

Incidence and Risk Factors for STI's in MSM Presenting to Auckland Sexual Health Service



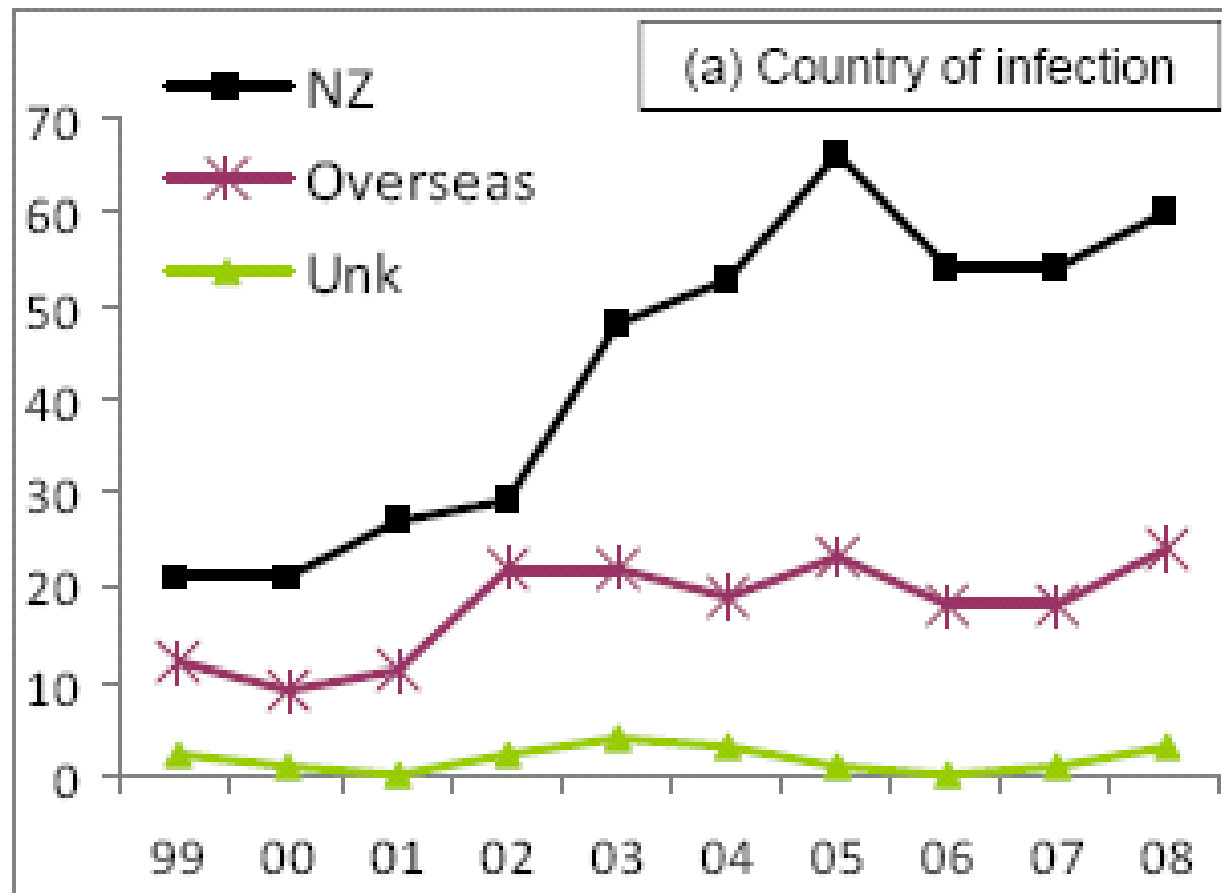
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Background

- Since the late 1990's NZ has had steadily rising incidence of HIV infections in MSM, mirroring similar trends in other developed countries.
- Since 2002 the majority of HIV infections in MSM have been acquired within New Zealand
- NZ acquired infections accounted for 70% of infections in MSM in 2002.

