- 19. Weinhardt, L., et al., Effects of counseling and testing on sexual risk behaviour: a meta-analytic review of published research, 1985-1997. American Journal of Public Health, 1999. **89**(9): p. 1397-1405.
- 20. Commonwealth of Australia, *National Sexually Transmissable Infections Strategy 2005-2008*. 2005: p. Available at: http://www.health.gov.au/internet/wcms/publishing.nsf/Content/phd-sti-strategy-cnt.htm/\$FILE/sti strategy.pdf. Accessed September 20, 2005.
- 21. Australasian Chapter of Sexual Health Medicine, Sexually transmitted infection testing guidelines for men who have sex with men. 2005): p. Available at: http://www.ashm.org.au/uploadFile/MSM STI Guidelines PrintQualFinal%202005.pdf. Accessed Oct 17, 2005.
- 22. National Centre in HIV Social Research, HIV/AIDS, Hepatitis C & Related Diseases in Australia. 2001: p. Available at: http://nchsr.arts.unsw.edu.au/pdf%20reports/ARB2001%20web.pdf.Accessed October 17, 2005.
- 23. Queensland AIDS Council, HIV education action plan 2004: Progress report. 2004.
- 24. NSW Health. Responding to the increase in HIV notifications among gay men: HIV/AIDS sector action plan. 2003 [cited.
- 25. Sherr, L., et al., *Try this HIV test -- an evaluation of a mass media campaign targeting homosexual men.* Sexually Transmitted Infections, 1999. **75**(4): p. 273.
- 26. McOwan, A., et al., Can targeted HIV testing campaigns alter health-seeking behaviour? AIDS Care, 2002. **14**(3): p. 385-390.
- 27. STATA [computer programme], *Version 7.0.* 2002, College Station (TX, US): Stata Corporation.
- 28. Stephenson, D. *Model fit validation using residual diagnostics*. 2005 [cited November 8, 2005].
- 29. Dore, G., et al., eds. *HIV/viral hepatitis: a guide for primary care*. Revised ed. 2004, Australasian Society for HIV Medicine: Darlinghurst, NSW.
- 30. STATA. 2002, Stata Corporation: College Station (TX, US).
- 31. Weinhardt, L.S., et al., Effects of HIV counseling and testing on sexual risk behavior: a metaanalytic review of published research, 1985-1997. Am J Public Health, 1999. **89**(9): p. 1397-405.
- 32. Sexually Transmitted Infections in Gay Men Action Group, Sexually transmitted infection testing guidelines for men who have sex with men. 2002, South Eastern Sydney Public Health Unit: Sydney.
- Hull, P., et al., *Gay community periodic survey: Melbourne 2003*. 2003, National Centre in HIV Social Research: Sydney. p. 42.
- Read, T., et al., HIV in men who have sex with men: a report of a case control study of incident HIV infections and HIV transmission among men who have sex with men. 2004, Burnet Institute: Melbourne. p. 120.
- 35. Guy, R.J., et al., Sustained increase in infectious syphilis notifications in Victoria. Med J Aust, 2005. **183**(4): p. 218.

Appendix

Appendix 1: Examples of the 'Check it Out' campaign messages

1. Gaydar web banner – link to the 'Check It Out' campaign



2. Check It Out campaign postcard



Front

Not all STI's (sexually transmitted infections) have symptoms. This means you could have one and not know it; so, if you have sex, go for a full sexual health check up once a year, or more often if you have sex with a number of different partners.

A full sexual health check up might include:

- a blood sample for HIV, Syphillis (and Hep A, B & C)
- checks for gonorrhoea and chlamydia
- checking to see if you need a vaccination for Hep A and B

Having a regular sexual health check up is a part of a healthy sex life. So even if you're feeling fine, visit the doctor for a regular HIV and STI check.

Using condoms and water-based lube when having sex is the best way to avoid getting or passing on HIV.