NZ AIDS Epidemiology Report 2009



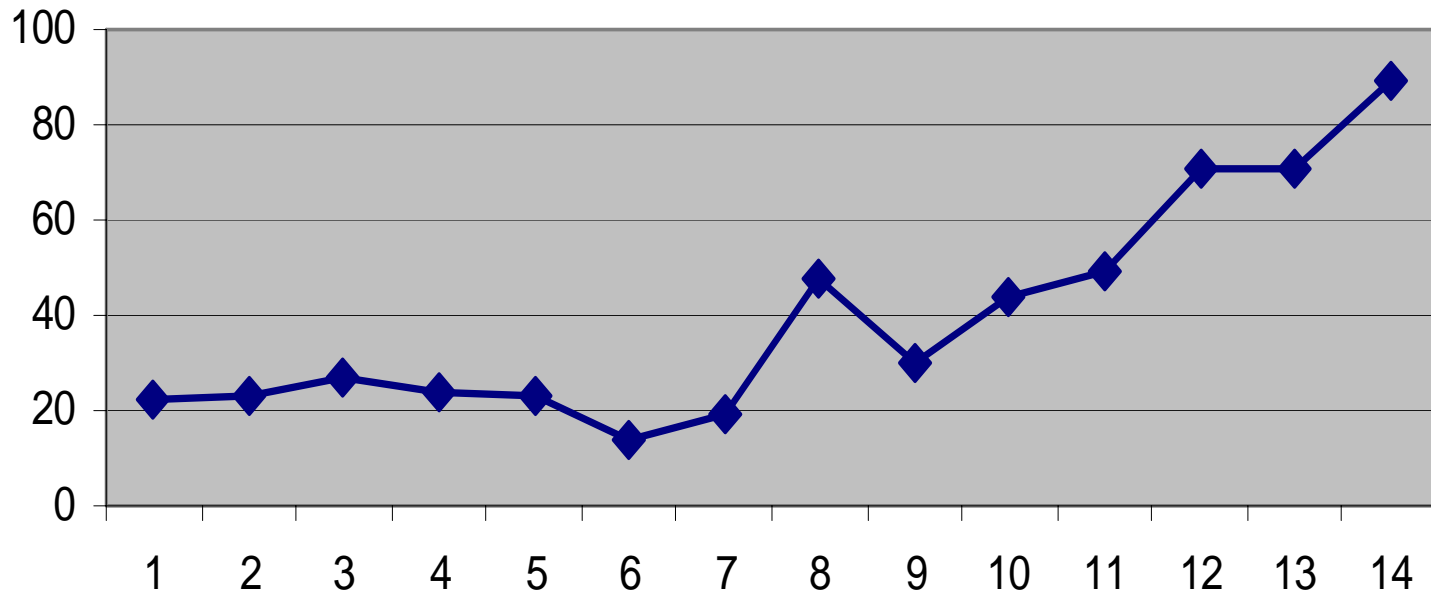


Infectious Syphilis

- Infectious syphilis notifications to ESR have increased annually since 2000.
- Two NZ studies have shown MSM to be a major risk group for acquisition of infectious syphilis. (Cunningham et al NZMJ 2007, Azariah, Perkins et al Sex Health 2008)
- Both these studies found that the majority of infections in MSM were acquired within New Zealand

ESR Data

Infectious Syphilis Cases Reported to ESR 1996 to 2008





Study Aim

- There is no published data on incidence of other sexually transmitted infections in MSM in New Zealand.
- Our aim was to collect behavioural data and determine incidence of STI and HIV in a sample of MSM presenting to Auckland Sexual Health Service.



Method

- MSM presenting for STI screening or with symptoms were eligible. Questionnaire was filled in by the patient and/or clinician
- Data on demographics, sexual behaviour, use of recreational drugs and how sexual contacts were made was collected.
- Data on incidence of laboratory or clinically confirmed STI's amongst participants was linked to questionnaires.
- Enrolment occurred from May 2008 to April 2009. Study was approved by Northern X Regional Ethics Committee.



Statistical analysis

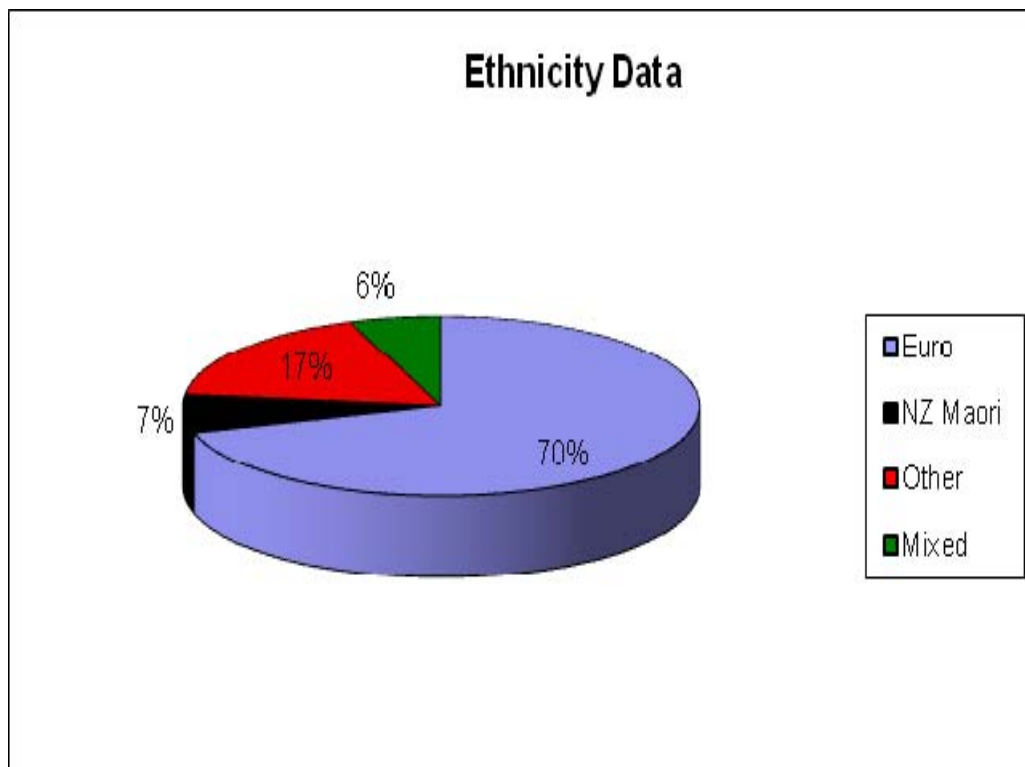
- Binary logistic regression was used with the two separate outcomes – STI or HIV diagnosed in the previous 12 months and new STI or HIV diagnosed at the current visit.
- Explanatory variables used were:
 - Demographic
 - Behaviour
 - Sexual practices
- Explanatory variables were analysed separately then as a combined analysis



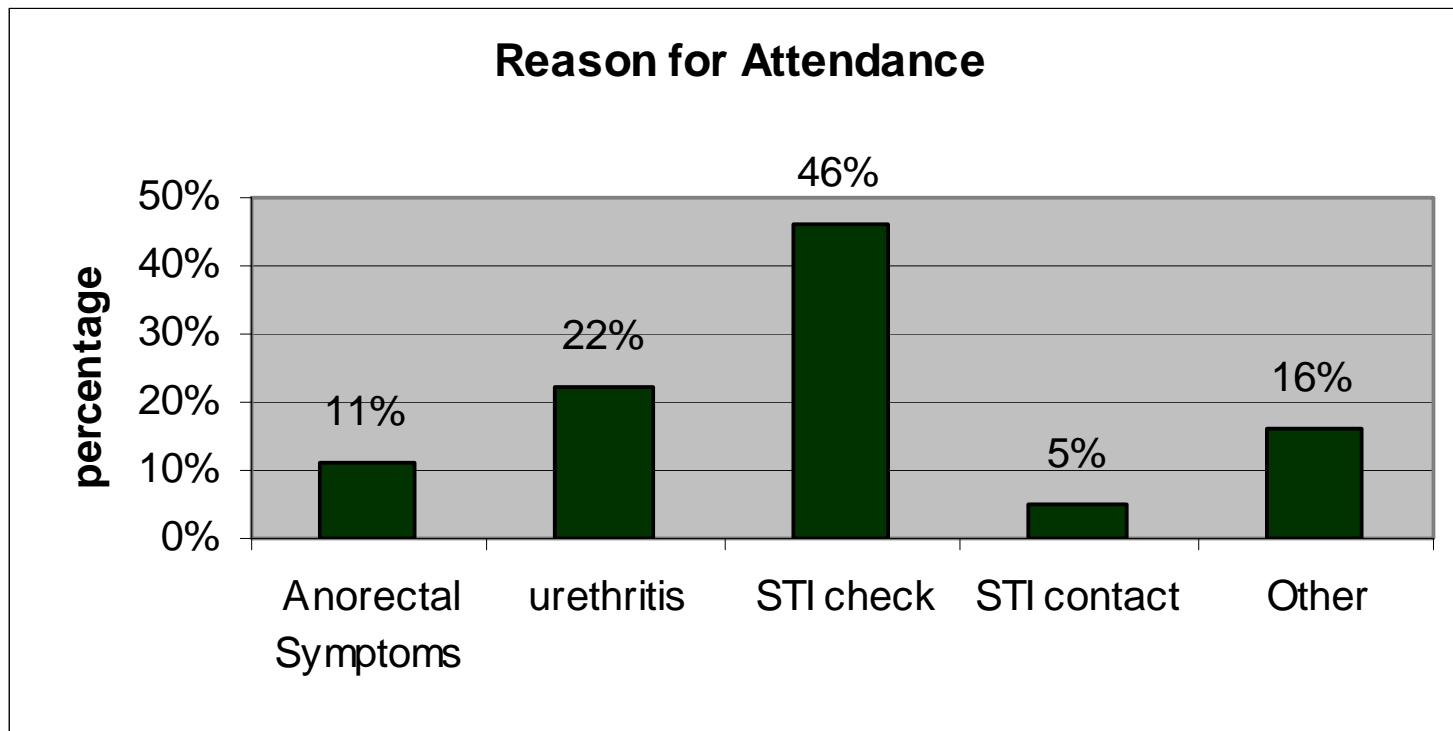
Results

- 87 men agreed to fill in the survey and 2 declined (participation rate 98%).
- The age range was from 15 to 66 with a mean age of 34.
- The majority (70%) were born in NZ (n= 61) and were mainly of European ethnicity (70%). (Similar to GAPSS)
- None of the participants identified as purely Pacific ethnicity.