For confidential & anonymous information and referral about sexual h check-ups call AIDSLINE on 1800 133 392 or go to www.checkitout.net

Back



'Check It Out' campaign posters

LET'S TALK MAN TO MAN

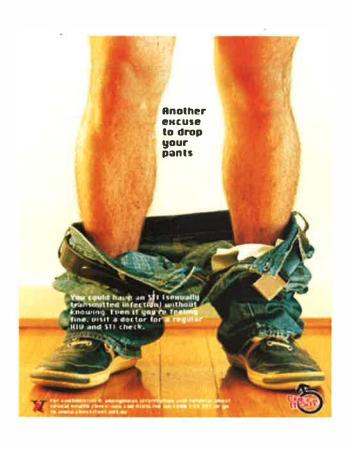


No matter whose you're from and what you're May, if you're having way, puss though these a regular season the attributes, forms \$71% towardly interested infectioness form? You're symptoms—so you could have only and not know're.

To lind our more, your a doctor for a private and combined a check up.
For its formation and interest about source what health other knows.

ACMATING on 1109 835-892 or go someway beth frost will assume.





Appendix 2: Questionnaire

| octor | HUMAN IMMUNODEFICIENCY VIRU | S ILINA | VICES NTIDANY DEALIES | T EODU |
|-------|--|--------------|--|--|
| | Name: | o (niv) A | | Reference/UR Number |
| | Address: | | _ | |
| | | - | | |
| | Telephone: | | : | |
| | | | | |
| tient | ☐ Female ☐ Male | | | |
| | Name Code* Sex | | / / Date of Birth | Postcode of Residence |
| | *First two letters of surname, then first two letter | s of first . | | POSTCOOLE OF RESIDERO |
| Requ | est Date / / / | | | |
| | lave you had a previous HIV test? | | Are you an injecting drug user? □ Yes □ No | |
| | ☐ Yes, give date of last test/(mm/yy) | | | |
| | Unknown | | □ Unknown | |
| | esult of last HIV test? | | How many female sexual partners have you had in the last 12 months? | |
| | Positive Indeterminate | | | |
| ĺ | □ Negative | | (Nur | noer) |
| (| □ Unknown | 6 | How many male sell in the last 12 month | xual partners have you had |
| | you a sex worker? | | in the last 12 month | ns r |
| | | | (Alum | nhari |
| 1 | □ Yes | | (Nur | nber) |
| 1 | □ Yes □ No □ Unknown | | XI. | |
| | □ Yes □ No | | HAVE SEX WITH | |
| | □ Yes □ No □ Unknown THIS SECTION ONLY FOR ME Country of Birth Have you had a STI in the past 12 months? □ Yes □ No □ Unknown STI test/s performed today? | | Where did you ha were HIV positive a. SOPV/sauna | MEN ve UAI with these men who |
| | □ Yes □ No □ Unknown THIS SECTION ONLY FOR ME Country of Birth Have you had a STI in the past 12 months? □ Yes □ No □ Unknown STI test/s performed today? □ Yes □ No | | Where did you ha were HIV positive a. SOPV/sauna Yes No Unknown b. Beat | MEN ve UAI with these men who |
| | □ Yes □ No □ Unknown THIS SECTION ONLY FOR ME Country of Birth Have you had a STI in the past 12 months? □ Yes □ No □ Unknown STI test/s performed today? □ Yes | | Where did you ha were HIV positive a. SOPV/sauna Yes No Unknown b. Beat | MEN ve UAI with these men who |
| | □ Yes □ No □ Unknown THIS SECTION ONLY FOR ME Country of Birth Have you had a STI in the past 12 months? □ Yes □ No □ Unknown STI test/s performed today? □ Yes □ No | | Where did you ha were HIV positive a. SOPV/sauna Yes No Unknown b. Beat | MEN ve UAI with these men who |
| | □ Yes □ No □ Unknown THIS SECTION ONLY FOR ME Country of Birth Have you had a STI in the past 12 months? □ Yes □ No □ Unknown STI test/s performed today? □ Yes □ No □ Unknown How many men have you had unprotected analy | | HAVE SEX WITH Where did you ha were HIV positive a. SOPV/sauna Yes No Unknown b. Beat Yes No Unknown c. Party (i.e. organ | MEN ve UAI with these men who |
| | □ Yes □ No □ Unknown THIS SECTION ONLY FOR MEI Country of Birth Have you had a STI in the past 12 months? □ Yes □ No □ Unknown STI test/s performed today? □ Yes □ No □ Unknown How many men have you had unprotected analintercourse (UAI) with in the past 12 months? | | Where did you ha were HIV positive a. SOPV/sauna Yes No Unknown b. Beat Yes No Unknown | MEN ve UAI with these men who or unknown status? |
| | ☐ Yes ☐ No ☐ Unknown ☐ THIS SECTION ONLY FOR MEI Country of Birth Have you had a STI in the past 12 months? ☐ Yes ☐ No ☐ Unknown STI test/s performed today? ☐ Yes ☐ No ☐ Unknown How many men have you had unprotected analintercourse (UAI) with in the past 12 months? ☐ (Number) | | HAVE SEX WITH Where did you ha were HIV positive a. SOPV/sauna Yes No Unknown b. Beat Yes No Unknown c. Party (i.e. organyes) No Unknown | MEN ve UAI with these men who or unknown status? |
| | ☐ Yes ☐ No ☐ Unknown ☐ THIS SECTION ONLY FOR MEI Country of Birth | | HAVE SEX WITH Where did you ha were HIV positive a. SOPV/sauna Yes No Unknown b. Beat Yes No Unknown c. Party (i.e. organ Yes No | MEN ve UAI with these men who or unknown status? |
| | □ Yes □ No □ Unknown THIS SECTION ONLY FOR ME Country of Birth | | HAVE SEX WITH Where did you ha were HIV positive a. SOPV/sauna Yes No Unknown b. Beat Yes No Unknown c. Party (i.e. organ Yes No Unknown | MEN ve UAI with these men who or unknown status? |
| | ☐ Yes ☐ No ☐ Unknown ☐ THIS SECTION ONLY FOR MEI Country of Birth | | HAVE SEX WITH Where did you ha were HIV positive a. SOPV/sauna Yes No Unknown b. Beat Yes No Unknown c. Party (i.e. organ Yes No Unknown d. Home Yes No Unknown | MEN ve UAI with these men who or unknown status? |
| | □ Yes □ No □ Unknown THIS SECTION ONLY FOR ME Country of Birth | | Where did you ha were HIV positive a. SOPV/sauna Yes No Unknown b. Beat Yes No Unknown c. Party (i.e. organ Yes No Unknown d. Home Yes No Unknown | MEN ve UAI with these men who or unknown status? |