Ethnicity



Reason for Attendance at ASHS

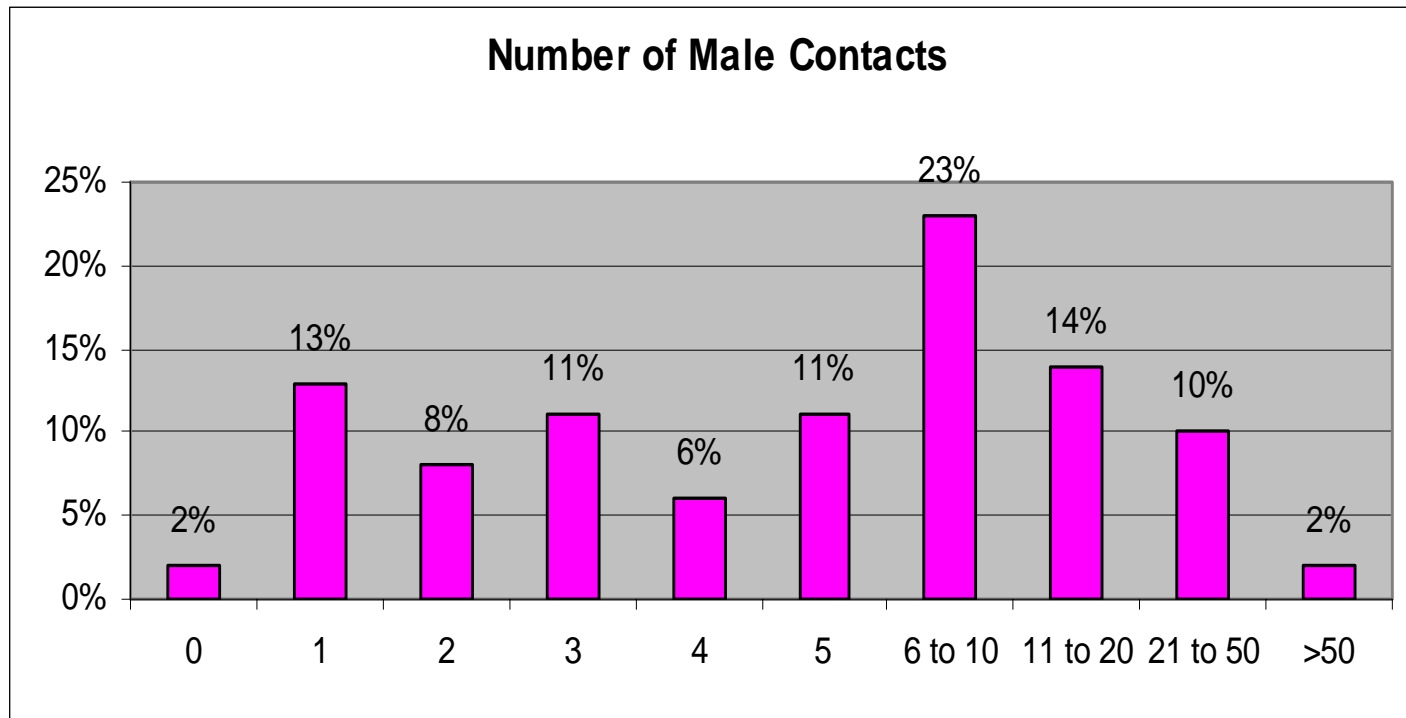




Sexual Partners

- Most men (91%) reported only male sex partners in the previous 6 months
- 8 men reported female partners as well
- There was a wide range in the numbers of reported sexual contacts within the previous 6 months
- 2 men reported no sexual contact

Numbers of Sexual Partners





Concurrent Partnerships

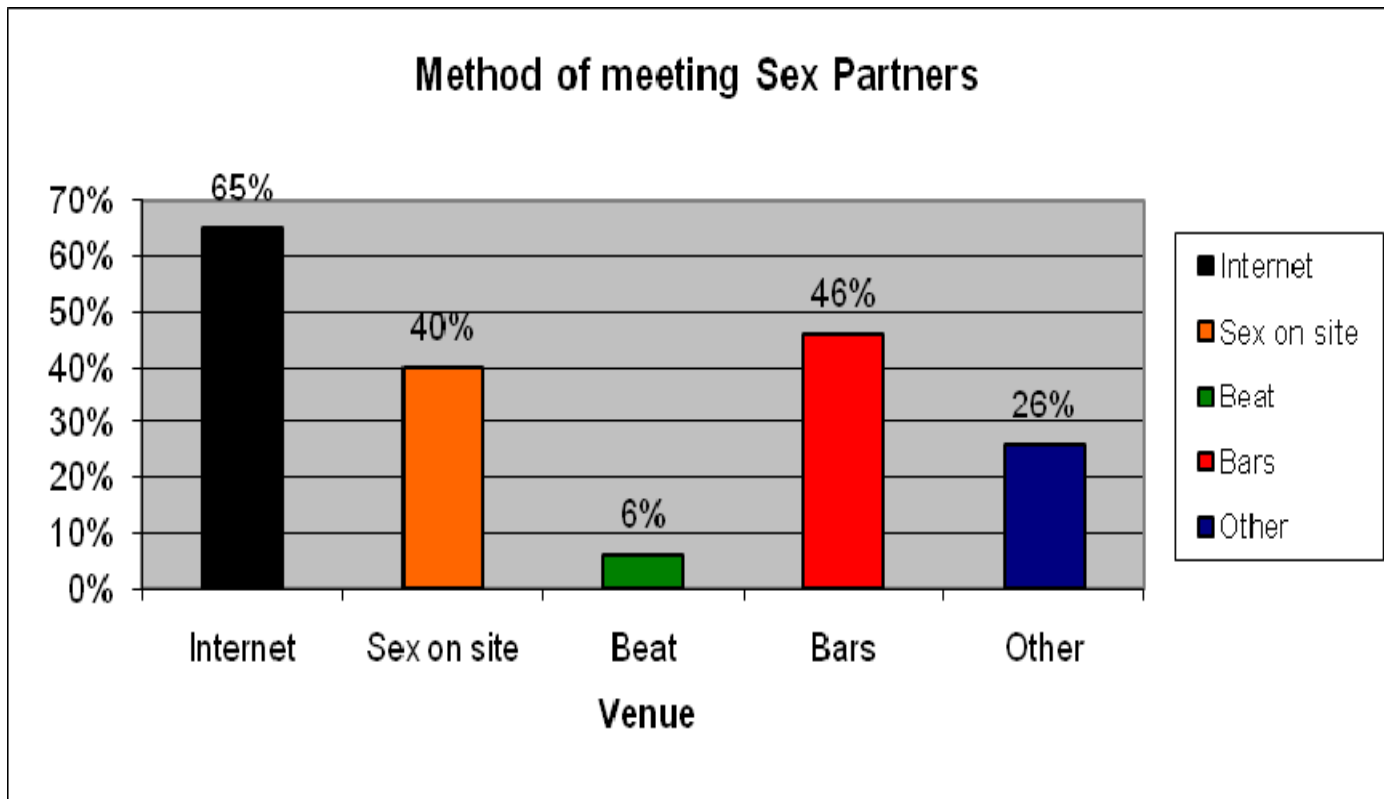
- 60 (69%) respondents reported having a regular sexual partner in the prior 6 month period.
- Of these men 45 (75%) reported also having casual sexual partners within the past 6 months



Known vs Unknown Partners

- 43% of men (n=35) reported they would be able to contact all of their sex partners within the previous 6 months
- Of those 35 men -the numbers of partners ranged from 1 to more than 10.
- 17% (n=13) had only had anonymous sex partners

Method of Meeting Sex Partners

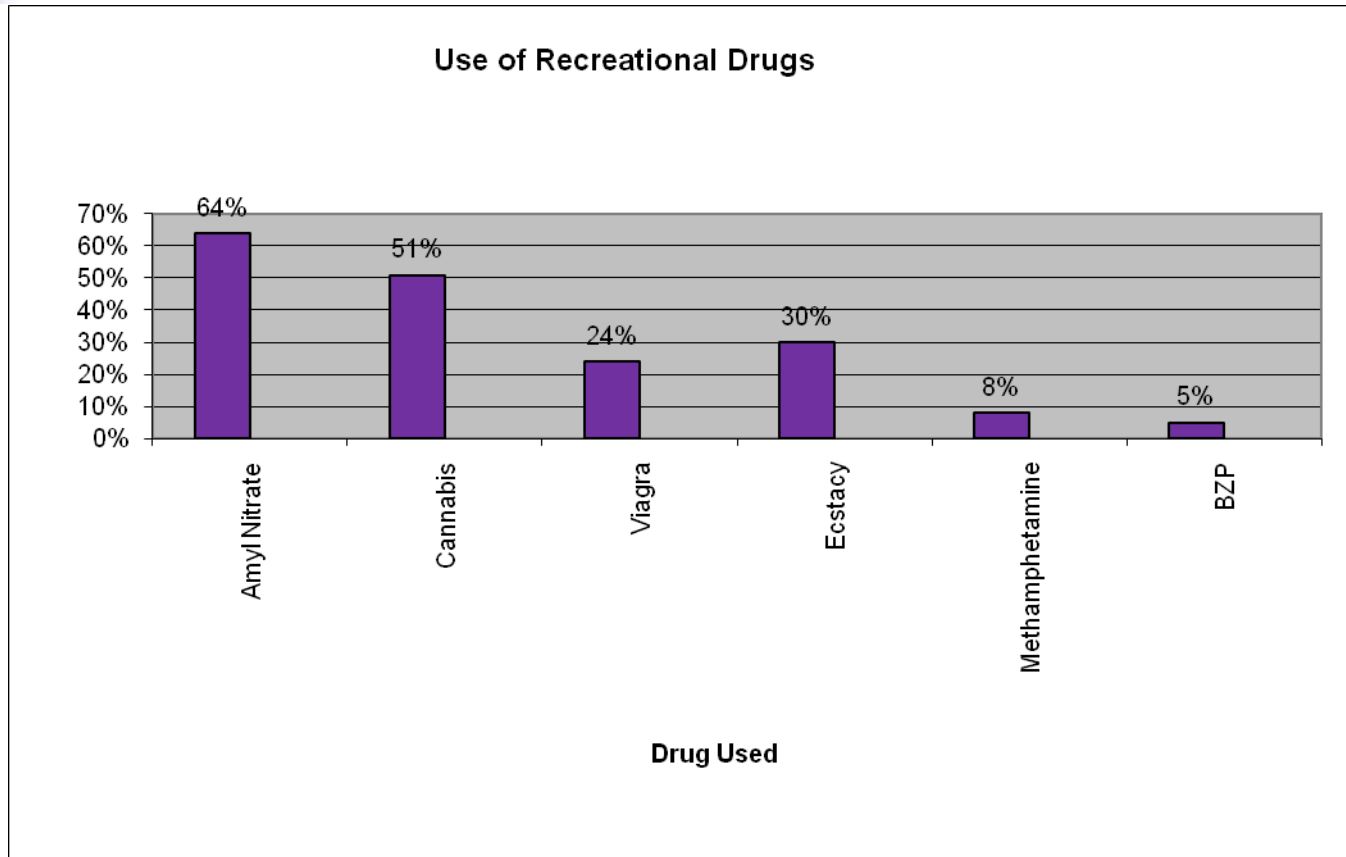




Recreational Drug Use

- 45%(n=37) reported use of recreational drugs within the previous 6 months
 - the majority of them had used more than once(89%).
- Amyl nitrate was the most commonly reported drug (64%), followed by cannabis, ecstasy and Viagra.
 - GAPSS – 56.9% reported recreational drug use