Appendix 3: Information sheet on sentinel surveillance

Chief Investigator: Dr Margaret Hellard, the Burnet Institute for Medical Research and Public Health (Burnet Institute)

Description

In Victoria, HIV diagnoses have increased markedly in recent years, especially among gay and homosexually active men. About 30% of these men had no history of having a previous HIV test.

In February 2004 the Victorian AIDS Council (VAC) commenced a campaign to increase HIV and STI testing among gay and homosexually active men. To assist with this campaign, the Burnet Institute is conducting sentinel surveillance at a number of clinics in Victoria. This clinic is involved in the surveillance.

What does the surveillance involve?

The surveillance involves all gay and homosexually active men who are having a HIV test being asked a series of questions about sexual behaviour. These questions are similar to what your clinician would normally ask in this situation.

What will happen to the information?

The information collected by your clinicians will be sent to the Burnet Institute to be analysed. The data will be sent to Burnet in such a way that you cannot be identified in any way. The information will be stored on a secure password protected database. If you would prefer that your information is not sent to the Burnet, please inform your clinician. A report will be given to the Department of Human Services, the VAC and the clinics. Please note this report will only contain summary data and not any individual patient data.

Sentinel surveillance will help determine if the VAC campaign has resulted in more people being tested for HIV and will be useful for planning future education strategies.

Contact Details

If you have any complaints about any aspect of this project, the way it is being conducted or any questions about your rights as a participant, then please contact the following person:

Dr Donna Cohen, Executive Officer, Department of Human Services, Human Research Ethics Committee, Ph: 03 9637 4239

The ethical aspects of this research project have been approved by the Ethics Committee of the Department of Human Services.

THANK YOU