Recreational Drug Use





Sexual Practices

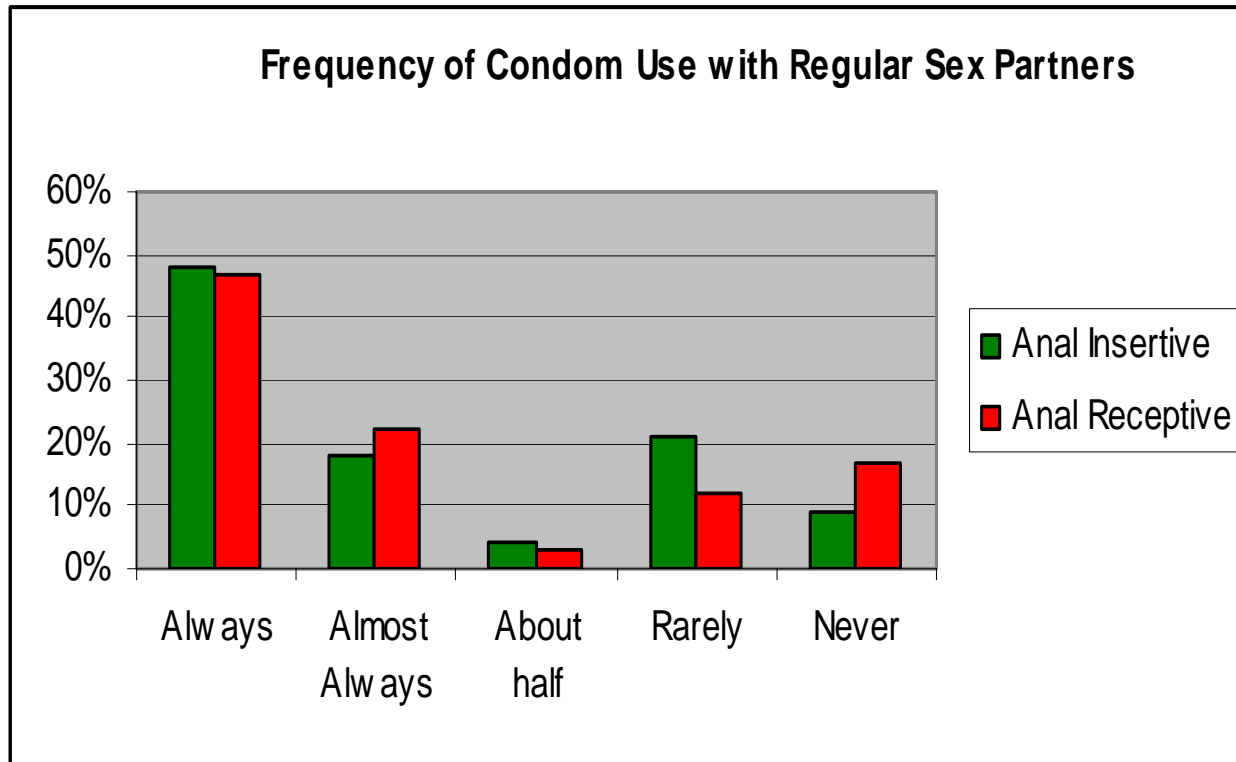
- 88% and 86% of men said they never used condoms for oral sex with regular and casual partners respectively
- However 93% said they knew they could get an STI from oral sex
- This finding has implications for the spread of infectious syphilis, gonorrhoea and herpes.



Condom Use for Anal Sex with Regular Partners

- 80%(n=68) of men reported they engaged in insertive anal sex with regular sex partners.
 - 66% of these (n=44) said they always or almost always used condoms for insertive anal sex and 30% said rarely or never.
- 70%(n=60) reported they engaged in receptive anal sex with regular sex partners
 - 69%(n=41) of these said they always or almost always used condoms and 29% said rarely or never.
- Similar to GAPSS 2006-75% had had anal sex

Condom Use for Anal Sex with Regular Partners



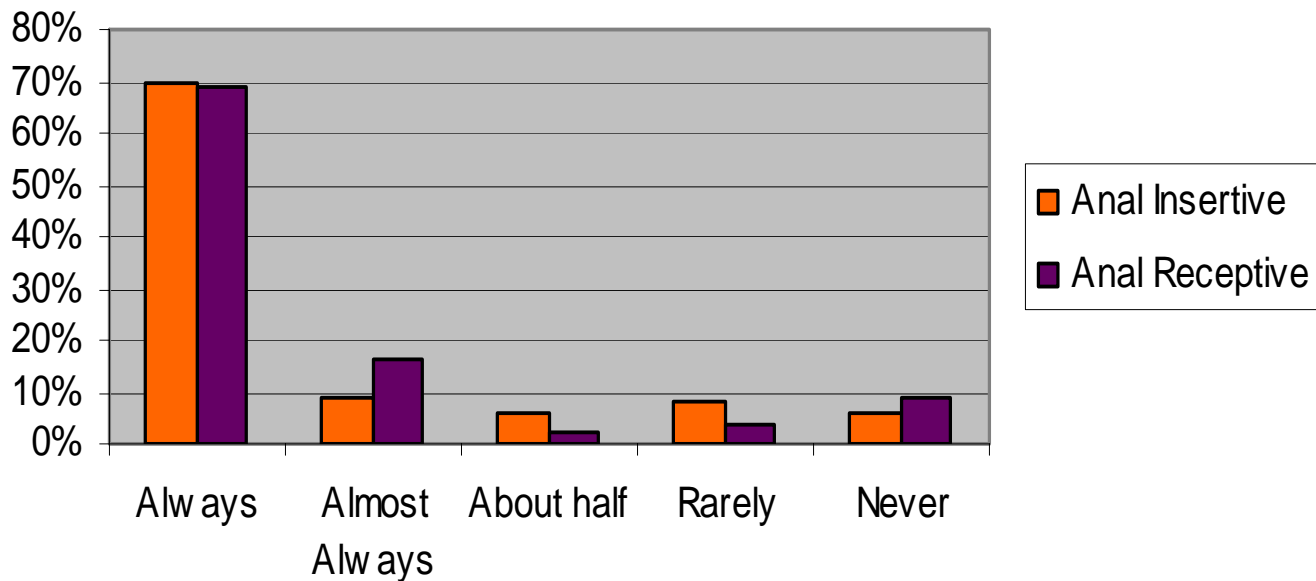


Condom Use with Casual Sex Partners

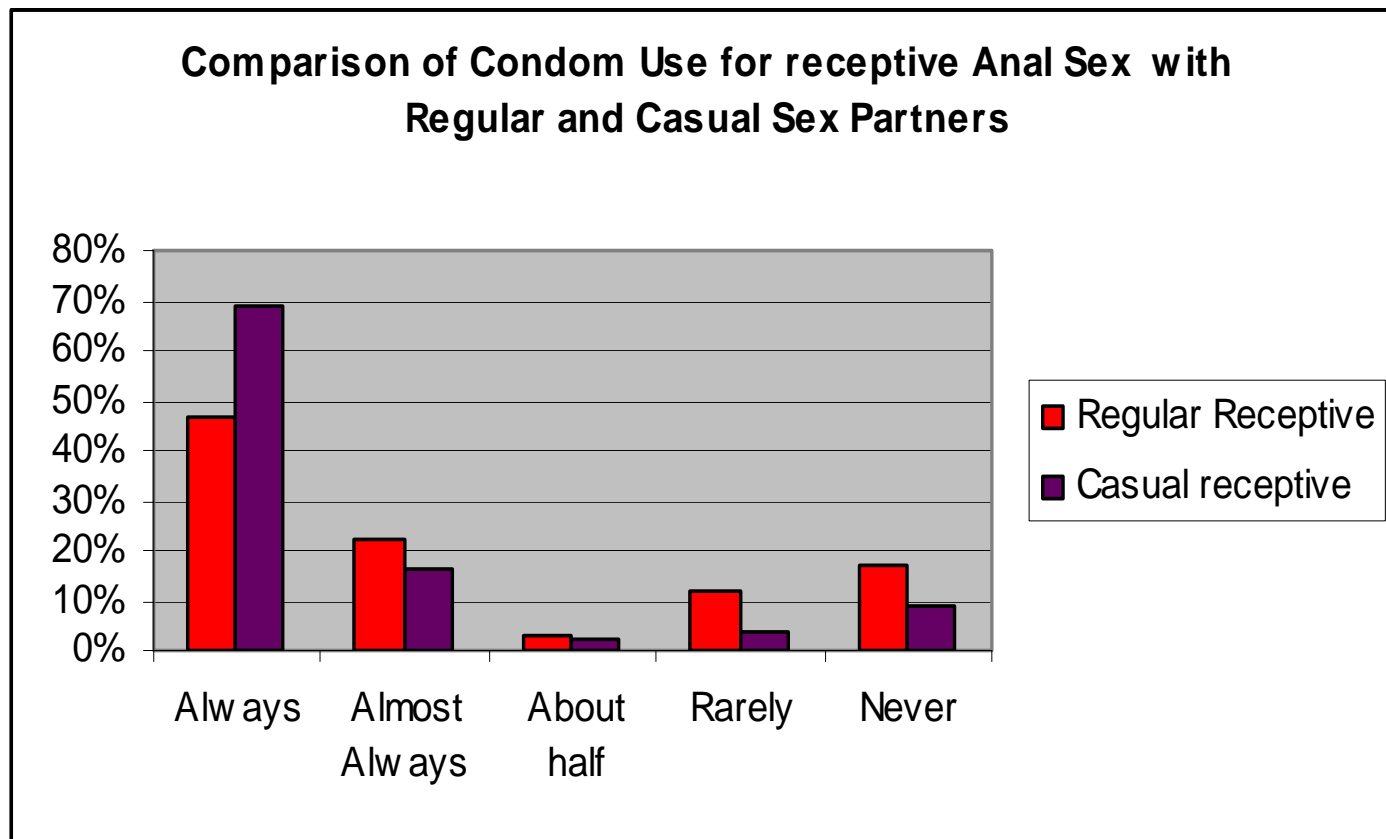
- 75%(n=64)of men reported they engaged in insertive anal sex with casual sex partners.
 - 79%(n=51) of these said they always or almost always used condoms and 14% said rarely or never.
- 65%(n=55)of men reported engaging in receptive anal sex with casual sex partners.
 - 85%(n=47) said they always or almost always used condoms and 13% said rarely or never.

Condom Use for Anal Sex with Casual Partners

Frequency of Condom Use with Casual Sex Partners



Comparison of Reported Condom Use with Casual and Regular Sex Partners



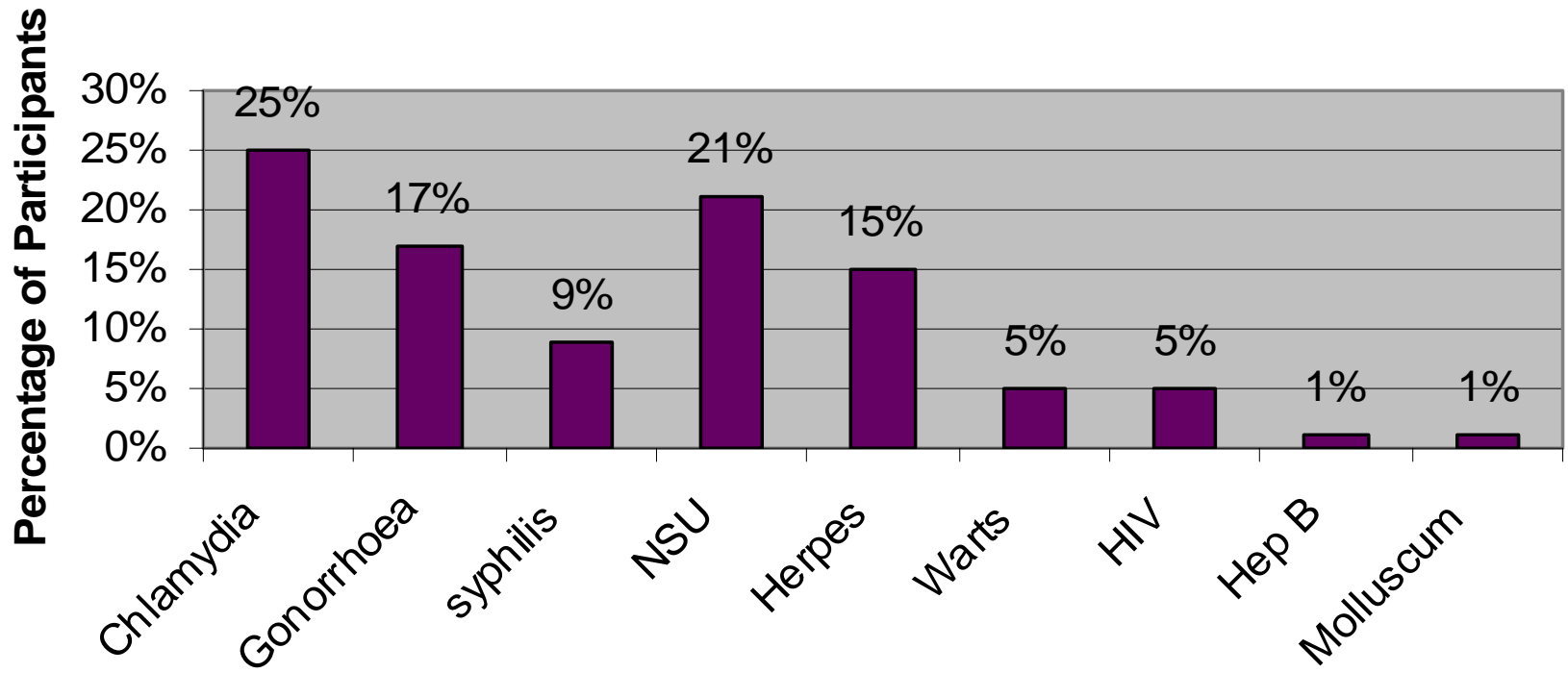


Previous STI History

- 63% (n=55) had previously had an HIV test at ASHS-29%(25) within the previous 12/12.
- 75%(n=65) of the sample had had a previous STI diagnosed at ASHS,34% (n=22) of these within the previous 12 months
- 3 men were HIV positive

Previous STI diagnosed at ASHS

Past STI Diagnoses





STI Data Current

- 45% (n=38) were diagnosed with a new STI
- The most common diagnoses were NSU(12%) chlamydia (9%), and gonorrhoea(8%).
- 2 men were diagnosed with infectious syphilis and 3 were diagnosed with HIV.



STI Data

- All 3 men diagnosed with HIV had had negative HIV tests at ASHS within the previous 12 months
- All had been previously diagnosed with genital ulcerative conditions
 - 2 with syphilis and 1 with HSV
- One of these men had reported always using condoms for anal sex with casual and regular sex partners in the previous 6 months



Risk Factors for STI/HIV Acquisition

- A wide range of variables including demographics, sexual practices, condom use, method of meeting sex contacts and use of recreational drugs found only one significant association:
- Maori were more likely to be diagnosed with a new STI ($p=0.04$)



Discussion

STI Incidence and Sexual Behaviour



- STI incidence(45%) and history of previous STI(75%) was high in this sample of MSM presenting to a sexual health clinic.
- Men were more likely to use condoms for anal sex with casual than with regular partners but a significant minority were engaging in high risk sexual practices with casual and sex regular partners- this may account for high STI rate
- STI's were diagnosed in some of those reporting high frequency of condom use
- Concurrent sex partnerships were common with 53% of participants reporting both regular and casual sex partners (similar to GAPSS 2006 data)
 - Concurrency accelerates the growth of an HIV epidemic (Saxton NZSHS conference 2008)



Recreational Drug Use

- 45%(n=37) of participants reported use of recreational drugs within the previous 6 months
 - Compared with 57%-GAPSS 2006
 - 10% had used Viagra and 4% methamphetamine
- International data indicates increased risk STI/HIV acquisition in MSM using recreational drugs – particularly Viagra and Methamphetamine.
- Both these drugs associated with
 - Increased length of sexual activity “sexual marathons”
 - UPAI-“crystal dick”
 - STI
 - Effect enhanced by simultaneous use



Internet Use

- Increasingly important as a method for MSM to meet sex partners.
- 63% of ASHS sample had met a sexual partner via the internet in the past 6 months
 - Higher than GAPSS – 38%
- ?Internet users higher risk for STI
 - GAPSS 2006-on-line respondents reported less frequent condom use than off-line respondents
- However a recent study found no increase in risk of current STI in MSM recruiting partners from internet (Al-Tayib et al).



Conclusions

- A significant minority of MSM are engaging in high-risk behaviour for acquisition of STI and HIV
- Recreational drug and internet use is common and may be contributing to HIV epidemic
- STI screening and HIV testing should be routinely offered regardless of reported condom use



Limitations

- Small sample size hindered making correlations between risk of STI and behaviour
- Risk behaviour was probably underestimated because of lack of anonymity of responses.